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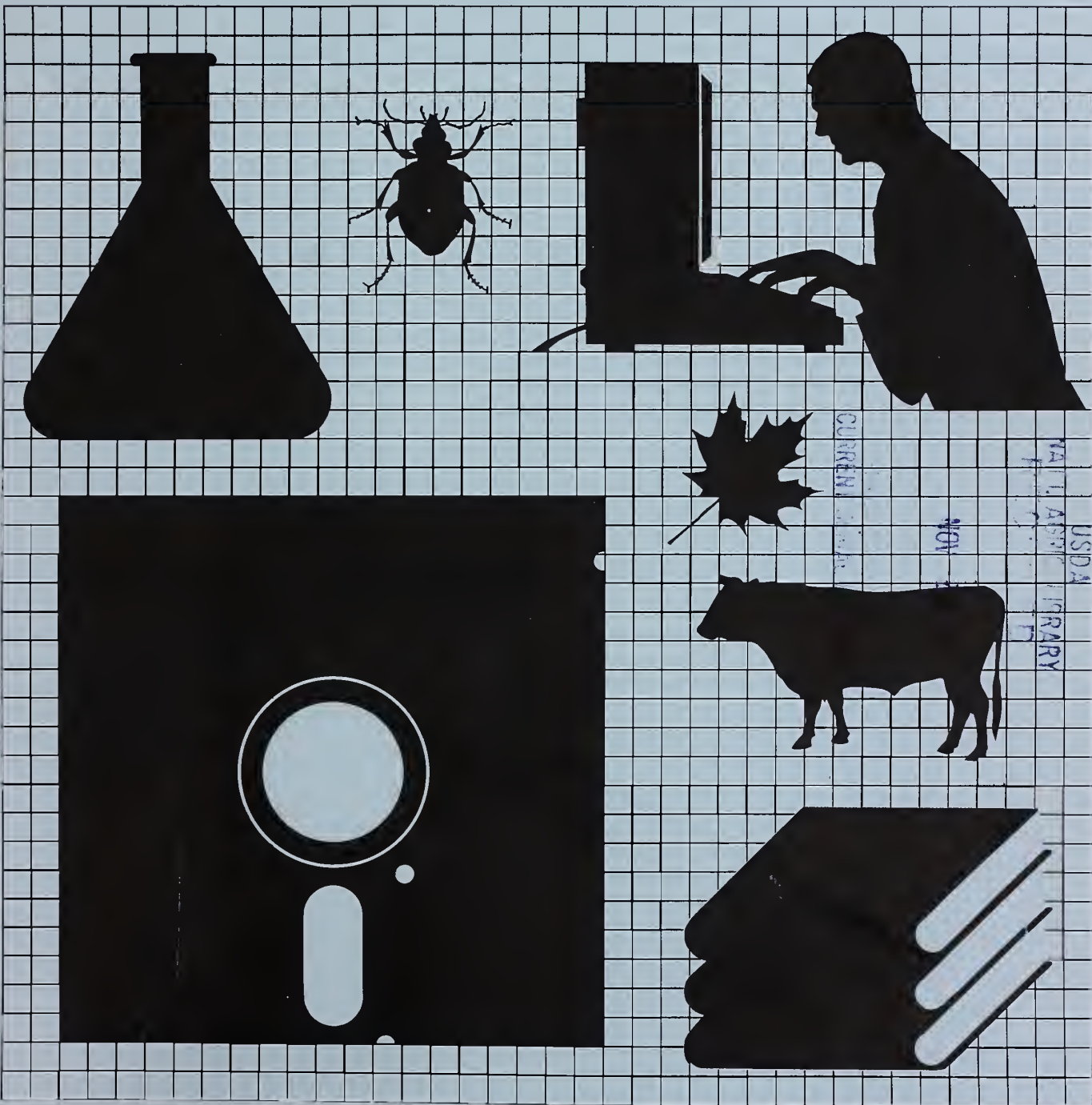
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# Bibliography of American Agricultural Bibliographies, 1984

## A Categorized Listing of American Bibliographies Indexed in AGRICOLA



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# Bibliography of American Agricultural Bibliographies, 1984

A Categorized Listing of American  
Bibliographies Indexed in  
AGRICOLA

Compiled by  
Charles N. Bebee  
National Agricultural Library

Bibliographies and Literature  
of Agriculture Number 54

United States Department of Agriculture  
National Agricultural Library  
Beltsville, Maryland 20705

October 1986

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## PREFACE

In 1978, the National Agricultural Library introduced a publication series entitled "Bibliographies and Literature of Agriculture," with BLA-1 being a Bibliography of Agricultural Bibliographies, 1977, which included database citations from 1970 through 1977.

A second issue with the same title carried literature citations from 1978-82 numbered as BLA-32. This was followed by BLA-44 which covered the year 1983.

The growth of these volumes has resulted in a need to reduce the publication size by limiting the coverage to "Bibliography of American Agricultural Bibliographies," for succeeding years.

The citations are arranged alphabetically by title within each Section Heading currently used in compiling the AGRICOLA database. Personal and corporate author indices appear following the categorized citations.

Any comments or criticisms may be forwarded to the compiler:

Charles N. Bebee  
USDA NAL  
Room 111, NAL Building  
Beltsville, MD 20705  
(301) 344-3704







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# AGRICULTURE

0001

**Agriculture in our lives an introduction to agricultural business and natural resources /by Alfred H. Krebs. -**  
Krebs, Alfred H. Danville, Ill. : Interstate Printers & Publishers, c1984. xii, 788 p. : ill. ; 24 cm. Includes bibliographies and index. (NAL Call No.: DNAL S495.K7 1984).

0002

**Available publications of the Agricultural Experiment Station (Louisiana).**  
Baton Rouge, La. : The Station. Circular - Louisiana Agricultural Experiment Station. Mar 1984. Bibliography. Mar 1984. (117). 22 p. (NAL Call No.: 100 L93 (2)).

0003

**Directories for agricultural resources.**  
Lassanyi, M.E. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Bibliography. Sept 1984. (84-60). 25 p. (NAL Call No.: DNAL aZ5071.N3).

0004

**Effects of nuclear attack on agriculture, 1969-1983.**  
Beebe, C.N. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. May 1984. Bibliography. May 1984. (84-33). 20 p. (NAL Call No.: aZ5071.N3).

0005

**Farmers in rebellion the rise and fall of the Southern Farmers Alliance and People's Party in Texas /by Donna A. Barnes. -**  
Barnes, Donna A., 1954. Austin : University of Texas Press, 1984. Includes index. x, 226 p. ; 24 cm. Bibliography: p. 217 -222. (NAL Call No.: DNAL JK2374.T4B37 1984).

0006

**Hispanic contributions to U.S. food & agriculture selected references /Jayne T. MacLean. -**  
MacLean, Jayne T. Beltsville, MD : U.S. Dept. of Agriculture, National Agricultural Library, 1984. Cover title.~ At head of title: In

observance of Hispanic Heritage Week, 1984. 8 leaves ; 28 cm. (NAL Call No.: DNAL aZ1231.M5M3).

0007

**Meeting the expectations of the land essays in sustainable agriculture and stewardship /edited by Wes Jackson, Wendell Berry, Bruce Colman. -**  
Jackson, Wes.; Berry, Wendell, 1934-; Colman, Bruce. San Francisco : North Point Press, 1984. xvi, 250 p. : ill. ; 23 cm. Bibliography: p. 231 -247. (NAL Call No.: DNAL S441.M4).

0008

**Papers presented to the symposium, Restructuring policy for agriculture, some alternatives /conducted in cooperation with the 149th National Meeting of the American Association for the Advancement of Science ; edited by Sandra S. Batie, J. Paxton Marshall. -**  
Batie, Sandra S.; Marshall, J. Paxton. Blacksburg, Va. : Virginia Polytechnic Institute and State University, College of Agriculture and Life Sciences, 1984. Cover title: Restructuring policy for agriculture, some alternatives.~ "May 1984.". viii, 142 p. : ill. ; 26 cm. -. Includes bibliographies. (NAL Call No.: DNAL S541.5.V8I54 no.84-2).

0009

**The paradox of success the impact on priority setting in agricultural research and extension / prepared by Jean Lipman-Blumen and Susan Schram. -**  
Lipman-Blumen, Jean. Schram, Susan. Washington, D.C. : Office of the Assistant Secretary, Science and Education, United States Department of Agriculture, 1984. "Prepared by LBS International, Ltd., Bethesda, Maryland, under the auspices of contract~ "June 1984.". 1 v. (various pagings) ; 28 cm. Bibliography: p. F1-F19. (NAL Call No.: DNAL aS541.L52).

0010

**Science and policy issuesa report of citizen concerns and recommendations for American agricultural research. -**  
Washington, D.C. : National Agricultural Research and Extension Users Advisory Board, 1984. "July 1984.". viii, 67 p. : ill. ; 22 cm. Includes bibliographical references. (NAL Call No.: DNAL aS494.5.G44S33).

# RESEARCH

0011

**Agricultural policies, research programs.**  
Lassanyi, M. Beltsville, Md. : The Library.  
Quick bibliography series - National  
Agricultural Library. Bibliography. Oct 1984.  
(85-01). 23 p. (NAL Call No.: DNAL aZ5071.N3).

0012

**Agricultural Productivity Act of 1983 hearing before the Subcommittee on Agricultural Research and General Legislation of the Committee on Agriculture, Nutrition, and Forestry, United States Senate, Ninety-eighth Congress, second session, on S. 1128 ... June 14, 1984. -.**  
United States.~Congress.~Senate.~Committee on Agriculture, Nutrition, and Forestry.~Subcommittee on Agricultural Research and General Legislation. Washington, D.C. : U.S. G.P.O., 1984. Distributed to some depository libraries in microfiche.~ Item 1032-C, 1032-D (microfiche). iv, 276 p. : ill. ; 24 cm. -. Bibliography: p. 200-202. (NAL Call No.: DNAL KF26.A351 1984a).

0013

**Fiscal year 1984 EPA research and development authorization hearings before the Subcommittee on Natural Resources, Agriculture Research and Environment of the Committee on Science and Technology, U.S. House of Representatives, Ninety-eighth Congress, first session, March 10; April 19, 27, 1983. -.**  
United States.~Congress.~House.~Committee on Science and Technology.~Subcommittee on Natural Resources, Agriculture Research, and Environment. Washington, D.C. : U.S. G.P.O., 1984. Distributed to some depository libraries in microfiche.~ "No. 113." iii, 301 p. : maps ; 24 cm. Includes bibliographical references. (NAL Call No.: DNAL KF27.S3978 1983e).

0014

**Impact on U.S. scientific research of proposal to withdraw from UNESCO hearings before the Subcommittee on Natural Resources, Agriculture Research, and Environment and the Subcommittee on Science, Research, and Technology of the Committee on Science and Technology, U.S. House of Representatives, Ninety-eighth Congress, second session, March 8, 15, 1984. -.**  
United States.~Congress.~House.~Committee on Science and Technology.~Subcommittee on Natural Resources, Agriculture Research, and Environment. Washington, D.C. : U.S. G.P.O., 1984. Distributed to some depository libraries in microfiche.~ "No. 120." iii, 235 p. ; 24 cm. Includes bibliographical references. (NAL Call No.: DNAL KF27.S3978 1984b).

0015

**New directions for agriculture the science and technology of the future : hearing before the Joint Economic Committee, Congress of the United States, Ninety-eighth Congress, second session, October 2, 1984. -.**  
United States.~Congress.~Joint Economic Committee. Washington, D.C. : U.S. G.P.O., 1984. Distributed to some depository libraries in microfiche. iii, 147 p. : ill. ; 24 cm. -. Includes bibliographies. (NAL Call No.: DNAL KF25.E2 1984).

0016

**Research--background for 1985 farm legislation /report prepared by Paul O'Connell ; with contributions from Gary Taylor and Karen Skinner. -.**  
O'Connell, Paul. Taylor, Gary.; Skinner, Karen. Washington, D.C. : U.S. Dept. of Agriculture, Science and Education, 1984. "November 1984." viii, 59 p. : ill. ; 28 cm. Bibliography: p. 57-59. (NAL Call No.: DNAL aS541.025).



# METEOROLOGY AND CLIMATOLOGY

0017

**Acid precipitation : an annotated bibliography / compiled by Denise A. Wiltshire and Margaret L. Evans.**

Wiltshire, Denise A. Evans, Margaret L. Alexandria, Va. Dept. of the Interior, U.S. Geological Survey Distribution Branch, Text Products Section, U.S. Geological Survey 1984. Includes indexes. iii, 282 p. ; 28 cm. -. (NAL Call No.: Z5862.2.A26W45).

0018

**Climatic change and streamflow in the Southwest /H.B. Osborn, L.J. Lane. -.**

Dsborn, Herbert Bradley, 1929. Lane, L. J. Flagstaff, Ariz. : Amer. Society of Civil Engineers, Irrigation and Drainage Div., 1984? . Cover title.~ "Work performed under the auspices of the US Department of Energy."~ "LA-UR--84-1415."~ "DE84 O12658."~ CDNF-840744--2. 10 leaves : ill., map ; 28 cm. Bibliography: leaves 7-8. (NAL Call No.: DNAL QC981.8.C507).

0019

**HIPLEX a cooperative program on rain augmentation in the High Plains /by A.S. Dennis ... et al. . -.**

Dennis, Arnett S. Denver, Colo. : U.S. Dept. of the Interior, Bureau of Reclamation, Division of Atmospheric Resources Research ; Springfield, Va. : Available from the N.T.I.S., 1984. Final report.~ "June 1984"--Cover. iv, 55 p. : ill., maps ; 28 cm. Bibliography: p. 41-55. (NAL Call No.: DNAL QC928.7.H5).

0020

**Probable maximum precipitation estimates, United States between the Continental Divide and the 103rd meridian /prepared by J.F. Miller ... et al. . -.**

Miller, J. F.\_1928. Silver Spring, Md. : U.S. Dept. of Commerce, National Oceanic and Atmospheric Administration, 1984. "March 1984.". xvi, 245 p. : ill., maps ; 28 cm. -. Bibliography: p. 225-228. (NAL Call No.: DNAL 157.991 H99 no.55).

0021

**Seasonal climate scenarios for Europe and North America in a high-CO2, warmer world /prepared by J.P. Palutikof, T.M.L. Wigley and J.M. Lough. -.**

Palutikof, J. P. Wigley, T. M. L.; Lough, J. M. Washington, D.C. : U.S. Dept. Energy, Office of Energy Research ; Springfield, Va. : Available from NTIS, 1984. "DOE/EV/10098-5."~ "TRO12."~ "August 1984."~ "Prepared for: United States Dept. of Energy, Office of Energy Research, Office of Basic Energy Sciences, Carbon Dioxide Research Division; under contract no.

DE-ACO2-79EV10098.". vi, 70 p. : ill., maps ; 28 cm. Bibliography: p. 68-70. (NAL Call No.: DNAL QC879.8.P36).

0022

**Statistical relationships between meteorological data stations and implications to diagnostic models in complex terrain /W.M. Porch, R. Lange, D.E. Bennett. -.**

Porch, W. M. Lange, R.; Bennett, D. E. Livermore, Calif. : Lawrence Livermore National Laboratory, University of California, 1984. Cover title.~ "Preprint."~ "This paper was prepared for presentation at the Third Conference on Mountain Meteorology, October 15-19, 1984, Portland, Oregon."~ "June 1984."~ CDNF-841059--2.~ "DE84 O14380"--P. 1 . 4 leaves : ill. ; 28 cm. Bibliography: leaf 4. (NAL Call No.: DNAL QC940.U5P6).

0023

**The Times Books world weather guide a city-by-city guide that will enable you to forecast the weather you can expect in any part of the world at any time of the year /by E.A. Pearce and C.G. Smith. -.**

Pearce, E. A. Smith, C. G.\_1921. New York : Times Books, c1984. Includes index. 480 p. : col. ill. ; 25 cm. Bibliography: p. 6. (NAL Call No.: DNAL QC982.P43).

0024

**Weather summaries for Coram Experimental Forest, northwestern Montana an international biosphere reserve /Roger D. Hungerford, Joyce A. Schlieter. -.**

Hungerford, Roger D. Schlieter, Joyce A. Ogden, UT : U.S. Dept. of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station, 1984. Cover title.~ Distributed to depository libraries in microfiche.~ "March 1984.". 34 p. : ill., 1 map ; 28 cm. -. Bibliography: p. 11. (NAL Call No.: DNAL aSD11.A48 no.160).

# HISTORY

0025

**Cotton fields no more Southern agriculture, 1865-1980 /Gilbert C. Fite. -.**  
Fite, Gilbert C. 1918. Lexington, Ky. : University Press of Kentucky, c1984. xiii, 121 p. 8 p. of plates : ill. ; 25 cm. Includes bibliographies and index. (NAL Call No.: DNAL HD1773.A5F58).

0026

**Cotton, the plant that would be king /by Bertha S. Dodge. -.**  
Dodge, Bertha Sanford, 1902. Austin : University of Texas Press, 1984. Includes index. ix, 175 p. : ill. ; 23 cm. Bibliography: p. 165-168. (NAL Call No.: DNAL HD9870.5.D63 1984).

0027

**Guide to the botanical records and papers in the archives of the Hunt Institute. 2.**  
Stieber, M.T. (comp.). Karg, A.L. (comp.). Pittsburgh, Pa. : Hunt Institute for Botanical Documentation, Carnegie-Mellon University. Huntia. Bibliography. Oct 1984. v. 5 (3). p. 127-210. (NAL Call No.: DNAL 450 H92).

0028

**Peppers the domesticated Capsicums /written and illustrated by Jean Andrews ; foreword by W. Hardy Eshbaugh. -.**  
Andrews, Jean. Austin : University of Texas Press, 1984. Includes index. xi, 170 p., 32 leaves of plates : ill. (some col.) ; 32 cm. Bibliography: p. 155 -166. (NAL Call No.: DNAL SB307.P4A53 1984).

0029

**Prehistory of Long Valley, Idaho /by Quentin Mark Arnold ; with an appendix on the Cabarton materials by Jerry Wylie. -.**  
Arnold, Quentin Mark. Ogden, Utah : USDA Forest Service, Intermountain Region, 1984 . xi, 148, 14 p. : ill., maps ; 28 cm. -. Bibliography: p. 144-148. (NAL Call No.: DNAL aE78.A145C9 no.10).



# EDUCATION AND TRAINING NOT EXTENSION

0030

**Black colleges and universities challenges for the future /edited by Antoine Garibaldi. -.**  
Garibaldi, Antoine. New York : Praeger, 1984.  
xiv, 299 p. ; 25 cm. Includes bibliographies and index. (NAL Call No.: DNAL LC2781.B43).

0031

**The impact of computer technology on agricultural economics education /Kerry K. Litzenberg, M. Edward Rister, Chris S. McIntosh. -.**  
Litzenberg, Kerry K. Rister, M. Edward; McIntosh, C. S. College Station, Tex. : Dept. of Agricultural Economics, Texas Agricultural Experiment Station, Texas A&M University System, 1984 . "August 1984.". 21 leaves : ill. ; 28 cm. -. Bibliography: leaves 15-16. (NAL Call No.: DNAL HD1775.T4T4 no.84-1 SP-5).

0032

**Profiles of U.S.A. forestry schools and consortia / based on the work of Richard T. Kelley ; funded by the U.S. Agency for International Development, Bureau for Science and Technology, Office of Forestry, Environment and Natural Resources through RSSA BST-5519-R-AG-2188 which is jointly managed by the USDA Office of International Cooperation and Development and the USDA Forest Service, Forestry Support Program.**  
Kelly, Richard T. & Profiles of USA forestry schools and consortia. Washington, D.C. The Agency USDA Forest Service (1984- ). At head of title: Forestry support system ~"January 1984. ~Includes index. 1 v. (loose-leaf) ; 28 cm. (NAL Call No.: SD250.5.P7).

# EXTENSION AND ADVISORY WORK NON U.S.

0033

**Annotated bibliography of selected extension publications, conservation tillage /by J.W. Bauder. -.**  
Bauder, J. W. Washington, D.C.? : Conservation Tillage Information Center ; Fort Wayne, Ind. (2010 Inwood Dr., Fort Wayne 46815) : Available from Conservation Tillage Information Center, 1984. Cover title: Cooperative extension publications on conservation tillage, an annotated bibliography.~ "A special project of the National Association of Conservation Districts."~ "This publication was produced as a cooperative effort of the Montana Cooperative Extension Service, the Minnesota Agricultural Extension Service, the Extension Service-USDA and the Conservation Tillage~ "July 1984.". 84 p. ; 28 cm. (NAL Call No.: DNAL Z5074.S65B37).

0034

**The Cooperative Extension Service a national assessment /Paul D. Warner and James A. Christenson. -.**  
Warner, Paul D. Christenson, James A. Boulder, Colo. : Westview Press, 1984. Includes index. xviii, 195 p. : ill., maps ; 24 cm. Bibliography: p. 149-156. (NAL Call No.: DNAL S544.W33).

0035

**Extension community leadership programs in the United States report of a survey on community leadership programs conducted by extension throughout the United States /prepared by the North Central Regional Interest Network on Community Leadership Programs. -.**  
Ames, Iowa : North Central Regional Center for Rural Development, Iowa State University of Science and Technology, 1984. "June 1984.". vi, 160 p. : forms ; 28 cm. Includes bibliographical references. (NAL Call No.: DNAL S544.E97).

0036

**Florida agricultural information retrieval system (FAIRS) design of a computerized consultation system for agricultural extension /Howard W. Beck, Jerry L. Stimac, Fred A. Johnson. -.**  
Beck, Howard W. Stimac, Jerry L.; Johnson, Fred A. Gainesville, Fla. : University of Florida, IFAS, 1984. Cover title.~ "June 20, 1984.". 20 p. : ill. ; 28 cm. Bibliography: p. 12-13. (NAL Call No.: DNAL S494.5.I47B43).

0037

**The Montana Cooperative Extension Service a history, 1893-1974 /by Merrill G. Burlingame and Edward J. Bell, Jr. -.**  
Burlingame, Merrill G. 1901. Bell, Edward J. Bozeman, Mont. : Montana State University, c1984. xvi, 365 p. : ill. ; 23 cm. Includes bibliographies and index. (NAL Call No.: DNAL S544.3.M9B87).

0038

**Partners in action community volunteers, Cooperative Extension agents : national projections / Sara M. Steele ... et al. . -.**  
Steele, Sara M.,\_1931. Madison, Wis. : Department of Continuing and Vocational Education, University of Wisconsin-Madison, 1984. Extension Repository Collection.~ Cover title.~ "Implications of volunteerism in Extension."~ Funding for the study was provided by USDA-ES and the University of Wisconsin. 9 p. : ill. ; 28 cm. Bibliography: p. 9. (NAL Call No.: DNAL S544.P3).

0039

**Publications (Missouri, Cooperative Extension Service).**  
Columbia, Mo. : University of Missouri. MP - University of Missouri Extension Division. Apr 1984. Bibliography. Apr 1984. (205,rev.). 27 p. (NAL Call No.: S81.A2M5).

# ADMINISTRATION

0040

**Report of the Committee on Agriculture, House of Representatives, together with minority views to the Committee on the Budget, pursuant to the Congressional Budget and Impoundment Control Act.**

United States ~ Congress ~ House ~ Committee on Agriculture. Washington (D.C.) U.S. G.P.O. 1984. At head of title: 98th Congress, 2d session, committee print. iii, 80 p. ; 24 cm. (NAL Call No.: S21.Z2A544 1984).

# LEGISLATION

0041

**Alternative agricultural and food policies and the 1985 Farm Bill /editors, Gordon C. Rausser, Kenneth R. Farrell. -.**

Rausser, Gordon Clyde, 1943-; Farrell, Kenneth R. Berkeley, Calif. : Giannini Foundation of Agricultural Economics, University of California ; Washington, D.C. : National Center for Food and Agricultural Policy, Resources for the Future, 1984? . Papers presented at a Conference sponsored by the Giannini Foundation of Agricultural Economics, University of California and Resources for the Future, Washington, D.C. held at the Shattuck Hotel, Ber. xix, 425 p. : ill. ; 24 cm. (NAL Call No.: DNAL KF1692.A75A4).

0042

**Long-term farm policy to succeed the Agriculture and Food Act of 1981hearings before the Committee on Agriculture, House of Representatives, Ninety-eighth Congress, second session. -.**

United States.~Congress.~House.~Committee on Agriculture. Washington, D.C. : U.S. G.P.O., 1984. Distributed to some depository libraries in microfiche.~ "Hearings before the Subcommittee on Departmental Operations, Research, and Foreign Agriculture of the Committee on Agriculture, House of Representatives"--T.p., pt. 5.~ "Hearings before the Subcommittee on Conservation, Credit, and Rural Development of the Committee on Agriculture, House of Representatives"--T.p., pt. 4.~ Pt. 5 has also special title: Research, extension, and teaching.~ Pt. 7 has subtitle: Peanut price support program, hearings before the Subcommittee on Tobacco and Peanuts of the Committee on Agriculture, House of Representatives, Ninety-eighth Congress, second sess~ Hearings held Feb. 28-<Oct. 8, 1984 >~ "Serial no. 98-70."~ Item 1010-A, 1010-B (microfiche). v. <1-8 > : ill. ; 24 cm. Includes bibliographies and indexes. (NAL Call No.: DNAL KF27.A3 1981b).

# ECONOMICS, DEVELOPMENT, RURAL SOCIOLOGY

0043

**Social, structural, and technological changes  
in agriculture, 1979 - March, 1984.**

Lassany, M.E. Beltsville, Md. : The Library.

Quick bibliography series - National

Agricultural Library. July 1984. Updates Quick

Bibliography no. 82-30 ~Bibliography. July

1984. (84-39). 29 p. (NAL Call No.: aZ5071.N3).



# ECONOMICS

- 0044  
**Agricultural sustainability in a changing world order /edited by Gordon K. Douglass. -.**  
Douglass, Gordon K.,\_1927. Boulder, Colo. : Westview Press, 1984. xiv, 282 p. : ill. ; 24 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL S523.A35).
- 0045  
**Bibliography on economic cooperation among developing countries, 1981-1982 with annotations /compiled and edited by Nada Verbic. -.**  
Verbic, Nada. Boulder : Westview Press, 1984. "Published in association with the Research Centre for Cooperation with Developing Countries (RCCDC), Ljubljana, Yugoslavia."~ Includes index. vii, 299 p. ; 23 cm. -. (NAL Call No.: DNAL Z7164.U5V47).
- 0046  
**The Caribbean Basin to the year 2000 demographic, economic, and resource-use trends in seventeen countries : a compendium of statistics and projections /by Norman A. Graham and Keith L. Edwards ; in association with James J. Emery ... et al. . -.**  
Graham, Norman A. Edwards, Keith L. Boulder : Westview Press, 1984. xv, 166 p. : ill. ; 23 cm. -. Includes bibliographical references. (NAL Call No.: DNAL HC151.G72).
- 0047  
**Economic implications of a delayed uniform planting date for cotton production in the Texas Rolling Plains /Sharif M. Masud ... et al. . -.**  
Masud, Sharif M. College Station, Tex. : Texas Agricultural Experiment Station, Texas A&M University System, 1984. "August 1984.". 33 p. : 1 map ; 28 cm. Bibliography: p. 25-26. (NAL Call No.: DNAL 100 T31S (1) no.1481).
- 0048  
**The economics of home solar water heating the geography of climate, fuel prices, and taxes /by Gene R. Heinze Fry. -.**  
Fry, Gene R. Heinze. Ithaca, N.Y. : Department of Agricultural Economics, Cornell University Agricultural Experiment Station, New York State College of Agriculture and Life Sciences, 1984. "July 1984.". vi, 134 p. : ill., maps ; 28 cm. -. Bibliography: p. 127-129. (NAL Call No.: DNAL 281.9 C81A no.84-12).
- 0049  
**Energy use for Midwest agriculture /Folke Dovring ; Department of Agricultural Economics, Agricultural Experiment Station, College of Agriculture, University of Illinois at Urbana-Champaign. -.**  
Dovring, Folke. Urbana, Ill. : The Station, 1984. Cover title.~ "August 1984.". 56 p. : ill., 1 map ; 28 cm. -. Bibliography: p. 53-56. (NAL Call No.: DNAL 281.9 IL62 no.194).
- 0050  
**Explaining labor market changes in the U.S. food sector /by David R. Lee. -.**  
Lee, David R. Ithaca, N.Y. : Dept. of Agricultural Economics, Cornell University Agricultural Experiment Station, New York State College of Agriculture and Life Sciences, 1984. Cover title.~ "August 1984.". 17 p. ; 28 cm. -. Bibliography: p. 16-17. (NAL Call No.: DNAL HD1407.C6 no.84-17).
- 0051  
**Multiplier effect of the agricultural sector on the general economy. -.**  
Washington, D.C. : U.S. General Accounting Office, Resources, Community, and Economic Development Division, 1984. Cover title.~ "April 17, 1984."~ GAO/RCED-84-56.~ B-214874. 4, 10 leaves ; 28 cm. Includes bibliographical references. (NAL Call No.: DNAL HD1761.M8).
- 0052  
**The Politics of agriculture in tropical Africa /Jonathan Barker, editor. -.**  
Barker, Jonathan,\_1938. Beverly Hills : Sage Publications, c1984. 320 p. ; 23 cm. -. Includes bibliographies. (NAL Call No.: DNAL HD2118.P64).
- 0053  
**Taxes and agriculture hearing before the Joint Economic Committee, Congress of the United States, Ninety-eighth Congress, second session, May 10, 1984. -.**  
United States.~Congress.~Joint Economic Committee. Washington, D.C. : U.S. G.P.O., 1984. Distributed to some depository libraries in microfiche. iii, 145 p. : ill. ; 24 cm. -. Includes bibliographies. (NAL Call No.: DNAL KF30.E2 1984a).

0054

**Technology and agricultural development in pre-war Japan /Penelope Francks. -.**  
 Francks, Penelope, 1949. New Haven : Yale University Press, 1984, c1983. Includes index. xiii, 322 p. : maps ; 24 cm. Bibliography: p. 306-314. (NAL Call No.: DNAL S471.J3F66).

0055

**Toward the next generation of farm policy a staff study /prepared for the use of the Joint Economic Committee and the Subcommittee on Agriculture and Transportation of the Joint Economic Committee, Congress of the United States. -.**  
 Washington, D.C. : U.S. G.P.D., 1984. Cover title.~ Distributed to some depository libraries in microfiche.~ "December 15, 1983.". vii, 87 p. ; 24 cm. -. Bibliography: p. 85-86. (NAL Call No.: DNAL HD1761.T62).

0056

**The value of conserving genetic resources /by Margery L. Oldfield. -.**  
 Oldfield, Margery L. Washington, D.C. : U.S. Dept. of the Interior, National Park Service : For sale by the Supt. of Docs., U.S. G.P.D., 1984. Includes index. xxii, 360 p. : ill., 1 map ; 24 cm. Bibliography: p. 310-311. (NAL Call No.: DNAL S494.3.D43).

0057

**Wool and mohairbackground for 1985 farm legislation. -.**  
 Washington, D.C. : U.S. Dept. of Agriculture, Economic Research Service, 1984. "September 1984"--P. iii. iv, 43 p. : ill. ; 28 cm. -. Bibliography: p. 32. (NAL Call No.: DNAL 1 Ag84Ab no.466).

0058

**Computer-aided land use and sic planning and management proceedings of the Second Symposium on Computer-Aided Land Use Planning and Management /Julius Gy. Fabos, Imre Petrasovits. -.**  
 Petrasovits, Imre.; Fabos, Julius Gy. Amherst : Massachusetts Agricultural Experiment Station, University of Massachusetts at Amherst, College of Food and Natural Resources, 1984. "July 1984."~ "Organized jointly by the University of Massachusetts and the University of Godollo, Hungary.". vi, 100 p. : ill. ; 23 cm. -. Includes bibliographical references. (NAL Call No.: DNAL 100 M38H no.693).

0059

**Establishing agricultural use values based on soil survey information and enterprise budgets /Glenn D. Pederson ... et al. -.**  
 Pederson, Glenn D. Fargo, N.D. : Dept. of Agricultural Economics, North Dakota Agricultural Experiment Station, North Dakota State University, 1984. Cover title.~ "May 1984.". ii, 41 p. : ill. ; 28 cm. -. Bibliography: p. 39-40. (NAL Call No.: DNAL 281.9 N814A no.186).

0060

**Land reform, American style /edited by Charles C. Geisler and Frank J. Popper. -.**  
 Geisler, Charles C.; Popper, Frank J. Totowa, N.J. : Rowman & Allanheld, 1984. x, 353 p. : ill. ; 24 cm. Includes bibliographies and index. (NAL Call No.: DNAL HD205.L35 1984).

0061

**Land use and forest resources in a changing environment the urban/forest interface /edited by Gordon A. Bradley. -.**  
 Bradley, G. A. Seattle : University of Washington Press, c1984. "Proceedings of the National Symposium on the Urban/Forest Interface: Land Use and Forest Resources in a Changing Environment, held at the University of Washington, October 27-29, 1982 ... sponsored by ...". xi, 222 p. : ill. ; 25 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL HD256.L36).

0062

**Land-use update for Suffolk and Norfolk counties with area statistics for 1951, 1971 and 1980 /William MacConnell... et al. -.**  
 MacConnell, William P. Amherst, Mass. : University of Massachusetts Agricultural Experiment Station, 1984. "December 1984."~ "A cooperative study supported by: Metropolitan Area Planning Council, Massachusetts Department of Public Works, Highway Administration and Urban Transportation Administration, U.S. Soil Conservation. 25, 67 p. : ill. ; 23 cm. -. Bibliography: p. 24. (NAL Call No.: DNAL 100 M38H (1) no.699).

0063

**Remaking Ibiaca rural life in Aragon under Franco /Susan Friend Harding. -.**  
 Harding, Susan Friend. Chapel Hill : University of North Carolina Press, c1984. Includes index. xvi, 221 p. : ill., maps ; 24 cm. Bibliography: p. 207-213. (NAL Call No.: DNAL HD1333.S712I243).

## ECONOMICS

- 0064  
**Second draft resource management plan and draft environmental impact statement for the Buffalo Resource Area, Casper District, Wyoming /prepared by Bureau of Land Management, Buffalo Resource Area and Casper District Office, Wyoming. -.**  
United States.~Bureau of Land Management.~Buffalo Resource Area. Buffalo, Wyo. : The Area, 1984. Cover title: Buffalo resource management plan : draft environmental impact statement.~ "August 1984."~ "July 1984"--V. 1, p. 4 of cover.~ Second v. consists of 16 folded col. maps in 8 pockets. 2 v. : ill., maps (some col.) ; 28 cm.  
Bibliography: v. 1, p. 341-343. (NAL Call No.: DNAL HD243.W8D42).
- 0065  
**Vanishing farmland a legal solution for the states /Sarah E. Redfield. -.**  
Redfield, Sarah E. Lexington, Mass. : Lexington Books, c1984. Includes index. xxii, 196 p. ; 24 cm. "Table of authorities": p. 175-196. (NAL Call No.: DNAL KF5700.R42).
- 0066  
**Agriculture and the environment /John M. Sweeten and Frank J. Humenik, co-editors. -.**  
Sweeten, John M.; Humenik, Frank J. St. Joseph, Mich. : American Society of Agricultural Engineers, c1984. Cover title: Agriculture and the environment: an examination of critical issues for food policy.~ "Public policies issues report developed by Environmental Quality Coordinating Committee (T-9) of the American Society of Agricultural Engineers.". xvi, 117 p. : ill. ; 24 cm. Includes bibliographies. (NAL Call No.: DNAL S441.A4).
- 0067  
**Barley -- background for 1985 farm legislation / prepared by the National Economics Division ; written by William Lin, Sam Evans, and Gregory Davenport with contributions from Bradley Karman in the International Economics Division. -.**  
Lin, William. Evans, John.; Davenport, Gregory.; Karman, Bradley. Washington, D.C. : USDA, ERS, 1984. Cover title.~ September 1984. iv, 40 p. : ill. ; 28 cm. -. Bibliography: p. 30. (NAL Call No.: DNAL 1 Ag84Ab no.477).
- 0068  
**Costs and rates of return for wine grape vineyards, 1984 / Daniel J. Kirpes and Raymond J. Folwell. -.**  
Kirpes, Daniel J. Folwell, Raymond J. Pullman, Wash. : Washington State University, 1984. Title from cover.~ "December 1984."~ "Replaces EB 1201"--Back cover. 49 p. ; 28 cm. -. Bibliography: p. 31. (NAL Call No.: DNAL 275.29 W27P no.1308).
- 0069  
**Dairy -- background for 1985 farm legislation / prepared by the National Economics Division ; written by Richard F. Fallert with contributions from James J. Miller and Lynn G. Sleight. -.**  
Fallert, Richard Francis, 1930. Miller, James J.; Sleight, Lynn G. Washington, D.C. : USDA, ERS, 1984. Cover title.~ September 1984. iv, 41 p. : ill., map ; 28 cm. -. Bibliography: p. 29-31. (NAL Call No.: DNAL 1 Ag84Ab no.474).
- 0070  
**The economics of the tobacco industry /Paul R. Johnson. -.**  
Johnson, Paul R. 1929. New York : Praeger, 1984. Includes index. xi, 157 p. : ill. ; 24 cm. -. Bibliography: p. 143-151. (NAL Call No.: DNAL HD9135.J63).
- 0071  
**The impact of OSHA and EPA regulation on productivity /Wayne B. Gray. -.**  
Gray, Wayne B. Cambridge, Mass. (1050 Massachusetts Avenue, Cambridge 02138) : National Bureau of Economic Research, 1984. "July 1984". 56, 4 p. : ill. ; 28 cm. -. Includes bibliographies. (NAL Call No.: DNAL HB1.A2N3 no.1405).
- 0072  
**Input-output multipliers for Oklahoma /Vorawoot Hirunruk, Dean F. Schreiner and Chaipant Pongtanakorn. -.**  
Hirunruk, Vorawoot. Schreiner, Dean F.; Pongtanakorn, Chaipant. Stillwater, Dkla. : Agricultural Experiment Station, Oklahoma State University, 1984. "October 1984.". 31 p. ; 28 cm. -. Bibliography: p. 27. (NAL Call No.: DNAL 100 Ok4M no.857).
- 0073  
**Oats -- background for 1985 farm legislation / prepared by the National Economics Division ; written by Mack Leath with contributions from William Lin. -.**  
Leath, Mack N., 1941. Lin, William. Washington, D.C. : USDA, ERS, 1984. Cover title.~ September 1984. iv, 30 p. : ill., map ; 28 cm. -. Bibliography: p. 20. (NAL Call No.: DNAL 1 Ag84Ab no.473).



0074

**Production economics theory with applications**

/John P. Doll, Frank Orazem. -.

Doll, John P. Orazem, Frank. New York : Wiley, c1984. ix, 470 p. : ill. ; 25 cm. Includes bibliographies and index. (NAL Call No.: DNAL HB241.D64 1984).

0075

**Sorghum -- background for 1985 farm legislation / prepared by the National Economics Division ; written by Keith Collins and William Lin with contributions from Gerald Rector . -.**

Collins, Keith. Lin, William.; Rector, Gerald. Washington, D.C. : USDA, ERS, 1984. Cover title.~ September 1984. iv, 48 p. : ill. ; 28 cm. -. Bibliography: p. 39. (NAL Call No.: DNAL 1 Ag84Ab no.475).

0076

**Soybeans -- background for 1985 farm legislation / prepared by the National Economics and International Economics Divisions ; written by Duane Hacklander and Walter Gardiner . -.**

Hacklander, Duane Donald, 1939. Gardiner, Walter. Washington, D.C. : USDA, ERS, 1984. Cover title.~ September 1984. iv, 34 p. : ill. ; 28 cm. -. Bibliography: p. 21. (NAL Call No.: DNAL 1 Ag84Ab no.472).

0077

**Sugar -- background for 1985 farm legislation / prepared by the National Economics Division ; written by Frederic L. Hoff with contributions from Robert Barry and Luigi Angelo and John Nuttall . -.**

Hoff, Frederic L. Barry, Robert.; Angelo, Luigi.; Nuttall, John. Washington, D.C. : USDA, ERS, 1984. Cover title.~ September 1984. iv, 54 p. : ill. ; 28 cm. -. Bibliography: p. 43-44. (NAL Call No.: DNAL 1 Ag84Ab no.478).

0078

**The United States poultry industry 1979-1984.**

Pisa, M.G. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Bibliography. Nov 1984. (85-05). 20 p. (NAL Call No.: DNAL aZ5071.N3).

# FARM ORGANIZATION AND MANAGEMENT

- 0079  
**Agricultural project management monitoring and control of implementation /Peter Smith. -.**  
Smith, Peter. London ; New York : Elsevier Applied Science Publishers, 1984. ix, 190 p. : ill. ; 23 cm. Includes bibliographies and index. (NAL Call No.: DNAL HD1428.S5).
- 0080  
**Black farmers in Mississippi and Tennessee sand clay hills /by Robert D. Munoz. -.**  
Munoz, Robert D. Mississippi State, Miss. : Economic Development Division, Economic Research Service, U.S.D.A., in cooperation with MAFES, 1984. "June 1984."~ Spiral spine. 23 leaves : ill., map ; 28 cm. -. Bibliography: leaves 22-23. (NAL Call No.: DNAL 100 M69Mr no.149).
- 0081  
**Changes in farm structure the United States and New York, 1930 - 1982 /by B.F. Stanton. -.**  
Stanton, B. F. Ithaca, N.Y. : Dept. of Agricultural Economics, Cornell University, Agricultural Experiment Station, New York State College of Agriculture and Life Sciences, 1984. "September 1984.". 35 p. : ill. ; 28 cm. -. Includes bibliographical references. (NAL Call No.: DNAL HD1407.C6 no.84-23).
- 0082  
**Characterization study of small farms in western Arkansas Logan and Yell Counties /Donald E. Voth ... et al. -.**  
Voth, Donald E. Fayetteville, Ark. : Agricultural Experiment Station, Division of Agriculture, University of Arkansas, 1984. "December 1984.". 48 p. ; 23 cm. -. Bibliography: p. 42-44. (NAL Call No.: DNAL 100 AR42 no.876).
- 0083  
**Costs and benefits of the Steuben County potato IPM program /Martin Meltzer. -.**  
Meltzer, Martin. Ithaca, N.Y. : Dept. of Agricultural Economics, Cornell University Agricultural Experiment Station, New York State College of Agriculture and Life Sciences, 1984. Cover title.~ "December 1984.". 22 p. : ill. ; 28 cm. -. Bibliography: p. 18. (NAL Call No.: DNAL HD1407.C6 no.84-29).
- 0084  
**Crop and livestock insurance 1970-1983.**  
Pisa, M.G. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Bibliography. Nov 1984. (85-03). 15 p. (NAL Call No.: DNAL aZ5071.N3).
- 0085  
**Crop yields and net income on prime farmland in New York /Nelson L. Bills, Ralph Heimlich, Sharon Stachowski. -.**  
Bills, Nelson L. Ithaca, N.Y. : Dept. of Agricultural Economics, Cornell University Agricultural Experiment Station, New York State College of Agriculture and Life Sciences, 1984. Cover title.~ "November 1984.". i, 30 p. ; 28 cm. -. Bibliography: p. 28-30. (NAL Call No.: DNAL 281.9 C81A no.84-21).
- 0086  
**Dairy management practices and New York dairy farm incomes, 1982 / C.A. Bratton.**  
Bratton, C. A. Ithaca, New York Dept. of Agricultural Economics, Cornell University Agricultural Experiment Station, New York College of Agriculture and Life Sciences 1984. "May 1984". ii, 50 p. ; 28 cm. -. (NAL Call No.: 281.9 C81A no.84-6).
- 0087  
**Decision making under risk on a vegetable farm in Massachusetts a case study /George Rizopoulos, P. Geoffrey Allen, Bernard J. Morzuch. -.**  
Rizopoulos, George, 1958. Allen, P. G. 1942-; Morzuch, Bernard J. Amherst : Massachusetts Agricultural Experiment Station, College of Food and Natural Resources, University of Massachusetts at Amherst, 1984. "July 1984.". v, 43 p. : ill. ; 23 cm. -. Bibliography: p. 35-36. (NAL Call No.: DNAL 100 M38H (1) no.695).
- 0088  
**Diverse beginnings agricultural economics 1880 - 1920 /by B.F. Stanton. -.**  
Stanton, B. F. Ithaca, N.Y. : Dept. of Agricultural Economics, Cornell University Agricultural Experiment Station, New York State College of Agriculture and Life Sciences, 1984. Cover title.~ "August 1984.". 13 p. ; 28 cm. -. Bibliography: p. 10-13. (NAL Call No.: DNAL HD1407.C6 no.84-18).

0089

**Economic aspects of losses in Agriculture.**  
Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Bibliography. June 1984. (84-40). 26 p. (NAL Call No.: DNAL aZ5071.N3).

0090

**Economic characteristics, needs, and opportunities for minority farms, small farms, and other farms in East Central Oklahoma /by Irving Russell, Luther Tweeten, and Cheryl Rogers.** -.  
Russell, Irving. Stillwater, Okla. : Agricultural Experiment Station, Oklahoma State University, 1984. "November 1984.". 46 p. ; 28 cm. -. Bibliography: p. 46. (NAL Call No.: DNAL 100 Ok4M no.860).

0091

**An empirical allocation of dairy farm partnership income to capital, labor, and management /by Loren Tauer.** -.  
Tauer, Loren. Ithaca, N.Y. : Dept. of Agricultural Economics, Cornell University Agricultural Experiment Station, New York State College of Agriculture and Life Sciences, 1984. Cover title.~ "June 1984.". 10 p. ; 28 cm. -. Bibliography: p. 10. (NAL Call No.: DNAL HD1407.C6 no.84-15).

0092

**Farm women in the United States : an updated literature review and annotated bibliography / Susan Bentley and Carolyn Sachs.**  
Bentley, Susan. University Park, Pa. Dept. of Agricultural Economics and Rural Sociology, Center for Rural Women, Agricultural Experiment Station, The Pennsylvania State University 1984. "May 1984". 76 p. ; 28 cm. -. Includes bibliographies. (NAL Call No.: 281.9 P38 no.174).

0093

**Farmer cooperative publications.** -.  
Washington, D.C. : U.S. Dept. of Agriculture, Agricultural Cooperative Service, 1984. Cover title. 57 p. ; 22 cm. -. (NAL Call No.: DNAL aHD1491.A1U56 no.4).

0094

**Financial policies and management of agricultural development banks /Carlos Pomareda.** -.  
Pomareda, Carlos. Boulder, Colo. : Westview Press, 1984. Includes index. xvii, 180 p. : ill. ; 23 cm. Bibliography: p. 157-164. (NAL Call No.: DNAL HG2051.D44P65).

0095

**Impact of the Tax system on productivity in small business and agriculture hearing before the Subcommittee on Oversight of the Internal Revenue Service of the Committee on Finance, United States Senate, Ninety-eighth Congress, second session, May 21, 1984.** -.  
United States.~Congress.~Senate.~Committee on Finance.~Subcommittee on Oversight of the Internal Revenue Service. Washington, D.C. : U.S. G.P.O., 1984. Distributed to some depository libraries in microfiche.~ Item 1038-A, 1038-B (microfiche). iii, 166 p. ill. ; 24 cm. -. Includes bibliographical references. (NAL Call No.: DNAL KF26.F56 1984).

0096

**Jobs for Americans the untapped potential for employing more people in America's largest industry /by Medard Gabel and Ellen Stoker Pahl.** -.  
Gabel, Medard. Pahl, Ellen Stoker. Emmaus, Pa. (33 E. Minor St., Emmaus, Pa. 18049) : Cornucopia Project, Rodale Press, 1984. "The Cornucopia Project of Rodale Press."--cover. i, 3, 42 p. : ill. ; 28 cm. Bibliography: p. 33-42. (NAL Call No.: DNAL HD1525.G3).

0097

**A linear programming analysis of several alternatives available to agricultural producers in the Texas Rio Grande Valley /Kerry K. Litzenberg, M. Edward Rister and Brady Edwards.** -.  
Litzenberg, Kerry K. Rister, M. Edward; Edwards, Brady. College Station, Tex. : Dept. of Agricultural Economics, Texas Agricultural Experiment Station, Texas A&M University System, 1984. "July 1984.". 74 leaves : ill., maps ; 28 cm. -. Bibliography: leaves 73-74. (NAL Call No.: DNAL HD1775.T4T4 no.84-1 SP-8).

0098

**A list of references related to small farms and family farms.**  
Reda, K.J. Burton, R.O. Jr. S.1. : The Station. Miscellaneous publication - West Virginia University, Agricultural and Forestry Experiment Station. Bibliography. June 1984. (12). 16 p. (NAL Call No.: DNAL S127.E2).

0099

**Long-term farm policy to succeed the Agriculture and Food Act of 1981 hearings before the Committee on Agriculture, House of Representatives, Ninety-eighth Congress, second session.** -.  
United States.~Congress.~House.~Committee on Agriculture. Washington, D.C. : U.S. G.P.O., 1984. Distributed to some depository libraries in microfiche.~ Includes index.~ "Serial no.



## FARM ORGANIZATION AND MANAGEMENT

98-70." v. : ill. ; 24 cm. Bibliography: pt. 1, p. 356. (NAL Call No.: DNAL KF27.A3 1984b).

### 0100

**One farm's experience using an on-farm microcomputer accounting program /by Caroline Nowak Rasmussen, Wayne A. Knoblauch. -.**  
Rasmussen, Caroline Nowak. Ithaca, N.Y. : Dept. of Agricultural Economics, Cornell University Agricultural Experiment Station, New York State College of Agriculture and Life Sciences, 1984. Cover title.~ "November 1984.". 19 p. ; 28 cm. -. Bibliography: p. 19. (NAL Call No.: DNAL HD1407.C6 no.84-26).

### 0101

**Pick-your-own farming cash crops for small acreages /Ralph L. Wampler and James E. Motes. -.**  
Wampler, Ralph L., 1929. Motes, James E., 1942. Norman : University of Oklahoma Press, c1984. Includes index. xii, 194 p. : ill. ; 24 cm. Bibliography: p. 181-192. (NAL Call No.: DNAL HD1476.U5W35).

### 0102

**Small farms, family and part-time farming in the United States.**  
MacLean, J. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Bibliography. July 1984. (84-48). 17 p. (NAL Call No.: DNAL aZ5071.N3).

### 0103

**The "whys" and "hows" of farm credit in agricultural financing, 1979-January 1984.**  
Lassanyi, M.E. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Apr 1984. Bibliography. Apr 1984. (84-30). 27 p. (NAL Call No.: aZ5071.N3).

### 0104

**Young farm operators and their families in the sand-clay hills of Mississippi-Tennessee /by John C. Crecink. -.**  
Crecink, John C. Mississippi State, Miss. : Mississippi State University, Mississippi Agricultural and Forestry Experiment Station, Department of Agricultural Economics, 1984. "March 1984.". 38 p. : map ; 28 cm. -. Bibliography: p. 37-38. (NAL Call No.: DNAL 100 M69Mr no.147).

# INTERNATIONAL DEVELOPMENT AID, AIMS, POLICIES, PROGRAMS

0105

Feeding the world's population developments in the decade following the World Food Conference of 1974 : report /prepared for the Committee on Foreign Affairs, U.S. House of Representatives by the Foreign Affairs and National Defense Division, Congressional Research Service, the Library of Congress. -. Washington, D.C. : U.S. G.P.O., 1984. At head of title: 98th Congress, 2d session. Committee print.~ Distributed to some depository libraries in microfiche.~ "October 1984.". xii, 779 p. : ill. ; 24 cm. Includes bibliographical references. (NAL Call No.: DNAL HD9000.5.F42).

0106

A major international dimension for U.S. colleges of agriculture an imperative /presented by E.T. York at the annual meeting of National Association of State Universities and Land Grant Colleges, Denver, Colorado, November 12, 1984. -. York, E. T. Washington, D.C.? : U.S. Dept. of Agriculture, Extension Service, 1984. 19 p. : 1 port. ; 22 cm. -. Bibliography: p. 19. (NAL Call No.: DNAL aHD1431.Y6).

0107

Evaluation and reauthorization of the Special Supplemental Food Program for Women, Infants, and Children WIC hearings before the Committee on Agriculture, Nutrition, and Forestry, United States Senate and the Subcommittee on Nutrition of the Committee on Agriculture, Nutrition, and Forestry, United States Senate, Ninety-eighth Congress, second session, March 15 and April 9, 1984. -. United States.~Congress.~Senate.~Committee on Agriculture, Nutrition, and Forestry. Washington, D.C. : U.S. G.P.O., 1984. Distributed to some depository libraries in microfiche.~ Item 1032-C, 1032-D (microfiche). iv, 178 p. : ill. ; 24 cm. -. Bibliography: p. 106. (NAL Call No.: DNAL KF26.A35 1984d).

0108

Hunger in the United States and related issueshearings before the Subcommittee on Domestic Marketing, Consumer Relations, and Nutrition of the Committee on Agriculture, House of Representatives, Ninety-eighth Congress, second session, March 2, 1984, Chicago, Ill., March 30, 1984, Miami, Fla. -. United States.~Congress.~House.~Committee on Agriculture.~Subcommittee on Domestic Marketing, Consumer Relations, and Nutrition. Washington, D.C. : U.S. G.P.O., 1984. Distributed to some depository libraries in microfiche.~ "Serial no. 98-63."~ Item 1010-A, 1010-B (microfiche). iv, 344 p. : ill. ; 24 cm. Includes bibliographical references. (NAL Call No.: DNAL KF27.A3336 1984c).

0109

Oversight of Food and Nutrition Service programsfood stamps, child nutrition, and commodity distribution : hearing before the Committee on Agriculture, Nutrition, and Forestry, United States Senate, Ninety-eighth Congress, second session, April 25, 1984. -. United States.~Congress.~Senate.~Committee on Agriculture, Nutrition, and Forestry. Washington, D.C. : U.S. G.P.O., 1984. Distributed to some depository libraries in microfiche. iii, 66 p. : ill. ; 24 cm. -. Includes bibliographical references. (NAL Call No.: DNAL KF26.A35 1984b).

0110

Oversight of the food stamp programhearings before the Committee on Agriculture, Nutrition, and Forestry, United States Senate and the Subcommittee on Nutrition of the Committee on Agriculture, Nutrition, and Forestry, United States Senate, Ninety-eighth Congress, second session, March 19, 1984--Raleigh, N.C.; March 21, 1984--Washington, D.C.; April 30, 1984--Washington, D.C. -. United States.~Congress.~Senate.~Committee on Agriculture, Nutrition, and Forestry. Washington, D.C. : U.S. G.P.O., 1984. Distributed to some depository libraries in microfiche. v, 345 p. ; 24 cm. -. Includes bibliographical references. (NAL Call No.: DNAL KF26.A35 1984c).

0111

P.L. 480 concessional sales and food for development programs terms and conditions, planning and implementation procedures /by Lawrence D. Fuell. -. Fuell, Lawrence D. Washington, D.C. : United States Dept. of Agriculture, Foreign Agricultural Service, 1984. iii, 34 p. : ill. ; 28 cm. -. Bibliography: p. 34. (NAL Call No.: DNAL A281.9 Ag8F no.212).

0112

Participation behavior of the food stamp eligible households in four states /by Yong Hee Kim. -. Kim, Yong Hee, 1950. 1983, c1984. Thesis (Ph.D.)--Ohio State University, 1983. Photocopy of typescript. Ann Arbor: University Microfilms International, 1985. ix, 137 pages ; 21 cm. Bibliography: pages 87-91. (NAL Call No.: DNAL DISS 84-00,235).

# INTERNATIONAL DEVELOPMENT AID, AIMS, POLICIES, PROGRAMS

0113

Review of fiscal year 1985 budget for the Food and Nutrition Service, U.S. Department of Agriculture, the Hunger Relief Act of 1984, and related matters hearing before the Subcommittee on Domestic Marketing, Consumer Relations, and Nutrition of the Committee on Agriculture, House of Representatives, Ninety-eighth Congress, second session, on H.R. 5151, April 26, 1984. -.

United States.~Congress.~House.~Committee on Agriculture.~Subcommittee on Domestic Marketing, Consumer Relations, and Nutrition. Washington, D.C. : U.S. G.P.O., 1984.

Distributed to some depository libraries in microfiche.~ "Serial no. 98-69." iv, 343 p. : maps ; 24 cm. Includes bibliographical references. (NAL Call No.: DNAL KF27.A3336 1984b).

# COOPERATIVES

0114

**Advising people about cooperatives. -.**  
Kirkman, C. H. Washington, D.C.? : U.S. Dept. of Agriculture, Agricultural Cooperative Service, 1984. Cover title.~ Distributed to depository libraries in microfiche. iii, 39 p. ; 22 cm. -. Includes bibliographical references. (NAL Call No.: DNAL aHD1491.A1U56 no.29 1984).

0115

**International Cooperative, Inc. the evolution and dissolution of a potato processing cooperative /by Glenn D. Pederson and Donald F. Scott. -.**  
Pederson, Glenn D. Fargo, N.D. : Department of Agricultural Economics, North Dakota Agricultural Experiment Station, North Dakota State University, 1984. Cover title.~ "January 1984.". iii, 34 p. : ill. ; 28 cm. -. Bibliography: p. 34. (NAL Call No.: DNAL 281.9 N814A no.182).

0116

**Marketing operations of dairy cooperatives / Thomas H. Stafford and James B. Roof . -.**  
Stafford, Thomas H. Roof, James B. Washington, D.C.? : USDA, Agricultural Cooperative Service, 1984. Cover title.~ "July 1984.". v, 27, 13 p., 1 p. of plates : ill., maps ; 22 cm. -. Includes bibliographical references. (NAL Call No.: DNAL aHD1491.A1U542 no.40).

0117

**Merging cooperatives planning, negotiating, implementing / Bruce L. Swanson . -.**  
Swanson, Bruce L. Washington, D.C.? : U.S. Dept. of Agriculture, Agricultural Cooperative Service, 1984. Cover title.~ "January 1985"--Verso of cover. v, 38 p. ; 22 cm. - Bibliography: p. 38. (NAL Call No.: DNAL aHD1491.A1U542 no.43).



# RURAL SOCIOLOGY

0118

**Grassland, forest, and historical settlement an analysis of dynamics in northeast Missouri** /Michael J. O'Brien ; with contributions by Jacqueline A. Ferguson ... et al. . -.  
O'Brien, Michael J. 1950. Ferguson, Jacqueline A. Lincoln : University of Nebraska Press, c1984. Includes index. xxii, 345 p. : ill., maps ; 24 cm. -. Bibliography: p. 325 -338. (NAL Call No.: DNAL GF504.M8027).

0119

**Women's role in farming and agriculture.**  
Rafats, J. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Updates 83-05.~ Bibliography. Sept 1984. (84-64). 10 p. (NAL Call No.: DNAL aZ5071.N3).

0120

**Nonmetropolitan fiscal indicators: a review of the literature.**

Reeder, R.J. Washington, D.C. : The Service. Extract: Fiscal indicators are important to rural development because they identify the nature and severity of local government fiscal stress in nonmetropolitan areas. This report discusses the state of the art of rural fiscal indicators by comparing rural and urban indicator studies. Although they have certain fundamental characteristics in common, rural and urban studies emphasize different types of fiscal difficulties. Substantial data and statistical problems limit rural fiscal indicator research. Nevertheless, rural fiscal studies appear to be catching up to the level of urban fiscal indicator analysis. ERS staff report - United States Dept. of Agriculture, Economic Research Service. Jan 1984. Available from NTIS, order no. PB84-148527 ~Literature review. Jan 1984. (AGES830908). 53 p. Includes 126 references. (NAL Call No.: 916762(AGE)).

0121

**Room for manoeuvre an exploration of public policy planning in agricultural and rural development** /edited by E.J. Clay and B.B. Schaffer. -.

Clay, E. J.; Schaffer, B. B. Rutherford N.J. : Fairleigh Dickinson University Press, 1984. Includes index. viii, 209 p. : ill. ; 23 cm. Bibliography: p. 194 -202. (NAL Call No.: DNAL HD1417.R66).

0122

**Rural Development Reorganization Act of 1984 and the U.S. Department of Agriculture's rural development policy reporthearing before the Subcommittee on Conservation, Credit, and Rural Development of the Committee on Agriculture, House of Representatives, Ninety-eighth**

**Congress, second session, on H.R. 5024, May 16, 1984. -.**

United States.~Congress.~House.~Committee on Agriculture.~Subcommittee on Conservation, Credit, and Rural Development. Washington, D.C. : U.S. G.P.O., 1984. Distributed to some depository libraries in microfiche.~ "Serial no. 98-73.". iv, 270 p. : ill.; 24 cm. Includes bibliographical references. (NAL Call No.: DNAL KF27.A3226 1984h).

0123

**Studies on agrarian reform and rural poverty**

/M.R. El Ghonemy ... et al. . -.  
El Ghonemy, M. R. Rome : Food and Agriculture Organization of the United Nations, 1984. vii, 104 p. : ill. ; 23 cm. -. Includes bibliographies. (NAL Call No.: DNAL HD1333.5.S68).

0124

**Technical aid to the rural farm poor can it make economic sense?** /Eldon D. Smith, Harry H. Hall, Don Simon. -.

Smith, Eldon D. Lexington, Ky. : Dept. of Agricultural Economics, University of Kentucky, Agricultural Experiment Station, 1984. "February 1984.". 22, 1 p. ; 28 cm. -. Bibliography: p. 23 . (NAL Call No.: DNAL HD1775.K4K4 no.53).



# DISTRIBUTION AND MARKETING

0125

**Agricultural trade and international marketing of North Africa, 1970 - March, 1984.**  
Lassanyi, M.E. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. July 1984. Bibliography. July 1984. (84-38). 12 p. (NAL Call No.: aZ5071.N3).

0126

**Agricultural trade situation of the USSR.**  
Lassanyi, M.E. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Bibliography. Dec 1984. (85-12). 14 p. (NAL Call No.: DNAL aZ5071.N3).

0127

**Agricultural trade: the United States and Japan, 1979-1983.**  
Pisa, M.G. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. July 1984. Bibliography. July 1984. (84-51). 9 p. (NAL Call No.: aZ5071.N3).

0128

**The applesauce industry market analysis and strategic implications /Michael P. Uetz, Bruce L. Anderson, Edward W. McLaughlin. -**  
Uetz, Michael P. Ithaca, N.Y. : Dept. of Agricultural Economics, New York State College of Agriculture and Life Sciences, 1984. "November 1984.". v, 61 p. : map ; 28 cm. -. Bibliography: p. 59-61. (NAL Call No.: DNAL 281.9 C81A no.84-15).

0129

**Applications of chemical engineering in the forest products industry /N. Lawrence Ricker, editor. -**  
Ricker, N. Lawrence. New York : American Institute of Chemical Engineers, 1984. Selected papers and abstracts from the annual AIChE meeting in Los Angeles, Nov. 14-19, 1982. 117 p. : ill. ; 28 cm. -. Includes bibliographies. (NAL Call No.: DNAL TS802.A66).

0130

**Asymmetry in the retail pricing of major dairy products with implications for U.S. dairy policy /by Henry W. Kinnucan, and Olan D. Forker. -**  
Kinnucan, Henry W. Ithaca, N.Y. : Dept. of Agricultural Economics, Cornell University Agricultural Experiment Station, New York State College of Agriculture and Life Sciences, 1984. "May, 1984."~ Cover title. 25 p. ; 28 cm. -. Bibliography: p. 24-25. (NAL Call No.: DNAL HD1407.C6 no.84-14).

0131

**Cameroon an export market profile /Mary E. Burfisher. -**  
Burfisher, Mary E. Washington, D.C. : U.S. Dept. of Agriculture, Economic Research Service : The Supt. of Docs., U.S. G.P.O. distributor, 1984. Cover title.~ Distributed to depository libraries in microfiche.~ "In cooperation with the Foreign Agricultural Service."~ "September 1984"--P. 2 of cover.~ S/N 001-019-00349-0~ Item 42-B (microfiche). iv, 32 p. : ill., 1 map ; 28 cm. -. Bibliography: p. 29. (NAL Call No.: DNAL A281.9 Ag8F no.205).

0132

**The China trade: east-west agricultural connection.**  
Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Bibliography. July 1984. (84-46). 9 p. (NAL Call No.: DNAL aZ5071.N3).

0133

**The commodity futures market 1979-1983.**  
Pisa, M.G. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Apr 1984. Bibliography. Apr 1984. (84-25). 17 p. (NAL Call No.: aZ5071.N3).

0134

**Comparing monetary returns of marketing channels for red raspberries /Martha A. Kimball, Bernard J. Morzuch. -**  
Kimball, Martha A. 1957. Morzuch, Bernard J. Amherst : Massachusetts Agricultural Experiment Station, College of Food and Natural Resources, University of Massachusetts at Amherst, 1984. "July 1984.". 33 p. : ill. ; 23 cm. -. Includes bibliographical references. (NAL Call No.: DNAL 100 M38H (1) no.696).

0135

**Cottonbackground for 1985 farm legislation. -**  
Washington, D.C. : U.S. Dept. of Agriculture, Economic Research Service, 1984. "September 1984"--P. iii, iv, 46 p. : ill., 1 map ; 28 cm. -. Bibliography: p. 34-36. (NAL Call No.: DNAL 1 Ag84Ab no.476).

0136

**Current situations & prospects for Australian & New Zealand agricultural markets.**  
Lassanyi, M.E. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. May 1984. Bibliography. May 1984. (84-31). 13 p. (NAL Call No.: aZ5071.N3).

## DISTRIBUTION AND MARKETING

0137

**Development of short-term forecasting models for feeder pig prices /by Karl S. Wright, Travis D. Phillips, and Ying-Nan Lin. -.**  
Wright, Karl S.; Phillips, Travis D.; Lin, Ying-Nan. Mississippi State, Miss. : Mississippi State University, Mississippi Agricultural and Forestry Experiment Station, Dept. of Agricultural Economics, 1984. "January 1984.". vi, 97 leaves ; 28 cm. -. Bibliography: leaves 93-97. (NAL Call No.: DNAL 100 M69Mr no.145).

0138

**The Direct marketing handbook /Edward L. Nash, editor in chief. -.**  
Nash, Edward L. New York : McGraw-Hill, c1984. xxiii, 946 p. : ill. ; 24 cm. Includes bibliographical references and index. (NAL Call No.: DNAL HF5438.25.D57).

0139

**East-West agricultural trade.**  
Lassanyi, M. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Bibliography. Nov 1984. (85-02). 23 p. (NAL Call No.: DNAL aZ5071.N3).

0140

**Economics and management of food processing /W. Smith Greig. -.**  
Greig, W. Smith, 1925. Westport, Conn. : AVI Pub. Co., c1984. xi, 521 p. : ill. ; 24 cm. Includes bibliographies and index. (NAL Call No.: DNAL HD9005.G7247).

0141

**Evaluation of alternative market organizations for Hawaii's beef industry a study of the impact of size, location, and concentration /Michael Muench ... et al. -.**  
Muench, M. N. 1949. Honolulu, Hawaii : Hawaii Institute of Tropical Agriculture and Human Resources, College of Tropical Agriculture and Human Resources, University of Hawaii, 1984. Cover title.~ "April 1984.". ii, 41 p. ; 28 cm. -. Bibliography: p. 41. (NAL Call No.: DNAL S539.5.I52 no.013).

0142

**The evolution of U.S. agricultural trade policies and programs /by Alan J. Webb and David Blandford. -.**  
Webb, Alan J. Ithaca, N.Y. : Dept. of Agricultural Economics, Cornell University Agricultural Experiment Station, New York State College of Agriculture and Life Sciences, 1984. Cover title.~ "December 1984.". 27 p. : ill. ;

28 cm. -. Bibliography: p. 26-27. (NAL Call No.: DNAL HD1407.C6 no.84-30).

0143

**Factors affecting United States rice exports /by Makasiri Sangsiri and Earl A. Stennis. -.**  
Sangsiri, Makasiri. Stennis, Earl A. Mississippi State, Miss. : Mississippi State University, Mississippi Agricultural and Forestry Experiment Station, Department of Agricultural Economics, 1984. Spiral spine.~ Omission: Table of contents includes "List of tables", "List of figures", and "List of appendix tables" for which there are no pages.~ "August 1984.". 70 leaves ; 28 cm. -. Bibliography: p. 67-70. (NAL Call No.: DNAL 100 M69Mr no.152).

0144

**Federal marketing orders, 1970-1983.**  
Pisa, M.G. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. May 1984. Bibliography. May 1984. (84-34). 28 p. (NAL Call No.: aZ5071.N3).

0145

**Financial constraints to trade and growth the world debt crisis and its aftermath /Mathew D. Shane, David Stallings. -.**  
Shane, Mathew D. Stallings, David. Washington, D.C. : USDA, Economic Research Service : for sale by Supt. of Docs., 1984. Cover title.~ "December 1984.". v, 30 p. : ill. ; 28 cm. -. Bibliography: p. 29-30. (NAL Call No.: DNAL A281.9 Ag8F no.211).

0146

**Grain transportation 1977 - April, 1984.**  
Lassanyi, M.E. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. July 1984. Bibliography. July 1984. (84-45). 16 p. (NAL Call No.: aZ5071.N3).

0147

**Honeybackground for 1985 farm legislation. -.**  
Washington, D.C. : U.S. Dept. of Agriculture, Economic Research Service, 1984. "September 1984"--P. iii, iv, 30 p. : ill. ; 28 cm. -. Bibliography: p. 27-29. (NAL Call No.: DNAL 1 Ag84Ab no.465).



0148

**Improved food distribution facilities for central North Carolina /by Richard K. Overheim ... et al. -.**  
Overheim, Richard K. Washington, D.C. : U.S. Dept. of Agriculture, Agricultural Marketing Service, 1984. Distributed to depository libraries in microfiche.~ "November 1984"--T.p. verso. 68 p. : ill., 2 maps ; 28 cm. -. Includes bibliographical references. (NAL Call No.: DNAL 1 Ag84Mr no.1140).

0149

**Indian River citrus packinghouse location a dynamic programming approach /by Richard L. Kilmer and Thomas Spreen. -.**  
Kilmer, Richard L. Gainesville, Fla. : Agricultural Experiment Stations, Institute of Food and Agricultural Sciences, University of Florida, 1984. "October 1984.". iv, 36 p. : map ; 23 cm. -. Bibliography: p. 35-36. (NAL Call No.: DNAL 100 F66S(1) no.848).

0150

**International trade distortions harming U.S. agricultural exportshearing before the Committee on Foreign Relations, United States Senate, Ninety-eighth Congress, second session, June 26, 1984. -.**  
United States.~Congress.~Senate.~Committee on Foreign Relations. Washington, D.C. : U.S. G.P.O., 1984. Distributed to some depository libraries in microfiche. iii, 114 p. : ill ; 24 cm. (NAL Call No.: DNAL KF26.F6 1984).

0151

**Introduction to food engineering /R. Paul Singh, Dennis R. Heldman. -.**  
Singh, R. Paul. Heldman, Dennis R. Orlando : Academic Press, 1984. xii, 306 p. : ill. ; 23 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL TP370.S456).

0152

**Marketing cooperatives: organization, operation and management, 1979-1983.**  
Pisa, M.G. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Apr 1984. Bibliography. Apr 1984. (84-29). 27 p. (NAL Call No.: a25071.N3).

0153

**Peanutsbackground for 1985 farm legislation: -.**  
Washington, D.C. : U.S. Dept. of Agriculture, Economic Research Service, 1984. "September 1984"--P. iii. iv, 28 p. : 1 map ; 28 cm. -. Bibliography: p. 19. (NAL Call No.: DNAL 1 Ag84Ab no.469).

0154

**Prospects for beef cattle supply in the United States and the South /Barry W. Bobst and Joe T. Davis. -.**  
Bobst, Barry W. Lexington, Ky. : Department of Public Information, Kentucky Agricultural Experiment Station, University of Kentucky, 1984. "June 1984.". 40 p. : map ; 28 cm. -. Bibliography: p. 40. (NAL Call No.: DNAL 100 G29So no.304).

0155

**Review of commodity futures trading and its relationship to agricultural producershearing before the Subcommittee on Conservation, Credit, and Rural Development of the Committee on Agriculture, House of Representatives, Ninety-eighth Congress, second session, May 25, 1984. Wichita, KS. -.**  
United States.~Congress.~House.~Committee on Agriculture.~Subcommittee on Conservation, Credit, and Rural Development. Washington, D.C. : U.S. G.P.O., 1984. Distributed to some depository libraries in microfiche.~ "Serial no. 98-74."~ Item 1010-A, 1010-B (microfiche). iii, 116 p. : ill. ; 24 cm. Includes bibliographical references. (NAL Call No.: DNAL KF27.A3226 1984c).

0156

**Ricebackground for 1985 farm legislation. -.**  
Washington, D.C. : U.S. Dept. of Agriculture, Economic Research Service, 1984. "September 1984"--P. iii. iv, 46 p. : ill. ; 28 cm. -. Bibliography: p. 33. (NAL Call No.: DNAL 1 Ag84Ab no.470).

0157

**Shipping by piggyback a potential alternative for Florida produce transportation /Richard Beilock. -.**  
Beilock, Richard P. Gainesville Fla. : Agricultural Experiment Stations, Institute of Food and Agricultural Sciences, University of Florida, 1984. "January 1984.". 36 p. : ill. ; 23 cm. -. Bibliography: p. 35-36. (NAL Call No.: DNAL 100 F66S(1) no.839).

0158

**Sources of instability in the world wheat market /by Nancy E. Schwartz and David Blandford. -.**  
Schwartz, Nancy E. Ithaca, N.Y. : Dept. of Agricultural Economics, Cornell University Agricultural Experiment Station, New York State College of Agriculture and Life Sciences, 1984. Cover title.~ "August 1984.". 12 p. ; 28 cm. -. Bibliography: p. 12. (NAL Call No.: DNAL HD1407.C6 no.84-13).

## DISTRIBUTION AND MARKETING

0159

**Sources of recent changes in U.S. agricultural exports /John Dunmore, James Longmire. -.**  
Dunmore, John. Longmire, James. Washington, D.C. : U.S. Dept. of Agriculture, Economic Research Service, International Economics Division, 1984. Distributed to depository libraries in microfiche.~ "January 1984.". iv, 59 p. : ill. ; 28 cm. -. Bibliography: p. 47-48. (NAL Call No.: DNAL HD9005.D8).

0160

**South Dakota swine production and marketing recent trends and producer survey results /by Larry Janssen. -.**  
Janssen, Larry. Brookings, S.D. : Agricultural Experiment Station, South Dakota University, 1984? . Cover title. 35 p. : maps ; 28 cm. Bibliography: p. 34. (NAL Call No.: DNAL aHD9435.U53S8).

0161

**Taxation and pricing of agricultural and industrial goods /Raaj Kumar Sah, Joseph E. Stiglitz. -.**  
Sah, Raaj Kumar. Cambridge, Mass. (1050 Massachusetts Avenue, Cambridge 02138) : National Bureau of Economic Research, 1984. "April 1984.". 53, 4 p. ; 28 cm. -. Bibliography: p. 49-53. (NAL Call No.: DNAL HB1.A2N3 no.1338).

0162

**Tobaccobackground for 1985 farm legislation. -.**  
Washington, D.C. : U.S. Dept. of Agriculture, Economic Research Service, 1984. "September 1984"--P. iii, iv, 40 p. ; 28 cm. -. Bibliography: p. 31. (NAL Call No.: DNAL 1 Ag84Ab no.468).

0163

**Transportation costs and tariffs in international cotton trade /by Musa Pinar and Earl A. Stennis. -.**  
Pinar, Musa. Stennis, Earl A.,\_1940. Mississippi State, Miss. : Dept. of Agricultural Economics, Mississippi Agricultural and Forestry Experiment Station, 1984. "This report is based upon research done by Musa Pinar for a doctoral degree in agricultural economics." --- Intro. iii, 63 leaves ; 28 cm. -. Bibliography: leaves 57-63. (NAL Call No.: DNAL 100 M69Mr no.151).

0164

**Urner Barry shell egg quotes how good are they? /by William Lesser, Marc Warman. -.**  
Lesser, William. Ithaca, N.Y. : Dept. of Agricultural Economics, Cornell University Agricultural Experiment Station, New York State College of Agriculture and Life Sciences, 1984. Cover title.~ "October 1984.". 17 p. ; 28 cm. -. Bibliography: p. 16-17. (NAL Call No.: DNAL HD1407.C6 no.84-25).

0165

**Wheatbackground for 1985 farm legislation. -.**  
Washington, D.C. : U.S. Dept. of Agriculture, Economic Research Service, 1984. "September 1984"--P. iii, iv, 42 p. : ill. ; 28 cm. -. Bibliography: p. 31. (NAL Call No.: DNAL 1 Ag84Ab no.467).

0166

**World grain trade: implications for the future, 1979-1983.**  
Lassanyi, M.E. Beltsville, Md. : The Library. Quick bibliography series - National. Agricultural Library. Mar 1984. Updates 82-28 ~Bibliography. Mar 1984. (84-21). 28 p. (NAL Call No.: aZ5071.N3).

0167

**World trade in fruits and vegetables projections for an enlarged European Community /Alexander H. Sarris. -.**  
Sarris, Alexander. Washington, D.C. : U.S. Dept. of Agriculture, Economic Research Service, 1984. Cover title.~ "August 1984"--P. i, vi, 58 p. ; 28 cm. -. Bibliography: p. 48-49. (NAL Call No.: DNAL A281.9 Ag8F no.202).

0168

**Characteristics of consumer demand for bananas in Honolulu /by Frank S. Scott, Jr. and Teck C. Yeap. -.**  
Scott, Frank S. Yeap, Teck C.,\_1958. Honolulu, Hawaii : Hawaii Institute of Tropical Agriculture and Human Resources, University of Hawaii at Manoa, 1984. "July 1984."~ "630 US ISSN 0197-9310.". 42 p. : ill. ; 25 cm. -. Bibliography: p. 34. (NAL Call No.: DNAL S539.5.R43 no.031).

0169

**Characteristics of consumer demand for roasted macadamia nuts /by Frank S. Scott, Galal Osmann, Maurice Kanda. -.**  
Scott, Frank S. Osman, Galal,\_1938-; Kanda, Maurice,\_1955. Honolulu : Hawaii Institute of Tropical Agriculture and Human Resources, College of Tropical Agriculture and Human

Resources, University of Hawaii at Manoa, 1984.  
80 p. ; 26 cm. -. Bibliography: p. 62. (NAL  
Call No.: DNAL S539.5.R43 no.034).

0170

**Tobit analysis of factors affecting vegetable  
expenditure patterns in U.S. households /Oral  
Capps, Jr. and John McDonough Love. -.**  
Capps, Oral. Love, John McDonough. Blacksburg,  
Va. : Virginia Agricultural Experiment Station,  
Virginia Polytechnic Institute and State  
University, 1984. "July 1984.". viii, 70 p. :  
ill. ; 23 cm. -. Bibliography: p. 69-70. (NAL  
Call No.: DNAL S541.5.V8B8 no.84-4).



# PLANT SCIENCE

0171

**Bibliography of Edgar T. Wherry (Botanical literature).**

Wagner, W.H. Jr. Philadelphia, Pa. : Philadelphia Botanical Club. Bartonica. Mar 8, 1984. Bibliography. Mar 8, 1984. (49). p. 6-14. (NAL Call No.: 451 P532).

0172

**Bibliography of Illinois vegetation /Paul G. Risser. -.**

Risser, Paul G. Champaign, Ill. : State of Illinois, Dept. of Energy and Natural Resources, Natural History Survey Division, 1984. Cover title.~ "August 1984."~ Includes indexes. 51 p. : 2 maps ; 28 cm. -. (NAL Call No.: DNAL 442.9 IL62 no.121).

0173

**Color aerial photography in the plant sciences and related fields proceedings of the Ninth Biennial Workshop on Color Aerial Photography in the Plant Sciences, held in Orlando, Florida, and at University of Florida, Institute of Food & Agricultural Sciences, Citrus Research & Education Center, Lake Alfred, Florida, November 15-17, 1983 /sponsors, Florida Region, American Society of Photogrammetry and American Society of Photogrammetry. -.**

Falls Church, Va. : American Society of Photogrammetry, c1984. vii, 204 p. : ill. (some col.) ; 23 cm. Includes bibliographies. (NAL Call No.: DNAL S494.5.A25W67 1983).

0174

**Recent literature on hepatics and anthocerotetes. 101.**

Stotler, R.E. Crandall-Stotler, B. Carbondale, Ill. : American Bryological and Lichenological Society. The Bryologist. Spring 1984. Bibliography. v. 87 (1). p. 70-76. (NAL Call No.: 450 B84).

0175

**Recent literature on hepatics and anthocerotetes. 102.**

Stotler, R.E. Crandall-Stotler, B. Carbondale, Ill. : American Bryological and Lichenological Society. The Bryologist. Summer 1984. Bibliography. v. 87 (2). p. 169-174. (NAL Call No.: 450 B84).

0176

**Recent literature on hepatics and anthocerotetes. 103.**

BRYDAM. Stotler, R.E. Crandall-Stotler, B. Carbondale, Ill. : American Bryological and Lichenological Society. The Bryologist. Bibliography. Fall 1984. v. 87 (3). p. 266-272. (NAL Call No.: DNAL 450 B84).

0177

**Recent literature on hepatics and anthocerotetes. 104.**

BRYDAM. Stotler, R.E. Crandall-Stotler, B. Carbondale, Ill. : American Bryological and Lichenological Society. The Bryologist. Bibliography. Winter 1984. v. 87 (4). p. 374-378. (NAL Call No.: DNAL 450 B84).

0178

**Recent literature on lichens. 119.**

Egan, R.S. Carbondale, Ill. : American Bryological and Lichenological Society. The Bryologist. Spring 1984. Bibliography. v. 87 (1). p. 76-84. (NAL Call No.: 450 B84).

0179

**Recent literature on lichens. 120.**

BRYDAM. Egan, R.S. Carbondale, Ill. : American Bryological and Lichenological Society. The Bryologist. Bibliography. Fall 1984. v. 87 (3). p. 273-279. (NAL Call No.: DNAL 450 B84).

0180

**Recent literature on lichens. 121.**

BRYDAM. Egan, R.S. Carbondale, Ill. : American Bryological and Lichenological Society. The Bryologist. Bibliography. Winter 1984. v. 87 (4). p. 379-384. (NAL Call No.: DNAL 450 B84).

0181

**Recent literature on mosses. 128.**

Bauer, C.R. Crosby, M.R. Carbondale, Ill. : American Bryological and Lichenological Society. The Bryologist. Spring 1984. Bibliography. v. 87 (1). p. 84-90. (NAL Call No.: 450 B84).

0182

**Recent literature on mosses. 129.**

Bauer, C.R. Crosby, M.R. Carbondale, Ill. : American Bryological and Lichenological Society. The Bryologist. Summer 1984. Bibliography. v. 87 (2). p. 175-180. (NAL Call No.: 450 B84).

0183

**Recent literature on mosses. 130.**

BRYDAM. Bauer, C.R. Crosby, M.R. Carbondale, Ill. : American Bryological and Lichenological Society. The Bryologist. Bibliography. Fall 1984. v. 87 (3). p. 280-285. (NAL Call No.: DNAL 450 B84).

0184

**Reference plant collection of the Coweeta Hydrologic Laboratory, North Carolina /J. Dan Pittillo and Martha Lee. -.**

Pittillo, J. Dan. Lee, Martha. Asheville, N.C. (200 Weaver Blvd., Asheville 28804) Forest Experiment Station, U.S. Dept. of Agriculture, Forest Service, 1984. "September 1984." 34 p. ; 28 cm. -. Bibliography: p. 2-3. (NAL Call No.: DNAL aSD433.A53 no.29).

# PLANT PRODUCTION - GENERAL

0185

**CRC handbook of tropical food crops /editor, Franklin W. Martin. -.**  
Martin, Franklin W. Boca Raton, Fla. : CRC Press, c1984. 296 p. : ill. ; 26 cm. Includes bibliographies and index. (NAL Call No.: DNAL SB176.T76C73).

0186

**The cultivated hemlocks /John C. Swartley ; revised by Humphrey J. Welch ; technical editor, Theodore R. Dudley ; biographical essay about the author by Robert L. Fincham. -.**  
Swartley, John Clymer, 1907. Welch, H. J.; Dudley, T. R. 1936. Portland, Or. : Timber Press, 1984. 186 p. : ill. ; 28 cm.  
Bibliography: p. 183-186. (NAL Call No.: DNAL OK494.5.P66S83).

0187

**Double-cropping and interplanting, June 1982-December 1983.**  
MacLean, J.T. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Mar 1984. Updates 82-29 -Bibliography. Mar 1984. (84-18). 19 p. (NAL Call No.: aZ5071.N3).

0188

**Drought resistance--pathway to productivity, 1979-1983 (Crops).**  
Lassanyi, M.E. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Feb 1984. Bibliography. Feb 1984. (84-15). 31 p. (NAL Call No.: aZ5071.N3).

0189

**A review of crop requirements for potato production with emphasis in tropical and subtropical regions /by Luis A. Manrique. -.**  
Manrique, Luis A. 1948. Ithaca, N.Y. : Department of Agronomy, New York State College of Agriculture and Life Sciences, Cornell University, 1984. "May 1984.". 38 p. : ill. ; 28 cm. -. Bibliography: p. 26-38. (NAL Call No.: DNAL 281.8 C814 no.106).

0190

**Tissue culture, 1982-1984 (Plants, including trees).**  
Gilbert, H. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Aug 1984. Bibliography. Aug 1984. (84-57). 23 p. (NAL Call No.: aZ5071.N3).

0191

**Vegetation of the Cross Timbers Experimental Range, Payne County, Oklahoma /Anne L. Ewing, Jimmy F. Stritzke and James D. Kulbeth. -.**  
Ewing, Anne L. Stillwater, Okla. : Agricultural Experiment Station, Division of Agriculture, Oklahoma State University, 1984. "October 1984.". 40 p. : ill., maps ; 28 cm. -. Bibliography: p. 32-33. (NAL Call No.: DNAL 100 Ok4M no.856).

0192

**Annotated bibliography of Federal fruit and nut research in the Southeast, 1914-81 /by J. Wendell Snow. -.**  
Snow, J. Wendell. Beltsville, Md. : U.S. Dept. of Agriculture, Agricultural Research Service ; Springfield, Va. : National Technical Information Service, distributor, 1984. Distributed to depository libraries in microfiche.~ "September 1984."~ Includes author and subject indexes. 100 p. ; 28 cm. -. (NAL Call No.: DNAL aS21.R44A7 no.13).

0193

**Bonsai--miniature potted trees.**  
Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Bibliography. July 1984. (84-47). 6 p. (NAL Call No.: DNAL aZ5071.N3).

0194

**British and American gardens in the eighteenth century eighteen illustrated essays on garden history /edited by Robert P. Maccubbin and Peter Martin. -.**  
Maccubbin, Robert P.; Martin, Peter, 1940. Williamsburg, Va. : Colonial Williamsburg Foundation, c1984. "Published simultaneously as volume VIII, n.s., 2 of Eighteenth-century life by the College of William and Mary"--T.p. verso. 188 p., 92 p. of plates : ill. ; 24 cm. Includes bibliographies. (NAL Call No.: DNAL SB457.54.B75).

0195

**Chaparral--soils and management.**  
Keeley, J.E. (comp.). Davis, Calif. : The Center. Report - California Water Resources Center, University of California, Davis. June 1984. Bibliography. June 1984. (58). p. 72-91. (NAL Call No.: 292.9 C1282).



0196

**Costs and returns of irrigated multiple-crop production in the Georgia coastal plain, 1982** /by G. Scott Smith ... et al. -.  
Smith, G. Scott. Athens, Ga. : Department of Agricultural Economics, University of Georgia, 1984. Chiefly tables.~ Bibliography: p. 15. 123 leaves : map ; 28 cm. -. (NAL Call No.: DNAL HD1775.G4G42 no.84-2).

0197

**Cranberry production in the Pacific Northwest** /by Azmi Y. Shawa ... et al. -.  
Shawa, Azmi Y. Corvallis, Dr.? : Cooperative Extension of Washington State University, Oregon State University, University of Idaho and U.S. Dept. of Agriculture, 1984. "A Pacific Northwest Extension publication.". 50 p. : ill. (some col.) ; 28 cm. Bibliography: p. 49-50. (NAL Call No.: DNAL 275.29 W27Pn no.247).

0198

**Feasibility of potato production in Hawaii** /by Luis A. Manrique. -.  
Manrique, Luis A. 1948. Honolulu : HITAHR, College of Tropical Agriculture and Human Resources, University of Hawaii at Manoa, 1984. "January 1984.". 44 p. : ill. ; 26 cm. -. Bibliography: p. 42-44. (NAL Call No.: DNAL S539.5.R43 no.026a ).

0199

**Fruit crops, 1984a summary of research.** -.  
Wooster, Ohio : Ohio State University, Ohio Agricultural Research and Development Center, 1984. Cover title.~ "August 1984.". 71 p. : ill. ; 28 cm. -. Includes bibliographical references. (NAL Call No.: DNAL 100 Dh3R no.283 etc).

0200

**Fumigant development for killing insects on lettuce and other produce** /Ruth Lynn Hooper ... et al. -.  
Hooper, Ruth Lynn. Natick, Mass. : US Army Natick Research and Development Center, 1984. Final technical report 1 Oct. 80 - 30 Sept. 83.~ Contract No. D83-13.~ Report No. NATICK/TR-84/O46; AD A146661. v, 8 leaves ; 28 cm. Bibliography: leaf 6. (NAL Call No.: DNAL SB981.F8).

0201

**Herbs : an indexed bibliography, 1971-1980 : the scientific literature on selected herbs, and aromatic and medicinal plants of the Temperate Zone** / James E. Simon, Alena F. Chadwick, Lyle E. Craker.  
Simon, James E. Chadwick, Alena F.; Craker, Lyle E. Hamden, Conn. Archon Books 1984. Includes index. xviii, 770 p. ; 24 cm. (NAL Call No.: Z5996.H37S56).

0202

**Hydroponics/nutrient film technique, 1979-1984 (Mainly horticultural crop production methods).**  
Gilbert, H. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Aug 1984. Updates Quick Bibliography No. 83-31 ~Bibliography. Aug 1984. (84-56). 13 p. (NAL Call No.: aZ5071.N3).

0203

**Ikebana rare book collection located at the U.S. National Arboretum** /compiled by Alan Fusonie and Judith Ho. -.  
Fusonie, Alan. Ho, Judith. Beltsville, Md. : Special Collections, National Agricultural Library, 1984. iii, 9 leaves : ill. ; 28 cm. (NAL Call No.: DNAL aZ5996.F55F7).

0204

**Indoor gardening.**  
MacLean, J.T. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Bibliography. Dec 1984. (85-11). 10 p. (NAL Call No.: DNAL aZ5071.N3).

0205

**Instructions for phenological observations lilac and honeysuckle** /P.A. Dube, L.P. Perry and M.T. Vittum. -.  
Dube, P. A. Perry, Leonard P.; Vittum, M. T. Burlington, Vt. : Vermont Agricultural Experiment Station, 1984. 7 p. : ill. ; 26 cm. -. Bibliography: p. 7. (NAL Call No.: DNAL 100 V59 no.692).

0206

**Integrated crop managementintegrated orchard management manual.** -.  
Morgantown, W.Va. : West Virginia University, Cooperative Extension Service, Center for Extension and Continuing Education, 1984? . Integrated Pest Management Collection.~ Cover title. 1 v. (various pagings) : ill. (some col.), forms ; 30 cm. Includes bibliographical references. (NAL Call No.: DNAL SB950.I5433).

## PLANT PRODUCTION - GENERAL

0207

**Organic farming and gardening, 1979-1984.**  
MacLean, J.T. Beltsville, Md. : The Library.  
Quick bibliography series - National  
Agricultural Library. June 1984. Updates 83-40  
-Bibliography. June 1984. (84-42). 19 p. (NAL  
Call No.: aZ5071.N3).

0208

**Plants for profit a complete guide to growing  
and selling greenhouse crops /Francis X.  
Jozwik. -.**  
Jozwik, Francis X. Mills, Wyo. : Andmar Press,  
c1984. Includes index. x, 334 p. : ill., col.  
port. ; 24 cm. Bibliography: p. 325-326. (NAL  
Call No.: DNAL SB415.U69).

0209

**Postharvest biotechnology of vegetables  
/authors, D.K. Salunkhe, B.B. Desai. -.**  
Salunkhe, D. K. Desai, B. B., 1941. Boca Raton,  
Fla. : CRC Press, c1984. 2 v. : ill. ; 26 cm.  
Includes bibliographies and indexes. (NAL Call  
No.: DNAL SB324.85.S24).

0210

**Programing container-grown woody ornamental  
crops /by Vicky W. Crafton and Travis D.  
Phillips. -.**  
Crafton, Vicky W. Phillips, Travis D.  
Mississippi State, Miss. : Mississippi State  
University, Mississippi Agricultural and  
Forestry Experiment Station, Department of  
Agricultural Economics, 1984. 45 leaves : ill.  
; 23 cm. -. Bibliography: leaf 45. (NAL Call  
No.: DNAL 100 M69Mr no.155).

0211

**Quince (Cydonia oblonga) 1970-1985.**  
Lassanyi, M. Beltsville, Md. : The Library.  
Quick bibliography series - National  
Agricultural Library. Bibliography. Feb 1985.  
(85-22). 16 p. (NAL Call No.: DNAL aZ5071.N3).

0212

**Selected vegetable crops for production on  
small farms /Robert J. Precheur ... et al. -.**  
Precheur, Robert J. Amherst : Massachusetts  
Agricultural Experiment Station, College of  
Food and Natural Resources, University of  
Massachusetts at Amherst, 1984. "October  
1984." iv, 41 p. : ill. ; 23 cm. -. Includes  
bibliographical references. (NAL Call No.: DNAL  
100 M38H (1) no.697).

0213

**Shrublands in California: literature review and  
research needed for management: executive  
summary.**  
RUCCD. De Vries, J.J. ed. Davis, Calif. : The  
Center. Report - California Water Resources  
Center, University of California, Davis. July  
1984. (60). 15 p. ill. (NAL Call No.: DNAL  
292.9 C1282).

0214

**Turfgrass science and management /Robert D.  
Emmons. -.**  
Emmons, Robert D., 1945. Albany, N.Y. : Delmar  
Publishers, c1984. Includes index. xi, 451 p. :  
ill. ; 24 cm. Bibliography: p. 444-445. (NAL  
Call No.: DNAL SB433.E4).

0215

**Urban and community gardening.**  
Beltsville, Md. : The Library. Quick  
bibliography series - National Agricultural  
Library. Bibliography. May 1984. (84-37). 10 p.  
(NAL Call No.: DNAL aZ5071.N3).

0216

**The use of prices and other market information  
in the Michigan potato industry /by Ralph D.  
Christy, Marvin L. Klein, and James T. Bonnen.  
-.**  
Christy, Ralph D. East Lansing : Dept. of  
Agricultural Economics, Michigan State  
University, 1984. "December 1984." 71 p. :  
ill. ; 28 cm. -. Bibliography: p. 60-61. (NAL  
Call No.: DNAL 281.9 M5842 no.461).

0217

**Vegetable gardening.**  
Maclean, J.T. Beltsville, Md. : The Library.  
Quick bibliography series - National  
Agricultural Library. Updates 83-32.-  
Bibliography. June 1984. (84-43). 16 p. (NAL  
Call No.: DNAL aZ5071.N3).

0218

**Wild and exotic mushroom cultivation in North  
America a growers' and gourmets' guide to the  
new edible species /by Geraldine C. Kaye. -.**  
Kaye, Geraldine C. Cambridge, Mass., U.S.A. :  
Farlow Reference Library and Herbarium of  
Cryptogamic Botany, Harvard University, c1984.  
Includes indexes. 32 p. : ill. ; 23 cm.  
Bibliography: p. 4-13. (NAL Call No.: DNAL  
SB353.K39).

0219

Attitudes of grain producers and elevator managers toward electronic marketing of grain and transportation services /Larry D. Makus, James R. Russell, and Venugopal R. Pakanati. -. Makus, Larry D. Russell, James R.; Pakanati, Venugopal R. Stillwater, Okla. : Agricultural Experiment Station, Oklahoma State University, 1984. "November 1984.". 56 p. ; 28 cm. -. Bibliography: p. 25-26. (NAL Call No.: DNAL 100 Ok4M no.854).

0220

Attitudes of soybean producers and elevator managers toward electronic marketing of soybeans and transportation services /Robert L. Oehrtman, James R. Russell, and Verna Frakes. -. Oehrtman, Robert L. Russell, James R.; Frakes, Verna. Stillwater, Okla. : Agricultural Experiment Station, Oklahoma State University, 1984. "November 1984.". iii, 60 p. ; 28 cm. -. Bibliography: p. 30. (NAL Call No.: DNAL 100 Ok4M no.853).

0221

Attitudes of wheat producers and elevator managers toward electronic marketing of wheat and transportation services /Cindy J. Bradley, Kim B. Anderson, and James R. Russell. -. Bradley, Cindy J. Anderson, Kim B.; Russell, James R. Stillwater, Okla. : Agricultural Experiment Station, Oklahoma State University, 1984. "October 1984.". 61 p. ; 28 cm. -. Bibliography: p. 26-27. (NAL Call No.: DNAL 100 Ok4M no.852).

0222

The Brazilian soybean industry economic structure and policy interventions /Gary W. Williams, Robert L. Thompson. -. Williams, Gary W. Thompson, Robert L. Washington, D.C. : U.S. Dept. of Agriculture, Economic Research Service : for sale by Supt. of Docs., 1984. Cover title.~ "October 1984.". iv, 31 p. : ill. ; 28 cm. -. Bibliography: p. 30-31. (NAL Call No.: DNAL A281.9 Ag8F no.200).

0223

Corn producers and elevator managers attitudes toward a grain electronic market (GEM) /Daniel S. Tilley, Matthew C. Dickey, and James R. Russell. -. Tilley, Daniel S. Dickey, Matthew C.; Russell, James R. Stillwater, Okla. : Agricultural Experiment Station, Oklahoma State University, 1984. "September 1984.". 53 p. ; 28 cm. -. Bibliography: p. 22. (NAL Call No.: DNAL 100 Ok4M no.851).

0224

Development of new crops : needs, procedures, strategies, and options. Ames, Iowa Council for Agricultural Science and Technology 1984. "October 1984. ~Includes bibliographical references. 30 p. : ill. ; 28 cm. -. (NAL Call No.: S22.C6 no.102).

0225

Drip irrigation for cotton implications for farm profits /Paul Wilson, Harry Ayer, Gary Snider. -. Wilson, Paul N. Ayer, Harry Wright, 1942-; Snider, Gary. Washington, D.C. : U.S. Dept. of Agriculture, Economic Research Service in cooperation with University of Arizona Dept. of Agricultural Economics : Supt. of Docs., U.S. G.P.O. distributor ; Springfield, Va. : National Technical Information Service, Identification Section distributor, 1984. Cover title.~ Distributed to depository libraries in microfiche.~ "July 1984"--P. i. v, 29 p. : ill., 1 map ; 28 cm. -. Bibliography: p. 28-29. (NAL Call No.: DNAL A281.9 Ag8A no.517).

0226

Effects of government programs on corn, soybeans, and wheat production in the U.S. /Won W. Koo and James R. Lehman. -. Koo, Won W. Lehman, James R. Fargo, N.D. : Dept. of Agricultural Economics, North Dakota Agricultural Experiment Station, North Dakota State University, 1984. Cover title.~ "November 1984.". iv, 37 p. : ill. ; 28 cm. -. Bibliography: p. 34-37. (NAL Call No.: DNAL 281.9 N814A no.193).

0227

Evaluation of the 1982 corn objective yield validation survey /Fred B. Warren, Ronald J. Steele. -. Warren, Fred B. Steele, Ronald J. Washington, D.C. : USDA, Statistical Reporting Service, Statistical Research Div., 1984. Cover title.~ "August 1984.". iv, 13 p. ; 28 cm. -. Includes bibliographical references. (NAL Call No.: DNAL aSB191.M2W3).

0228

A finite element model of water uptake by soybean in a soil of limited root volume /by David E. Radcliffe. -. Radcliffe, David E. 1948. 1984. Thesis (Ph.D.)--University of Kentucky, 1984. Photocopy. Ann Arbor, Mich. : University Microfilms International, 1985. xi, 211 p. ; 21 cm. Bibliography: p. 203-210. (NAL Call No.: DNAL DISS 84-28,429).



## PLANT PRODUCTION - GENERAL

0229

**Fruits and seeds of genera in the subfamily Mimosoideae (Fabaceae) /by Charles R. Gunn. -** Gunn, Charles R., 1927. Washington, D.C.? : U.S. Dept. of Agriculture, ARS ; Springfield, Va. : for sale by NTIS, 1984. Issued December 1984.~ Includes index. v, 194 p. : ill. ; 28 cm. -. Bibliography:p. 186-189. (NAL Call No.: DNAL 1 Ag84Te no.1681).

0230

**Grain sorghum performance tests in the High Plains of Texas, 1983 /Dennis Pietsch ... et al. . -** Pietsch, Dennis. College Station, Tex. : Texas Agricultural Experiment Station, 1984 . "August 1984.". 48 p. : maps ; 28 cm. -. Bibliography: p. 3 of cover. (NAL Call No.: DNAL 100 T31M no.1564).

0231

**Integrated crop management field and forage crops. -** Morgantown, W.Va. : Cooperative Extension Service, Center for Extension and Continuing Education, West Virginia University, 1984? . Integrated Pest Management Collection.~ Cover title. 1 v. (various pagings) : ill. (some col.), forms ; 30 cm. Includes bibliographical references. (NAL Call No.: DNAL SB950.I543).

0232

**Optimal forage, production, harvesting, allocating, and feeding systems for grouped dairy herds /by Robert A. Milligan, Robert S. Ramsey. -** Milligan, Robert A. Ithaca, N.Y. : Dept. of Agricultural Economics, Cornell University Agricultural Experiment Station, New York State College of Agriculture and Life Sciences, 1984. Cover title.~ "August 1984.". 14 p. : ill. ; 28 cm. -. Bibliography: p. 13-14. (NAL Call No.: DNAL HD1407.C6 no.84-16).

0233

**Rail transportation in the grain market an overview /by Albert Myles and Albert J. Allen. -** Myles, Albert. Mississippi State, Miss. : Department of Agricultural Economics, Mississippi Agricultural and Forestry Experiment Station, Mississippi State University, 1984. "May 1984.". 51 leaves ; 28 cm. -. Bibliography: leaves 26 -27. (NAL Call No.: DNAL 100 M69Mr no.148).

0234

**Soybean response to irrigation of Mississippi River Delta soils /by Larry G. Heatherly. -** Heatherly, Larry G., 1946. Beltsville, Md. : U.S. Dept. of Agriculture, Agricultural Research Service ; Springfield, Va. : National Technical Information Service distributor , 1984. Distributed to depository libraries in microfiche.~ "December 1984.". 49 p. ; 28 cm. -. Bibliography: p. 48-49. (NAL Call No.: DNAL aS21.R44A7 no.18).

0235

**Usual planting and harvesting dates for U.S. field crops. -** Washington, D.C. : U.S. Dept. of Agriculture, Statistical Reporting Service : The Supt. of Docs., U.S. G.P.D. distributor , 1984. Cover title.~ "April 1984"--P. i.~ "Supersedes Agriculture Handbook No. 283, Usual planting and harvesting dates, by states, in principal producing areas, revised August 1972"--P. i. i, 77 p. : maps ; 28 cm. -. (NAL Call No.: DNAL 1 Ag84Ah no.628).

0236

**Wild rice production, prices and marketing /Elizabeth H. Winchell, Reynold P. Dahl. -** Winchell, Elizabeth H. Dahl, Reynold P. St. Paul, Minn. : Agricultural Experiment Station, University of Minnesota, 1984. 35 p. : ill., maps ; 28 cm. -. Includes bibliographical references. (NAL Call No.: DNAL S1.M52 no.29).

0237

**Developing strategies for rangeland management a report /prepared by the Committee on Developing Strategies for Rangeland Management, National Research Council/National Academy of Sciences. -** Boulder, Colo. : Westview Press, 1984. "In a two-year study, the National Academy of Sciences' Committee on Developing Strategies for Rangeland Management examined at length the scientific, political, economic, legal, and social issues arising.~ Funded by the Bureau of Land Management, U.S. Dept. of the Interior. xxi, 202 p. : ill., map ; 24 cm. -. Includes bibliographies. (NAL Call No.: DNAL SF85.3.D48).

0238

**Managing intermountain rangelands--research on the Benmore. Experimental Range, 1940-84 /Kirk A. Astroth, Neil C. Frischknecht. -** Astroth, Kirk A. Frischknecht, Neil C.,\_1918. Ogden, Utah : USDA, Forest Service, Intermountain Forest and Range Experiment Station, 1984. Cover title.~ "December 1984.". 44 p. : ill. ; 28 cm. -. Bibliography: p. 38-40. (NAL Call No.: DNAL aSD11.A48 no.175).



0239

**Managing Intermountain rangelands--salt-desert shrub ranges /James P. Blaisdell, Ralph C. Holmgren. -**  
Blaisdell, James P. Holmgren, Ralph C. Ogden, Utah : USDA, Forest Service, Intermountain Forest and Range Experiment Station, 1984. Cover title.~ "June 1984.". 52 p. : ill. (some col.), maps ; 28 cm. -. Bibliography: p. 49-52. (NAL Call No.: DNAL aSD11.A48 no.163).

0240

**Taylor Grazing Act in Nevada, 1934-1984. -**  
Shane, Maxine F. Washington, D.C.? : U.S. Dept. of the Interior, 1984?. Cover title.~ "BLMNVGI84017400" -- P. 20 . 19 p. : ill. ; 22 cm. Bibliography: p. 18-19 . (NAL Call No.: DNAL SF85.35.N3T3).

0241

**Ginseng.**  
Rafats, J. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Updates 81-03.~ Bibliography. Sept 1984. (84-65). 17 p. (NAL Call No.: DNAL aZ5071.N3).

0242

**Guayule.**  
Rafats, J. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Updates 83-07.~ Bibliography. Sept 1984. (84-63). 11 p. (NAL Call No.: DNAL aZ5071.N3).

0243

**Herbal bounty! the gentle art of herb culture /Steven Foster ; illustrated by D.D. Dowden ; foreword by Richard Evans Schultes ; preface by Shiu Ying Hu. -**  
Foster, Steven, 1957. Salt Lake City : G.M. Smith, 1984. Includes index. 192 p., 8 p. of plates : ill. (some col.) ; 14 x 21 cm. Bibliography: p. 179-185. (NAL Call No.: DNAL SB351.H5F627 1984).

0244

**Jojoba.**  
Gilbert, H. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Updates 83-30.~ Bibliography. Aug 1984. (84-55). 11 p. (NAL Call No.: DNAL aZ5071.N3).

0245

**Mushrooms in the garden /Hellmut Steineck. -**  
Steineck, Hellmut. Eureka, Calif. : Mad River Press, c1984. Translated from German.~ Includes index. 152 p. : ill. (some col.) ; 21 cm. Bibliography: p. 138-139. (NAL Call No.: DNAL SB353.S734 1984).

0246

**The supply response for rubber in Sri Lanka a preliminary analysis /Michael J. Hartley, Marc Nerlove, R. Kyle Peters, Jr. -**  
Hartley, Michael J., 1943. Nerlove, Marc, 1933-; Peters, R. Kyle, 1954. Washington, D.C. : World Bank, c1984. Summaries in French and Spanish. 82 p. : ill. ; 28 cm. -. Bibliography: p. 82. (NAL Call No.: DNAL HD9161.S752H37).

0247

**Use of tropical vegetables to improve diets in the Pacific Region /Stacy K. Evensen, Bluebell R. Standal. -**  
Evensen, Stacy K. 1954. Standal, Bluebell R. 1921. Honolulu : HITAHR, College of Tropical Agriculture and Human Resources, University of Hawaii, 1984. "June 1984.". 32 p. : form ; 26 cm. -. Bibliography: p. 18-19. (NAL Call No.: DNAL S539.5.R43 no.028).

# PLANT BREEDING

0248

**Cell culture and somatic cell genetics of plants /edited by Indra K. Vasil. -**  
Vasil, Indra K. Orlando, Fla. : Academic Press, 1984. v. : ill. ; 24 cm. Includes bibliographies and index. (NAL Call No.: DNAL QK725.C37).

0249

**Cellular and molecular biology of plant stress proceedings of the ARCO Plant Cell Research Institute-UCLA symposium held at Keystone, Colorado, April 15-21, 1984 /editors, Joe L. Key, Tsune Kosuge. -**  
Key, Joe L.; Kosuge, Tsune. New York : Alan R. Liss, 1984. xvii, 494 p. : ill. ; 24 cm. -. Includes bibliographical references and index. (NAL Call No.: DNAL QH506.U34 v.22).

0250

**Genetic engineering for crop plant improvement 1979-1984.**  
MacLean, J.T. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Bibliography. Dec 1984. (85-09). 17 p. (NAL Call No.: DNAL aZ5071.N3).

0251

**Levels-of-growing-stock cooperative study in Douglas-fir Report no. 7 Preliminary results, Stampede Creek, and some comparisons with Iron Creek and Hoskins /Richard L. Williamson and Robert O. Curtis. -**  
Williamson, Richard L. Portland, Or. : U.S. Dept. of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station, 1984. Report no. 7. Preliminary results, Stampede Creek, and some comparisons with Iron Creek and Hoskins. 42 p. : ill., map ; 28 cm. -. Bibliography: p. 20-21. (NAL Call No.: DNAL A99.9 F7625Uni no.323).

0252

**Molecular genetics of plants /edited by John G. Scandalios. -**  
Scandalios, John George. Orlando ; New York : Academic, 1984. x, 288 p. : ill. ; 24 cm. -. Includes bibliographical references and index. (NAL Call No.: DNAL 443.D39 v.22).

0253

**Recent soybean genetics and breeding publications.**  
Ames, Iowa : The Service. Soybean genetics newsletter - United States, Agricultural Research Service. Bibliography. Apr 1984. v. 11. p. 177-191. (NAL Call No.: DNAL aSB205.S7S6).

0254

**Tree improvement plan for Northeastern Area, State and Private Forestry, United States Department of Agriculture-Forest Service /prepared by Leroy C. Johnson, Ronald P. Overton. -**  
Johnson, Leroy C. Overton, Ronald P. Durham? NH : U.S. Dept. of Agriculture, Forest Service, Northeastern Area, 1984. On cover: State & private forestry: a cooperative effort.~ "August, 1984"-Cover. i, 71, 89 p. : ill. ; 28 cm. Bibliography: p. 65-70. (NAL Call No.: DNAL aSD399.5.U6).

# PLANT ECOLOGY

0255

**Agroecology the scientific basis of alternative agriculture /Miguel A. Altieri. -.**

Altieri, Miguel A. Berkeley, Calif. : Division of Biological Control, University of California, 1984. Includes index. xiii, 162 p. : ill. ; 26 cm. Bibliography: p. 141-156. (NAL Call No.: DNAL S589.7.A4 1984).

0256

**California grasslands (Ecology, animal ecology).**

Keeley, J.E. (comp.). Davis, Calif. : The Center. Report - California Water Resources Center, University of California, Davis. June 1984. Bibliography. June 1984. (58). p. 116-128. (NAL Call No.: 292.9 C1282).

0257

**Chaparral--animals.**

Keeley, J.E. (comp.). Davis, Calif. : The Center. Report - California Water Resources Center, University of California, Davis. June 1984. Bibliography. June 1984. (58). p. 93-101. (NAL Call No.: 292.9 C1282).

0258

**Chaparral--community structure.**

Keeley, J.E. (comp.). Davis, Calif. : The Center. Report - California Water Resources Center, University of California, Davis. June 1984. Bibliography. June 1984. (58). p. 19-31. (NAL Call No.: 292.9 C1282).

0259

**Chaparral--fire and demography.**

Keeley, J.E. (comp.). Davis, Calif. : The Center. Report - California Water Resources Center, University of California, Davis. June 1984. Bibliography. June 1984. (58). p. 32-52. (NAL Call No.: 292.9 C1282).

0260

**Common herbaceous plants of southern forest range /Harold E. Grelen and Ralph H. Hughes. -.**

Grelen, Harold E. Hughes, Ralph H. New Orleans, La. : United States Dept. of Agriculture, Forest Service, Southern Forest Experiment Station, 1984. Revision of Research paper SO-23 "Common plants of longleaf pine-bluestem ranges," 1966.~ Cover title.~ "November 1984."~ Includes index. ii, 147 p. : ill., map ; 28 cm. -. (NAL Call No.: DNAL A99.9 F7628Us no.210).

0261

**Coniferous forest habitat types of northern Utah /Ronald L. Mauk, Jan A. Henderson. -.**

Mauk, Ronald L. Henderson, Jan A. Ogden, Utah : U.S. Dept. of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station, 1984. Cover title.~ Distributed to depository libraries in microfiche.~ "July 1984." 89 p. : ill., 1 map ; 28 cm. -. Bibliography: p. 61-64. (NAL Call No.: DNAL aSD11.A48 no.170).

0262

**Effects of competing vegetation on forest trees a bibliography with abstracts /compilers:**

**Ronald E. Stewart, Larry L. Gross, Barbara H. Honkala. -.**

Stewart, Ronald Eugene, 1943. Gross, Larry L.; Honkala, Barbara H. Washington, D.C. : U.S. Forest Service, 1984. "September 1984."~ Includes index. 39, 11, 260 p. : ill. ; 28 cm. -. (NAL Call No.: DNAL aSD11.U52 no.43).

0263

**Natural hydrocarbon emission rate measurements from selected forest sites /by Brian K. Lamb ... et al. -.**

Lamb, Brian K.,\_1951. Research Triangle Park, N.C. : U.S. Environmental Protection Agency, Environmental Sciences Research Laboratory, 1984. "January 1984."~ "PB84-124981." x, 115 leaves : ill., maps ; 28 cm. -. Includes bibliographies. (NAL Call No.: DNAL TD1.E2 no.84-001).

0264

**A New ecology novel approaches to interactive systems /edited by Peter W. Price, C.N. Slobodchikoff, and William S. Gaud. -.**

Price, Peter W.,\_1938-; Slobodchikoff, C. N.; Gaud, William S.,\_1943. New York : Wiley, c1984. Based on a conference held at Northern Arizona University, Aug. 11-13, 1982.~ "A Wiley-Interscience publication." x, 515 p. : ill. ; 25 cm. Includes bibliographies and indexes. (NAL Call No.: DNAL QH540.N395).

0265

**Plants, people, and paleoecology biotic communities and aboriginal plant usage in Illinois /by Frances B. King. -.**

King, Frances B. Springfield, Ill. : Illinois State Museum, 1984. Includes index. ix, 224 p. : ill., maps ; 28 cm. -. Bibliography: p. 209-216. (NAL Call No.: DNAL QE720.K5).

## PLANT ECOLOGY

0266

Proceedings of the eighth North American Forest Biology Workshop Logan, Utah, July 30-August 1, 1984 /edited and compiled by Ronald M. Lanner ; co-sponsored by the Working Groups on Physiology and Genetics and Tree Improvement, Society of American Foresters, and Dept. of Forest Resources, College of Natural Resources, Utah State University. -.  
Lanner, Ronald M. Logan, Utah : Dept. of Forest Resources, Utah State University, 1984  
On cover: Eighth North American Forest Biology Workshop. ii, 196 p. : ill. ; 28 cm. Includes bibliographies and index. (NAL Call No.: DNAL SD118.N58 1984).

0267

A theory of forest dynamics the ecological implications of forest succession models /Herman H. Shugart. -.  
Shugart, H. H. New York : Springer-Verlag, c1984. Errata slip included.~ Includes index. xiv, 278 p. : ill. ; 25 cm. Bibliography: p. 235 -267. (NAL Call No.: DNAL QK938.F6S47).

0268

Timberline mountain and arctic forest frontiers /text by Stephen F. Arno ; art by Ramona P. Hammerly. -.  
Arno, Stephen F. Hammerly, Ramona P. Seattle : The Mountaineers, c1984. Includes index. 304 p. : ill., maps ; 22 cm. Bibliography: p. 285-300. (NAL Call No.: DNAL QK110.A76).

0269

Vegetation response to carbon dioxide research plan /prepared by Roger C. Dahlman. -.  
Dahlman, Roger C. Washington, D.C. : U.S. Dept. of Energy, Office of Energy Research ; Springfield, Va. : Available from NTIS, 1984. "DOE/ER-0187."~ "January 1984.". iii, 32 p. : ill. ; 28 cm. Bibliography: p. 23-24. (NAL Call No.: DNAL QK753.C3D3).



# PLANT STRUCTURE

0270

**Chaparral--morphology and physiology.**  
Keeley, J.E. (comp.). Davis, Calif. : The Center. Report - California Water Resources Center, University of California, Davis. June 1984. Bibliography. June 1984. (58). p. 53-71. (NAL Call No.: 292.9 C1282).

0271

**Contemporary problems in plant anatomy / edited by Richard A. White, William C. Dickinson.**  
White, Richard A.; (Richard Alan),; 1935-; Dickson, William C. Orlando Academic Press 1984. Papers from a plant anatomy symposium held at Duke University and the University of North Carolina at Chapel Hill in early 1983 ~Includes bibliographies and index. xii, 598 p. : ill. ; 24 cm. (NAL Call No.: QK640.3.C66).

0272

**Principal works on the pollen morphology of Myrtales.**  
Thanikaimoni, K. St. Louis, Mo. : The Garden. Annals of the Missouri Botanical Garden. Bibliography.~ Literature review. 1984. v. 71 (3). p. 970-985. (NAL Call No.: DNAL 451 M69).

0273

**Structure, function, and biosynthesis of plant cell walls proceedings of the Seventh Annual Symposium in Botany, January 12-14, 1984, University of California, Riverside /edited by W.M. Dugger and Salomon Bartnicki-Garcia. -.**  
Dugger, W. M.,\_1919-; Bartnicki-Garcia, S. Rockville, Md. : American Society of Plant Physiologists, c1984. Proceedings sponsored by the Dept. of Botany and Plant Sciences, University of California, Riverside, and other organizations. xiii, 507 p. : ill. ; 23 cm. Includes bibliographies and index. (NAL Call No.: DNAL QK725.S95 1984).

# PLANT NUTRITION

0274

**Growth responses of crop plants to fish soluble nutrients fertilization /L.H. Aung ... et al. .**

Aung, L. H. Blacksburg : College of Agriculture and Life Sciences, Virginia Agricultural Experiment Station, Virginia Polytechnic Institute and State University, 1984.

"VPI-SG-84-07.". xii, 80 p. : ill. ; 23 cm. -.

Bibliography: p. 77-80. (NAL Call No.: DNAL S541.5.V8B8 no.84-9).

# PLANT PHYSIOLOGY AND BIOCHEMISTRY

0275

**Allelopathy /Elroy L. Rice. -**  
Rice, Elroy L. 1917. Orlando : Academic Press, 1984. Includes index. xi, 422 p. : ill. ; 24 cm. -. Bibliography: p. 365-412. (NAL Call No.: DNAL QK911.R5 1984).

0276

**Bibliography, salt impacts on vegetation and soils technical report /NUS Corporation ; prepared for Office of Nuclear Waste Isolation, Battelle Memorial Institute. -**  
Columbus, Ohio : The Office ; Springfield, Va. : available from National Technical Information Service, 1984. "August 1984"~ "BMI/DNWI-544"~ "Distribution Category UC-70"~ Report prepared by NUS Corporation under subcontract with Battelle Project Management Division, Office of Nuclear Waste Isolation, under contract nos. DE-AC06-76RLD1830 and DE-AC02-83CH10140 with U.S. iii, 78 p. ; 28 cm. (NAL Call No.: DNAL Z5354.S35B5).

0277

**Bibliography (Seed biochemistry and physiology, pathology, identification of cultivars and species).**  
Kulik, M.M. (S.I.) : The Association. The Newsletter of the Association of Official Seed Analysts. Feb 1984. Bibliography. v. 58 (1). p. 70-88. (NAL Call No.: 61.9 AS7N).

0278

**Bibliography Seed biochemistry and physiology; seed pathology; anatomy, development and morphology .**  
ADSNA. Kulik, M.M. S.I. : The Association. The Newsletter of the Association of Official Seed Analysts. Bibliography. Sept 1984. v. 58 (3). p. 93-108. (NAL Call No.: DNAL 61.9 AS7N).

0279

**Bibliography (Seed biochemistry and physiology, seed pathology, seed anatomy and development).**  
Kulik, M.M. (S.I.) : The Association. The Newsletter of the Association of Official Seed Analysts. May 1984. Bibliography. v. 58 (2). p. 31-46. (NAL Call No.: 61.9 AS7N).

0280

**Biosynthesis of the photosynthetic apparatus molecular biology, development, and regulation : proceedings of a UCLA symposium held in Keystone, Colorado, April 21-26, 1983 /editors, J. Philip Thornber, L. Andrew Staehelin, Richard B. Hallick. -**  
Thornber, J. Philip.; Staehelin, L. Andrew.; Hallick, R. B. New York : A.R. Liss, c1984.

"Pages 1-224 of this volume are reprinted from the Journal of cellular biochemistry, volumes 22, 23, 24, and 25"--P. ix . xx, 405 p. : ill. ; 27 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL QK882.B45).

0281

**Chloroplasts /J. Kenneth Hooper. -**  
Hooper, J. Kenneth, 1938. New York : Plenum Press, c1984. x, 280 p. : ill. ; 27 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL QK725.H66).

0282

**Comparison of metabolic inhibitors, film-forming antitranspirants, and microjet irrigation for water use efficiency of rabbiteye blueberries /by Fouad M. Basiouny. -**  
Basiouny, Fouad Mohamed, 1933. Washington, D.C. : Office of Water Research, Bureau of Reclamation, U.S. Dept. of Interior, 1984. Cover title.~ "December, 1984."~ Grant no. 14-34-0001-0510.~ "PB85-204006.". vi, 62 leaves : ill. ; 28 cm. Bibliography: leaves 55-62. (NAL Call No.: DNAL QK710.2.B3).

0283

**The effects of vegetation conversion upon water use by riparian plant communities research project technical completion report /Lloyd W. Gay ; prepared for United States Department of the Interior. -**  
Gay, Lloyd W. 1933. Tucson, Ariz. : School of Renewable Natural Resources, University of Arizona, 1984. Partially funded by the U.S. Dept. of the Interior, as authorized under the Water Research and Development Act of 1978.~ "January 1984."~ Project B-084-ARIZ, agreement no. 14-34-0001-9146. vi, 60, 115 p. : ill. ; 28 cm. Includes bibliographies. (NAL Call No.: DNAL QK873.G28).

0284

**Isopentenoids in plants biochemistry and function /edited by W. David Nes, Glenn Fuller, Lee-Shin Tsai. -**  
Nes, W. David.; Fuller, Glenn, 1929-; Tsai, Lee-Shin, 1938. New York : M. Dekker, c1984. "The result of a Symposium on the Biochemistry and Function of Isopentenoids in Plants, held at the USDA Western Regional Research Center on March 22-24, 1982"--Pref. xiii, 596 p. : ill. ; 24 cm. Includes bibliographical references and index. (NAL Call No.: DNAL QK898.I76I76).

# PLANT PHYSIOLOGY AND BIOCHEMISTRY

0285

**Microbial growth on C1 compounds proceedings of the 4th International Symposium /editors, Ronald L. Crawford, R.S. Hanson. -.**  
Crawford, R. L., 1947-; Hanson, R. S. Washington, D.C. : American Society for Microbiology, 1984. Proceedings of the 4th International Symposium on Microbial Growth on One Carbon Compounds, held at the University of Minnesota, Minneapolis, Minn., Sept. 6-10, 1983. ix, 343 p. : ill. ; 27 cm. Includes bibliographies and indexes. (NAL Call No.: DNAL QR86.M52).

0286

**Nitrogen fixation in soybeans.**  
Maclean, J.T. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Updates 81-04.~ Bibliography. Dec 1984. (85-10). 17 p. (NAL Call No.: DNAL aZ5071.N3).

0287

**Phytochemical adaptations to stress /edited by Barbara N. Timmermann, Cornelius Steelink, and Frank A. Loewus. -.**  
Phytochemical Society of North America.~Meeting\_1983 :\_University of Arizona). Timmermann, Barbara N.; Steelink, Cornelius.; Loewus, Frank A., 1919. New York : Plenum Press, c1984. "Proceedings of the Annual Symposium of the Phytochemical Society of North America ... held July 5-8, 1983, at the University of Arizona, Tucson, Arizona"--T.p. verso. ix, 334 p. : ill. ; 24 cm. -. Includes bibliographies and indexes. (NAL Call No.: DNAL QK865.A1R4 v. 18).

0288

**Salinity tolerance in plants strategies for crop improvement /edited by Richard C. Staples, Gary H. Toenniessen. -.**  
Staples, Richard C.; Toenniessen, Gary H. New York : Wiley, c1984. "A Wiley-Interscience publication."~ Papers presented at an international conference held in Bellagio, Italy, sponsored by the Rockefeller Foundation. xv, 443 p. : ill. ; 25 cm. -. Includes bibliographies and indexes. (NAL Call No.: DNAL QK753.S3S24).

0289

**Seed germination and allelopathy--California.**  
Keeley, J.E. (comp.). Davis, Calif. : The Center. Report - California Water Resources Center, University of California, Davis. June 1984. Bibliography. June 1984. (58). p. 102-115. (NAL Call No.: 292.9 C1282).

0290

**A Selected bibliography of insect-vascular plant associational studies / compiled by John M. Kingsolver, Suzanne W.T. Batra, Joyce A. Utmar.**  
Kingsolver, John M.; (John Mark); 1925-; Batra, Suzanne W. T.; Utmar, Joyce A. (Washington, D.C.?) U.S. Dept. of Agriculture, Agricultural Research Service for sale by Supt. of Docs. Springfield, Va. available from NTIS 1984. "Issued May 1984". iii, 229 p. ; 22 cm. -. (NAL Call No.: aZ5076.A1U54 no.27).

0291

**Tissue culture in forestry and agriculture /edited by Randolph R. Henke ... et al. ; technical editor, Claire M. Wilson. -.**  
Henke, Randolph. New York : Plenum Press, c1985. "Proceedings of the Third Tennessee Symposium on Plant Cell and Tissue Culture ... held September 9-13, 1984, at the University of Tennessee, Knoxville, Tennessee"--T.p. verso. xviii, 390 p. : ill. ; 26 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL SB123.6.T46 1984).



# PLANT TAXONOMY AND GEOGRAPHY

0292

**Additional Iowa pteridophyte references (to the bibliography).**

Peck, J.H. Cedar Falls, Iowa : The Academy. The Proceedings of the Iowa Academy of Science. June 1984. Bibliography. v. 91 (2). p. 82-84. (NAL Call No.: 500 I093).

0293

**Additional notes on the Eriocaulaceae. XCV. (Paepalanthus spp., citations).**

Moldenke, H.N. Plainfield, N.J. : Harold N. and Alma L. Moldenke. Phytologia. Feb 1984. v. 55 (1). p. 44-55. (NAL Call No.: 450 P563).

0294

**Additional notes on the Eriocaulaceae. XCVI. (Paepalanthus spp., Philodice spp., Rondonanthus spp., Syngonanthus spp., identification, citations).**

Moldenke, H.N. Plainfield, N.J. : Harold N. and Alma L. Moldenke. Phytologia. Mar 1984. v. 55 (2). p. 57-108. (NAL Call No.: 450 P563).

0295

**Additional notes on the Eriocaulaceae. XCVII. (Syngonanthus spp., citations, identification).**

Moldenke, H.N. Plainfield, N.J. : Harold N. and Alma L. Moldenke. Phytologia. Apr 1984. v. 55 (3). p. 148-174. (NAL Call No.: 450 P563).

0296

**Additional notes on the Eriocaulaceae. XCVIII. (Syngonanthus spp., Tonina fluviatilis f. obtusifolia, Tonina fluviatilis f. parvifolia, Wurdackia flabelliformis, citations).**

Moldenke, H.N. Plainfield, N.J. : Harold N. and Alma L. Moldenke. Phytologia. May 1984. v. 55 (4). p. 257-276. (NAL Call No.: 450 P563).

0297

**Additional notes on the genus Cornutia. VII. (Cornutia australis var. ocidentalis, Cornutia coerulea, Cornutia grandifolia, citations).**

Moldenke, H.N. Plainfield, N.J. : Harold N. and Alma L. Moldenke. Phytologia. May 1984. v. 55 (4). p. 276-278. (NAL Call No.: 450 P563).

0298

**Additional notes on the genus Gmelina. I. (Citations and description).**

Moldenke, H.N. Plainfield, N.J. : Harold N. and Alma L. Moldenke. Phytologia. June 1984. v. 55 (6). p. 424-442. (NAL Call No.: 450 P563).

0299

**Additional notes on the genus Gmelina. II. (Citations, common and vernacular names, description, economic uses).**

Moldenke, H.N. Plainfield, N.J. : Harold N. and Alma L. Moldenke. Phytologia. June 1984. v. 55 (7). p. 460-499. (NAL Call No.: 450 P563).

0300

**Additional notes on the genus Gmelina. III. (Description, citations, includes medicinal uses).**

Moldenke, H.N. Plainfield, N.J. : Harold N. and Alma L. Moldenke. Phytologia. July 1984. v. 56 (1). p. 32-54. (NAL Call No.: 450 P563).

0301

**Additional notes on the genus Gmelina. IV. (Description, citations).**

Moldenke, H.N. Plainfield, N.J. : Harold N. and Alma L. Moldenke. Phytologia. Aug 1984. v. 56 (2). p. 102-126. ill. (NAL Call No.: 450 P563).

0302

**American Arctic lichens /John W. Thomson ; illustrations by Bethia Brehmer ; supplementary drawings by Lucy C. Taylor. -**

Thomson, John Walter, 1913. Brehmer, Bethia. New York : Columbia University Press, 1984. v. : ill. ; 26 cm. Includes bibliographies and index. (NAL Call No.: DNAL QK587.7.N67T5).

0303

**Arkansas ferns and fern allies /by W. Carl Taylor ; illustrated by Paul W. Nelson. -**

Taylor, W. Carl, 1946. Milwaukee, Wis. : Milwaukee Public Museum, c1984. Includes index. 262 p. : ill. ; 24 cm. Bibliography: p. 254-259. (NAL Call No.: DNAL QK525.5.A8T39).

0304

**Bibliography of introduced Ilex species and their infraspecific ranks.**

Eisenbeiss, G. Baltimore, Md. : Holly Society of America. Holly society journal. Bibliography. Spring 1984. v. 2 (2). p. 1-7. (NAL Call No.: DNAL QK495.I3H6).

0305

**A bibliography of numerical phenetic studies in systematic botany.**

Baum, B.R. Duncan, T.; Phillips, R.B. St. Louis, Mo. : The Garden. Annals of the Missouri Botanical Garden. Includes extensive tables of taxonomic groups.~ Bibliography. 1984. v. 71

## PLANT TAXONOMY AND GEOGRAPHY

(4). p. 1044-1060. (NAL Call No.: DNAL 451 M69).

0306

### Chaparral--evolution and systematics.

Keeley, J.E. (comp.). Davis, Calif. : The Center. Report - California Water Resources Center, University of California, Davis. June 1984. Bibliography. June 1984. (58). p. 1-18. (NAL Call No.: 292.9 C1282).

0307

### Classification and evaluation of forest sites in the Cumberland Mountains /Glendon W. Smalley. -.

Smalley, Glendon W. New Orleans, La. : U.S. Dept. of Agriculture, Forest Service, Southern Forest Experiment Station, 1984. Cover title.~ "October 1984.". ii, 84 p. : ill., maps ; 28 cm. -. Bibliography: p. 82-84. (NAL Call No.: DNAL aSD11.U57 no.50).

0308

### Eastern Washington range plants /Ben F. Roche, Jr. and Cindy Jo Talbott ; illustrated by Kappy Brun-Shindell, Cindy J. Talbott, Janet Zehm. -.

Roche, Ben. Pullman, Wash. : Cooperative Extension, College of Agriculture & Home Economics, Washington State University, 1984. Includes index. 62 p. : ill. ; 28 cm. -. Bibliography: p. 61-62. (NAL Call No.: DNAL 275.29 W27P no.1302).

0309

### A field guide to medicinal plants /Arnold and Connie Krochmal. -.

Krochmal, Arnold, 1919. Krochmal, Connie. New York : Times Books, 1984. Includes indexes. 274 p. : ill. ; 24 cm. Bibliography: p. 16-17. (NAL Call No.: DNAL QK99.U6K76 1984).

0310

### Flowers of the southwestern forests and woodlands /Teralene S. Foxx & Dorothy Hoard ; illustrations by Dorothy Hoard. -.

Foxx, Teralene S., 1939. Hoard, Dorothy. Los Alamos, N.M. : Los Alamos Historical Society, c1984. Includes indexes. iv, 210 p. : ill. ; 22 cm. Bibliography: p. 195. (NAL Call No.: DNAL QK142.F69).

0311

### Forest classification at high latitudes as an aid to regeneration proceedings of a fifth international workshop, August 15, 16, 17, 1983, Fairbanks, Alaska, U.S.A. /edited by Mayo Murray ; sponsored by the School of Agriculture and Land Resources, University of Alaska, Fairbanks ... et al. -.

Murray, Mayo. Portland, Or. : Pacific Northwest Forest and Range Experiment Station, USDA ; Fairbanks : School of Agriculture and Land Resources Management, University of Alaska, 1984. "December 1984.". 54 p. : ill., maps ; 28 cm. -. Includes bibliographies. (NAL Call No.: DNAL aSD11.A46 no.177).

0312

### Guide to the wetland plant communities of Fort McClellan, Alabama /by L.L. Gaddy ; performed for National Wetlands Inventory, Southeast Region, U.S. Fish and Wildlife Service, and U.S. Army Chemical and Military Police Centers. -.

Gaddy, L. L. Washington, D.C. : The Service ; Fort McClellan, Ala. : The Centers, 1984. Maps on p. 2 and 4 of cover. v, 59 p. : ill. (some col.), maps ; 20 cm. Includes bibliographical references and index. (NAL Call No.: DNAL QK938.M3G3).

0313

### Herbaceous plants of Maryland /By Melvin L. Brown and Russell G. Brown. -.

Brown, Melvin L. Brown, Russell G. College Park, Md. : For sale and distribution by The Book Center, University of Maryland, c1984. Illustrated with over 2250 labeled drawings plus 272 photographs in color and including information on the climate, soils, ecological habitats, and many plant associations of Maryland.~ Includes index. xlvii, 1127 p., 32 p. of plates : ill. (some col.), maps ; 26 cm. Bibliography: p. 1089-1090. (NAL Call No.: DNAL QK165.B7).

0314

### Insectivorous plants, 1970-1983 (Includes physiology).

Longenecker, W.H. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Apr 1984. Bibliography. Apr 1984. (84-27). 5 p. (NAL Call No.: aZ5071.N3).

0315

### An international census of the coniferae, I /compiled by John Silba. -.

Silba, John. Plainfield, N.J. : Moldenke, 1984. 79 p. ; 28 cm. -. Bibliography: p. 77-78. (NAL Call No.: DNAL QK3.P6 no.7).

0316

**New Mexico grasses a vegetative key /Carolyn M. Barnard, Loren D. Potter. -.**  
Barnard, Carolyn M., 1944. Potter, Loren D. Albuquerque : University of New Mexico Press, c1984. Includes index. ix, 157 p. : ill. ; 19 cm. Bibliography: p. 148-150. (NAL Call No.: DNAL QK495.G74B33 1984).

0317

**Notes on the genus Gmelina (Verbenaceae) (Citations, description).**

Moldenke, H.N. Plainfield, N.J. : Harold N. and Alma L. Moldenke. Phytologia. May 1984. v. 55 (5). p. 308-342 (continued). (NAL Call No.: 450 P563).

0318

**Olacaceae /by H.O. Sleumer. -.**

Sleumer, H. O. New York : Published for Organization for Flora Neotropica by the New York Botanical Garden, c1984. "Issued 15 May 1984."~ Includes indexes. 159 p. : ill. ; 26 cm. -. Bibliography: p. 139-141. (NAL Call No.: DNAL QK474.5.A1F5 no.38).

0319

**Sampling and identifying allergenic pollens and molds an illustrated manual for physicians and lab technicians /by E. Grant Smith. -.**

Smith, E. Grant. San Antonio, Tex. : Blewstone Press, 1984. Includes index. viii, 92 p. : col. ill. ; 28 cm. Bibliography: p. 78-79. (NAL Call No.: DNAL QK658.S6).

0320

**Silvical characteristics of Engelmann spruce /Robert R. Alexander and Wayne D. Shepperd. -.**

Alexander, Robert R. Shepperd, Wayne D. Fort Collins, Colo. : USDA, Forest Service, Rocky Mountain Forest and Range Experiment Station, 1984. "December 1984.". 38 p. : ill., map ; 28 cm. -. Bibliography: p. 15- 19 . (NAL Call No.: DNAL aSD11.A42 no.114).

0321

**A systematic study of Flourensia (Asteraceae, Heliantheae) /Michael O. Dillon. -.**

Dillon, Michael Owen, 1947. Chicago, Ill. : Field Museum of Natural History, 1984. Includes index of Latin and common names.~ Originally presented as the author's thesis (University of Texas at Austin) under the title: Systematic study of the genus Flourensia (Asteraceae, Heliantheae). iii, 66 p. : ill., maps ; 26 cm. -. Bibliography: p. 64-65. (NAL Call No.: DNAL QK3.F54 no.16).

0322

**Toxigenic Fusarium species, identity and mycotoxicology /W.F.O. Marasas, Paul E. Nelson, T.A. Toussoun. -.**

Marasas, Walter Friedrich Otto, 1941. Nelson, P. E.\_1927-; Toussoun, T. A.\_1925. University Park : Pennsylvania State University Press, c1984. Includes indexes. xxi, 328 p. ; 27 cm. Bibliography: p. 273 -310. (NAL Call No.: DNAL QK625.T8M37).

0323

**Trees of the Great Basin a natural history /Ronald M. Lanner ; drawings by Christine Rasmuss. -.**

Lanner, Ronald M. Rasmuss, Christine. Reno : University of Nevada Press, 1984. Includes index. xvi, 215, p., 40 p. of plates : ill. (some col.) ; 25 cm. -. Bibliography: p. 207-208. (NAL Call No.: DNAL QK484.G65L36).

0324

**The vascular plants of Louisiana an annotated checklist and bibliography of the vascular plants reported to grow without cultivation in Louisiana /D.T. MacRoberts. -.**

MacRoberts, D. T. Shreveport, La. : Museum of Life Sciences, Louisiana State University in Shreveport, 1984. Includes index. 165 p. : map ; 25 cm. -. Bibliography: p. 130-149. (NAL Call No.: DNAL QH1.B8 no.6).

0325

**Wildflowers of the Northern Great Plains /F.R. Vance, J.R. Jowsey, J.S. McLean. -.**

Vance, F. R. 1907. Jowsey, J. R.\_1925-; McLean, J. S.\_1940-; Vance, F. R.\_1907. Minneapolis : University of Minnesota Press, c1984. Rev. ed. of: Wildflowers across the prairies. 1977.~ Includes indexes. 336 p. : ill. (some col.) ; 23 cm. Bibliography: p. 319. (NAL Call No.: DNAL QK203.P7V36 1984).



# PROTECTION OF PLANTS

0326

**Integrated pest management for citrus.** -.  
Berkeley, Calif. : University of California  
Statewide Integrated Pest Management Project,  
Division of Agriculture and Natural Resources,  
1984. Spine title: IPM for citrus. 144 p. :  
ill. (some col.) ; 28 cm. -. Bibliography: p.  
143. (NAL Call No.: DNAL SB608.C5I48).

0327

**Research Planning Conference on Biological  
Control, March 20-22, 1984.** -.  
Washington, D.C.? : U.S. Dept. of  
Agriculture, Agricultural Research Service,  
1984. Cover title. vi, 473 p. ; 28 cm. Includes  
bibliographies. (NAL Call No.: DNAL aSB975.R38  
1984).

0328

**Pests not known to occur in the United States  
or of limited distribution.** -.  
Washington, D.C.? : U.S. Dept. of  
Agriculture, Animal and Plant Health Inspection  
Service, Plant and Protection Quarantine, 1984.  
"September 1984.". 1 v. (loose-leaf) : ill.,  
maps ; 30 cm. -. Includes bibliographies. (NAL  
Call No.: DNAL aSB599.A3U5 no.45).

0329

**Biology and temperature responses of *Chelonus  
kellieae* and *Chelonus phthorimaeae*  
(Hymenoptera: Braconidae) and their host, the  
potato tuberworm, *Phthorimaea operculella*  
(Lepidoptera: Gelechiidae) / Nelson R. Powers  
and Earl R. Oatman.** -.  
Powers, Nelson R. Berkeley, Calif. : University  
of California, Division of Agriculture and  
Natural Resources, 1984. "December 1984.". 32  
p. : ill. ; 26 cm. -. Bibliography: p. 31-32.  
(NAL Call No.: DNAL 100 C12H v.52 no.9).

0330

**Ecology of gall-forming Lepidoptera on  
*Tetradymia* I. Gall size and shape; II. Plant  
stress effects on infestation intensity; III.  
Within-plant horizontal and vertical  
distribution / Hollister Hartman.** -.  
Hartman, Hollister. Berkeley : California  
Agricultural Experiment Station, 1984.  
"February 1984.". 39 p. : ill., map ; 26 cm. -  
Includes bibliographies. (NAL Call No.: DNAL  
100 C12 v.52 no.3).

0331

**Economics of Douglas-fir tussock moth control  
an analysis using the combined stand  
prognosis/Douglas-fir tussock moth outbreak  
model and the FORPLAN linear programming model  
on the Clearwater and Malheur National Forests  
/ Wayne E. Bousfield ... et al.** -.  
Bousfield, W. E. Washington, D.C. : U.S. Dept.  
of Agriculture, Forest Service, Forest Pest  
Management, 1984. "March 1984.". viii, 36 p. :  
ill., 1 map ; 28 cm. Bibliography: p. 25-26.  
(NAL Call No.: DNAL aSB608.D6E23).

0332

**Gypsy moth control January 1979-January 1984  
(*Porthetria dispar*).**  
MacLean, J.T. Beltsville, Md. : The Library.  
Quick bibliography series - National  
Agricultural Library. Apr 1984. Updates and  
revises 83-23 ~Bibliography. Apr 1984. (84-26).  
22 p. (NAL Call No.: aZ5071.N3).

0333

**Integrated pest management for cotton in the  
western region of the United States / Western  
Regional Integrated Pest Management Project ...  
et al.** -.  
Oakland, Calif. : University of California,  
Division of Agriculture and Natural Resources,  
c1984. Spine title: IPM for cotton. ~ "Prepared  
by the IPM Manual Group"--P. 3. 144 p. : ill.  
(some col.) ; 28 cm. -. Bibliography: p.  
140-141. (NAL Call No.: DNAL SB608.C8I585).

0334

**Introduction to forest entomology a training  
manual for forest technicians / Douglas C.  
Allen, James E. Coufal.** -.  
Allen, Douglas C. Coufal, James E. Syracuse,  
N.Y. : Syracuse University Press, 1984. vii,  
152 p. : ill. ; 23 cm. Bibliography: p. 135.  
(NAL Call No.: DNAL SB761.A46 1984).

0335

**Proceedings--new and improved techniques for  
monitoring and evaluating spruce budworm  
populations, September 13-15, 1983, Holiday  
Inn, Burlington, VT / David G. Grimbale, Daniel  
R. Kucera, co-chairmen and workshop  
coordinators : prepared by U.S. Department of  
Agriculture, Forest Service, Northeastern  
Station ; sponsored by Vermont Department of  
Forests, Parks and Recreation ; USDA Forest  
Service, State and Private Forestry ;  
CANADA/United States Spruce Budworms R&D  
Program.** -.  
Grimble, David G.; Kucera, Daniel R. Broomall,  
Pa. : The Station, 1984. "February 1984.". iv,  
71 p. : ill., maps ; 28 cm. -. Includes  
bibliographies. (NAL Call No.: DNAL aSD11.U56  
no.88).



0336

**Spruce budworm-damaged timber and wood chips recommendations for use /Johanna M. Goldsmith and Bruce L. Parker. -.**

Goldsmith, Johanna M. Parker, Bruce L. Burlington, Vt. : Agricultural Experiment Station, 1984. "November 1984.". iv, 39 p. : ill. ; 28 cm. -. Bibliography: p. 24-39. (NAL Call No.: DNAL S541.5.V5R4 no.40).

0337

**Spruce budworms handbook spruce budworm parasites in Maine : a reference manual for collection and identification of common species / by David A. Tilles and Norman E. Woodley. -.**

Tilles, David A. Woodley, Norman E. Washington, D.C.? : USDA, Forest Service, Cooperative State Research Service, 1984. Cover title.~ "CANUSA, Canada/United States Spruce Budworms Program"--P.2. 35 p. : ill. ; 28 cm. -. (NAL Call No.: DNAL 1 Ag84Ah no.616).

0338

**Suppression and management of cabbage looper populations. -.**

Lingren, P. D.; Green, G. L. Washington, D.C.? : U.S. Dept. of Agriculture, Agricultural Research Service ; U.S. G.P.O., 1984. "Lingren, P.D. and G.L. Green, editors"--P. iii. iv, 150 p. : ill., maps ; 28 cm. -. Bibliography: p. 133-148. (NAL Call No.: DNAL 1 Ag84Te no.1684).

0339

**Studies on lesion nematodes and corn rootworms on corn /James D. Smolik. -.**

Smolik, James D. Beltsville, Md. : Agricultural Research Service, U.S. Dept. of Agriculture, 1984. Cover title.~ "Mimeo Report. Specific cooperative agreement no. 1-58-519B-O-0901, Agricultural Research Service, U.S. Department of Agriculture and the South Dakota Agricultural Experiment Station. National Agricul. 2, 19, 2 leaves ; 28 cm. Bibliography: leaf 18. (NAL Call No.: DNAL aSB608.M2S6).

0340

**Compendium of pea diseases /edited by Donald J. Hagedorn. -.**

Hagedorn, Donald J. St. Paul, Minn. : American Phytopathological Society in cooperation with Dept. of Plant Pathology, University of Wisconsin--Madison, 1984. iv, 57 p., 16 p. of plates : ill. (some col.) ; 28 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL SB608.P25C66).

0341

**Fundamentals of plant pathology /Daniel A. Roberts, Carl W. Boothroyd. -.**

Roberts, Daniel A. 1922. Boothroyd, Carl W. 1915. New York : W.H. Freeman and Co., c1984. Includes bibliographies and index. xvi, 432 p. : ill. ; 25 cm. (NAL Call No.: DNAL SB731.R56 1984).

0342

**Home vegetable garden disease, insect and weed control. -.**

East Lansing : Cooperative Extension Service, Michigan State University, 1984. "September 1984.". 51 p. ; 28 cm. -. (NAL Call No.: DNAL 275.29 M58B no.760(b) 1984).

0343

**Tropical plant diseases /H. David Thurston. -.**

Thurston, H. David 1927. St. Paul, Minn. : American Phytopathological Society, c1984. vii, 208 p. : ill. ; 28 cm. Includes bibliographies and indexes. (NAL Call No.: DNAL SB605.T7T59).

0344

**Annotated bibliography of oak wilt, 1943-80 /Paul A. Mistretta ... et al. -.**

Mistretta, Paul A. Washington, D.C.? : USDA, Forest Service, 1984. "December 1984."~ Includes index. iii, 132 p. ; 28 cm. -. (NAL Call No.: DNAL aSD11.U52 no.45).

0345

**Rice blast epidemiology /C.H. Kingsolver, T.H. Barksdale, M.A. Marchetti. -.**

Kingsolver, C. H. University Park, Pa. : Pennsylvania State University, College of Agriculture, Agricultural Experiment Station, 1984. Cover title.~ "September 1984.". 33 p. : ill. ; 28 cm. -. Bibliography: p. 26-27. (NAL Call No.: DNAL 100 P381 no.853).

0346

**Incidence and expression of cymbidium mosaic virus in dendrobium hybrids /Alan K. Okemura, Haruyuki Kamemoto, Mamoru Ishii. -.**

Okemura, Alan K., 1959. Kamemoto, Haruyuki.; Ishii, Mamoru, 1919. Honolulu : HITAHR, College of Tropical Agriculture and Human Resources, University of Hawaii at Manoa, 1984. "August 1984.". 12 p. : ill. ; 26 cm. -. Bibliography: p. 12. (NAL Call No.: DNAL S539.5.R43 no.033).

## PROTECTION OF PLANTS

0347

**Direct and indirect effects of acidic deposition on vegetation /edited by Rick A. Linthurst. -.**

Linthurst, Rick A. Boston : Butterworth, c1984. "An Ann Arbor Science book."~ Papers presented at a symposium on acid precipitation at the annual meeting of the American Chemical Society, Las Vegas, Nev., Mar. 1982. xv, 117 p. : ill. ; 25 cm. -. Includes bibliographical references and index. (NAL Call No.: DNAL QH545.A17D56).

0348

**Effects of acid precipitation on composition, electrokinetic behavior, cation adsorption and ion exchange capacity in various soil systems /Alan R. Bowers, principal investigator and Timothy Higgs. -.**

Bowers, Alan R. Higgs, Timothy. Knoxville, Tenn. : Tennessee Water Resources Research Center, University of Tennessee ; Springfield, Va. : Available from NTIS, 1984. Partially funded by the U.S. Dept. of the Interior, Geological Survey.~ "September, 1984."~ "Project number G870-03."~ "UT publication no. R01-2550-29-001-85."~ PB85-217727. iv, 82 leaves : ill., maps ; 28 cm. Bibliography: leaves 79-82. (NAL Call No.: DNAL QH545.A17B6).

0349

**Insect management for food storage and processing /edited by Fred J. Baur. -.**

Baur, Fred J. St. Paul, Minn. : American Association of Cereal Chemists, c1984. xiv, 384 p. : ill. ; 29 cm. Includes bibliographies. (NAL Call No.: DNAL SB937.I49).

# WEEDS

0350

**Aquatic weed control.**

MacLean, J.T. Beltsville, Md. : The Library.  
Quick bibliography series - National  
Agricultural Library. Updates 80-07.~  
Bibliography. Dec 1984. (85-07). 18 p. (NAL  
Call No.: DNAL aZ5071.N3).

0351

**Biological methods of weed control /Sara S.  
Rosenthal, Donald M. Maddox and Kathy Brunetti.**

-.  
Rosenthal, Sara S. Maddox, Donald M.; Brunetti,  
Kathy. Fresno, Calif. : Thomson Pub., 1984. 88  
p. : ill. ; 28 cm. -. Bibliography: p. 71-85.  
(NAL Call No.: DNAL SB611.5.R6).

0352

**Chemical weed control in dendrobium orchid /by  
Tadashi Higaki, Joanne Imamura, Roy K.  
Nishimoto. -.**

Higaki, Tadashi, 1935. Imamura, Joanne, 1954-;  
Nishimoto, Roy Katsuto, 1944. Honolulu :  
HITAHR, College of Tropical Agriculture and  
Human Resources, University of Hawaii at Manoa,  
1984. 8 p. ; 26 cm. -. Bibliography: p. 8. (NAL  
Call No.: DNAL S539.5.R43 no.037).

0353

**Integrated management of aquatic weeds final  
project report 1984. -.**

Gainesville, Fla. : Center for Aquatic Weeds,  
Institute of Food and Agricultural Sciences,  
University of Florida, 1984?. Summary report,  
USDA/SEA/ARS - University of Florida.~ Florida  
cooperative agreement (P-94)~ USDA-ARS no.  
58-7B30-O-177. 1 v. (various foliations) : ill.  
; 28 cm. Includes bibliographies. (NAL Call  
No.: DNAL SB614.I52).

0354

**Weed control study manual / prepared by Brian  
Pasic ... et al. . -.**

Pasic, Brian. Pullman, Wash. : Cooperative  
Extension, College of Agriculture & Home  
Economics, Washington State University, 1984.  
43 p. : ill. ; 28 cm. -. Bibliography: p. 36.  
(NAL Call No.: DNAL 275.29 W27Mi no.4750).

# PESTICIDES - GENERAL

0355

**CRC handbook of chromatography pesticides and related organic chemicals /editors, Joanne M. Follweiler, Joseph Sherma. -.**

Follweiler, Joanne M.; Sherma, Joseph. Boca Raton, Fla. : CRC Press, c1984. v. ; 27 cm. - Includes bibliographies and index. (NAL Call No.: DNAL SB960.C7).

0356

**EPA's pesticide registration activities hearing before a subcommittee of the Committee on Government Operations, House of Representatives, Ninety-eighth Congress, first session. -.**

United States.~Congress.~House.~Committee on Government Operations.~Environment, Energy, and Natural Resources Subcommittee. Washington, D.C. : U.S. G.P.O., 1984. "Ninety-eighth Congress, second session"--Pt. 2.~ Distributed to some depository libraries in microfiche.~ "September 26, 1983"--Pt. 1.~ "June 7, 1984"--Pt. 2. 2 v. : ill. ; 24 cm. Bibliography: pt. 1, p. 281-288. (NAL Call No.: DNAL KF27.G655 1984).

0357

**Estimation of parameters for modeling the behavior of selected pesticides and orthophosphate /edited by: P.S.C. Rao, V.E. Berkheiser, and L.T. Ou. -.**

Rao, P. S. C. Athens, Ga. : U.S. Environmental Protection Agency ; Springfield, Va. : available from NTIS, 1984. "January 1984."~ "PB84-148774."~ "EPA-600/3-84-019."~ "Grant No. R-805529.". xiv, 181 leaves : ill. ; 28 cm. - Bibliography: leaves 141-143. (NAL Call No.: DNAL TD1.E2 no.84-019).

0358

**Ethylene dibromide (EDB), 1970-1983.**

Pisa, M.G. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Mar 1984. Bibliography. Mar 1984. (84-20). 17 p. (NAL Call No.: aZ5071.N3).

0359

**Glossary of pesticide toxicology and related terms /by Naeem Eesa and L.K. Cutkomp. -.**

Eesa, Naeem. Cutkomp, L. K. Fresno, Calif. : Thomson Publications, c1984. 84 p. : ill. ; 28 cm. Bibliography: p. 79-84. (NAL Call No.: DNAL RA1270.P4E33).

0360

**Government regulation of the pesticide ethylene dibromide (EDB) joint hearings before certain subcommittees of the Committee on Government Operations, House of Representatives, Ninety-eighth Congress, second session, March 5 and 6, 1984. -.**

United States.~Congress.~House.~Committee on Government Operations. Washington, D.C. : U.S. G.P.O., 1984. Distributed to some depository libraries in microfiche. vii, 1403 p. : ill. ; 24 cm. Includes bibliographies. (NAL Call No.: DNAL KF27.G6 1984).

0361

**Harvest of unknowns pesticide contamination in imported foods /by Shelley A. Hearne. -.**

Hearne, Shelley A. New York, N.Y.? : Natural Resources Defense Council, c1984. 60, 20, viii p. : ill. ; 28 cm. Bibliography: p. i -viii. (NAL Call No.: DNAL TX571.P4H4).

0362

**Herbicide manual a guide to supervise pest management and to train O&M personnel /by Gary W. Hansen, Floyd E. Oliver, N.E. Otto. -.**

Hansen, Gary W. Oliver, Floyd E.; Otto, N. E. Denver, Colo. : U.S. Dept. of the Interior, Bureau of Reclamation : For sale by the Supt. of Docs., U.S. G.P.O. ; Denver, CO : Bureau of Reclamation, Engineering and Research Center distributor, 1984. xx, 346 p. : ill. (some col.) ; 24 cm. - Includes bibliographical references. (NAL Call No.: DNAL SB951.H26 1983).

0363

**Leaching evaluation of agricultural chemicals (LEACH) handbook /by J.D. Dean, P.P. Jowise, and A.S. Donigian, Jr. -.**

Dean, J. D. Jowise, P.P.; Donigian, Anthony S. Athens, Ga. : Environmental Research Laboratory, Office of Research and Development, U.S. Environmental Protection Agency ; Cincinnati, OH : Center for Environmental Research Information distributor, 1984. "Funded wholly or in part by the United States Environmental Protection Agency under contract no. 68-03-3116 to Anderson-Nichols & Co., Inc."--T.p. verso.~ Distributed to depository libraries in microfiche.~ "June 1984."~ "EPA-600/3-84-068.". ix, 407 p. : ill., maps ; 28 cm. - Bibliography: p. 69-71. (NAL Call No.: DNAL TD1.E2 no.84-068).



0364

**Literature references to chemical control of mosquitoes 1979-83.**

Sollers-Riedel, H. (comp.). Albany, N.Y. : American Mosquito Control Association. Mosquito news. June 1984. Bibliography. v. 44 (2,pt.1). p. 256-261. (NAL Call No.: 421 M85).

0365

**A literature review of paraquat toxicity.**

VHTOD. Onyeama, H.P. Oehme, F.W. Manhattan, Kan. : American Academy of Veterinary and Comparative Toxicology. Veterinary and human toxicology. Literature review. Dec 1984. v. 26 (6). p. 494-502. Includes 40 references. (NAL Call No.: DNAL SF601.A47).

0366

**Ornamental and turf pesticide applicator manual / compiled by O. Norman Nesheim . -.**

Nesheim, O. Norman. Stillwater : Cooperative Extension Service, Division of Agriculture, Oklahoma State University, 1984. 71 p. : ill. ; 28 cm. -. Bibliography: p. 71. (NAL Call No.: DNAL 275.29 Ok41C no.838 1984).

0367

**Paraquat and diquat. -.**

Geneva : World Health Organization, 1984. At head of title on cover: IPCS International Programme on Chemical Safety.~ Published under the joint sponsorship of the United Nations Environment Programme, the International Labour Organisation, and the World Health Organization. 181 p. : ill. ; 21 cm. -. Includes bibliographies. (NAL Call No.: DNAL RA565.A1E63 no.39).

0368

**Pesticide bibliographies / prepared by the Grocery Manufacturers of America, Inc.**

Bebee, Charles N. Washington, D.C. The Manufacturers (1984). Cover title ~GMA acknowledges Charles Bebee, U.S. National Agricultural Library for reviewing the bibliography and adding many references from the USDA data bases. 42 p. ; 28 cm. (NAL Call No.: Z5074.P4P4).

0369

**Pesticides in groundwater beneath the Central Sand Plain of Wisconsin /John M. Harkin ... et al. . -.**

Harkin, John M. Madison, Wis. : Water Resources Center, University of Wisconsin ; Springfield, Va. : available from NTIS, 1984. "Supported in part by the U.S. Dept. of the Interior, P.L. 95-467."~ "PB84-212372."~ Technical completion

report project number A-094-WIS"--p. i.a. viii, 46 leaves : ill., maps ; 28 cm. -. Bibliography: leaves 44-46. (NAL Call No.: DNAL TD427.P35P47).

0370

**Tabulations of selected methods of syntheses that are frequently employed for insect sex pheromones, emphasizing the literature of 1977-1982.**

Sonnet, P.E. New York : Springer-Verlag, c1984. Techniques in pheromone research / edited by Hans E. Hummel, Thomas A. Miller ... et al. . Literature review. p. 371-403. Includes references. (NAL Call No.: DNAL QL495.T43).

0371

**Utilization of chitin to control pesticide mobility /by Charles L. McCormick and Kenneth W. Anderson. -.**

McCormick, Charles L. Anderson, Kenneth W. Ocean Spring, Miss. : Mississippi-Alabama Sea Grant Consortium, 1984. "MASGP-82-039."~ "Final technical report."~ Grant NA81AA-D-00050. 31 p. : ill. ; 28 cm. Bibliography: p. 30-31. (NAL Call No.: DNAL QD321.M29).

# SOIL SCIENCE

0372

**Andosols /edited by Kim H. Tan. -.**

Tan, Kim H.\_1926. New York : Van Nostrand Reinhold, c1984. "A Hutchinson Ross Benchmark book."~ Includes index. xiii, 418 p. : ill., maps ; 26 cm. -. Bibliography: p. 399-405. (NAL Call No.: DNAL S592.17.V65A5).

0373

**Booker tropical soil manual a handbook for soil survey and agricultural land evaluation in the tropics and subtropics /edited by J.R. Landon. -.**

Landon, J. R.\_1947. London : Booker Agriculture International Ltd. ; New York : Longman, 1984. Includes indexes. xiv, 450 p. : ill. ; 31 cm. Bibliography: p. 411-434. (NAL Call No.: DNAL S599.9.T76B66).

# SOIL BIOLOGY

0374

**Dinitrogen fixation and actinorhizal plants /Stephen F. Zitzer and Carl L. Lane. -.**  
Zitzer, Stephen F. Clemson, S.C. : Clemson University, College of Forest and Recreation Resources, 1984. "January 1984.". ii, 32 p. ; 27 cm. -. Bibliography: p. 21-32. (NAL Call No.: DNAL SD144.S6C5 no.39).

0375

**Strontium sorption on Savannah River plant soils /Steve L. Hoeffner. -.**  
Hoeffner, Steve L. Aiken, S.C. : E.I. du Pont de Nemours & Co. ; Springfield, Va. : Available from National Technical Information Service, 1984. "DP-1694."~ "December 1984."~ "Prepared for the U.S. Dept. of Energy under contract DE AC09-76SR00001.". 27 p. : ill. ; 28 cm. Bibliography: p. 24-25. (NAL Call No.: DNAL S592.6.S85H6).

# SOIL CHEMISTRY AND PHYSICS

0376

**Effects of clay-water interactions on water retention in porous media /by Robert J. Lenhard. -.**

Lenhard, Robert J. 1984. Thesis (Ph.D.)--Oregon State University, 1984. Photocopy. Ann Arbor, Mich. : University Microfilms International, 1985. 145 pages ; 21 cm. Bibliography: pages 105-108. (NAL Call No.: DNAL DISS 84-18,166).

0377

**Geography of soil geochemistry of Missouri agricultural soils ; Geochemical classification by factor analysis of Missouri agricultural soils /by Ronald R. Tidball. -.**

Tidball, Ronald R. Washington, D.C. : U.S. G.P.O. ; Alexandria, VA : For sale by the Branch of Distribution, U.S. Geological Survey, 1984. iv, 54, 19 p. : ill., maps ; 29 cm. -. Includes bibliographies. (NAL Call No.: DNAL 407 G29Pr no.954-H,I).

0378

**Hydrologic characteristics of Nebraska soils /by Jack T. Dugan. -.**

Dugan, J. T. Washington, D.C. : U.S. Dept. of the Interior, Geological Survey ; Alexandria, VA : For sale by the Branch of Distribution, U.S. Geological Survey, 1984. iv, 19 p., 12 folded leaves of plates : ill. (some col.) ; 28 cm. -. Bibliography: p. 16. (NAL Call No.: DNAL 407 G29W no.2222).

0379

**Modeling physics and chemistry of contaminant transport in three-dimensional unsaturated groundwater flow / by R.M. Li ... et al. . -.**

Li, R. M. Fort Collins, Colo. : Simons, Li and Associates : Prepared for Bureau of Reclamation, 1984. "PB85-160653."~ Cover title.~ SBIR Phase I final report. vi, 71, 42 p. : ill. ; 28 cm. Bibliography: p. 69-71. (NAL Call No.: DNAL TC176.L5).

0380

**Parameter estimation in the vadose zone /by M.E. Campana, R.L. Boone. -.**

Campana, M. E. Boone, R. L. Reno, Nev. : Water Resources Center, Desert Research Institute, University of Nevada System, 1984. Partially funded by U.S. Dept. of Interior, Office of Water Research and Technology, project C-00184-T, grant 14-34-0001-0476 and the Bureau of Reclamation.~ "March 1984.". vii, 55 p. : ill. ; 28 cm. -. Bibliography: p. 51-55. (NAL Call No.: DNAL GB1197.6.C18).

0381

**Podzols /edited by Peter Buurman. -.**

Buurman, Peter. New York : Van Nostrand Reinhold, c1984. Some papers in French. xiv, 450 p. : ill. ; 26 cm. -. Includes bibliographies and indexes. (NAL Call No.: DNAL S592.17.P63P63).

0382

**Proceedings of the Benchmark Soils Project Symposium at the International Conference on Soils with Variable Charge /ISSS, Massey University, Palmerston North, New Zealand, February 16, 1981 ; edited by H. Ikawa. -.**

University of Hawaii at Manoa.~Benchmark Soils Project.~Symposium\_(1981:\_Massey University). Ikawa, H. Honolulu, Hawaii : Hawaii Institute of Tropical Agriculture and Human Resources, College of Tropical Agriculture and Human Resources, University of Hawaii at Manoa, 1984. "April 1984."~ Maps on lining paper. ix, 59 p. : ill., maps ; 28 cm. -. Includes bibliographical references. (NAL Call No.: DNAL S481.R4 no.042).

0383

**Regional variation of selected topsoil properties in Sitiung, West Sumatra, Indonesia /B.B. Trangmar ... et al. . -.**

Trangmar, B. B. 1952. Honolulu : HITAHR, College of Tropical Agriculture and Human Resources, University of Hawaii, 1984. "August 1984.". 30 p. : ill., maps ; 26 cm. -. Bibliography: p. 28-30. (NAL Call No.: DNAL S539.5.R43 no.026).

0384

**Soil systems in North Carolina /R.B. Daniels ... et al. . -.**

Daniels, Raymond B., 1925. Raleigh, N.C. : North Carolina Agricultural Research Service, North Carolina State University, 1984. "October, 1984."~ One folded col. map in pocket. 77 p. : ill., maps ; 28 cm. -. Includes bibliographies. (NAL Call No.: DNAL 100 N81 (1) no.467).

0385

**Soils and vegetation of the Apalachicola National Forest. -.**

Washington, D.C.? : U.S. Dept. of Agriculture, Forest Service, Southern Region, 1984. Cover title: National forests in Florida. Soils and vegetation of the Apalachicola National Forest.~ "August 1984.". viii, 165 p. : ill., maps ; 28 cm. Bibliography: p. 164. (NAL Call No.: DNAL SD390.S55).



# SOIL SURVEYING AND MAPPING

0386

**Field guide to soils and the environment applications of soil surveys /Gerald W. Olson.**

-.  
Olson, Gerald W. New York : Chapman and Hall, 1984. "A Dowden and Culver book.". xvii, 219 p. : ill. ; 29 cm. -. Includes bibliographies. (NAL Call No.: DNAL S592.14.036).

0387

**List of published soil surveys: January 1984.**

Washington, D.C. : U.S. Department of Agriculture, Soil Conservation Service. List of published soil surveys. Bibliography. Mar 1984. (slightly rev.). p. 1-28. (NAL Call No.: DNAL a25074.S7L5).

0388

**Procedures for collecting soil samples and methods of analysis for soil survey /United States Department of Agriculture, Soil Conservation Service. -.**

United States.~Soil Conservation Service.  
Washington, D.C.? : The Service, 1984. Cover title.~ "July 1984.". iv, 68 p. : ill. ; 28 cm. -. Bibliography: p. 67-68. (NAL Call No.: DNAL aS591.A22 no.1 1984).

0389

**Soil survey of Audubon County, Iowa /United States Department of Agriculture, Soil Conservation Service ; in cooperation with Iowa Agriculture and Home Economics Experiment Station; Cooperative Extension Service, Iowa State University; Department of Soil Conservation, State of Iowa. -.**

Minger, Mark J. Washington, D.C.? : The Service, 1984. Cover title.~ "By Mark J. Minger"--P. 1.~ "Issued July 1984"--P. iii.~ Includes index. vii, 136 p., 2, folded p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 89-90. (NAL Call No.: DNAL aS591.I8A8).

0390

**Soil survey of Carroll County, Arkansas /United States Department of Agriculture, Soil Conservation Service ; in cooperation with Arkansas Agricultural Station. -.**

Fowlkes, David H. Harper, M. Dean.; McCright, Richard T. Washington, D.C.? : The Service, 1984. Cover title.~ "By David H. Fowlkes, M. Dean Harper and Richard T. McCright"--P. 1.~ "Issued June 1984"--P. iii.~ Includes glossary and indexes to map sheets and units. vii, 1, 119 p., 40 folded p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 73. (NAL Call No.: DNAL aS591.A8C25).

0391

**Soil survey of Carroll County Tennessee /United States Department of Agriculture, Soil Conservation Service ; in cooperation with Tennessee Agricultural Experiment Station. -.**  
Moore, Charles L. Washington, D.C.? : The Service, 1984. Cover title.~ "By Charles L. Moore ... et al. "--P. 1.~ "Issued August 1984"--P. iii.~ Includes index. vii, 83 p., 71 folded p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 49. (NAL Call No.: DNAL aS591.T2C3).

0392

**Soil survey of Charlotte County, Florida /United States Department of Agriculture, Soil Conservation Service ; in cooperation with University of Florida, Institute of Food and Agricultural Sciences, Agricultural Experiment Stations and Soil Science Department, and Florida Department of Agriculture and Consumer Services. -.**

Henderson, Warren G. Washington, D.C.? : The Service, 1984. Cover title.~ "By Warren G. Henderson"--P. 1.~ "Issued December 1984"--P. iii.~ Includes index. vii, 185 p., 61 folded p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 101. (NAL Call No.: DNAL aS591.F6C4).

0393

**Soil survey of Columbia County, Florida /United States Department of Agriculture, Soil Conservation Service ; in cooperation with United States Department of Agriculture, Forest Service; University of Florida, Institute of Food and Agricultural Sciences, Agricultural Experiment Stations, Soil Science Department; and Florida Department of Agriculture and Consumer Services. -.**

Howell, David A. Washington, D.C.? : The Service, 1984. Cover title.~ "By David A. Howell"--P. 1.~ "Issued October 1984"--P. iii.~ Includes index. vii, 187 p., 2 folded p. of plates : ill., maps (1 col.) ; 28 cm. + 17 folded sheets of maps. Bibliography: p. 105. (NAL Call No.: DNAL aS591.F6C8).

0394

**Soil survey of Comal and Hays Counties, Texas /United States Department of Agriculture, Soil Conservation Service ; in cooperation with Texas Agricultural Experiment Station. -.**

Batte, Charles D. Washington, D.C.? : The Service, 1984. Cover title.~ "By Charles D. Batte"--P. 1.~ "Issued June 1984"--P. iii.~ Includes glossary and indexes to map sheets and units. vii, 1, 136 p., 106 folded p. of plates : ill., maps (2 col.) ; 28 cm. Bibliography: p. 85. (NAL Call No.: DNAL aS591.T4C6).

## SOIL SURVEYING AND MAPPING

0395

Soil survey of Copiah County, Mississippi /United States Department of Agriculture, Soil Conservation Service ; in cooperation with United States Department of Agriculture, Forest Service and Mississippi Agricultural and Forestry Experiment Station. -.  
Milbrandt, Allen Carl, 1920. Washington : National Cooperative Soil Survey, 1984 . Cover title. vii, 119 p., 65 folded p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 75. (NAL Call No.: DNAL aS591.M7C8).

0396

Soil survey of Cumberland and Hoke Counties, North Carolina /by Berman D. Hudson ; United States Department of Agriculture, Soil Conservation Service, in cooperation with North Carolina Department of Natural Resources and Community Development ... et al. -.  
Hudson, Berman D. Washington, D.C.? : The Service, 1984 . Issued October 1984--P. iii.~ Includes index to map sheets. vii, 155 p., 25 folded p. of plates : ill., maps (2 col.) ; 28 cm. Bibliography: p. 93. (NAL Call No.: DNAL aS591.N8C8).

0397

Soil survey of Defiance County, Ohio /United States Department of Agriculture, Soil Conservation Service ; in cooperation with Ohio Department of Natural Resources, Division of Soil and Water Conservation and Ohio Agricultural Research and Development Center. -.  
Flesher, E. C. Washington, D.C.? : The Service, 1984. Cover title.~ "By E. C. Flesher"--P. 1.~ "Issued July 1984"--P. iii.~ Includes index. vii, 185 p., 2 , 63 folded p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 121. (NAL Call No.: DNAL aS591.D3D4).

0398

Soil survey of Fairfield-Nephi area, Utah : b parts of Juab, Sanpete, and Utah Counties /United States Department of Agriculture, Soil Conservation Service ; in cooperation with the United States Department of Agriculture, Forest Service, United States Department of the Interior, Bureau of Land Management, and the Utah Agricultural Experiment Station. -.  
Trickler, Darryl L. Hall, Darrel T. Washington, D.C.? : Soil Conservation Service, 1984. Cover title.~ "By Darryl L. Trickler and Darrel T. Hall"--P. 1.~ "Issued June 1984"--P. iv.~ Includes glossary and indexes to map sheets and units. xi, 1 , 361 p., 133 folded p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 213. (NAL Call No.: DNAL aS591.U8J8).

0399

Soil survey of Fulton and Izard Counties, Arkansas /United States Department of Agriculture, Soil Conservation Service ; in cooperation with Arkansas Agricultural Experiment Station. -.  
Ward, Larry B. Rowlett, James F. Washington, D.C.? : The Service, 1984. Cover title.~ "By Larry B. Ward and James F. Rowlett"--P. 1.~ "Issued April 1984"--P. iii.~ Includes index. vii, 122 p., 65 folded p. of plates : ill., maps (some col.) ; 28 cm. Bibliography: p. 73. (NAL Call No.: DNAL aS591.A8F8).

0400

Soil survey of Fulton County, Ohio /United States Department of Agriculture, Soil Conservation Service ; in cooperation with Ohio Department of Natural Resources, Division of Lands and Soil and Ohio Agricultural Research and Development Center. -.  
Stone, K. L. Michael, D. R. Washington, D.C.? : The Service, 1984. Cover title.~ "By K. L. Stone, Jr. and D. R. Michael"--P. 1.~ "Issued October 1984"--P. iii.~ Includes index. vi, 166 p., 65 folded p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 99. (NAL Call No.: DNAL aS591.03F8).

0401

Soil survey of Harmon County, Oklahoma /United States Department of Agriculture, Soil Conservation Service ; in cooperation with Oklahoma Agricultural Experiment Station and Oklahoma Conservation Commission. -.  
Ford, Jimmy G. Wilson, R. Clay.; Scott, Gregory F. Washington, D.C.? : The Service, 1984. Cover title.~ "By Jimmy G. Ford, R. Clay Wilson, and Gregory F. Scott"--P. 1.~ "Issued September 1984"--P. iii.~ Includes index. ix, 198 p., 35 folded p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 119. (NAL Call No.: DNAL aS591.D5H2).

0402

Soil survey of Henry County, Illinois /United States Department of Agriculture, Soil Conservation Service ; in cooperation with Illinois Agricultural Experiment Station. -.  
Washington, D.C.? : The Service, 1984. Cover title.~ "By S. L. Elmer ... et al. "--P. 1.~ "Issued October 1984"--P. iv.~ Includes index. ix, 238 p., 128 folded p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 139. (NAL Call No.: DNAL aS591.I3H6).



0403

Soil survey of Hertford County North Carolina /United States Department of Agriculture, Soil Conservation Service ; in cooperation with North Carolina Department of Natural Resources and Community Development, North Carolina Agricultural Research Service, North Carolina Agricultural Extension Service, and Hertford County Board of Commissioners. - .  
Kirby, Robert M., 1922. Washington, D.C.? : The Service, 1984. Cover title.~ "By Robert M. Kirby"--P. 1.~ Item 102-B-33~ "Issued July 1984"--P. iii.~ Includes index. vii, 99 p., 9 folded p. of plates : ill., maps (1 col.) ; 28 cm. - . Bibliography: p. 61. (NAL Call No.: DNAL aS591.N8H6).

0404

Soil survey of Jackson County, Missouri /United States Department of Agriculture, Soil Conservation Service ; in cooperation with Missouri Agricultural Experiment Station. - .  
Preston, George D. Washington, D.C. : The Service, 1984. Cover title.~ "By George D. Preston"--P. 1.~ "Issued September 1984": p. iii.~ Includes index. vii, 143 p., 37 folded p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 87. (NAL Call No.: DNAL aS591.M8U2).

0405

Soil survey of Kearney County, Nebraska /United States Department of Agriculture, Soil Conservation Service ; in cooperation with the University of Nebraska, Conservation and Survey Division. - .  
Wahl, Frank. Wilson, Jay.; Scheinost, Steve. Washington, D.C.? : The Service, 1984. Cover title.~ "By Frank Wahl, Jay Wilson, and Steve Scheinost."--P. 1.~ "Issued September 1984"--P. iii.~ Includes index.~ Item 102-B-27. vii, 157 p., 44 p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 105. (NAL Call No.: DNAL aS591.N2K3).

0406

Soil survey of Lafourche Parish, Louisiana /by S. Dayton Matthews ; United States Department of Agriculture, Soil Conservation Service ; in cooperation with Louisiana Agricultural Experiment Station and Louisiana State Soil and Water Conservation Committee. - .  
Matthews, S. Dayton. Washington, D.C.? : The Service, 1984. "Issued October 1984"--P. iii.~ Includes index to map sheets. vii, 106 p., 123 folded p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 65. (NAL Call No.: DNAL aS591.L8L3).

0407

Soil survey of Lee County, Florida /by Warren G. Henderson ; United States Department of Agriculture, Soil Conservation Service ; in cooperation with University of Florida Institute of Food and Agricultural Sciences, Agricultural Experiment Stations and Soil Science Department, and Florida Department of Agriculture and Consumer Services. - .  
Henderson, Warren G. Washington, D.C.? : The Service, 1984. "Issued December 1984"--P. iii, vii, 185 p., 76 folded p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 101. (NAL Call No.: DNAL aS591.F6L4).

0408

Soil survey of Lyon County area, Nevada /United States Department of Agriculture, Soil Conservation Service ; in cooperation with the United States Department of Agriculture, Forest Service, United States Department of the Interior, Bureau of Land Management and Bureau of Indian Affairs and the University of Nevada, Agricultural Experiment Station. - .  
Archer, Warren M. Washington, D.C.? : The Service, 1984. Cover title.~ "By Warren M. Archer"--P. 1.~ "Issued June 1984"--P. iv.~ Includes index. 1 case (1 v., 41 maps) : ill., maps (1 col.) ; 31 cm. Bibliography: p. 235. (NAL Call No.: DNAL aS591.N3L9).

0409

Soil survey of Marion and Ralls Counties, Missouri /United States Department of Agriculture, Soil Conservation Service in cooperation with Missouri Agricultural Experiment Station. - .  
Watson, F. C. Washington, D.C.? : The Service, 1984. Cover title.~ "Issued September 1984"--P. iii.~ Includes index. vii, 117 p., 82 p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 73. (NAL Call No.: DNAL aS591.M8M35).

0410

Soil survey of McCone County, Montana / by Donald E. Strom ; United States Department of Agriculture, Soil Conservation Service ; in cooperation with the United States Department of the Interior, Bureau of Land Management and Fish and Wildlife Service, and the Montana Agricultural Experiment Station. - .  
Strom, Donald E. Washington, D.C.? : The Service, 1984. Cover title.~ "Issued July 1984"--P. iv.~ Includes index to map units. xi, 361 p., 140 folded p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 217. (NAL Call No.: DNAL aS591.M9M2).

## SOIL SURVEYING AND MAPPING

0411

Soil survey of Mecosta County, Michigan /United States Department of Agriculture, Soil Conservation Service ; in cooperation with the Michigan Agricultural Experiment Station. -. Corder, Paul G. Washington, D.C.? : The Service, 1984. Cover title.~ "By Paul G. Corder"--P. 1.~ "Issued May 1984"--P. iii.~ Includes glossary and indexes to map sheets and units. vii, 1, 155 p., 87 folded p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 93. (NAL Call No.: DNAL aS591.M5M4).

0412

Soil survey of Mercer and Summers Counties, West Virginia /United States Department of Agriculture, Soil Conservation Service ; in cooperation with West Virginia University, Agricultural and Forestry Experiment Station. -. Sponaugle, Kelley N. Washington, D.C.? : The Service, 1984. Cover title.~ "By Kelley N. Sponaugle ... et al."--P. 1.~ "Issued July 1984"--P. iii.~ Includes index. ix, 173 p., 53 folded p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 83. (NAL Call No.: DNAL aS591.W4S8).

0413

Soil survey of Monroe County, Iowa /by Douglas B. Delmann ; fieldwork by Douglas B. Delmann ; United States Department of Agriculture, Soil Conservation Service, in cooperation with the Iowa Agriculture and Home Economics Experiment Station, the Cooperative Extension Service, Iowa State University and the Department of Soil Conservation, State of Iowa. -. Delmann, Douglas B. Washington, D.C.? : The Service, 1984. Cover title.~ "Issued September 1984"--P. iii.~ Includes index of map sheets. ix, 192 p., 64 folded p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 113. (NAL Call No.: DNAL aS591.I8M7).

0414

Soil survey of Monroe County, Wisconsin /United States Department of Agriculture, Soil Conservation Service ; in cooperation with Research Division of the College of Agricultural and Life Sciences, University of Wisconsin. -. Barndt, Wayne D. Langton, John E. Washington, D.C.? : The Service, 1984. Cover title.~ "By Wayne D. Barndt and John E. Langton"--P. 1.~ "Issued June 1984"--P. iii.~ Includes index. ix, 206 p., 2, 138 folded p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 127. (NAL Call No.: DNAL aS591.W6M7).

0415

Soil survey of Murray County, Oklahoma /United States Department of Agriculture, Soil Conservation Service ; in cooperation with the Oklahoma Agricultural Experiment Station. -. Watterson, Anderson. Boggard, Vinson A.; Moebius, Gordon E. Washington, D.C. : The Service, 1984. Cover title.~ "By Anderson Watterson, Jr., Vinson A. Boggard, and Gordon E. Moebius"--P.1.~ "Issued November 1984"--P. iii.~ Includes index. viii, 187 p., 38 folded leaves of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 103-113. (NAL Call No.: DNAL aS591.05M8).

0416

Soil survey of Orange County, Indiana /United States Department of Agriculture, Soil Conservation Service ; in cooperation with United States Department of Agriculture, Forest Service, Purdue University, Agricultural Experiment Station, and the Indiana Department of Natural Resources, Soil and Water Conservation Committee. -. Wingard, Robert C. Washington, D.C.? : Soil Conservation Service, 1984. Cover title.~ "By Robert C. Wingard"--P. 1.~ "Issued May 1984"--P. iii.~ Includes glossary and indexes to map sheets and units. vii, 1, 124 p., 63 folded p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 73. (NAL Call No.: DNAL aS591.I606).

0417

Soil survey of Pennington County, Minnesota /by R.B. Heschke ; soils surveyed by W.J. Aas ... et al. ; United States Department of Agriculture, Soil Conservation Service, in cooperation with the Minnesota Agricultural Experiment Station. -. Heschke, R. B. Washington, D.C.? : The Service, 1984. "Issued February 1984"--P. iii.~ Includes index to map sheets. vii, 156 p., 52 folded p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 99. (NAL Call No.: DNAL aS591.M6P3).

0418

Soil survey of Saguache County area, Colorado /United States Department of Agriculture, Soil Conservation Service ; in cooperation with Colorado Agricultural Experiment Station; United States Department of the Interior, Bureau of Land Management; and Saguache County. -. Yenter, James M. Washington, D.C.? : The Service, 1984. Cover title.~ "By James M. Yenter"--P.1.~ "Issued November 1984"--P.iii.~ Includes index. vii, 203 p., 2 folded p. of plates : ill., maps (1 col.) ; 28 cm. + 28 folded maps. Bibliography: p. 117. (NAL Call No.: DNAL aS591.C6S2).



0419

Soil survey of San Luis Obispo County, California, coastal part /by Daniel J. Ernstrom ; United States Department of Agriculture, Soil Conservation Service, in cooperation with University of California Agricultural Experiment Station. -.

Ernstrom, Daniel J. Washington, D.C.? : The Service, 1984. "Issued September 1984"--P. iii.~ Includes index to map sheets. ix, 265 p., 3 folded p. of plates : ill., maps (1 col.) ; 28 cm. + 21 folded maps in case ; 31 cm. Bibliography: p. 161. (NAL Call No.: DNAL aS591.C2S27).

0420

Soil survey of Seneca Nation of Indians, New York /by Paul S. Puglia ; United States Department of Agriculture, Soil Conservation Service in cooperation with Cornell University Agricultural Experiment Station. -.

Puglia, Paul S. Washington, D.C.? : The Service, 1984. Issued August 1984.~ Includes index to map sheets. ix, 208 p., 13 folded p. of plates : ill., maps ; 28 cm. Bibliography: p. 123. (NAL Call No.: DNAL aS591.N7C2).

0421

Soil survey of Shelby County, Alabama /United States Department of Agriculture, Soil Conservation Service ; in cooperation with the Alabama Agricultural Experiment Station, the Alabama Soil and Water Conservation Committee, and the Alabama Cooperative Extension Service. -.

Stevens, Robert W. 1947. Washington, D.C.? : The Service, 1984. Cover title.~ "By Robert W. Stevens"--P. 1.~ "Issued July 1984"--P. iii.~ Includes index. vii, 130 p. 2 folded p. of plates : ill., maps (1 col.) ; 28 cm. + 16 folded maps in case ; 31 cm. Bibliography: p. 73. (NAL Call No.: DNAL aS591.A35S5).

0422

Soil survey of Story County, Iowa /United States Department of Agriculture, Soil Conservation Service ; in cooperation with Iowa Agriculture and Home Economics Experiment Station and the Cooperative Extension Service, Iowa State University and the Department of Soil Conservation State of Iowa. -.

DeWitt, Thomas A. Washington, D.C.? : The Service, 1984. Cover title.~ "By Thomas A. DeWitt"--P. 1.~ "Issued May 1984"--P. iii.~ Includes index. ix, 149 p., 2, 84 folded p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 89. (NAL Call No.: DNAL aS591.I8S8).

0423

Soil survey of Valley County, Montana /United States Department of Agriculture, Soil Conservation Service ; in cooperation with Montana Agricultural Experiment Station. -.

Bingham, LaMonte C. Washington, D.C.? : The Service, 1984. "Issued August 1984"--P. iii.~ In cooperation with Montana Agricultural Experiment Station.~ Includes glossary and index to map sheets. v, 102 p., 1 folded p. of plates : ill., maps (1 col.) ; 28 cm. + 323 folded sheets of maps. Bibliography: p. 97. (NAL Call No.: DNAL aS591.M9V3).

0424

Soil survey of Waupaca County, Wisconsin /by Augustine J. Otter ; United States Department of Agriculture, Soil Conservation Service in cooperation with the Research Division of the College of Agricultural and Life Sciences, University of Wisconsin. -.

Otter, Augustine J. Washington, D.C.? : The Service, 1984. Issued September 1984.~ Includes index to map sheets. vii, 167 p., 99 folded p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 103. (NAL Call No.: DNAL aS591.W6W6).

0425

Soil survey of Wayne County, Ohio /United States Department of Agriculture, Soil Conservation Service ; in cooperation with Ohio Department of Natural Resources, Division of Lands and Soil and the Ohio Agricultural Research and Development Center. -.

Bureau, M. F. Graham, T. E.; Scherzinger, R. J. Washington, D.C.? : The Service, 1984. Cover title.~ "By M. F. Bureau, T. E. Graham, and R. J. Scherzinger"--P. 1.~ "Issued July 1984"--P. iii.~ Includes index. ix, 201 p., 2, 80 folded p. of plates : ill., maps (1 col.) ; 28 cm. Bibliography: p. 127. (NAL Call No.: DNAL aS591.O3W4).

# SOIL FERTILITY - FERTILIZERS

0426

**Agricultural use of sewage sludge a literature review /W.D. Kelley ... et al. . -.**  
Kelley, W. D. Blacksburg, Va. : Virginia Water Resources Research Center, Virginia Polytechnic Institute and State University, 1984. Partially funded by the U.S. Dept. of the Interior, Geological Survey.~ "December 1984."~ Project A-097-VA. v, 46 p. ; 23 cm. -. Bibliography: p. 27-35. (NAL Call No.: DNAL TD201.V57 no.143).

0427

**Commercial vegetative inoculum of Pisolithus tinctorius and inoculation techniques for development of ectomycorrhizae on bare-root tree seedlings /by D.H. Marx ... et al. . -.**  
Marx, Donald Henry, 1936. Washington, D.C. : Society of American Foresters, 1984. On cover: Supplement to Forest science, vol. 30, no. 3, September 1984. 101 p. ; 26 cm. -. Bibliography: p. 77-81. (NAL Call No.: DNAL 99.8 F76322 no.25).

0428

**A Computer model for economic selection among available fertilizer materials /M. Edward Rister ... et al. . -.**  
Rister, M. Edward. College Station, Tex. : Dept. of Agricultural Economics, Texas Agricultural Experiment Station, Texas A&M University System, 1984. "April 1984." 27 leaves ; 28 cm. -. Bibliography: leaves 26-27. (NAL Call No.: DNAL HD1775.T4T4 no.84-1 SP-2).

0429

**The effect of soil on the mutagenic properties of waste water /by Michael J. Plewa and Philip K. Hopke. -.**  
Plewa, Michael J. Hopke, Philip K., 1941. Urbana, Ill. : University of Illinois at Urbana-Champaign, Water Resources Center, 1984. "December 1984."~ Project no. S-095-Ill.~ "UILU-WRC-84-195."-- Cover. ii, 42 p. : ill. ; 28 cm. -. Bibliography: p. 17-19. (NAL Call No.: DNAL TC424.I3I4 no.195).

0430

**Effects of natural gas decontrol on farming costs and income /Michael LeBlanc. -.**  
LeBlanc, Michael. Washington, D.C. : U.S. Dept. of Agriculture, Economic Research Service, National Economics Division, 1984. Cover title.~ "January 1984." iv, 18 p. : ill. ; 28 cm. -. Bibliography: p. 17-18. (NAL Call No.: DNAL HD9483.U52L4).

0431

**Nitrogen in crop production proceedings of a symposium held 25-27 May 1982 at Sheffield, Alabama /sponsored by the National Fertilizer Development Center of the Tennessee Valley Authority ... et al. ; Roland D. Hauck, editor-in-chief. -.**  
Hauck, Roland D. 1926. Madison, Wis. : American Society of Agronomy, 1984. xxv, 804 p. : ill. ; 24 cm. Includes bibliographies and index. (NAL Call No.: DNAL S651.N57).

0432

**Nitrogen use in Pennsylvania prospects for self-sufficiency /by Medard Gabel, Amy Heiland, Ellen Stoker Pahl. -.**  
Gabel, Medard. Heiland, Amy.; Pahl, Ellen Stoker. Emmaus, Pa. (33 E. Minor St., Emmaus, Pa. 18049) : Cornucopia Project, Rodale Press, 1984. 18 p. : ill. ; 28 cm. Bibliography: p. 16-18. (NAL Call No.: DNAL S651.G3).

0433

**Organic farming current technology and its role in a sustainable agriculture : proceedings of a symposium /sponsored by Division S-3, S-4, S-6, S-8, and A-5 of the American Society of Agronomy, Crop Science Society of America, and the Soil Science Society of America in Atlanta, Ga., 29 Nov.-3 Dec. 1981 ; editorial committee, D.F. Bezdicek ... et al. ; organizing committee, L.F. Elliott, R.H. Miller, J.J. Mortvedt ; managing editor, David M. Kral ; assistant editor, Sherri L. Hawkins. -.**  
Kral, David M. Madison, Wis. : The Societies, 1984. vii, 192 p. : ill. ; 23 cm. -. Includes bibliographies. (NAL Call No.: DNAL 64.9 Am3 no.46).

0434

**Pressurized distribution for on-site domestic wastewater-renovation systems /C. Roland Mote. -.**  
Mote, C. Roland. Fayetteville, Ark. : Agricultural Experiment Station, Division of Agriculture, University of Arkansas, 1984. "April 1984."~ HI.F 3/25-7: B 8/870~ Caption title. 31 p. : ill. ; 23 cm. -. Bibliography: p. 31. (NAL Call No.: DNAL 100 AR42 no.870).

0435

**Utilization of sewage sludge compost as a soil conditioner and fertilizer for plant growth. -.**  
Washington, D.C.? : U.S. Dept. of Agriculture, Agricultural Research Service : Supt. of Docs., U.S. G.P.O., distributor, 1984. "Issued August 1984"--T.p. verso. 32 p. : map ; 28 cm. -. Bibliography: p. 27-32. (NAL Call No.: DNAL 1 Ag84Ab no.464).

# SOIL CULTIVATION

0436

**Agroforestry in the southern United States 33rd annual forestry symposium /edited by Norwin E. Linnartz and Mark K. Johnson. -.**

Linnartz, Norwin E., 1926-; Johnson, Mark K. Baton Rouge, La. : Louisiana Agricultural Experiment Station, School of Forestry, Wildlife, and Fisheries, Louisiana State University Agricultural Center in cooperation with Louisiana Cooperative Extension Service, 1984. viii, 183 p. : ill. ; 23 cm. -. Includes bibliographies. (NAL Call No.: DNAL 99.9 L935 33rd).

0437

**Conservation tillage, including minimum & no-tillage.**

Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Updates 82-19.~ Bibliography. June 1984. (84-41). 28 p. (NAL Call No.: DNAL az5071.N3).

0438

**Production of surplus crops on irrigated land served by the U.S. Bureau of Reclamation /Austin Fox, Charles Moore, and Harold Stults. -.**

Fox, Austin 1923. Moore, Charles.; Stults, Harold. Washington, D.C.? : USDA, ERS, National Economics Division, 1984. Cover title.~ "February 1984.". ix, 81 p., 1 leaf of plates : ill., col. map ; 28 cm. -. Bibliography: p. 80-81. (NAL Call No.: DNAL aS616.U5F6).

0439

**Tillage systems for soil and water conservation /by Paul W. Unger. -.**

Unger, Paul W. Rome : FAO, 1984. xvi, 278 p. : ill. ; 30 cm. -. Bibliography: p. 241-270. (NAL Call No.: DNAL S590.F58 no.54).



# SOIL EROSION AND RECLAMATION

0440

**The Effects on farm income of constraining soil and plant nutrient losses an application of the CREAMS simulation model /Bradley M. Crowder ... et al. . -.**

Crowder, Bradley M. University Park, Pa. : Pennsylvania State University, College of Agriculture, Agricultural Experiment Station, 1984. Cover title.~ "May 1984.". 73 p. : ill. ; 28 cm. -. Bibliography: p. 25-27. (NAL Call No.: DNAL 100 P381 no.850).

0441

**A guide for predicting sheet and rill erosion on forest land /George E. Dissmeyer and George R. Foster. -.**

Dissmeyer, George E. Foster, George R. Atlanta, Ga. : USDA, Forest Service, Southern Region, 1984. iv, 40 p. : ill. (some col.), 1 map ; 28 cm. -. Bibliography: p. 28. (NAL Call No.: DNAL aSD11.U5962 no.6 1984).

0442

**Principles of soil conservation and water management /H.R. Arakeri, Roy Donahue. -.**

Arakeri, Hanumappa Ramappa, 1919. Donahue, Roy L.,\_1908. Totowa, N.J. : Rowman & Allanheld, c1984. xii, 254, 8 p. of plates : ill., map ; 24 cm. Includes bibliographies. (NAL Call No.: DNAL S623.A65 1984a).

0443

**Regional soil and water conservation needshearings before the Subcommittee on Soil and Water Conservation, Forestry and Environment of the Committee on Agriculture, Nutrition, and Forestry, United States Senate, Ninety-eighth Congress, first session, May 31, 1983--Jackson, Miss., June 1, 1983--Louisville, Ky., June 13, 1983--Ames, Iowa, June 24, 1983--Brattleboro, Vt., June 28, 1983--Washington, D.C. -.**

United States.~Congress.~Senate.~Committee on Agriculture, Nutrition, and Forestry.~Subcommittee on Soil and Water Conservation, Forestry, and Environment. Washington D.C. : U.S. G.P.O., 1984. Distributed to some depository libraries in microfiche.~ Item 1032-C, 1032-D (microfiche). vii, 434 p. : ill. ; 24 cm. -. Includes bibliographical references. (NAL Call No.: DNAL KF26.A35758 1983f).

0444

**Restoration of pyritic soils and the quantification of erosion control /by Charles R. Lee, John G. Skogerboe. -.**

Lee, Charles R. Skogerboe, John G. Vicksburg, Miss. : U.S. Army Engineer Waterways Experiment Station ; Springfield, Va. : Available from NTIS, 1984 . Contains two papers presented at

the 1983 Symposium on Surface Mining, Hydrology, Sedimentology, and Reclamation held in Lexington, Kentucky entitled "Vegetation restoration of pyritic soils" and "Qua~ Final report.~ Cover title.~ "October 1984."~ At head of title: Environmental Impact Research Program.~ Funded by the U.S. Dept. of the Army under the Environmental Impact Research Program.~ AD-A148 946. 20 leaves : ill. ; 27 cm. -. Bibliography: leaf 20. (NAL Call No.: DNAL S623.L4).

0445

**Soil conservation in America what do we have to lose? /prepared by the American Farmland Trust. -.**

Washington, D.C. : The Trust, c1984. xxiii, 133 p. : ill., 1 map ; 28 cm. Includes bibliographies. (NAL Call No.: DNAL S624.A1S66).

0446

**Techniques for producing and measuring water drops: a literature review.**

Robinette, M.J. McCool, D.K. Beltsville, Md. : The Service. ARS - United States Department of Agriculture, Agricultural Research Service. Literature review. Nov 1984. (11). 18 p. Includes references. (NAL Call No.: DNAL aS21.R44A7).



# FORESTRY

0447

**Principles of forest entomology laboratory manual /Douglas C. Allen. -.**

Allen, Douglas C. Syracuse, N.Y. : Syracuse University Press, 1984. 203 p. : ill. ; 28 cm. Includes bibliographies. (NAL Call No.: DNAL SB761.A464).

0448

**Recent publications of the Pacific Northwest Forest and Range Experiment Station, third quarter 1984.**

Portland, Or. : The Station. United States Department of Agriculture Forest Service - Pacific Northwest Forest and Range Experiment Station. Bibliography. Sept 1984. 15 p. (NAL Call No.: DNAL aZ5991.U543).

# FORESTRY PRODUCTION - GENERAL

0449

## Agroforestry.

MacLean, J.T. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Bibliography. Dec 1984. (85-06). 7 p. (NAL Call No.: DNAL aZ5071.N3).

0450

## Bibliography of forestry in Puerto Rico /Menandra Mosquera, JoAnne Feheley, compilers.

-. Mosquera, Menandra. Feheley, JoAnne. New Orleans, La. : USDA, Forest Service, Southern Forest Experiment Station, 1984. Cover title.~ Distributed to depository libraries in microfiche.~ "September, 1984."~ Includes indexes. ii, 196 p. : port. ; 28 cm. -. (NAL Call No.: DNAL aSD11.U57 no.51).

0451

## Environmentally related restrictions on the timber harvesting capability of a National Forest a case study /Robert J. Hrubes. -.

Hrubes, Robert J. Berkeley : California Agricultural Experiment Station, 1984. "January 1984.". 37 p. : ill. ; 26 cm. -. Bibliography: p. 33. (NAL Call No.: DNAL 100 C12H v.52 no.1).

0452

Forest resources of Alabama /Victor A. Rudis, James F. Rosson, Jr., and John F. Kelly. -. Rudis, Victor A. New Orleans, La. : U.S. Dept. of Agriculture, Forest Service, Southern Forest Experiment Station, 1984. Distributed to depository libraries in microfiche.~ "November, 1984.". iii, 55 p. : ill., maps ; 28 cm. -. Bibliography: p. 37. (NAL Call No.: DNAL A99.9 F628Ur no.98).

0453

International Symposium of Recent Advances in Forest Biotechnology June 10-13, 1984 : Grand Traverse Resort Village, Traverse City, Michigan /sponsored by Michigan Biotechnology Institute ; in cooperation with Michigan State University and Michigan Technological University ; co-chairs, James Hanover, David Karnosky, Daniel Keathley. -. Hanover, James.; Karnosky, David F.\_1949-; Keathley, Daniel,\_1953. East Lansing : Michigan Biotechnology Institute, 1984. Cover title: Proceedings, International Symposium of Recent Advances in Forest Biotechnology. 194 leaves : ill. ; 28 cm. Includes bibliographies. (NAL Call No.: DNAL SD433.I572 1984).

0454

## Research for tomorrow's forests1983 research accomplishments. -.

Washington, D.C.? : USDA, Forest Service, 1984. "July 1984.". iv, 235 p. : ill., map ; 22 x 28 cm. -. Bibliography: p. 54-232. (NAL Call No.: DNAL aSD11.U52 no.41).

0455

## Urban forestry, January 1982-December 1983.

MacLean, J.T. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Mar 1984. Updates 83-17 ~Bibliography. Mar 1984. (84-19). 26 p. (NAL Call No.: aZ5071.N3).

0456

## California forests--fire and demography.

Keeley, J.E. (comp.). Davis, Calif. : The Center. Report - California Water Resources Center, University of California, Davis. June 1984. Bibliography. June 1984. (58). p. 129-146. (NAL Call No.: 292.9 C1282).

0457

## MERCHANDIZER--adapting USLYCOWG to the marketplace /Richard W. Guldin. -.

Guldin, Richard W. New Orleans, La. : USDA, Forest Service, Southern Forest Experiment Station, 1984. Cover title.~ "December 1984.". 36 p. ; 28 cm. -. Bibliography: p. 4. (NAL Call No.: DNAL aSD11.U57 no.52).

0458

## Regeneration of Douglas-fir in the Klamath Mountains Region, California and Oregon /R.O. Strothmann, Douglass F. Roy. -.

Strothmann, R. D. Berkeley, Calif. : Pacific Southwest Forest and Range Experiment Station, 1984. "December 1984.". 35 p. ; 28 cm. -. Bibliography: p. 31-35. (NAL Call No.: DNAL aSD11.A325 no.81).

0459

## Christmas tree: production and economics.

Rafats, J. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Updates 82-11.~ Bibliography. Sept 1984. (84-66). 17 p. (NAL Call No.: DNAL aZ5071.N3).

0460

Engineering and equipment development & test publications--November 1980 to October 1984. Washington, D.C. : The Service. Engineering field notes - United States Forest Service, Engineering Staff. Bibliography. Nov/Dec 1984. v. 16. 25 p. (NAL Call No.: DNAL aSD388.A1U52).

0461

Harvesting the South's small trees /Doris Robertson, proceedings coordinator ; Julia White, editorial assistant. -. Robertson, Doris.; White, Julia. Madison, Wis. : Forest Products Research Society, c1984. "Papers for this proceedings were presented at an FPRS conference on "Harvesting the South's Small Trees," held in Biloxi, Mississippi, April 18-20, 1983.". 141 p. : ill. : 28 cm. -. Includes bibliographical references. (NAL Call No.: DNAL SD436.S67H37).

0462

Mentor self-study course /United States Department of Agriculture, Forest Service, Engineering Staff. -. Washington, D.C. : The Staff, 1984. "April 1984.". 1 v. (loose-leaf) : ill., forms ; 22 x 28 cm. -. Includes bibliographical references. (NAL Call No.: DNAL aSD388.A1U55 no.7115-516-100).

# FOREST MANAGEMENT

0463

**Draft environmental impact statement national forests in Mississippi land & resource management plan / responsible official, John E. Alcock. -.**

Alcock, John E. Jackson? Miss. : USDA, Forest Service, Southern Region, 1984. Cover title.~ "December 1984."~ Includes index. 1 v. (various pagings) : ill., maps ; 28 cm. Bibliography: p. 8-1 - 8-5. (NAL Call No.: DNAL aSD428.A2M72).

0464

**Draft environmental impact statement for the Daniel Boone National Forest land and resource management plan /responsible official, John E. Alcock. -.**

Alcock, John E. Winchester, Ky. : USDA, Forest Service, Southern Region, 1984. Caption title.~ Includes index. 1 v. (various pagings) : ill., maps ; 28 cm. Bibliography: p. IX-1 - IX-7. (NAL Call No.: DNAL aSD428.D3D3).

0465

**Draft environmental impact statement for the Medicine Bow National Forest and Thunder Basin National Grassland, land and resource management plan. -.**

Laramie, Wyo. : USDA, Forest Service, 1984. Cover title: Land and resource management plan, draft environmental impact statement : Medicine Bow National Forest and Thunder Basin National Grassland.~ Ten folded maps in pocket of v. 1.~ "02-06-84-16.". 2 v. : ill., maps (some col.) ; 28 cm. Includes bibliographical references and index. (NAL Call No.: DNAL aSD428.M42D7).

0466

**Draft environmental impact statement for the proposed land management plan Ozark-St. Francis National Forests /responsible official, John E. Alcock. -.**

Alcock, John E. Russellville, Ark. : USDA, Forest Service, Southern Region, 1984? . Caption title.~ Includes index. 1 v. (various pagings) : ill., maps ; 28 cm. Bibliography: p. 9-1 - 9-10. (NAL Call No.: DNAL aSD428.09093).

0467

**Draft environmental impact statement Jefferson National Forest, land and resource management plan. -.**

Roanoke, Va. : USDA, Forest Service, Land Management Planning, 1984? . Includes index. 1 v. (various pagings) : ill., maps ; 28 cm. Bibliography: p. IX-1 - IX-6. (NAL Call No.: DNAL aSD428.J4D7).

0468

**Final environmental impact statement for the Nebraska National Forest land and resource management plan /responsible official, James F. Torrence. -.**

Torrence, James F. Chadron, Neb. : USDA, Forest Service, 1984? . Caption title.~ Two folded maps in pocket.~ "02-07-81-07."~ Errata sheet inserted. 1 v. (various pagings) : ill., maps (some col.) ; 28 cm. Includes bibliographical references and index. (NAL Call No.: DNAL aSD428.N2F5).

0469

**Final environmental impact statement for the Rio Grande National Forest land and resource management plan Mineral, Hinsdale, Conejos, Alamosa, Saguache, Archuleta and Rio Grande Counties, Colorado /responsible official, James F. Torrence. -.**

Torrence, James F. Monte Vista, Colo. : USDA, Forest Service, 1984. Caption title.~ Cover title: Final environmental impact statement: Rio Grande National Forest.~ Five folded maps in pockets (v.1.).~ Includes index.~ "02-09-82-08.". 2 v. : ill., maps ; 28 cm. Bibliography: p. B-2 - B-3 (Appendices). (NAL Call No.: DNAL aSD428.R56F5).

0470

**Four decades of selection management on the Corsett farm forestry forties /R.R. Reynolds, James B. Baker and Timothy T. Ku. -.**

Reynolds, R. R. 1906. Fayetteville, Ark. : Agricultural Experiment Station, Division of Agriculture, University of Arkansas, 1984. "June 1984.". 43 p. : ill. ; 23 cm. -. Bibliography: p. 43. (NAL Call No.: DNAL 100 AR42 no.872).

0471

**The greening of the South the recovery of land and forest /Thomas D. Clark. -.**

Clark, Thomas Dionysius, 1903. Lexington, Ky. : University Press of Kentucky, c1984. Includes index. xvi, 168 p., 24 p. of plates : ill. ; 24 cm. -. Bibliography: p. 149 -157. (NAL Call No.: DNAL SD144.A15C53).

0472

**History of sustained-yield forestry a symposium : Western Forestry Center, Portland, Oregon, October 18-19, 1983 /Harold K. Steen, general editor ; coordinated by the Forest History Society for the International Union of Forestry Research Organizations (IUFRO), Forest History Group (\$6.07). -.**

Steen, Harold Karl, 1935. Santa Cruz, Calif. : The Society, c1984. Summaries in English, French, and German. xviii, 470 p. : ill. ; 21 cm. Includes bibliographies. (NAL Call No.:



DNAL SD131.H57).

bibliographical references. (NAL Call No.: DNAL A99.9 F7625Un no.120).

0473

**Jefferson National Forestdraft land and resource management plan.** -.  
Roanoke, VA : U.S. Dept. of Agriculture, Forest Service, Land Management Planning, 1984? .  
Cover title: Jefferson National Forest, land and resource management plan, draft.~ Two folded maps in pocket.~ Includes index. 1 v. (various pagings) : ill., maps (some col.) ; 28 cm. Bibliography: VIII-1 - VIII-6. (NAL Call No.: DNAL aSD428.J4J4).

0474

**Medicine Bow National Forest and Thunder Basin National Grasslandland and resource management plan (proposed).** -.  
Laramie, Wyo. : Rocky Mountain Region, USDA Forest Service, 1984. Cover title: Land and resource management plan, Medicine Bow National Forest and Thunder Basin National Grassland, proposed.~ "September 1984.". 406 p. in various pagings : ill., maps ; 28 cm. + 2 maps (part. col.) in pocket. Includes bibliographical references and index. (NAL Call No.: DNAL aSD428.M42M4).

0475

**Nebraska National Forest land and resource management plan /Rocky Mountain Region, USDA Forest Service.** -.  
Chadron, Neb. : The Region, 1984. Cover title: Land and resource management plan, Nebraska National Forest.~ "August 1984."~ One folded map in pocket.~ Errata sheet inserted. 1 v. (various pagings) : ill., maps, forms ; 28 cm. Includes bibliographical references and index. (NAL Call No.: DNAL aSD428.N2N42).

0476

**Proceedings of the Forest Land Inventory Workshop, Denver, Colorado, March 26-30, 1984 preparing for the 21st Century /compiled and edited by H. Gyde Lund.** -.  
Washington, D.C. : USDA Forest Service, Division of Timber Management, 1984. vi, 334 p. : ill. ; 28 cm. Includes bibliographical references. (NAL Call No.: DNAL aSD565.F673 1984).

0477

**Production, prices, employment, and trade in northwest forest industries, second quarter 1984 /Florence K. Ruderman.** -.  
Ruderman, Florence K. Portland, Or. : USDA, Forest Service, Pacific Northwest Forest and Range Experiment Station, 1984. Cover title.~ "December 1984.". 61 p. ; 28 cm. -. Includes

0478

**Review of Forest Service practices in New Mexicohearing before the Subcommittee on Forests, Family Farms, and Energy of the Committee on Agriculture, House of Representatives, Ninety-eighth Congress, second session, April 30, 1984, Santa Fe and Taos, N. Mex.** -.  
United States.~Congress.~House.~Committee on Agriculture.~Subcommittee on Forests, Family Farms, and Energy. Washington, D.C. : U.S. G.P.O., 1984. Distributed to some depository libraries in microfiche.~ "Serial no. 98-67.". iv, 221 p. : ill. ; 24 cm. Bibliography: p. 181. (NAL Call No.: DNAL KF27.A344 1984b).

0479

**Base-age invariant polymorphic site index curves for even-aged spruce-fir stands in Maine /Bret P. Vicary, Thomas B. Brann, Ralph H. Griffin.** -.  
Vicary, Bret P. Brann, Thomas B.; Griffin, Ralph H. Orono, Me. : University of Maine at Orono, Maine Agricultural Experiment Station, 1984. "October 1984.". 33 p. : ill., map ; 23 cm. -. Bibliography: p. 31-33. (NAL Call No.: DNAL 100 M28S (1) no.802).

0480

**Eastern South Dakota forest statistics, 1980 /Gerhard K. Raile.** -.  
Raile, Gerhard K. St. Paul, Minn. : North Central Forest Experiment Station, Forest Service, USDA, 1984. Cover title.~ "September 1984."~ Chiefly statistics. 60 p. ; 28 cm. -. (NAL Call No.: DNAL aSD11.A35 no.74).

0481

**Growth and yield of sitka spruce and western hemlock at Cascade Head Experimental Forest, Oregon /Stephen H. Smith ... et al.** -.  
Smith, Stephen H. Portland, Or. : Pacific Northwest Forest and Range Experiment Station, 1984. Cover title.~ "September 1984.". 30 p. : ill., maps ; 28 cm. -. Bibliography: p. 14. (NAL Call No.: DNAL A99.9 F7625Uni no.325).

0482

**Inventorizing forest and other vegetation of the high latitude and high altitude regions proceedings of an international symposium, Society of American Foresters Regional Technical Conference, 23-26 July, 1984, Fairbanks, Alaska, USA /sponsored by Society of American Foresters, Science Region 1 ... et al.** ; in cooperation with State of Alaska,

## FOREST MANAGEMENT

Department of Natural Resources ... et al. ;  
edited by Vernon J. LaBau, Calvin L. Kerr. -.  
Society of American Foresters Regional  
Technical Conference (1984 : Fairbanks,  
Alaska). LaBau, Vernon J.; Kerr, Calvin L.  
Bethesda, Md. : The Society, 1984. "December  
1984.". viii, 296 p. : ill., maps ; 28 cm. -.  
Includes bibliographical references & index.  
(NAL Call No.: DNAL SD551.S64 1984).

0483

Kansas forest inventory, 1981 /John S. Spencer,  
Jr., John K. Strickler, and William J. Moyer.

-.  
Spencer, John S. Strickler, John K.; Moyer,  
William J. St. Paul, MN : U.S. Dept. of  
Agriculture, Forest Service, North Central  
Forest Experiment Station, 1984. Cover title.~  
Distributed to depository libraries in  
microfiche.~ "December 1984"--T.p. verso.~  
Title on cover: Research bulletin NC-83.~ Item  
83-B-5 (microfiche). 134 p. : ill., maps ; 28  
cm. -. Bibliography: p. 19. (NAL Call No.: DNAL  
aSD11.A35 no.83).

0484

Stand structure and yields of site-prepared  
loblolly pine plantations in the lower Coastal  
plain of the Carolinas, Georgia, and north  
Florida /Jerome L. Clutter ... et al. . -.

Clutter, Jerome Lee, 1934. Asheville, N.C. :  
U.S. Dept. of Agriculture, Forest Service,  
Southeastern Forest Experiment Station, 1984.  
Distributed to depository libraries in  
microfiche.~ "September 1984.". iv, 173 p. :  
ill., 1 map ; 28 cm. -. Bibliography: p. 162.  
(NAL Call No.: DNAL aSD433.A53 no.27).

0485

Tables of whole-tree weight for selected U.S.  
tree species. -.

Washington, D.C.? : U.S. Dept. of  
Agriculture, Forest Service, 1984. Distributed  
to depository libraries in microfiche.~ "July  
1984.". iii, 157 p. : ill. ; 28 cm. -.  
Bibliography: p. 153-155. (NAL Call No.: DNAL  
aSD11.U52 no.42).

# FOREST PRODUCTS - GENERAL

0486

**International forest products trade resources and market opportunities /H. Edward Dickerhoof, editor ; Doris Robertson, proceedings coordinator ; Julia White, editorial assistant.** -.

Dickerhoof, Edward. Madison, Wis. : Forest Products Research Society, c1984. Errata slip inserted.~ "Papers ... presented at a conference sponsored by the Forest Products Research Society in cooperation with the USDA Forest Service ... et al. ... held in Arlington, Virginia, November 7-9, 1983.". 176 p. : ill. ; 28 cm. -. Includes bibliographies. (NAL Call No.: DNAL HD9750.5.I5).

0487

**Tropical timbers of the world /by Martin Chudnoff.** -.

Chudnoff, Martin. Washington, D.C. : U.S. Dept. of Agriculture, Forest Service ; 1984. "September 1984.". v, 464 p. : ill. ; 28 cm. -. Bibliography: p. 441-442. (NAL Call No.: DNAL 1 Ag84Ah no.607).

0488

**An analysis of New York's timber resources /Thomas J. Considine, Jr.** -.

Considine, Thomas J. Broomall, Pa. : U.S. Dept. of Agriculture, Forest Service, Northeastern Forest Experiment Station, 1984. Cover title. 70 p. : ill., maps ; 28 cm. -. Bibliography: p. 59-61. (NAL Call No.: DNAL A99.9 F7622Uf no.80).

0489

**DESIM user's manual a procedural guide for desinging and simulating hardwood sawmill systems /Edward L. Adams.** -.

Adams, Edward L. Broomall, Pa. : U.S.D.A., Forest Service, Northeastern Forest Experiment Station, 1984. Cover title.~ Errata sheet inserted. 58 p. : ill., forms ; 28 cm. -. Bibliography: p. 24. (NAL Call No.: DNAL ASD11.U56 no.94).

0490

**The hardwood resource in western Oregon /John H. Poppino and Donald R. Gedney.** -.

Poppino, John H. Gedney, Donald R. Portland, Dr. : Pacific Northwest Forest and Rane Experiment Station, 1984. 37 p. : ill., map ; 28 cm. -. (NAL Call No.: DNAL A99.9 F7625Un no.116).

0491

**Marine wood maintenance manual a guide for proper use of Douglas-fir in marine exposures /Jeffery J. Morrell, Guy G. Helsing, Robert D. Graham.** -.

Morrell, Jeffery J., 1955. Helsing, Guy G.; Graham, Robert D. Corvallis, Dr. : Forest Research Laboratory, College of Forestry, Oregon State University, 1984. "October 1984."--Cover.~ "College of Forestry and Sea Grant College Program"--Cover. 62 p. : ill., map ; 28 cm. -. Includes bibliographies. (NAL Call No.: DNAL SD1.07 no.48).

0492

**Painting and finishing wood for use outdoors /by William C. Feist.** -.

Feist, William C. Madison, Wisconsin : USDA Forest Products Laboratory, 1984. . Cover title.~ Paper also published in: New ideas materials procedures, proceedings of Seventh Annual Educational Conference, 1984, February 5-8; Baltimore, Md., American Society of Home Inspectors, Inc., 1984. 27 leaves : ill. ; 28 cm. Bibliography: p. 16-17. (NAL Call No.: DNAL ATT325.F45).

0493

**Reaction of epoxides with wood /by Roger M. Rowell and W. Dale Ellis.** -.

Rowell, Roger M. Ellis, Walter Dale. Madison, Wis. : USDA, Forest Service, Forest Products Laboratory, 1984. "December 1984.". 41 p. : ill. ; 28 cm. -. Bibliography: p. 38. (NAL Call No.: DNAL A99.9 F7634U no.451).

0494

**Timber resource statistics for the Talkeetna block, Susitna River basin multiresource inventory unit, Alaska, 1979 /Theodore S. Setzer, Gary L. Carroll, and Bert R. Mead.** -.

Setzer, Theodore S. Carroll, Gary L.; Mead, Bert R. Portland, Dr. : Pacific Northwest Forest and Range Experiment Station, 1984. Cover title.~ "October 1984.". 47 p. : ill., map ; 28 cm. -. Bibliography: p. 47. (NAL Call No.: DNAL A99.9 F7625Un no.115).

0495

**U.S. timber production, trade, consumption, and price statistics, 1950-83 /by Alice H. Ulrich.** -.

Ulrich, Alice H. Washington, D.C.? : USDA, Forest Service, 1984. "August 1984.". v, 83 p. : ill. ; 28 cm. -. Bibliography: p. 77-83. (NAL Call No.: DNAL 1 Ag84M no.1442).



## FOREST PRODUCTS - GENERAL

0496

**Wood preservation and wood products treatment.** -.  
Athens, Ga. : Cooperative Extension Service, The University of Georgia, College of Agriculture, 1984. Cover title. iv, 52 p. : ill. ; 28 cm. -. Bibliography: p. 42. (NAL Call No.: DNAL 275.29 G29B no.823).

0502

**Utilization of lignins and lignin derivatives /Fred Boye.** -.  
Boye, Fred. Appleton, Wis. : Institute of Paper Chemistry, 1984. Includes indexes. 2 v. (ii, 966 p.) ; 28 cm. -. (NAL Call No.: DNAL 241.4 Ap5 no.292).

0497

**Effect of ventilation rate and board loading on formaldehyde concentration: a critical review of the literature (Air contamination).**  
Myers, G.E. Madison, Wis. : Forest Products Research Society. Forest products journal. Oct 1984. Literature review. v. 34 (10). p. 59-68. ill. Includes 43 references. (NAL Call No.: 99.9 F7662J).

0498

**Proceedings of a workshop on the durability of structural panels, Pensacola, Florida, October 5-7, 1982 /edited by Eddie W. Price ; presented by the Southern Forest Experiment Station and Auburn University.** -.  
Price, Eddie W. New Orleans, Louisiana : U.S. Dept. of Agriculture, Forest Service, Southern Forest Experiment Station, 1984. "December 1984". iii, 185 p. : ill. ; 28 cm. -. Includes bibliographies. (NAL Call No.: DNAL aSD11.U57 no.53).

0499

**Computer model for economic study of unbleached kraft paperboard production /Peter J. Ince.** -.  
Ince, Peter J. Madison, Wis. : Forest Products Laboratory, 1984. Cover title. 42 p. : ill. ; 28 cm. -. Includes bibliographical references. (NAL Call No.: DNAL aSD11.A57 no.42).

0500

**1984 Polymers, Laminations, and Coatings Conference, Westin Copley Place, Boston, Mass., September 24-26.** -.  
Atlanta, Ga. : Tappi Press, c1984. Spine title: TAPPI Polymers, Laminations, and Coatings Conference. 2 v. (ix, 691 p.) : ill. ; 28 cm. -. Includes bibliographies. (NAL Call No.: DNAL TS1109.T27 1984).

0501

**1984 Pulping Conference Hyatt Regency, San Francisco, CA, November 12-14.** -.  
Atlanta, GA : TAPPI Press, c1984. 3 v. (639 p.) : ill. ; 29 cm. -. Includes bibliographies. (NAL Call No.: DNAL TS1171.T3 1984).



# FOREST INJURIES AND PROTECTION

0503

**FUELBED-EAST user's guide for modeling activity fuels and fire behavior in eastern forests /David L. Radloff, Duane R. Freeman, and Richard F. Yancik. -.**

Radloff, David L. Freeman, Duane R.; Yancik, Richard F. Fort Collins, Colo. : Rocky Mountain Forest and Range Experiment Station, Forest Service, U.S. Dept. of Agriculture, 1984. 12 p. : ill. ; 28 cm. Bibliography: p. 9. (NAL Call No.: DNAL aSD421.45.M37R3).

0508

**The 1978 National Fire-Danger Rating Systemtechnical documentation. -.**

Ogden, Utah : U.S. Dept. of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station, 1984. Caption title.~ Distributed to depository libraries in microfiche.~ "July 1983.". 44 p. : ill., 1 map ; 28 cm. -. Bibliography: p. 34-37. (NAL Call No.: DNAL aSD11.A48 no.169).

0504

**La Mesa Fire Symposium Los Alamos, New Mexico, October 6 and 7, 1981 /compiled by Teralene S. Foxx. -.**

Foxx, Teralene S. Los Alamos, N.M. : Los Alamos National Laboratory, 1984. Partially funded by the National Park Service and the Eisenhower Consortium of the U.S. Forest Service.~ Symposium co-sponsored by the LA/NERP and the Southwest Fire Council.~ "Issued February 1984."~ One folded map in pocket.~ "LA-9236-NERP."~ "UC-11.". vi, 172 p. : ill., maps ; 28 cm. Includes bibliographies. (NAL Call No.: DNAL SD421.32.N6L3 1981).

0505

**The legal system, the U.S. Forest Service, and human-caused wild fires /Linda R. Donoghue and Donna M. Paananen. -.**

Donoghue, Linda R. St. Paul, Minn. : U.S. Dept. of Agriculture, Forest Service, North Central Forest Experiment Station, 1984. Cover title.~ Distributed to depository libraries in microfiche.~ "December 1984"--T.p. verso. 57 p. : ill. ; 28 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL aSD11.A34 no.248).

0506

**Wall of flames the Minnesota forest fire of 1894 /Lawrence H. Larsen. -.**

Larsen, Lawrence H. 1931. Fargo : North Dakota Institute for Regional Studies, c1984. Includes index. 187 p., 2 p. of plates : ill. ; 24 cm. Bibliography: p. 179-182. (NAL Call No.: DNAL SD421.32.M6L37).

0507

**Wilderness fire management planning guide /William C. Fischer. -.**

Fischer, William C. Ogden, Utah : U.S. Dept. of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station, 1984. Distributed to depository libraries in microfiche.~ "August 1984.". 56 p. : ill., maps ; 28 cm. -. Includes bibliographies. (NAL Call No.: DNAL aSD11.A48 no.171).

# ANIMAL SCIENCE

0509

**Acarology VI /editors, D.A. Griffiths and C.E. Bowman. -**

Griffiths, D. A.; Bowman, C. E. 1984. New York : Halsted Press, 1984. Papers presented at the VI International Congress of Acarology, held 5-11 September 1982. 2 v. : ill. ; 25 cm. Includes bibliographies and indexes. (NAL Call No.: DNAL QL458.A2I5 1982).

# ANIMAL PRODUCTION

0510

**Advances and challenges in insect rearing / edited by E.G. King and N.C. Leppla.**  
King, Edgar George,; 1943-; Leppla, N. C.; (Norman Casey),; 1945. New Orleans, La. Agricultural Research Service (Southern Region), U.S. Department of Agriculture 1984. Revised version of 36 papers presented at a conference "Advances and Challenges in Insect Rearing" sponsored by the U.S. Dept. of Agriculture and the Insect Rearing Group held in Atlanta, Ga., on March 4-6, 1980 ~Includes bibliographies. xvi, 306 p. : ill., map ; 28 cm. (NAL Call No.: aSF518.A3 1984).

0511

**The Africanized honey bee in the United States what will happen to the U.S. beekeeping industry? /Robert McDowell.** -  
McDowell, Robert. Washington, D.C. : U.S. Dept. of Agriculture, Economic Research Service : for sale by Supt. of Docs., 1984. Cover title.~ "November 1984.". v, 33 p. : maps ; 28 cm. -. Bibliography: p. 24-26. (NAL Call No.: DNAL A281.9 Ag8A no.519).

0512

**An analysis of the pork industry in Maryland, North Carolina, Pennsylvania, and Virginia /Karen Mundy, David Kenyon, and John Crowgey, Jr.** -  
Mundy, Karen P. 1943. Kenyon, David E.; Crowgey, John. Blacksburg, Va. : College of Agriculture and Life Sciences, Virginia Agricultural Experiment Station, Virginia Polytechnic Institute and State University, 1984. "September 1984.". vi, 99 p. : ill., maps ; 23 cm. -. Bibliography: p. 91-94. (NAL Call No.: DNAL S541.5.V8B8 no.84-8).

0513

**Beekeeping in the U.S. 1970-1983.**  
Maclean, J.T. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Aug 1984. Bibliography. Aug 1984. (84-53). 14 p. (NAL Call No.: aZ5071.N3).

0514

**Cost comparison of private vs. for-hire trucking of cattle /Charles B. Soule ... et al.** -  
Soule, Charles B. Laramie, Wyo. : Agricultural Experiment Station, University of Wyoming, 1984. iv, 50 p. : ill. ; 28 cm. -. Bibliography: p. 35. (NAL Call No.: DNAL S131.E22 no.198).

0515

**The development of the ability to select for increased milk production the Jersey dairy cow in Maine, 1900-1984 /by John R. Paton and Barbara A. Barton.** -  
Paton, John R. Barton, Barbara A. Orono, Me. : Maine Agricultural Experiment Station, 1984. ix, 98 p. : ill., maps ; 23 cm. -. Bibliography: p. 98. (NAL Call No.: DNAL 100 M28S (1) no.792).

0516

**An Econometric model of the Hawaii beef industry and some of its applications /Roland K. Roberts ... et al.** -  
Roberts, Roland K., 1950. Honolulu : HITAHR, College of Tropical Agriculture and Human Resources, University of Hawaii at Manoa, 1984. "August 1984.". 43 p. : ill. ; 26 cm. -. Bibliography: p. 43. (NAL Call No.: DNAL S539.5.R43 no.032).

0517

**The economic feasibility of electricity generation on cage layer operations /by Boris E. Bravo-Ureta and Glen V. McMahon.** -  
Bravo-Ureta, Boris E. McMahon, Glen V. Storrs, Conn. : Storrs Agricultural Experiment Station, College of Agriculture and Natural Resources, The University of Connecticut, 1984. "May 1984.". 36 p. : ill. ; 22 cm. -. Bibliography: p. 30-31. (NAL Call No.: DNAL 100 C76Re no.79).

0518

**The effects of foreign beef imports on Hawaii beef prices and production /Roland K. Roberts, James C. Nolan, Jr.** -  
Roberts, Roland K., 1950. Nolan, James C., 1924. Honolulu : HITAHR, College of tropical Agriculture and Human Resources, University of Hawaii at Manoa, 1984. "November 1984.". 16 p. ; 26 cm. -. Bibliography: p. 15. (NAL Call No.: DNAL S539.5.R43 no.035).

0519

**Oklahoma equine agriculture symposium proceedings held at Oklahoma City, Oklahoma August 8 and 9, 1984 /proceedings co-edited and compiled by: R.L. Dalrymple, Jim Pumphrey ; symposium sponsored by: Agricultural Division, Nobel Foundation.** -  
Dalrymple, R. L.; Pumphrey, Jim. Ardmore, Okla. (2510 Highway 70 East, P.O. Box 2180, Ardmore 73402) : The Foundation, 1984. v, 180 p. : ill. ; 28 cm. Includes bibliographies. (NAL Call No.: DNAL SF285.05 1984).

## ANIMAL PRODUCTION

0520

(NAL Call No.: DNAL A281.9 Ag8A no.515).

**Proceedings /18th and 19th Mealani Beef Cattle Field Day, Mealani Experiment Station, Kamuela, Hawaii, October 15, 1983 and October 20, 1984.**

-.  
Honolulu, Hawaii : HITAHR, College of Tropical Agriculture and Human Resources, University of Hawaii, 1984. Cover title.~ "October 1984.". 44 p. : ill. ; 28 cm. -. Includes bibliographies. (NAL Call No.: DNAL S481.R4 no.050).

0521

**Production, marketing alternatives for northern Minnesota cow-calf producers /Robert Craven, Paul Hasbargen. -.**

Craven, Robert. Hasbargen, Paul R. St. Paul, Minn. : Agricultural Experiment Station, University of Minnesota, 1984. 66 p. ; 28 cm. -. Bibliography: p. 34. (NAL Call No.: DNAL 100 M66 (2) no.2208).

0522

**The relative profitability of producing broilers of various weights /by Jerry K. Slice, G. Wayne Malone. -.**

Slice, Jerry K. Malone, G. Wayne. Mississippi State : Dept. of Agricultural Economics, Mississippi Agricultural and Forestry Experiment Station, Mississippi State University, 1984. "August 1984.". 18 leaves : charts ; 28 cm. -. Bibliography: leaves 17-18. (NAL Call No.: DNAL 100 M69Mr no.154).

0523

**Sheep husbandry in the U.S., 1979-1983.**

MacLean, J.T. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Mar 1984. Bibliography. Mar 1984. (84-17). 23 p. (NAL Call No.: a25071.N3).

0524

**Structure and development of meat animals /H.J. Swatland. -.**

Swatland, H. J., 1944. Englewood Cliffs, N.J. : Prentice-Hall, c1984. xi, 436 p. : ill. ; 25 cm. Includes bibliographies and index. (NAL Call No.: DNAL SF140.C37S9).

0525

**The U.S. beef cow-calf industry /Henry C. Gilliam, Jr. -.**

Gilliam, Henry C. Washington, D.C. : U.S. Dept. of Agriculture, Economic Research Service : for sale by Supt. of Docs., 1984. Cover title.~ "September 1984."~ Includes errata sheet. viii, 60 p. : ill. ; 28 cm. -. Bibliography: p. 49.



# ANIMAL ECOLOGY

0526

**The Biology of ground-dwelling squirrels annual cycles, behavioral ecology, and sociality /edited by Jan O. Murie and Gail R. Michener.** -.

Murie, Jan O.; Michener, Gail R. Lincoln : University of Nebraska Press, c1984. "This volume arises from a symposium on sociality in ground squirrels, prairie dogs, and marmots held in Banff, Alberta, Canada, from 29 September to 3 October 1982"--Introd. xvi, 459 p. : ill. ; 24 cm. Includes bibliographies and index. (NAL Call No.: ONAL QL737.R68B518).

0532

**Tropical nature /Adrian Forsyth and Kenneth Miyata ; illustrations by Sarah Landry.** -. Forsyth, Adrian. Miyata, Kenneth. New York : Scribner, c1984. Includes index. xvii, 248 p. ill. ; 22 cm. Bibliography: p. 235-242. (NAL Call No.: ONAL QH108.A1F67).

0527

**The Ecology of aquatic insects /edited by Vincent H. Resh and David M. Rosenberg.** -.

Resh, Vincent H.; Rosenberg, David M. New York : Praeger, 1984. x, 625 p. : ill. ; 25 cm. Includes bibliographies and indexes. (NAL Call No.: ONAL QL463.E19).

0528

**Genetics and ecology of a hybrid zone in *Hyalophora* (Lepidoptera: Saturniidae) /by Michael M. Collins.** -.

Collins, Michael M. Berkeley : University of California Press, 1984, c1983. xii, 93 p. : ill. ; 25 cm. -. Bibliography: p. 31-36. (NAL Call No.: ONAL 500 C125E v.104).

0529

**Population characteristics, spatial organization, and natural mortality in the Columbian white-tailed deer /by Thomas A. Gavin ... et al.** -.

Gavin, Thomas A. Bethesda, Md. : The Wildlife Society, 1984. "Supplement to the Journal of wildlife management, vol. 48, no. 4, October 1984."-- "October 1984.". 41 p. : ill. ; 26 cm. -. Bibliography: p. 38-40. (NAL Call No.: DNAL 410 W64 no.91).

0530

**Size, function, and life history /William A. Calder III.** -.

Calder, William A., 1934. Cambridge, Mass. : Harvard University Press, 1984. Includes index. xii, 431 p. : ill. ; 25 cm. Bibliography: p. 389-421. (NAL Call No.: DNAL QL799.C29).

0531

**Swine science /by M.E. Ensminger, R.O. Parker.** -.

Ensminger, M. E. Parker, R. O. Danville, Ill. : Interstate Printers, 1984. 568 p. : ill. ; 28 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL SF395.E5 1984).

# ANIMAL STRUCTURE

0533

**Ecological entomology /edited by Carl B. Huffaker, Robert L. Rabb ; sponsored by the International Center for Integrated and Biological Control, the University of California and North Carolina State University, Raleigh. -.**

Huffaker, Carl B.,\_1914-; Rabb, R. L. New York : Wiley, c1984. "A Wiley-Interscience publication." xiii, 844 p. : ill. ; 24 cm. Includes bibliographies and index. (NAL Call No.: DNAL QL463.E18).

0534

**Proceedings of the fourth International Symposium on Trichoptera, Clemson, South Carolina, 11-16 July 1983 /edited by John C. Morse. -.**

Morse, John C. The Hague ; Boston : W. Junk ; Hingham, Ma : Distributors for the U.S. and Canada, Kluwer Academic Publishers, 1984. xxii, 486 p. : ill. ; 25 cm. -. Includes bibliographies and indexes. (NAL Call No.: DNAL QL461.S4 v. 30).

0535

**Regulation and development of the muscarinic acetylcholine receptor in chick embryonic heart /by Stanley Warren Halvorsen. -.**

Halvorsen, Stanley Warren, 1953. 1984. Thesis (Ph.D.)--University of Washington, 1984. Photocopy. Ann Arbor, Mich. : University Microfilms International, 1985. ix, 120 pages : ill. ; 21 cm. Bibliography: p. 102 -108. (NAL Call No.: DNAL DISS 84-19,143).

# ANIMAL NUTRITION

0536

**Interregional competition in the U.S. cattle feeding fed-beef economy with emphasis on the Southern Plains /G.M. Clary, R.A. Dietrich, D.E. Farris. -.**  
Clary, Gregory M. Dietrich, Raymond A. 1927-;  
Farris, Donald E. College Station, Tex. : Texas  
Agricultural Experiment Station, Texas A&M  
University System, 1984. "November 1984.". 59  
p. : ill., maps ; 28 cm. -. Bibliography: p.  
28. (NAL Call No.: DNAL 100 T31S (1) no.1487).

# ANIMAL PHYSIOLOGY AND BIOCHEMISTRY

0537

**Biology of the Alysiini (Hymenoptera: Braconidae), parasitoids of cyclorrhaphous diptera /Robert A. Wharton. -**  
Wharton, Robert. College Station, Tex. : Texas Agricultural Experiment Station, 1984. "August 1984". 39 p. : ill. ; 23 cm. -. Bibliography: p. 33-39. (NAL Call No.: DNAL 100 T31Tec no.11).

0538

**Modeling distributions of insect development time: a literature review and application of the Weibull function.**  
AESAAI. Wagner, T.L. Wu, H.I.; Sharpe, P.J.H.; Coulson, R.N. College Park, Md. : The Society. Annals of the Entomological Society of America. Literature review. Sept 1984. v. 77 (5). p. 475-483. Includes 29 references. (NAL Call No.: DNAL 420 EN82).

0539

**Modeling insect development rates: a literature review and application of a biophysical model.**  
Wagner, T.L. Wu, H.I.; Sharpe, P.J.H.; Schoolfield, R.M.; Coulson, R.N. College Park, Md. : The Society. Annals of the Entomological Society of America. Mar 1984. Literature review. v. 77 (2). p. 208-225. Includes references. (NAL Call No.: 420 EN82).



# ANIMAL TAXONOMY AND GEOGRAPHY

0540

An annotated bibliography of keys to Latin American weevils, Curculionidae sensu lato (Coleoptera: Curculionoidea)(supplement). SENTD. O'Brien, C.W. Wibner, G.J. College Station, Tex. : Southwestern Entomological Society. The Southwestern entomologist. Sept 1984. v. 9 (3). p. 279-285. maps. (NAL Call No.: DNAL QL461.S65).

0541

Boll weevil mass rearing technology /by P.P. Sikorowski ... et al. ; with historical introduction by T.B. Davich. -. Sikorowski, P. P. Jackson : University Press of Mississippi, c1984. 172 p. : ill. ; 24 cm. Includes bibliographies and index. (NAL Call No.: DNAL SF562.B58B64).

0542

The genus *Brachycentrus* in North America, with a proposed phylogeny of the genera of Brachycentridae (Trichoptera) /Oliver S. Flint, Jr. -. Flint, Oliver S. Washington, D.C. : Smithsonian Institution Press, 1984. Distributed to depository libraries in microfiche. iii, 58 p. : ill., maps ; 26 cm. -. Bibliography: p. 56-58. (NAL Call No.: DNAL QL21.U5S6 no.398).

0543

The Holarctic genera of Mymaridae (Hymenoptera: Chalcidoidea) /by Michael E. Schauff. -. Schauff, Michael E. 1949. Washington, D.C. : Entomological Society of Washington, 1984. Includes index. 67 p. : ill. ; 26 cm. -. Bibliography: p. 57-59. (NAL Call No.: DNAL 420 W27M no.12).

0544

Insects of the world /Anthony Wootton. -. Wootton, Anthony. New York : Facts on File, c1984. Includes index. 224 p. : ill. (some col.) ; 25 cm. Bibliography: p. 214-215. (NAL Call No.: DNAL QL463.W876).

0545

Lepidoptera associated with western spruce budworm /by Robert E. Stevens, V.M. Carolin, and George P. Markin. -. Stevens, Robert E., 1928. Washington, D.C. : U.S. Dept. of Agriculture, Forest Service, Cooperative State Research Service, 1984. "December 1984."~ CANUSA. 63 p. : col. ill. ; 22 cm. -. Bibliography: p. 61-63. (NAL Call No.: DNAL 1 Ag84Ah no.622).

0546

Ontogeny and systematics of fishes based on an international symposium dedicated to the memory of Elbert Halvor Ahlstrom ... held August 15-18, 1983, La Jolla, California /sponsored by the National Marine Fisheries Service, National Oceanic and Atmospheric Administration, United States Department of Commerce. -. New York : American Society of Ichthyologists and Herpetologists, c1984. Includes index. ix, 760 p. : ill. ; 29 cm. -. Bibliography: p. 688-745. (NAL Call No.: DNAL QL618.O57).

0547

A review of the Archaeid spiders and their relatives, with notes on the limits of the superfamily Palpimanoidea (Arachnida, Araneae) /Raymond R. Foster, Norman I. Platnick. -. Forster, Raymond R., 1922. Platnick, Norman I. New York, N.Y. : American Museum of Natural History, 1984. "Issued March 29, 1984." 106 p. : ill. ; 26 cm. -. Bibliography: p. 104-106. (NAL Call No.: DNAL 500 N483B v.178 art.1).

0548

Revision of North American Liris Fabricius (Hymenoptera, Sphecoidea, Larridae) /Karl V. Krombein and Sandra Shanks Gingras. -. Krombein, Karl V., 1912. Gingras, Sandra Shanks. City of Washington : Smithsonian Institution Press, 1984. iii, 96 p. : ill., maps ; 26 cm. -. Bibliography: p. 71-72. (NAL Call No.: DNAL QL21.U5S6 no.404).

0549

A revision of the Dryinidae (Hymenoptera) /by Massimo Olmi. -. Olmi, Massimo, 1926. Ann Arbor, Mich. : American Entomological Institute, 1984. Includes indexes. 2 v. (xii, 1913 p.) : ill. ; 24 cm. -. Bibliography: p. 1847-1869. (NAL Call No.: DNAL 420 Am34 no.37 pt.1).

0550

Revision of the genus *Enallagma* of the United States west of the Rocky Mountains and identification of certain larvae by discriminant analysis (Odonata: Coenagrionidae) /by Rosser W. Garrison. -. Garrison, Rosser W. Berkeley : University of California Press, 1984. ix, 129 p. : ill. ; 26 cm. -. Bibliography: p. 56-61. (NAL Call No.: DNAL 500 C125E v.105).

## ANIMAL TAXONOMY AND GEOGRAPHY

0551

**A revision of the world species of Sinophorus (Ichneumonidae) /by Michael Sanborne. -.**  
Sanborne, Michael. Ann Arbor, Mich. : American Entomological Institute, 1984. Includes indexes. ii, 403 p. : ill., maps ; 24 cm. -. Bibliography: p. 306-309. (NAL Call No.: DNAL 420 Am34 no.38).

0552

**The soft scale insects of Florida (Homoptera: Coccoidea: Coccidae) /by Avas B. Hamon and Michael L. Williams. -.**  
Hamon, Avas B. Williams, Michael L. Gainesville, Florida : Florida Dept. of Agriculture and Consumer Services, Division of Plant Industry, 1984. Includes index. xi, 194 p. : ill. (some col.), maps ; 27 cm. -. Bibliography: p. 188-191. (NAL Call No.: DNAL 410.9 F6632 v.11).

0553

**The Sphaerodactylus (Sauria, Gekkonidae) of Middle America /by Dennis M. Harris and Arnold G. Kluge. -.**  
Harris, Dennis M. Kluge, Arnold G. Ann Arbor, Mich. : Museum of Zoology, University of Michigan, 1984. Caption title. 59 p. : ill., maps ; 23 cm. -. Bibliography: p. 52-59. (NAL Call No.: DNAL 410 M582 no.706).

0554

**Systematics and phylogeny of Hipparion, Neohipparion, Nannippus, and Cormohipparion (Mammalia, Equidae) from the Miocene and Pliocene of the new world /Bruce J. MacFadden. -.**  
MacFadden, Bruce J. New York, N.Y. : American Museum of Natural History, c1984. "Issued November 15, 1984.". 195 p. : ill. ; 26 cm. -. Bibliography: p. 189-195. (NAL Call No.: DNAL 500 N483B v.179 art.1).

0555

**Systematics of Eusattus and Conisattus (Coleoptera, Tenebrionidae, Coniontini, Eusatti) /by John T. Doyen. -.**  
Doyen, John Thomas, 1941. San Francisco : California Academy of Sciences, 1984. 104 p. : ill., maps ; 26 cm. -. Bibliography: p. 99-100. (NAL Call No.: DNAL 500 C120 no.141).

0556

**Systematics of Fissurella in the Peruvian and Magellanic faunal provinces (Gastropoda : Prosobranchia) /James H. McLean. -.**  
McLean, James H., 1936. Los Angeles, Calif. : Natural History Museum of Los Angeles County, 1984. 70 p. : ill. ; 28 cm. -. Bibliography: p. 67-70. (NAL Call No.: DNAL 500 L893 no.354).

0557

**Systematics of Nearctic Telenomus classification and revisions of the Podisi and Phymatae species groups (Hymenoptera : Scelionidae) /by Norman F. Johnson. -.**  
Johnson, Norman F. Columbus, Ohio : College of Biological Sciences, Ohio State University, 1984. x, 113 p. : ill., 1 port. ; 26 cm. -. Bibliography: p. 66-76. (NAL Call No.: DNAL 442.9 Oh3 v.6 no.3).

0558

**Techniques in pheromone research /edited by Hans E. Hummel, Thomas A. Miller ; with contributions by H. Arn ... et al. -.**  
Hummel, Hans E.; Miller, Thomas A. New York : Springer-Verlag, c1984. xiv, 464 p. : ill. (some col.) ; 25 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL QL495.T43).

0559

**Tertiary marine pelecypods of California and Baja California Propeamussiidae and Pectinidae /by Ellen James Moore. -.**  
Moore, Ellen James. Washington, D.C. : U.S. Dept. of the Interior, Geological Survey ; Alexandria, Va. : For sale by the Distribution Branch, U.S. Geological Survey, 1984. Spine title: Tertiary mollusks, California and Baja California : pelecypods : Propeamussiidae and Pectinidae. Includes index. iv, 112 p., 84 p. of plates : ill., 2 maps ; 29 cm. -. Bibliography: p. 91-99. (NAL Call No.: DNAL 407 G29Pr no.1228-B).

0560

**The ticks of California (Acari, Ixodida) /by Deane P. Furman and Edmond C. Loomis. -.**  
Furman, Deane P., 1915. Loomis, Edmond C. Berkeley : University of California Press, 1984. viii, 239 p. : ill., maps ; 28 cm. -. Bibliography: p. 81-88. (NAL Call No.: DNAL 420 C12 v.25).

# VETERINARY SCIENCE AND HYGIENE

0561

**Clinical laboratory animal medicine an introduction /Donald D. Holmes. -.**  
Holmes, Donald D., 1930. Ames, Iowa : Iowa State University Press, 1984. Includes index. viii, 138 p. ; 26 cm. Bibliography: p. 115-126. (NAL Call No.: DNAL SF996.5.H65 1984).

0562

**Diagnostic and surgical arthroscopy in the horse /C. Wayne McIlwraith ; illustrations, Tom McCracken ; contributing authors, George S. Martin, Joseph J. Foerner. -.**  
McIlwraith, C. Wayne. Martin, George S.; Foerner, Joseph J. Edwardsville, Kan. : Veterinary Medicine Pub. Co., 1984. 137 p. : ill. (some col.) ; 28 cm. Includes bibliographies. (NAL Call No.: DNAL SF959.J64M34).

0563

**Foreign animal diseases their prevention, diagnosis and control /Committee on Foreign Animal Diseases of the United States Animal Health Association. -.**  
United States Animal Health Association.-Committee on Foreign Animal Diseases. Richmond, Va. (Suite 205, 6924 Lakeside Avenue, Richmond 23228) : The Committee, 1984. xxiv, 381 p. : ill. ; 21 cm. Includes bibliographies. (NAL Call No.: DNAL SF745.U4 1984).

0564

**Of mice, models, and men a critical evaluation of animal research /Andrew N. Rowan. -.**  
Rowan, Andrew N., 1946. Albany : State University of New York Press, c1984. Cover title: Of mice, models & men.~ Includes index. x, 323 p. ; 24 cm. Bibliography: p. 287-312. (NAL Call No.: DNAL HV4764.R69).

0565

**Proceedings May 23-25, 1984, second Symposium on Computer Applications in Veterinary Medicine /American Veterinary Computer Society, College of Veterinary Medicine, Mississippi State University. -.**  
Mississippi? : The Society?, 1984. Title from cover. iii, 355 p. : ill., forms ; 28 cm. Includes bibliographical references. (NAL Call No.: DNAL SF760.E4S9 1984).

0566

**Recent advances in virus diagnosis a seminar in the CEC Programme of Co-ordination of Research on Animal Pathology, held at the Veterinary Research Laboratories, Belfast, Northern Ireland, September 22-23, 1983 /sponsored by the Commission of the European Communities, Directorate-General for Agriculture, Co-ordination of Agricultural Research ; edited by M.S. McNulty and J.B. McFerran. -.**  
McNulty, M. S.; McFerran, J. B. Boston : M. Nijhoff for the Commission of the European Communities, 1984. viii, 213 p. : ill. ; 25 cm. -. Includes bibliographies. (NAL Call No.: DNAL SF780.4.R43).

0567

**Research on nonhuman primates /guest editor, Andrew G. Hendrickx. -.**  
Hendrickx, Andrew G. Orlando : Academic, 1984. xiv, 385 p. : ill. ; 24 cm. -. Includes bibliographical references and index. (NAL Call No.: DNAL 41.8 Ad9 v.28).

0568

**Symposium on advances in feline medicine II /John R. August and Andrew S. Loar, guest editors. -.**  
August, John R. 1950-; Loar, Andrew S. Philadelphia : Saunders, 1984. Cover title: Advances in feline medicine II. p. 1157-1382 : ill. ; 24 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL SF601.V523 v.14 no.6).

0569

**Symposium on large animal ophthalmology /Cecil P. Moore, guest editor. -.**  
Moore, Cecil P. Philadelphia : W.B. Saunders, 1984. Cover title: Large animal ophthalmology.~ "November 1984.". vi, p. 433-703 : ill. ; 24 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL SF601.V534 v.6 no.3).

0570

**Veterinary anatomy basic, comparative, and clinical /by M.J. Shively ; drawings by Sharon Ashby. -.**  
Shively, M. J. 1946. College Station : Texas A&M University Press, c1984. 582 p. : ill. ; 28 cm. Includes bibliographies and index. (NAL Call No.: DNAL SF761.S5).



## VETERINARY SCIENCE AND HYGIENE

0571

**A literature review on the toxicity of lasalocid, a polyether antibiotic (*Streptomyces lasaliensis*).**

Galitzer, S.J. Dehme, F.W. Manhattan, Kan. : American College of Veterinary Toxicologists. Veterinary and human toxicology. Aug 1984. Literature review. v. 26 (4). p. 322-326. Includes references. (NAL Call No.: SF601.A47).

0572

**Local immune responses of the gut /editors, Timothy J. Newby, Christopher R. Stokes. -.** Newby, Timothy J.; Stokes, Christopher R. Boca Raton, Fla. : CRC Press, c1984. 249 p. : ill. ; 26 cm. Includes bibliographies and index. (NAL Call No.: DNAL QR186.L63).

0573

**Manual of equine hematology /by D.W. Schalm ; with contributions from S.M. Darnton ... et al. . -.**

Schalm, Oscar William, 1909. Santa Barbara, Calif. : Veterinary Practice Pub. Co., c1984. viii, 80 p. : ill. (some col.) ; 26 cm. Includes bibliographical references and index. (NAL Call No.: DNAL SF769.5.S28).

0574

**Vitamin C and infectious disease: a review of the literature and the results of a randomized, double-blind, prospective study over 8 years.** Briggs, M. Boca Raton, Fla. : CRC Press, c1984. Recent vitamin research / editor, Michael H. Briggs. p. 39-81. Includes 413 references. (NAL Call No.: DNAL QP771.R43).

0575

**An economic analysis of the effects of coyotes on the Edwards Plateau sheep and goat industry /Kerry K. Litzenberg and Kim A. Keese. -.** Litzenberg, Kerry K. Keese, Kim A. College Station, Tex. : Dept. of Agricultural Economics, Texas Agricultural Experiment Station, Texas A&M University System, 1984. "April 1984.". 26, 1 leaves : ill., maps ; 28 cm. -. Bibliography: leaf 27. (NAL Call No.: DNAL HD1775.T4T4 no.84-1 SP-10).

0576

**Fundamentals of applied entomology /M. Curtis Wilson, Delmar B. Broersma, Arwin V. Provonsha. -.**

Wilson, M. Curtis 1921. Broersma, Delmar B.; Provonsha, Arwin V. Prospect Heights, Ill. : Waveland Press, c1984. viii, 216 p. : ill. ; 28 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL SB931.W5 1984).

0577

**Insect poisons, allergens, and other invertebrate venoms /edited by Anthony T. Tu. -.**

Tu, Anthony T., 1930. New York : M. Dekker, c1984. xv, 732 p. : ill., maps ; 27 cm. -. Includes bibliographies and indexes. (NAL Call No.: DNAL QP631.H3 v.2).

0578

**Pathogens of invertebrates application in biological control and transmission mechanisms /edited by Thomas C. Cheng. -.**

Cheng, Thomas C. New York : Plenum Press, c1984. "Proceedings of the Thirteenth Annual Meeting of the Society for Invertebrate Pathology, held July 26-August 2, 1980, in Seattle, Washington"--T.p. verso. viii, 278 p. : ill. ; 26 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL QR51.C62 v.7).

0579

**Relationship to the face fly (*Diptera:Muscidae*) to pinkeye in cattle: a review and synthesis of the relevant literature (*Musca autumnalis*, *Moraxella bovis*).**

Hall, R.D. Honolulu, Hawaii : Dept. of Entomology, Bishop Museum. Journal of medical entomology. July 26, 1984. Literature review. v. 21 (4). p. 361-365. Includes references. (NAL Call No.: 421 J828).

0580

**Location of cryptosporidia: review of the literature and experimental infections in calves (*Cryptosporidium*, calves).**

Anderson, B.C. Schaumburg, Ill. : American Veterinary Medical Association. American journal of veterinary research. July 1984. Literature review. v. 45 (7). p. 1474-1477. Includes references. (NAL Call No.: 41.8 AM3A).

0581

**Diseases of amphibians and reptiles /edited by Gerald L. Hoff, Frederic L. Frye, and Elliott R. Jacobson. -.**

Hoff, Gerald L., 1945-; Frye, Frederic L.; Jacobson, Elliott R., 1945. New York : Plenum Press, c1984. ix, 784 p. : ill. ; 26 cm. Includes bibliographies and index. (NAL Call No.: DNAL SF997.5.A45D57).



0582

**Symposium on advances in feline medicine I /John R. August and Andrew S. Loar, guest editors.** -.  
August, John R.\_1950-; Loar, Andrew S. Philadelphia : Saunders, c1984. vi., p. 953-1156 : ill., ports. ; 23 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL SF601.V523 v.14 no.5).

0583

**Chlamydia and chlamydial diseases of cattle: a review of the literature (Chlamydia trachomatis and Chlamydia psittaci).**

Idtse, F.S. Edwardsville, Kan. : Veterinary Medicine Publishing Co. VM/SAC, veterinary medicine & small animal clinician. Apr 1984. Literature review. v. 79 (4). p. 543-550. ill. Includes references. (NAL Call No.: 41.8 M69).

0584

**Bluetongue virus infection of sheep effect of prior immunization on clinical, immunological and pathological responses /by Charles Ray Mahrt.** -.

Mahrt, Charles Ray. 1984. Photocopy. Ann Arbor, Mich. : University Microfilms International, 1984. iii, 98 p. : ill. ; 21 cm. Bibliography: p. 72-74. (NAL Call No.: DNAL DISS 84-25,003).

0585

**Comparative serological evaluation of avian influenza vaccination in turkeys /by Albert John Surendran Abraham.** -.

Abraham, Albert John Surendran. 1984. Thesis (Ph.D.)--University of Minnesota, 1984. Photocopy. Ann Arbor, Mich. : University Microfilms International, 1985. iii, 139 p. : ill. ; 21 cm. Includes bibliographies. (NAL Call No.: DNAL DISS 84-18,436).

0586

**A comparison of the ELISA and serum neutralization tests for the detection of neutralising antibodies to foot-and-mouth disease virus cattle =Korrelation zwischen dem ELISA -Test und der Serumneutralisation zur Titrierung MKS-Virus-neutralisierender Antikörper im Serum von Kontrollrindern /by Lombard, M. and H.G. Petermann.** -.

Lombard, M. S.l. : s.n., 1984? . Translated from German, TT 84-4-0299.~ Translated from: Tierarztl. Umschau, vol. 37, no. 5:354-356, 1982. 10 p. : ill. ; 28 cm. Bibliography: p. 10. (NAL Call No.: DNAL TRANSL 31818).

0587

**DNA fingerprinting strain specific identification of pseudorabies virus final report /principal investigator, William C. Lawrence.** -.

Lawrence, William C. Philadelphia, Pa.? : University of Pennsylvania, School of Veterinary Medicine?, 1984? . Cover title.~ "Cooperative agreement no. 58-519B-2-1159 ; period 6-18-82 to 6-18-84.". 17 leaves : ill. ; 28 cm. Bibliography: leaf 4 . (NAL Call No.: DNAL QR456.L39).

0588

**Modern approaches to vaccines molecular and chemical basis of virus virulence and immunogenicity /edited by Robert M. Chanock, Richard A. Lerner.** -.

Chanock, Robert M.; Lerner, Richard A.\_1938. Cold Spring Harbor, N.Y. : Cold Spring Harbor Laboratory, 1984. Papers presented at a conference held in Sept. 1983 at Cold Spring Harbor Laboratory, Cold Spring Harbor, N.Y. xxv, 457 p. :ill. (some col.) ; 24 cm. Includes bibliographies and indexes. (NAL Call No.: DNAL QR189.M58).

0589

**Newcastle disease in Venezuela =La enfermedad de Newcastle (Neumoencefalitis aviaria) en Venezuela /by Divo, A.** -.

Divo, A. S.l. : s.n., 1984? . Translated from Spanish, TT 84-11013.~ Translated from: Bol. inst. investig. vet. Caracas, vol. 3, no. 16:547-575, May 1950. 25 leaves ; 28 cm. Bibliography: leaves 22-25. (NAL Call No.: DNAL TRANSL 31510).

# AQUATIC SCIENCES AND FISHERIES

0590

**Aquaculture in marine waters a list of selected reference books and monographs, 1961-1984**

**/compiled by Andre G. Coche. -.**

Coche, Andre Georges, 1931. Rome : Food and Agriculture Organization of the United Nations, 1984. Cover title.~ Includes indexes.~

"FIRI/C723(Rev.2)". 29 p. ; 28 cm. -. (NAL Call No.: DNAL SH1.F59 no.723 1984).

0591

**Biotechnology in the marine sciences proceedings of the first annual MIT Sea Grant lecture and seminar /edited by Rita R. Colwell, Anthony J. Sinskey, E. Ray Pariser. -.**

Colwell, R. R.\_1934-; Sinskey, Anthony J.; Pariser, E. Ray. New York : Wiley, c1984. Held Mar. 18-20, 1982.~ "A Wiley-Interscience publication.". xvii, 293 p. : ill. ; 24 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL TP248.2.B56).

# AQUACULTURE AND FISHERIES - GENERAL

0592

## **Aquaculture.**

Gilbert, H. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Bibliography. Sept 1984. (84-61). 29 p. (NAL Call No.: DNAL aZ5071.N3).

0593

**The effects of the 1983 El Nino on Oregon's coho and chinook salmon /Steven L. Johnson. -.** Johnson, Steven L. Corvallis : Oregon Dept. of Fish and Wildlife, Research and Development Section, 1984. "October 1984.". iii, 40 p. : ill. ; 28 cm. -. Bibliography: p. 39-40. (NAL Call No.: DNAL SH1.I55 no.84-8).

0594

**Freshwater environmental problems and coho production in Oregon /Steven L. Johnson. -.** Johnson, Steven L. Corvallis : Oregon Dept. of Fish and Wildlife, Research and Development Section, 1984. "November 1984.". 31 p. : ill. ; 28 cm. -. Bibliography: p. 27-31. (NAL Call No.: DNAL SH1.I55 no.84-11).

0595

**The relationship between crawfish production practices in Terrebonne Parish and yield /by Bennett B. Joffrion, Jr. -.** Joffrion, Bennett B. 1954. 1984. Thesis (M.S.)--Louisiana State University, Baton Rouge, 1984. Extension Repository Collection.~ "May 1984."~ Vita. ix, 2, 78 leaves ; 28 cm. Bibliography: leaves 65-66. (NAL Call No.: DNAL SH365.L8J6).

0596

**Aquaculture in fresh waters a list of selected reference books and monographs, 1951-1984 /compiled by Andre G. Coche. -.** Coche, Andre Georges, 1931. Rome : Food and Agriculture Organization of the United Nations, 1984. Cover title.~ Includes indexes.~ "FIRI/C724 (Rev.2)". 30 p. ; 28 cm. -. (NAL Call No.: DNAL SH1.F59 no.724 1984).

0597

**The freshwater aquaculture book a handbook for small scale fish culture in North America /by William McLarney. -.** McLarney, William. Point Roberts, Wash. : Hartley & Marks, c1984. "A Cloudburst Press book."~ Includes index. x, 583 p. : ill. ; 25 cm. Bibliography: p. 521 -544. (NAL Call No.: DNAL SH159.M4).

0598

**The freshwater snails of Florida a manual for identification /Fred G. Thompson. -.** Thompson, Fred G. 1934. Gainesville : University Presses of Florida, c1984. Includes indexes. x, 94 p. : ill. ; 23 cm. Bibliography: p. 87-88. (NAL Call No.: DNAL QL430.T48).

0599

**Third report to the fish farmers the status of warmwater fish farming and progress in fish farming research /edited by Harry K. Dupree and Jay V. Huner ; contributors, Ray R. Carter ... et al. -.** Carter, Ray R.; Dupree, Harry K.; Huner, Jay V. Washington, D.C. : U.S. Fish and Wildlife Service, 1984. vi, 270 p. : ill. ; 26 cm. Bibliography: p. 257-270. (NAL Call No.: DNAL SH34.T5 1984).

0600

**World review of interactions between marine mammals and fisheries /by Simon P. Northridge. -.** Northridge, Simon P. Rome : Food and Agriculture Organization of the United Nations, 1984. One folded col. map in pocket. vii, 190 p. : map ; 30 cm. -. Bibliography: p. 168-190. (NAL Call No.: DNAL SH1.F2 no.251).

0601

**Dinoflagellates /edited by David L. Spector. -.** Spector, David L. Orlando : Academic Press, 1984. xiv, 545 p. : ill. ; 24 cm. Includes bibliographies and indexes. (NAL Call No.: DNAL QL368.D6D56).

0602

**Research, development, and demonstration of algal production raceway (APR) systems for the production of hydrocarbon resources a subcontract report /Edward A. Laws. -.** Laws, Edward A., 1945. Golden, Colo. : Prepared for the U.S. Dept. of Energy by Solar Energy Research Institute ; Springfield, Va. : available from NTIS, 1984. "February 1984."~ Prepared under subcontract no. XE-O-9013-O1.~ "SERI/STR-231-2206."~ DE84004486. ix, 49 p. : ill. ; 28 cm. Bibliography: p. 47-49. (NAL Call No.: DNAL SH389.L3).

# FISHERIES AND AQUACULTURE MANAGEMENT - GENERAL

0603

**Exclusive dealing and vertical integration the efficiency of contracts in the tuna industry /by Edward C. Gallick. -.**

Gallick, Edward C. Washington, D.C.? : Federal Trade Commission, Bureau of Economics, 1984. "August 1984.". vi, 148 p. ; 23 cm. -. Bibliography: p. 143-148. (NAL Call No.: DNAL HD9469.T81G24).

0604

**Introduction to the practice of fishery science /William F. Royce. -.**

Royce, William F. Orlando : Academic Press, 1984. Includes index. xi, 428 p. ; ill., maps ; 24 cm. Bibliography: p. 413 -421. (NAL Call No.: DNAL SH331.R68).

0605

**Operational characteristics and costs of custom harvesting and hauling farm-raised catfish /by Mark E. Keenum and James G. Dillard. -.**

Keenum, Mark E. Dillard, James G. Mississippi State, Miss. : Dept. of Agricultural Economics, Mississippi Agricultural & Forestry Experiment Station, Mississippi State University, 1984. "October 1984.". 22 leaves ; 28 cm. -. Bibliography: leaf 22. (NAL Call No.: DNAL 100 M69Mr no.153).



# AQUATIC BIOLOGY AND ECOLOGY - GENERAL

0606

**Life in the Chesapeake Bay /Alice Jane Lippson ; Robert L. Lippson ; illustrations by Alice Jane Lippson. -.**

Lippson, Alice Jane. Lippson, Robert L. Baltimore : John Hopkins University Press, c1984. Includes index. ix, 229 p. : ill. ; 23 cm. Bibliography: p. 219-220. (NAL Call No.: DNAL QH104.5.C45L56).

0607

**Distribution and ecology of stream fishes in the San Francisco Bay drainage /R.A. Leidy. -.**  
Leidy, R. A. Berkeley : California Agricultural Experiment Station, 1984. "October 1984.". 175 p. : ill., maps ; 26 cm. - . Bibliography: p. 173-174. (NAL Call No.: DNAL 100 C12H v.52 no.8).

0608

**Energetics and transport in aquatic plants /John A. Raven. -.**

Raven, John A. New York : A.R. Liss, c1984. ix, 587 p. : ill. ; 24 cm. - . Includes bibliographies and index. (NAL Call No.: DNAL QK916.R38).

0609

**Proceedings 18th annual meeting, Aquatic Plant Control Research Program, 14-17 November 1983, Raleigh, North Carolina /U.S. Army Engineer Waterways Experiment Station. -.**

Aquatic Plant Control Research Program (U.S. Army Engineer Waterways Experiment Station).~Meeting\_1983 : Raleigh, North Carolina). Vicksburg, Miss. : U.S. Army Engineer Waterways Experiment Station ; Springfield, Va. : Available from National Technical Information Service , 1984. Cover title.~ Final report, prepared for Office, Chief of Engineers, U.S. Army, Washington, D.C. xii, 192 p. : ill., map ; 27 cm. - . Includes bibliographies. (NAL Call No.: DNAL SB423.U2 1983).

# OCEANOGRAPHY

0610

The ecology of estuarine channels of the Pacific northwest coast a community profile /by Charles A. Simenstad ; prepared for National Coastal Ecosystems Team, Division of Biological Services, Research and Development, Fish and Wildlife Service, U.S. Dept. of the Interior.

-.

Simenstad, Charles A. Washington, D.C. : The Service, 1984. "December 1983."~ Distributed to depository libraries in microfiche. xii, 181 p. : ill. ; 28 cm. -. Bibliography: p. 130-158. (NAL Call No.: DNAL QH540.U56 no.83/05).

0611

Proceedings of the Pacific Congress on Marine Technology, PACON 84 April 24-27, 1984, Honolulu, Hawaii /organized by Marine Technology Society--Hawaii Section, Center for Engineering Research, University of Hawaii at Manoa. -.

Manoa : The Society, 1984. 426 p. in various pagings : ill. ; 28 cm. Includes bibliographies. (NAL Call No.: DNAL TC1505.P33 1984).

# LIMNOLOGY

0612

**Chemical and physical properties of Connecticut  
lakes /C.R. Frick and W.A. Norvell. -.**  
Frick, C. R. Norvell, W. A. New Haven :  
Connecticut Agricultural Experiment Station,  
1984. "April 1984.". 27, 139 p. : charts ; 28  
cm. -. Bibliography: p. 10. (NAL Call No.: DNAL  
100 C76St(1) no.817).

# NONF

0613

**Cotton /editors R.J. Kohel and C.F. Lewis. -.**  
Kohel, R. J.; Lewis, C. F. 1917. Madison, Wis.  
: American Society of Agronomy, 1984. xiv, 605  
p. : ill. (some col.) ; 24 cm. -. Includes  
bibliographical references and index. (NAL Call  
No.: DNAL 4 Am392 no.24).

0614

**Essentials of textiles /Marjory L. Joseph. -.**  
Joseph, Marjory L. New York : Holt, Rinehart,  
and Winston, c1984. Includes index. x, 358 p. :  
ill. ; 24 cm. Bibliography: p. 345 -346. (NAL  
Call No.: DNAL TS1445.J63 1984).

0615

**Fiber technology from film to fiber /Hans A.  
Krassig, Jurgen Lenz, Herman F. Mark. -.**  
Krassig, Hans A., 1919. Lenz, Jurgen, 1933-;  
Mark, H. F. New York, N.Y. : M. Dekker, c1984.  
Includes index. viii, 333 p. : ill. ; 24 cm. -.  
Bibliography: p. 299-322. (NAL Call No.: DNAL  
TA418.9.F5I57 v.4).

0616

**Textiles decision making for the consumer  
/Nancy Belck, Marjory L. Joseph, Marlene  
Wamhoff. -.**  
Belck, Nancy. Joseph, Marjory L.; Wamhoff,  
Marlene.; Harries, Nancy Garrison, 1943. East  
Lansing, Mich. : Michigan State University  
Press, c1984. Rev. ed. of: Textiles / Nancy  
Garrison Harries. 1974.~ Includes index. 356  
p., 18 leaves of plates : ill. ; 28 cm. + 1  
envelope fabric and fiber samples.  
Bibliography: p. 339-340. (NAL Call No.: DNAL  
TS1445.B394 1984).



# AGRICULTURAL ENGINEERING

0617

Agricultural electronics--1983 and beyond proceedings of the National Conference on Agricultural Electronics Applications, December 11-13, 1983, Hyatt Regency Illinois Center, Chicago, Illinois. -.

St. Joseph, Mich. : American Society of Agricultural Engineers, c1984. 2 v. : ill., map ; 23 cm. -. Includes bibliographies. (NAL Call No.: DNAL TK7882.A37N38 1983).

# STRUCTURES AND STRUCTURAL EQUIPMENT

0618

**Mathematical models and optimization techniques for use in analysis and design of wastewater treatment systems /Chi-Chung Tang (Department of Civil Engineering), E. Downey Brill, Jr. (Institute for Environmental Studies), John T. Pfeffer. -**

Tang, Chi-Chung. Brill, E. Downey.; Pfeffer, John T. Urbana, Ill. : University of Illinois, Water Resources Center, 1984. Supported in part by funds provided by U.S. Dept. of the Interior.~ "November, 1984."~ Project no. S-092-ILL.~ "UIIU-WRC-1984"--Cover. xvii, 257 p. : ill. ; 28 cm. -. Bibliography: p. 247-257. (NAL Call No.: DNAL TC424.I3I4 no.194).

# FARM EQUIPMENT

0619

**Agricultural machines tillage, planters, and seeders (1970 -Sep 84) : (Citations from the Engineering Index database) /National Technical Information Service. -.**

Springfield, Va. : The Service, 1984. Report period covered: 1970 - Sep 84.~ "Oct 84."~ "PB84-876937."~ Includes index.~ NX5865. 1 v. (various foliations) ; 29 cm. (NAL Call No.: DNAL Z5074.M18A34).

0620

**Agricultural mechanization a comparative historical perspective /Hans P. Binswanger. -.** Binswanger, Hans P. Washington, D.C. : World Bank, 1984. Summaris in French and Spanish. 80 p. : ill. ; 28 cm. -. Bibliography: p. 75-80. (NAL Call No.: DNAL HD1459.B56).

0621

**Benjamin Holt & Caterpillar tracks & combines /Reynold M. Wik. -.**

Wik, Reynold M. St. Joseph, MI : American Society of Agricultural Engineers, c1984. Holt, Benjamin 1849-1920. 129 p. : ill. ; 28 cm. Bibliography: p. 121 -129. (NAL Call No.: DNAL TL140.H55W54).

0622

**Design of agricultural machinery /Gary Krutz, Lester Thompson, Paul Claar. -.**

Krutz, Gary. Thompson, Lester James, 1931-; Claar, Paul. New York : Wiley, c1984. vii, 472 p. : ill. ; 24 cm. Includes bibliographies and index. (NAL Call No.: DNAL TJ1480.K73).

# NATURAL RESOURCES

0623

**Agriculture and its environment prediction and control /J.Y. Yang with Robin K. Ray. -.**  
Wang, J. Y. Ray, Robin K. Dubuque, Iowa : Kendall/Hunt, 1984. v, 482 p. : ill., maps ; 23 cm. Includes bibliographies and index. (NAL Call No.: DNAL S589.7.W36).

0624

**California riparian systems ecology, conservation, and productive management /edited by Richard E. Warner and Kathleen M. Hendrix. -.**  
Warner, Richard E.; Hendrix, Kathleen M. Berkeley : University of California Press, c1984. xxix, 1035 p. : ill. ; 29 cm. Includes bibliographies and index. (NAL Call No.: DNAL QH105.C2C36).

0625

**Elk use and availability of cover and forage habitat components in the Blue Mountains, Northeast Oregon, 1976-1982 /Donavin A. Leckenby. -.**  
Leckenby, Donavin A. Portland, Or. : Oregon Dept. of Fish and Wildlife, Research and Development, 1984. i, 40 p. : ill., maps ; 28 cm. -. Bibliography: p. 38-40. (NAL Call No.: DNAL SK439.07 no.14).

0626

**Evaluation of a native vegetation masking technique /prepared by Margaret C. Kinsler ; prepared by Lockheed Engineering and Management Services Co., Inc. -.**  
Kinsler, M. C. Houston, Tex. : Lyndon B. Johnson Space Center, NASA ; Springfield, Va. : for sale by National Technical Information Service, 1984. AgRISTARS (Agriculture and Resources Inventory Surveys Through Aerospace Remote Sensing) is a joint program of the U.S. Dept. of Agriculture, the National Aeronautics and Space Administration, the Nat~ Lockheed Engineering and Management Services Company for National Aeronautics and Space Administration under Contract NAS 9-15800.~ Job order 72-474.~ Early warning and crop condition assessment EW-L4-04452.~ "February 1984.". iv, 19, 4 p. : ill., map ; 28 cm. -. Bibliography: p. 19. (NAL Call No.: DNAL S494.5.R4K56).

0627

**Fisherman's guide fishes of the Southeastern United States /by Charles S. Manooch, III ; illustrated by Duane Raver, Jr. -.**  
Manooch, Charles S. Raver, Duane, 1927. Raleigh, N.C. : North Carolina State Museum of Natural History, 1984. Added title: Fisherman's guide to the fishes of the Southeastern United States.~ Includes indexes. xiv, 362 p. : ill. (some col.) ; 24 cm. Bibliography: p. 317-328.

(NAL Call No.: DNAL SH464.S68M36).

0628

**National parks, conservation, and development the role of protected areas in sustaining society : proceedings of the World Congress on National Parks, Bali, Indonesia, 11-22 October 1982 /edited by Jeffrey A. McNeely and Kenton R. Miller ; International Union for Conservation of Nature and Natural Resources in cooperation with the United Nations Environment Programme ... et al. -.**  
McNeely, Jeffrey A.; Miller, Kenton. Washington, D.C. : Smithsonian Institution Press, c1984. xiii, 825 p. : ill., maps ; 28 cm. Bibliography: p. 801-825. (NAL Call No.: DNAL SB481.A2W67 1982).

0629

**Proceedings, symposium on the biology of atriplex and related chenopods, May 2-6, 1983 /compilers, Arthur R. Tiedeman ... et al. ; sponsored by Intermountain Forest and Range Experiment Station ... et al. -.**  
Tiedeman, Arthur R. Ogden, Utah : U.S. Dept. of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station, 1984. "October 1984."~ Spine title: Biology of atriplex: symposium proceedings. 309 p. : ill., maps, charts ; 28 cm. -. Includes bibliographies. (NAL Call No.: DNAL aSD11.A48 no.172).

0630

**Publications of the Denver Wildlife Research Center on birds and bird damage control. -.**  
Denver : U.S. Fish and Wildlife Service, Denver Wildlife Research Center, 1984. Cover title: Publications of the Section of Bird Damage Control.~ Includes index.~ "September 1984.". 42 p. ; 28 cm. (NAL Call No.: DNAL Z5333.A42P7).

0631

**Research natural areas baseline monitoring and management : proceedings of a symposium in Missoula, Montana, March 21, 1984 /coordinators, Janet L. Johnson, Jerry F. Franklin, Richard G. Krebill ; sponsored by the U.S. Department of Agriculture, Forest Service, Northern Region ... et al. -.**  
Johnson, Janet L.; Franklin, Jerry F.; Krebill, Richard G. Ogden, Utah : USDA, Forest Service, Intermountain Forest and Range Experiment Station, 1984. "November 1984.". 84 p. : ill., map ; 28 cm. -. Includes bibliographies. (NAL Call No.: DNAL aSD11.A48 no.173).



0632

The United States Fish and Wildlife Service  
/Nathaniel P. Reed and Dennis Drabelle. -.  
Reed, Nathaniel P. 1933. Drabelle, Dennis.  
Boulder, Colo. : Westview Press, 1984. Includes  
index. xii, 163 p. : ill., maps ; 24 cm. -.  
Bibliography: p. 154-155. (NAL Call No.: DNAL  
QL84.2.R42).

# ENERGY RESOURCES - GENERAL

0633

**The Impact of codes and regulatory practices on the presence of energy-efficient alternative housing /Jacquelyn W. McCray ... et al. . -** McCray, Jacquelyn W. Blacksburg, Va. : College of Human Resources, Virginia Agricultural Experiment Station, Virginia Polytechnic Institute and State University, 1984. "August 1984.". vi, 35 p. : ill. ; 23 cm. -. Bibliography: p. 33-35. (NAL Call No.: DNAL 100 G29So no.305).

0634

**Bioconversion systems /editor, Donald L. Wise. -** Wise, Donald L. 1937. Boca Raton, Fla. : CRC Press, c1984. 257 p. : ill. ; 27 cm. -. Includes bibliographical references and index. (NAL Call No.: DNAL TP360.B512).

0635

**Compendium of peanut diseases /edited by D. Morris Porter, Donald H. Smith, and R. Rodriguez-Kabana. -** Porter, D. Morris.; Smith, Donald H. 1918-; Rodriguez-Kabana, R. St. Paul, Minn. : American Phytopathological Society, c1984. vii, 73 p., 20 p. of plates : ill. (some col.) ; 28 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL SB608.P37C66).

0636

**Growing industrial materials renewable resources from agriculture and forestry /an initial report of the Critical Materials Task Force on the role of American agriculture and forestry in maintaining supplies of critical materials. -** Washington, D.C.? : USDA, 1984. "October 1, 1984.". iv, 30 p. ; 28 cm. Bibliography: p. 29-30. (NAL Call No.: DNAL aS494.5.E5G7).

0637

**Impact of natural gas prices on farmers and small businessmen hearing before the Subcommittee on Small Business: Family Farm of the Committee on Small Business, United States Senate, Ninety-eighth Congress, second session ... April 5, 1984. -** United States.~Congress.~Senate.~Committee on Small Business.~Subcommittee on Small Business: Family Farm. Washington, D.C. : U.S. G.P.O., 1984. Distributed to some depository libraries in microfiche.~ Item 1049-J, 1049-K (microfiche). iii, 546 p. : ill., maps : 24 cm. -. Includes bibliographical references. (NAL Call No.: DNAL KF26.S67 1984).

0638

**Jerusalem artichoke.** Rafats, J. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Bibliography. Sept 1984. (84-67). 6 p. (NAL Call No.: DNAL aZ5071.N3).

0639

**Liquid fuel from Illinois sources /R.A. Herendeen and F. Dovring ; Department of Agricultural Economics, Agricultural Experiment Station, College of Agriculture, University of Illinois at Urbana-Champaign. -** Herendeen, R. A. Dovring, Folke. Urbana, Ill. : The Station, 1984. Cover title.~ "May 1984.". 61 p. : ill. ; 28 cm. -. Bibliography: p. 53-58. (NAL Call No.: DNAL 281.9 IL62 no.192).

0640

**Microbiological and biochemical studies towards optimization of substrate utilization by methanogenic bacteria annual report, December 1983 - December 1984 /prepared by J.G. Ferry. -** Ferry, J. G. Blacksburg, Va. : Virginia Polytechnic Institute and State University for GAS Research Institute, 1984. "December 1984."~ PB85-188332.~ Contract no. 5082-260-0710. 46 leaves : ill. ; 28 cm. -. Bibliography: leaves 45-46. (NAL Call No.: DNAL TP248.A17F4).

0641

**An overview: biomass as an energy resource--promise and problem.** Beltsville, MD : The Library. Agricultural issues overview - National Agricultural Library, U.S. Department of Agriculture. Bibliography. Apr 1984. (5). 24 p. (NAL Call No.: DNAL aZ5071.A3A5).

0642

**An overview: selected information sources.** Beltsville, MD : The Library. Agricultural issues overview - National Agricultural Library, U.S. Department of Agriculture. Bibliography. Apr 1984. (6). 5 p. (NAL Call No.: DNAL aZ5071.A3A5).

0643

**An overview: small-lot wood management.** Beltsville, MD : The Library. Agricultural issues overview - National Agricultural Library, U.S. Department of Agriculture. Bibliography. Apr 1984. (3). 15 p. (NAL Call No.: DNAL aZ5071.A3A5).

0644

**An overview: wood energy markets.**  
Beltsville, MD : The Library. Agricultural issues overview - National Agricultural Library, U.S. Department of Agriculture. Bibliography. Apr 1984. (4). 12 p. (NAL Call No.: DNAL aZ5071.A3A5).

0645

**Proposed St. George Basin (sale 89) draft environmental impact statement, April 1985 /prepared by Minerals Management Service. -.**  
Anchorage, Alaska? : U.S. Dept. of the Interior, Minerals Management Service, Alaska Outer Continental Shelf Region, 1984. Cover title: St. George Basin sale 89.~ "MMS 84-0017.". 547 p. in various pagings : ill., maps (some col.) ; 28 cm. Bibliography: p. 1-23. (NAL Call No.: DNAL TD195.P4P73).

0646

**Prospectus for the utilization of leafy spurge (Euphorbia esula L.) as a source of liquid fuel and biomass final report /submitted by Stanley M. Wiatr. -.**  
Wiatr, Stanley M. Billings, Mont.? : Dept. of Natural Sciences, Eastern Montana College?, 1984?. Cover title.~ DOE Project DE-FG48-81R80-3006.~ DOE/R8/03006--T1.~ DE84 015203. 61 leaves : ill. ; 28 cm. Bibliography: leaves 58-61. (NAL Call No.: DNAL SB615.E86W5).

0647

**Research and development of shallow algal mass culture systems for the production of oils a subcontract report /Edward A. Laws. -.**  
Laws, Edward A., 1945. Golden, Colo. : Solar Energy Research Institute ; Springfield, Va. : available from NTIS, 1984. Cover title.~ "October 1984."~ Prepared for the U.S. Dept. of Energy; contract no. DE-AC02-83CH10093.~ Prepared under subcontract no. XK-3-03136.~ DE85000518. ix, 47 leaves : ill. ; 28 cm. -. Bibliography: leaves 41-43. (NAL Call No.: DNAL TP360.L3).

0648

**Turning Great Plains crop residues and other products into energy /Walter G. Heid, Jr. -.**  
Heid, Walter G. 1932. Washington, D.C. : U.S. Dept. of Agriculture, Economic Research Service : For sale by Supt. of Docs., 1984. Cover title.~ Distributed to depository libraries in microfiche.~ "November 1984"--P. i. iv, 37 p. : maps ; 28 cm. -. Bibliography: p. 24-26. (NAL Call No.: DNAL A281.9 Ag8A no.523).

0649

**Wood as energy. An overview: wood as an alternative home heating fuel.**  
Beltsville, MD : The Library. Agricultural issues overview - National Agricultural Library, U.S. Department of Agriculture. Bibliography. Apr 1984. (2). 28 p. (NAL Call No.: DNAL aZ5071.A3A5).

0650

**Final environmental assessment for the Table Mountain study area wind energy development /prepared by United States Department of Interior, Bureau of Land Management, El Centro Resource Area. -.**  
El Centro, Calif. : The Area, 1984. Cover title: Final environmental assessment for the Table Mountain wind energy study.~ "May 1984"--Cover.~ "BLM CA TE 84 010 3080.". 185 p. : ill., maps ; 28 cm. Bibliography: p. 172-176. (NAL Call No.: DNAL TK1541.F5).

0651

**Proceedings of the 9th National Passive Solar Conference, Columbus, Ohio, September 24-26, 1984 /editors, John Hayes, Alex Wilson. -.**  
Hayes, John.; Wilson, Alex. Boulder, Colo. : American Solar Energy Society, c1984. Cover title: 9th National Passive Solar Conference.~ Spine title: ASES 1984. xii, 589 p. : ill. ; 26 cm. -. Includes bibliographical references. (NAL Call No.: DNAL TH7413.N3 1984).

0652

**Solar greenhouses for the home / J.W. Bartok ... et al. . -.**  
Bartok, John W., 1936. Ithaca, N.Y. : Northeast Regional Agricultural Engineering Service, 1984. Cover title. 60 p. : ill., maps, plans ; 28 cm. -. Bibliography: p. 60. (NAL Call No.: DNAL S675.N72 no.2 1984).

0653

**The solar-hydrogen energy economy beyond the age of fire /Luther W. Skelton.**  
Skelton, Luther W. New York : Van Nostrand Reinhold, c1984. x, 197 p. : ill. ; 24 cm. Includes bibliographical references and index. (NAL Call No.: DNAL TJ810.S4854).

0654

**Solar thermal collectors proceedings of the fourth SOLERAS workshop, April 1983 at Denver, Colorado, USA /edited by Bakr H. Khoshaim, James S. Williamson. -.**  
Khoshaim, Bakr H.; Williamson, James S. Kansas City, Mo. : Program Operating Agent, Midwest Research Institute ; Springfield, Va. :

## ENERGY RESOURCES - GENERAL

National Technical Information Service distributor, 1984? . "Published for the United States-Saudi Arabian Joint Program for Cooperation in the Field of Solar Energy, SOLERAS."~ "DE84017395."~ "MRI/SOL-1301." . 387 p. : ill. ; 25 cm. Includes bibliographies. (NAL Call No.: DNAL TJ810.S642 1983).

0655

### Spent fuel storage. -.

Oak Ridge, Tenn. : Technical Information Center, Office of Scientific and Technical Information, U.S. Dept. of Energy ; Springfield, Va. : available from NTIS, 1984. Cover title.~ "August 1984."~ "DOE/TIC-3395-S1."~ Includes indexes.~ "DE84005534." . iii, 72, 76, 3 p. ; 28 cm. -. (NAL Call No.: DNAL Z5162.R42S66).

0656

### Technical evaluation of a solar heating system having conventional hydronic solar collectors and a radiant panel slab final report /by Robert J. Starr, Jon G. McGowan and Bran P. McNiff. -.

Starr, Robert J. McGowan, Jon G.; McNiff, Bran P. Lyndonville, Vt. : Solar Option One Co. ; Springfield, Va. : available from National Technical Information Service, 1984. "DOE/CE/15140-T1."~ "DE84009556."~ "Work performed under contract no. FG01-82CE15140"--cover.~ "Technical Information Center, Office of Scientific and Technical Information, United States Dept. of Energy"--cover. 92 p. : ill. ; 28 cm. Bibliography: p. 92. (NAL Call No.: DNAL TH7413.S7).

0657

### Wind energy for agriculture, 1981-1983.

MacLean, J.T. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Feb 1984. Updates 83-20 and 80-09 ~Bibliography. Feb 1984. (84-16). 17 p. (NAL Call No.: aZ5071.N3).

0658

Effects of surface coal-mine reclamation on stream quality in a small watershed near Nelsonville, southeastern Ohio /by S.M. Hindall ; prepared in cooperation with the U.S. Department of Agriculture, Forest Service and the U.S. Department of the Interior, Bureau of Land Management, Eastern States Office. -. Hindall, S. M. Columbus, Ohio : U.S. Geological Survey, 1984. iv, 28 p. : ill., maps ; 28 cm. -. Bibliography: p. 22. (NAL Call No.: DNAL GB701.W375 no.84-4179).



# WATER RESOURCES AND MANAGEMENT

0659

**Appraisal of data for ground-water quality in Nebraska /by Richard A. Engberg. -.**  
Engberg, Richard A. Washington, D.C. : U.S. Dept. of the Interior, Geological Survey ; Alexandria, Va. : For sale by the Distribution Branch, Text Products Section, U.S. Geological Survey, 1984. iv, 54 p. : ill. (some col.) ; 28 cm. -. Bibliography: p. 53-54. (NAL Call No.: DNAL 407 G29W no.2245).

0660

**Arizona water information directory where to find water information in Arizona /by K. James DeCook. -.**  
DeCook, Kenneth J. Tucson, Ariz. : College of Agriculture, University of Arizona, 1984. Funding for compilation of the directory was provided through the courtesy of the Cooperative Extension Service. xi, 252 p. : maps, form ; 28 cm. Includes bibliographies. (NAL Call No.: DNAL TD224.A6D4 1984).

0661

**Availability and chemistry of ground water on the Bruneau Plateau and adjacent eastern plain in Twin Falls County, south-central Idaho /by R.L. Moffatt and M.L. Jones ; prepared in cooperation with the Idaho Department of Water Resources. -.**  
Moffatt, R. L. Jones, Michael L. Boise, Idaho : U.S. Dept. of the Interior, Geological Survey, 1984 (1985 printing). vi, 43 p. : ill., maps ; 28 cm. -. Bibliography: p. 41-43. (NAL Call No.: DNAL GB701.W375 no.84-4065).

0662

**Availability and quality of water from the Dakota aquifer, northwest Iowa /by M.R. Burkart ; prepared in cooperation with the Iowa Geological Survey. -.**  
Burkart, M. R. Washington, D.C. : U.S. G.P.O. ; Alexandria, Va. : for sale by the Branch of Distribution, U.S. Geological Survey, 1984. Eight folded maps in pocket. iv, 65 p. : ill., maps ; 28 cm. -. Bibliography: p. 14. (NAL Call No.: DNAL 407 G29W no.2215).

0663

**Dardanelle flood plain management study, Yell County, Arkansas /cooperating agencies, Yell County Conservation District ... et al. -.**  
Little Rock, Ark.? : U.S. Dept. of Agriculture, Soil Conservation Service? , 1984. Cover title.~ July 1984.~ 3005L. 9, A1-A3 leaves (some folded) : 1 ill., 2 maps (1 col.) ; 28 cm. Bibliography: leaf 9. (NAL Call No.: DNAL aTC424.A8D3).

0664

**Developing the resource potential of a shallow water table /Donald W. Grimes and Roshan L. Sharma, Delbert W. Henderson. -.**  
Grimes, Donald W. Sharma, Roshan L.; Henderson, Delbert W. Davis, Calif. : California Water Resources Center, University of California, 1984. August 1984.~ Project UCAL-WRC-W 587. iii, 39 p. : ill. ; 28 cm. -. Bibliography: p. 30-31. (NAL Call No.: DNAL S494.5.W3G72).

0665

**Development of a model to predict the adsorption of lead from solution on a natural streambed sediment /by D.W. Brown and J.D. Hem. -.**  
Brown, D. W. 1949. Hem, J. D. 1916. Washington, D.C. : For sale by the Supt. of Docs., U.S. G.P.O., 1984. iv, 35 p. : ill. map ; 28 cm. -. Bibliography: p. 35. (NAL Call No.: DNAL 407 G29W no.2187).

0666

**Effect of eustatic sea-level changes on saltwater-freshwater in the northern Atlantic coastal plain /by Harold Meisler, P. Patrick Leahy, and LeRoy L. Knobel. -.**  
Meisler, Harold. Leahy, P. Patrick.; Knobel, LeRoy L. Washington, D.C. : U.S. G.P.O. ; Alexandria, Va. : for sale by the Distribution Branch, U.S. Geological Survey, 1984. iv, 28 p. : ill., map ; 28 cm. -. Bibliography: p. 26-28. (NAL Call No.: DNAL 407 G29W no.2255).

0667

**The effect of price on the demand for water in Massachusetts a case study /Thomas H. Stevens, Eleni Kesisoglou. -.**  
Stevens, T. H. 1944. Kesisoglou, Eleni. Amherst, Mass. : Massachusetts Agricultural Experiment Station, College of Food and Natural Resources, University of Massachusetts, 1984. "December 1984.". ii, 25 p. : ill. ; 23 cm. -. Bibliography: p. 24-25. (NAL Call No.: DNAL 100 M38H no.698).

0668

**Effects of artificial recharge on the Ogallala Aquifer, Texas /by R.F. Brown and W.S. Keys. -.**  
Brown, Richmond F. 1925. Keys, W. S. Reston, Va.? : U.S. Geological Survey ; Alexandria, Va. : For sale by the Branch of Distribution, USGS, 1984. vi, 56 p. : ill. ; 28 cm. -. Bibliography: p. 55-56. (NAL Call No.: DNAL 407 G29W no.2251).

# WATER RESOURCES AND MANAGEMENT

0669

**Effects of disinfection techniques on Chesapeake Bay sediments /Allen D. Uhler ... et al. -.**  
Uhler, Allen D. College Park : Maryland Water Resources Research Center, University of Maryland, 1984. "The research on which this report is based was financed in part by the U.S. Department of the Interior, as authorized by the Water Research and Development Act of 1978 (P.L. 95-467)."- "September 1984.". 49 p. : ill., map ; 28 cm. -. Bibliography: p. 24-26. (NAL Call No.: DNAL TD423.A1M3 no.82).

0670

**Effects of irrigating with wastewater on ground-water quality at Fort Carson Military Reservation golf course near Colorado Springs, Colorado /by Patrick Edelmann ; prepared in cooperation with the U.S. Department of the Army, Fort Carson Military Reservation. -.**  
Edelmann, Patrick. Lakewood, Colo. : U.S. Geological Survey, 1984. iv, 32 p. : ill., maps ; 28 cm. -. Bibliography: p. 24-25. (NAL Call No.: DNAL GB701.W375 no.83-4268).

0671

**Evaluation of environmental factors affecting yields of major dissolved ions of streams in the United States /by Norman E. Peters. -.**  
Peters, Norman E. Washington, D.C. : U.S. G.P.O. ; Alexandria, Va. : For sale by Distribution Branch, Text Products Section, U.S. Geological Survey, 1984. iv, 39 p. : ill., map ; 28 cm. -. Includes bibliographies. (NAL Call No.: DNAL 407 G29W no.2228).

0672

**Evaluation of the ground-water resources of parts of Lancaster and Berks Counties, Pennsylvania /by James M. Gerhart and George J. Lazorchick ; prepared in cooperation with the Susquehanna River Basin Commission. -.**  
Gerhart, James M. Lazorchick, George J. Harrisburg, Penn. : U.S. Geological Survey, WRD, 1984. Five folded maps in pocket. vii, 136 p. : ill., maps ; 28 cm. -. Bibliography: p. 76-78. (NAL Call No.: DNAL GB701.W375 no.84-4327).

0673

**Experiments in bioregionalism the New England river basins story /Charles H.W. Foster. -.**  
Foster, Charles H. W., 1927. Hanover, N.H. : University Press of New England, 1984. Includes index. xvi, 231 p., 1 p. of plates : ill. ; 24 cm. -. Bibliography: p. 217-222. (NAL Call No.: DNAL TC423.15.F67).

0674

**Financing water projects in North Carolina the state role /by Thomas Snyder, Dale Whittington, Doug Hillstrom (Department of City and Regional Planning, University of North Carolina at Chapel Hill). -.**  
Snyder, Thomas. Whittington, Dale.; Hillstrom, Doug. Raleigh, N.C. : Water Resources Research Institute of the University of North Carolina, 1984. Prepared for the Office of Water Resources, Dept. of Natural Resources and Community Development, and the Water Resources Research Institute of the University of North Carolina, grant no. 84-10-50114.~ Supported in part by funds provided by U.S. Dept. of the Interior.~ "August 1984.". xi, 62 p. : ill. ; 28 cm. -. Bibliography: p. 59-62. (NAL Call No.: DNAL TD201.N6 no.220).

0675

**Finite-element simulation of ground-water flow in the vicinity of Yucca Mountain, Nevada-California /by John B. Czarnecki and Richard K. Waddell ; prepared in cooperation with the U.S. Department of Energy. -.**  
Czarnecki, John B. Waddell, Richard K. Denver, Colo. : U.S. Geological Survey, 1984. Two folded maps in pocket. iv, 38 p. : ill., maps ; 28 cm. -. Bibliography: p. 31-34. (NAL Call No.: DNAL GB701.W375 no.84-4349).

0676

**The Finite element storm hydrograph model users guide /M.D. Smolen ... et al. -.**  
Smolen, M. D. Blacksburg, Va. : Dept. of Agricultural Engineering, College of Agriculture and Life Sciences, Virginia Polytechnic Institute and State University, 1984. "June 1984.". vi, 230 p. : ill., maps ; 23 cm. -. Bibliography: p. 117-118. (NAL Call No.: DNAL S541.5.V8B8 no.84-7).

0677

**Flood plain management study Lake Eau Claire, Eau Claire County, Wisconsin /prepared by United States Department of Agriculture, Soil Conservation Service, Madison, Wisconsin ; in cooperation with the Wisconsin Department of Natural Resources. -.**  
Madison, Wisc. : The Service, 1984. Cover title.~ "April 1984.". 1 v. (various pagings) : ill., maps (1 folded) ; 28 cm. Bibliography: leaf H-1. (NAL Call No.: DNAL aTC424.W6F55).

0678

**Flood plain management study Lost Creek and Sandy Creek, Robertson County, Texas /prepared by United States Department of Agriculture, Soil Conservation Service ... et al. -.**  
Temple, Tex. : The Service, 1984. Cover title: Lost Creek & Sandy Creek flood plain management



study, Robertson County, Texas.~ "February 1984.". i, 25, i, 83 p. (some folded) : ill., col. maps ; 28 cm. Bibliography: p. 25. (NAL Call No.: DNAL aTC424.T4F56).

0679

Flood plain management study, Crawford County, Indiana /prepared by: United States Department of Agriculture, Soil Conservation Service; assisting the: Crawford County Soil and Water Conservation District ... et al. ; in cooperation with the Indiana Department of Natural Resources. -.

Indianapolis : The Service, 1984. "July 1984.". 1 v. (various foliations) : folded ill., folded maps ; 28 cm. Includes bibliographical references and index to maps. (NAL Call No.: DNAL aTC424.I6F5).

0680

Flood plain management study, Crow Creek and Bengis Creek in vicinity of Stevenson, Alabama /prepared by U.S. Department of Agriculture, Soil Conservation Service ... et al. . -. Auburn, Ala. : The Service, 1984. Cover title.~ "November 1984.". 1 v. (various foliations), 16 folded leaves of plates : ill., col. maps ; 28 cm. Bibliography: leaf D-15. (NAL Call No.: ONAL aTC424.A2F57).

0681

Flood plain management study for the East Fork Shell Creek and adjacent critical flood plain areas in Mountrail County, North Dakota /prepared by United States Department of Agriculture, Soil Conservation Service ... et al. , for the City of Parshall. -. Bismarck, N.D. : The Service, 1984. "April 1984.". iii, 57 leaves (some folded), 1 folded leaf of plates : ill., col. maps ; 28 cm. Bibliography: leaf 57. (NAL Call No.: DNAL aTC424.N9F54).

0682

Flood plain management study, North Ore Creek, Livingston County, Michigan /prepared by United States Department of Agriculture, Soil Conservation Service ... et al. . -. East Lansing, Mich. : The Service, 1984. Cover title.~ "September 1984.". 1 v. (various pagings) : ill., folded maps (some col.) ; 28 cm. Bibliography: p. G-1. (NAL Call No.: DNAL aTC424.M5F55).

0683

Flood plain management study, Red Oak Creek and tributaries, Ellis County, Texas /prepared by United States Department of Agriculture, Soil Conservation Service ; in cooperation with Ellis-Prairie Soil and Water Conservation District, Ellis County Commissioners Court and the Texas Department of Water Resources. -. Temple, Texas : The Service, 1984. Cover title: Red Oak creek and tributaries, flood plain management study.~ "February 1984.". i, 25, i, 429 p. : ill., col. maps ; 28 x 53 cm. Bibliography: p. 25. (NAL Call No.: DNAL aTC424.T4F55 Fo).

0684

Flood plain management study, Tallaseehatchee, Crooked, Shirtee Creeks and tributaries in vicinity of Sylacauga, Alabama /prepared by U.S. Department of Agriculture, Soil Conservation Service, Auburn, Alabama ; in cooperation with City of Sylacauga, Alabama ... et al. . -. Auburn, Ala. : The Service, 1984. Cover title.~ "October 1984.". 16, 20 leaves, 39 leaves of folded plates : ill., maps (some col.) ; 28 cm. Bibliography: leaves C-19 - C-20. (NAL Call No.: DNAL aTC424.A2F64).

0685

Floodplain management study Crossville, White County, Illinois. -. Champaign, Ill. : USDA, Soil Conservation Service : Illinois Dept. of Transportation, Div. of Water Resources, 1984. Cover title.~ "June 1984.". 1 v. (various pagings) : ill., maps ; 28 cm. Bibliography: p. 32-34. (NAL Call No.: DNAL aTC424.I3F55).

0686

Floods of May 1978 in southeastern Montana and northeastern Wyoming /by Charles Parrett ... et al. ; prepared jointly by the U.S. Geological Survey and the National Oceanic and Atmospheric Administration. -. Parrett, Charles. Washington, D.C. : The Survey ; Alexandria, VA : For sale by the Distribution Branch, U.S. Geological Survey, 1984. vi, 74 p. : ill., maps ; 28 cm. -. Bibliography: p. 35. (NAL Call No.: DNAL 407 G29Pr no.1244).

0687

Floods of November 1978 to March 1979 in Arizona and west-central New Mexico /by B.N. Aldridge and T.A. Hales ; prepared in cooperation with the U.S. Bureau of Reclamation ... et al. . -. Aldridge, B. N. Hales, T. A. Washington, D.C. : U.S. G.P.O. ; Alexandria, Va. : for sale by Distribution Branch, Text Produces Section, U.S. Geological Survey, 1984. Two folded maps

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in pocket. iv, 149 p. : ill., maps ; 28 cm. -.  
Bibliography: p. 147-148. (NAL Call No.: DNAL  
407 G29W no.2241).

0688

**Freshwater runoff and salinity distribution in the Loxahatchee River Estuary, southeastern Florida, 1980-82 /by Gary M. Russell and Benjamin F. McPherson ; prepared in cooperation with the Florida Department of Environmental Regulation ... et al. . -.**  
Russell, Gary M. McPherson, Benjamin F. Tallahassee, Fla. : U.S. Geological Survey, 1984. vi, 36 p. : ill., maps ; 28 cm. -.  
Bibliography: p. 35-36. (NAL Call No.: DNAL GB701.W375 no.83-4244).

0689

**Gas-liquid chemistry of natural waters abstracts of papers presented at a conference held at Brookhaven National Laboratory, Upton, Long Island, New York, April 1-6, 1984 /sponsored by National Science Foundation ... et al. ; Leonard Newman, Editor. -.**  
Newman, Leonard. Upton, N.Y. : The Laboratory ; Springfield, VA : available from National Technical Information Service, 1984. "April 1984."~ "Environmental Control Technology and Earth Sciences-TIC-4500."~ "UC-11."~ "Under contract no. DE-AC02-76CH00016 with the U.S. Dept. of Energy." 2 v. (various pagings) : ill. ; 28 cm. -. Includes bibliographies. (NAL Call No.: DNAL GB855.G3).

0690

**Gazetteer of hydrologic characteristics of streams in Massachusetts Connecticut River basin /by S. William Wandle, Jr. ; prepared in cooperation with the Commonwealth of Massachusetts Department of Environmental Quality Engineering, Division of Water Pollution Control. -.**  
Wandle, S. William. Boston : U.S. Geological Survey, 1984. iv, 110 p. : ill., maps ; 28 cm. -. Bibliography: p. 108-110. (NAL Call No.: DNAL GB701.W375 no.84-4282).

0691

**Gazetteer of hydrologic characteristics of streams in Massachusetts Merrimack River basin /by S. William Wandle, Jr., and Richard A. Fontaine ; prepared in cooperation with the Commonwealth of Massachusetts, Department of Environmental Quality Engineering, Division of Water Pollution Control. -.**  
Wandle, S. William. Fontaine, R. A. Boston, Mass. : U.S. Dept. of the Interior, Geological Survey ; Denver, Colo. : Open-File Services Section, Western Distribution Branch, U.S. Geological Survey, 1984. Shipping list no.: 86-68-P. iv, 54 p. : ill., maps ; 28 cm. -. Bibliography: p. 53-54. (NAL Call No.: DNAL

GB701.W375 no.84-4284).

0692

**Geohydrologic setting of Mirror Lake, West Thornton, New Hampshire /by Thomas C. Winter ; prepared in cooperation with Cornell University and Institute of Ecosystem Studies, the New York Botanical Garden. -.**  
Winter, Thomas C. Lakewood, Colo. : U.S. Geological Survey, 1984. v, 61 p. : ill., maps ; 28 cm. -. Bibliography: p. 59-61. (NAL Call No.: DNAL GB701.W375 no.84-4266).

0693

**Geohydrology of the central Mesilla Valley, Dona Ana County, New Mexico /by Clyde A. Wilson and Robert R. White ; prepared in cooperation with the Elephant Butte Irrigation District and the New Mexico Interstate Stream Commission. -.**  
Wilson, Clyde A. White, Robert R. Albuquerque, N.M. : U.S. Geological Survey, 1984. Tables. vi, 144 p. : ill., maps ; 28 cm. -. Bibliography: p. 46-47. (NAL Call No.: DNAL GB701.W375 no.82-555).

0694

**Geohydrology of the Madison and associated aquifers in parts of Montana, North Dakota, South Dakota, and Wyoming /by Joe S. Downey. -.**  
Downey, Joe S. Washington, D.C. : U.S. Dept. of the Interior, Geological Survey, 1984. One folded leaf in pocket. v, 47 p. : ill., maps ; 28 cm. -. Bibliography: p. 44-47. (NAL Call No.: DNAL 407 G29Pr no.1273-G).

0695

**Geohydrology of volcanic tuff penetrated by test well UE-25bby R.G. Lahoud, D.H. Lobmeyer, and M.S. Whitfield, Jr. ; prepared in cooperation with the U.S. Department of Energy. -.**  
Lahoud, R. G. Lobmeyer, David H.; Whitfield, M. S. 1934. Denver, Colo. : U.S. Geological Survey, 1984. iv, 44 p. : ill., map ; 28 cm. -. Bibliography: p. 43-44. (NAL Call No.: DNAL GB701.W375 no.84-4253).

0696

**Great Lakes National Program Office Harbor Sediment Program, Lake Ontario 1981 Rochester, New York, Oswego, New York, Olcott, New York /by Anthony G. Kizlauskas, David C. Rockwell, Roger E. Claff for U.S. Environmental Protection Agency, Great Lakes National Program Office. -.**  
Kizlauskas, Anthony G. Rockwell, David C.; Claff, Roger E. Chicago, Ill. : The Office ; Springfield, Va. : Available through the National Technical Information Service, 1984 .



"EPA-905/4-84-002."~ "April 1984.". vi, 46, 7, 2 p. : maps ; 28 cm. Includes bibliographies. (NAL Call No.: DNAL GC380.15.K5).

0697

**Ground water contamination hearings before a subcommittee of the Committee on Government Operations, House of Representatives, Ninety-eighth Congress, first session, June 22, 23, and 29, 1983.** -.

United States.~Congress.~House.~Committee on Government Operations.~Environment, Energy, and Natural Resources Subcommittee. Washington, D.C. : U.S. G.P.O., 1984. Distributed to some depository libraries in microfiche.~ Item 1016-A, 1016-B (microfiche). iv, 630 p. : ill., maps, forms ; 24 cm. Includes bibliographical references. (NAL Call No.: DNAL KF27.G655 1983).

0698

**Ground-water monitoring at Santa Barbara, California phase 2-effects of pumping on water levels and on water quality in the Santa Barbara ground-water basin /by Peter Martin ; prepared in cooperation with the city of Santa Barbara.** -.

Martin, Peter, 1953. Reston, Va. ? : U.S. Dept. of the Interior, Geological Survey ; Alexandria, Va. : For sale by the Distribution Branch, USGS, 1984. iv, 31 p. : ill., maps ; 28 cm. -. Bibliography: p. 24-25. (NAL Call No.: DNAL 407 G29W no.2197).

0699

**Ground-water-quality appraisal of sand-plain aquifers in Hubbard, Morrison, Otter Tail, and Wadena Counties, Minnesota /by C.F. Myette ; prepared in cooperation with the Soil and Water Conservation Districts of Hubbard ... et al.** -.

Myette, C. F. St. Paul, Minn. : U.S. Dept. of the Interior, Geological Survey ; Denver, Colo. : Open-File Services Section, Western Distribution Branch, U.S. Geological Survey, 1984. v, 49 p. : ill., 2 maps ; 28 cm. -. Bibliography: p. 48-49. (NAL Call No.: DNAL GB701.W375 no.84-4080).

0700

**The ground-water resources in the Ross Barnett Reservoir area, Mississippi /by W.T. Oakley ; prepared in cooperation with the Pearl River Valley Water Supply District.** -.

Oakley, W. T. Jackson, Miss. : U.S. Geological Survey, 1984. iv, 32 p. : ill., maps (one folded) ; 28 cm. -. Bibliography: p. 31-32. (NAL Call No.: DNAL GB701.W375 no.84-4160).

0701

**A groundwater model of Cache Valley, Utah /by Calvin G. Clyde, Roland W. Jeppson, Win-Kai Liu.** -.

Clyde, Calvin G. Logan, Utah : Utah Water Research Laboratory, Utah State University, 1984. ix, 115 p. : ill., maps ; 28 cm. -. Bibliography: p. 55. (NAL Call No.: DNAL TC160.H9 no.84/04).

0702

**Hydrilla management in North Carolina /by Ronald G. Hodson, Grahan J. Davis, Kenneth E. Langeland.** -.

Hodson, Ronald G. Raleigh, N.C. : Water Research Institute of the University of North Carolina, 1984. "August 1984."~ Project no. 373503, agreement no. G-860. xvii, 46 p. : ill. ; 28 cm. -. Bibliography: p. 44-46. (NAL Call No.: DNAL TD201.N6 no.217).

0703

**Hydrogeologic setting and the potentiometric surfaces of regional aquifers in the Hollandale embayment, southeastern Minnesota, 1970-80 /by G.N. Delin and D.G. Woodward.** -.

Delin, G. N. Woodward, D. G. Washington, D.C. : U.S. G.P.O., 1984. iv, 56 p. : ill. (some col.), col. maps ; 28 cm. -. Bibliography: p. 54-55. (NAL Call No.: DNAL 407 G29W no.2219).

0704

**Hydrologic and water quality impacts of peat mining in North Carolina /J.D. Gregory ... et al.** -.

Gregory, J. D. 1943. Raleigh, N.C. : Water Resources Research Institute of the University of North Carolina, 1984. "August 1984."~ "UNC-WRRI-83-214."~ NOAA grants no. NA-79-AA-D-CZ097 and NA-80-AA-D-CZ149, WRI project nos. 50070 and 50071. xxvi, 215 p. : ill., map ; 28 cm. -. Includes bibliographies. (NAL Call No.: DNAL TD201.N6 no.214).

0705

**Hydrology and land use in Van Buren County, Michigan /by T.R. Cummings, F.R. Twenter, and D.J. Holtschlag ; prepared in cooperation with Van Buren County, Michigan Department of Natural Resources, Michigan Department of Agriculture.** -.

Cummings, T. R., 1930. Twenter, F. R.; Holtschlag, David J. Lansing, Mich. : U.S. Geological Survey, 1984. Two folded maps in pocket. xi, 124 p. : ill., maps ; 28 cm. -. Bibliography: p. 90-91. (NAL Call No.: DNAL GB701.W375 no.84-4112).

# WATER RESOURCES AND MANAGEMENT

0706

**Hydrology of Yucca Mountain and vicinity, Nevada-California investigative results through mid-1983 /by R.K. Waddell, J.H. Robison, and R.K. Blankennagel ; prepared in cooperation with the U.S. Department of Energy. -.**  
Waddell, Richard K. Robison, J. H.; Blankennagel, Richard K. Denver, Colo. : U.S. Geological Survey, 1984. Five maps on folded sheets in pocket. vi, 72 p. : ill., maps ; 28 cm. -. Bibliography: p. 67-72. (NAL Call No.: DNAL GB701.W375 no.84-4267).

0707

**Impact of development on availability and quality of ground water in eastern Nassau County, Florida, and southeastern Camden County, Georgia /by David P. Brown ; prepared in cooperation with the Ocean, Highway and Port Authority, Nassau County, Florida. -.**  
Brown, David P., 1947. Tallahassee, Fla. : U.S. Dept. of the Interior, Geological Survey ; Denver, Colo. : Open-File Services Section, Western Distribution Branch, U.S. Geological Survey, 1984 (1985 printing). vi, 113 p. : ill., maps ; 28 cm. -. Bibliography: p. 106-113. (NAL Call No.: DNAL GB701.W375 no.83-4190).

0708

**The impact of point and non-point nutrient enrichment on the dynamics of natural phytoplankton /Christopher F. D'Elia, James G. Sanders and Walter R. Boynton. -.**  
D'Elia, Christopher F. College Park : Maryland Water Resources Research Center, University of Maryland, 1984. "The research on which this report is based was financed in part by the U.S. Department of the Interior, as authorized by the Water Research and Development Act of 1978 (P.L. 95-467)."- "September 1984.". 50 p. : ill. ; 28 cm. -. Bibliography: p. 21-23. (NAL Call No.: DNAL TD423.A1M3 no.83).

0709

**Incised channels morphology, dynamics, and control /by Stanley A. Schumm, Michael D. Harvey, and Chester C. Watson. -.**  
Schumm, Stanley A., 1927. Harvey, Michael D.; Watson, Chester C. Littleton, Colo. : Water Resources Publications, c1984. "Originated as a report to the Soil Conservation Service on the channelized streams of northern Mississippi"--Pref.~ Includes index. vi, 200 p. : ill. ; 23 cm. Bibliography: p. 184-196. (NAL Call No.: DNAL GB565.M7S38).

0710

**Interpolating water-table altitudes in west-central Kansas using kriging techniques /by L.E. Dunlap and J.M. Spinazola. -.**  
Dunlap, Loyd E. Spinazola, Joseph M. Washington, D.C. : U.S. Geological Survey ; Alexandria, VA : For sale by the Branch of Distribution, U.S. Geological Survey, 1984. "Prepared in cooperation with the Western Kansas Groundwater Management District No. 1.". iv, 19 p. : ill., map ; 28 cm. -. Bibliography: p. 17. (NAL Call No.: DNAL 407 G29W no.2238).

0711

**An investment programming model for rural community water systems /Kwang-Sik Myoung and Dean F. Schreiner. -.**  
Myoung, Kwang-Sik. Schreiner, Dean F. Stillwater, Okla. : Agricultural Experiment Station, Oklahoma State University, 1984. "November 1984.". iv, 57 p. : ill. ; 23 cm. -. Bibliography: p. 51-54. (NAL Call No.: DNAL 100 Ok4 (4) no.161).

0712

**Isotopic studies of the natural sources of radium in groundwater in Illinois /Robert H. Gilkeson ... et al. -.**  
Gilkeson, Robert H. Urbana, Ill. : University of Illinois at Urbana-Champaign, Water Resources Center, 1984. "Final technical completion report to Bureau of Reclamation, Department of the Interior ..."- "April 1984."- "UILU-WRC-84-187."-- Cover.~ Project no.: B-139-111. 50 p. : ill., maps ; 28 cm. -. Bibliography: p. 47-50. (NAL Call No.: DNAL TC424.I3I4 no.187).

0713

**Low-flow transport models for conservative and sorbed solutes, Uvas Creek, near Morgan Hill, California /by Alan P. Jackman, Roy A. Walters and Vance C. Kennedy. -.**  
Jackman, Alan P. Walters, Roy A.; Kennedy, Vance C. 1923. Menlo Park, Calif. : U.S. Dept. of the Interior, Geological Survey, 1984. 82 p. : ill., map ; 28 cm. -. Bibliography: p. 73-74. (NAL Call No.: DNAL GB701.W375 no.84-4041).

0714

**Low-level radioactive-waste burial at the Palos Forest Preserve, Illinois geology and hydrology of the glacial drift, as related to the migration of tritium /by Julio C. Olimpio. -.**  
Olimpio, Julio C. Washington, D.C. : U.S. G.P.O., 1984. iv, 34 p. : ill. ; 28 cm. -. Bibliography: p. 34. (NAL Call No.: DNAL 407 G29W no.2226).



0715

Management of groundwater recharge areas in the mouth of Weber Canyon /by Calvin G. Clyde ... et al. . -.

Clyde, Calvin G. Logan, Utah : Utah Water Research Laboratory, Utah State University, 1984. xii, 101 p. : ill., charts, maps ; 28 cm. -. Bibliography: p. 99-100. (NAL Call No.: DNAL TC160.H9 no.84/01).

0716

Massachusetts agricultural-water quality study. -.

Washington, D.C.? : USDA, SCS, 1984. Cover title: Massachusetts agricultural water quality study.~ "Main report & Appendix A, Regional problem summary, Appendix B, Best management practices, Appendix C, Bibliography."~ Massachusetts River basin planning program.~ "August 1984.". 1 v. (various pagings) : ill., maps (some folded) ; 28 cm. Bibliography: p. C-1 - C-12. (NAL Call No.: DNAL aTD224.M4M3).

0717

Mathematical models for ungaged watersheds with potential for quantifying the effect of land use changes on streamflow /by Vijay P. Singh. -.

Singh, Vijay P. Baton Rouge, La. : Louisiana Water Resources Research Institute, Louisiana State University, 1984. Cover title.~ Partially funded by the U.S. Dept of the Interior under the Water Research and Development Act of 1978.~ "October 1984.". ix, 143 leaves : ill. ; 28 cm. Bibliography: leaves 130-143. (NAL Call No.: DNAL TC409.S56).

0718

Mercury in peat and its drainage waters in eastern North Carolina /by David W. Evans and Richard T. DiGiulio and Elizabeth A. Ryan. -.

Evans, David W. 1947. DiGiulio, Richard T. 1950-; Ryan, Elizabeth A. Raleigh, N.C. : Water Resources Research Institute of the University of North Carolina, 1984. "September 1984."~ Project no. 373502, agreement no. G-860.~ "UNC-WRRI-84-218.". xiv, 66 p. : ill., maps ; 28 cm. -. Bibliography: p. 58-66. (NAL Call No.: DNAL TD201.N6 no.218).

0719

A modification of the finite-difference model for simulation of two dimensional ground-water flow to include surface-ground water relationships /by Melih M. Ozbilgin and David C. Dickerman ; prepared in cooperation with the Rhode Island Water Resources Board. -.

Ozbilgin, Melih Mehmet. Dickerman, David C. Providence, R.I. : U.S. Geological Survey, 1984. iv, 98 p. : ill. ; 28 cm. -. Bibliography: p. 25. (NAL Call No.: DNAL

GB701.W375 no.83-4251).

0720

National water summary, 1983 hydrologic events and issues /by U.S. Geological Survey. -.

Reston, Va. : U.S. Dept. of the Interior, Geological Survey ; Washington, D.C. : For sale by the Supt. of Docs., U.S. G.P.O., 1984. vi, 243 p. : ill. (some col.), col. maps ; 28 cm. -. Includes bibliographies. (NAL Call No.: DNAL 407 G29W no.2250).

0721

Nutrient and detritus transport in the Apalachicola River, Florida /by Harold C. Mattraw, Jr., and John F. Elder. -.

Mattraw, Harold C. Elder, John F. Reston, Va.? : U.S. Dept. of the Interior, Geological Survey ; Alexandria, Va. : for sale by Distribution Branch, USGS, 1984. "River quality assessment of the Apalachicola River Basin, Florida"--Cover.~ At head of title: Chapter C. viii, 62 p. : ill., maps ; 28 cm. -. Bibliography: p. 57-59. (NAL Call No.: DNAL 407 G29W no.2196-C).

0722

Ola flood plain management study Yell County, Arkansas /Cooperating Agencies ; The Yell County Conservation District ; City of Ola ; Arkansas Soil and Water Conservation Commission and U.S. Dept. of Agriculture, Soil Conservation Service. -.

Little Rock, Arkansas : U.S. Soil Conservation Service, 1984. Cover title.~ "June 1984.". 11, 3, 1 leaves (some folded) : ill., maps ; 28 cm. Bibliography: leaf 10. (NAL Call No.: DNAL aTC424.A805).

0723

Oregon ground-water quality and its relation to hydrogeologic factors a statistical approach /by Timothy L. Miller and Joseph B. Gonthier. -.

Miller, Timothy L. Gonthier, Joseph B. Portland, Or. : U.S. Geological Survey ; Denver, Colo. : Open-File Services, Western Distribution Branch, 1984. vii, 88 p. : ill., maps ; 28 cm. -. Bibliography: p. 88. (NAL Call No.: DNAL GB701.W375 no.84-4242).

0724

Organic chemicals in natural waters applied monitoring and impact assessment /James W. Moore, S. Ramamoorthy. -.

Moore, James W., 1947. Ramamoorthy, S. New York : Springer-Verlag, c1984. xi, 289 p. : ill. ; 25 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL GB855.M667).

## WATER RESOURCES AND MANAGEMENT

0725

Phenolic contamination in the sand-and-gravel aquifer from a surface impoundment of wood treatment wastes, Pensacola, Florida /by D.E. Troutman ... et al. ; prepared in cooperation with the Florida Department of Environmental Regulation. -. Troutman, David E. Tallahassee, Fla. : U.S. Geological Survey, 1984. iv, 36 p. : ill., maps ; 28 cm. -. Bibliography: p. 29-30. (NAL Call No.: DNAL GB701.W375 no.84-4230).

0726

Predictive simulation of alternatives for managing the water resources of North Fork Solomon River Valley between Kirwin Dam and Waconda Lake, north-central Kansas /by Robert D. Burnett ; prepared in cooperation with the U.S. Bureau of Reclamation. -. Burnett, Robert D. Lawrence, Kan. : U.S. Geological Survey, 1984. One map on folded sheet in pocket. vi, 34 p. : ill., maps ; 28 cm. -. Bibliography: p. 33-34. (NAL Call No.: DNAL GB701.W375 no.84-4249).

0727

A Preliminary appraisal of sediment sources and transport in Kings Bay and vicinity, Georgia and Florida /by James B. McConnell ... et al. ; prepared in cooperation with the United States Navy, Officer in Charge of Construction, Trident Naval Submarine Base. -. McConnell, James B. Doraville, Ga. : U.S. Geological Survey ; Denver, Colo. : Open-File Services Section, Western Distribution Branch, U.S. Geological Survey, 1984. "1983.". vi, 68 p. : ill., 1 map ; 28 cm. -. Bibliography: p. 66-68. (NAL Call No.: DNAL GB701.W375 no.83-4060).

0728

Problems of rising ground-water levels in urban areas with special reference to the Louisville, Kentucky area /by Douglas V. Whitesides, Robert J. Faust, and Douglas D. Zettwoch ; prepared in cooperation with the Kentucky Geological Survey, University of Kentucky. -. Whitesides, Douglas V. Faust, Robert J.; Zettwoch, Douglas D. Louisville, Ky. : U.S. Geological Survey ; Lakewood, CO : Open-File Services Section, Western Distribution Branch, U.S. Geological Survey, 1984. "1983.". v, 26 p. : ill., maps ; 28 cm. -. Bibliography: p. 25-26. (NAL Call No.: DNAL GB701.W375 no.83-4233).

0729

Proceedings of the seminars on flood vulnerability analysis and on the principles of floodplain management for flood loss prevention. -. New York : United Nations, 1984. At head of title: Economic and Social Commission for Asia and the Pacific, Bangkok, Thailand. 130 p. : ill., map ; 30 cm. -. Includes bibliographical references. (NAL Call No.: DNAL 290.9 Un35F no.58).

0730

Projected effects of ground-water withdrawals in the Arkansas River Valley, 1980-99, Hamilton and Kearny Counties, southwestern Kansas /by L.E. Dunlap, R.J. Lindgren, and J.E. Carr ; prepared in cooperation with the Kansas State Board of Agriculture. -. Dunlap, L. E. Lindgren, Richard J.; Carr, J. E. Lawrence, Kan. : U.S. Geological Survey, WRD, 1984. vi, 168 p. : ill., maps ; 28 cm. -. Bibliography: p. 26. (NAL Call No.: DNAL GB701.W375 no.84-4082).

0731

Projected water-level declines in the Ogallala aquifer in Lea County, New Mexico /by Douglas P. McAda ; prepared in cooperation with the New Mexico State Engineer Office. -. McAda, Douglas P. Albuquerque, N.M. : U.S. Geological Survey, 1984. ix, 84 p. : ill., maps ; 28 cm. -. Bibliography: p. 82-84. (NAL Call No.: DNAL GB701.W375 no.84-4062).

0732

A qualitative appraisal of the hydrology of the Yemen Arab Republic from Landsat images /by Maurice J. Grolier, G.C. Tibbitts, Jr., and Mohammed Mukred Ibrahim. -. Grolier, Maurice J. (Maurice Jean), 1918. Tibbitts, G. C.; Ibrahim, Mohammed Mukred. Washington, D.C. : U.S. G.P.D., 1984. Prepared in cooperation with the Yemen Arab Republic under the auspices of the U.S. Agency for International Development. ~ "Landsat 1 mosaic showing the four catchment areas, major drainage basins, and drainage network of the Yemen Arab Republic (San'a')": col. map on folded leaf in pocket. v, 70 p. : maps (some col.) ; 23 cm. -. Bibliography: p. 56-58. (NAL Call No.: DNAL 407 G29W no.1757-P).

0733

Quality and quantity of runoff and atmospheric deposition in urban areas of Salt Lake County, Utah, 1980-81 /by R.C. Christensen ... et al. ; prepared in cooperation with the Salt Lake County Division of Flood Control and Water Quality. -. Christensen, R. C. Salt Lake City, Utah : U.S.



Dept. of the Interior, Geological Survey ; Denver, Colo. : Open-File Services Section, Western Distribution Branch, U.S. Geological Survey, 1984. Two maps on folded sheet in pocket.~ Chiefly tables. viii, 223 p. : ill., 1 map ; 28 cm. -. Bibliography: p. 85-87. (NAL Call No.: DNAL GB701.W375 no.84-4011).

0734

**Quality-assurance data for routine water analysis in the laboratories of the U.S. Geological Survey for water-year 1983 /by Dale B. Peart and Nancy A. Thomas. -.**  
Peart, Dale B. Thomas, Nancy. Denver, Colo. : U.S. Geological Survey, 1984. vi, 112 p. : ill. ; 28 cm. -. Bibliography: p. 19-20. (NAL Call No.: DNAL GB701.W375 no.84-4234).

0735

**Quality of ground water in agricultural areas of the San Luis Valley, South-Central Colorado /by Patrick Edelmann and David P. Buckles ; prepared in cooperation with the Rio Grande Water Conservation District. -.**  
Edelmann, Patrick. Buckles, David R. Lakewood, Colo. : U.S. Geological Survey, 1984. v, 37 p. : ill., maps ; 28 cm. -. Bibliography: p. 25-26. (NAL Call No.: DNAL GB701.W375 no.83-4281).

0736

**Quality of water in the alluvial aquifer, American Bottoms, East St. Louis, Illinois /by David C. Voelker ; prepared in cooperation with U.S. Army Corps of Engineers, St. Louis District. -.**  
Voelker, David C. Urbana, Ill. : U.S. Dept. of the Interior, Geological Survey ; Denver, CO : Open-File Services Section, Western Distribution Branch, U.S. Geological Survey distributor , 1984. v, 51 p. : maps ; 28 cm. -. Bibliography: p. 11-12. (NAL Call No.: DNAL GB701.W375 no.84-4180).

0737

**Quantity and quality of streamflow in the southeastern Uinta Basin, Utah and Colorado /by K.L. Lindskov and Briant A. Kimball. -.**  
Lindskov, K. L. Kimball, Briant A. Washington, D.C. : U.S. G.P.O. : For sale by the Supt. of Docs., 1984. vii, 72 p. : ill., maps ; 29 cm. -. Bibliography: p. 69-71. (NAL Call No.: DNAL 407 G29W no.2224).

0738

**Quantity and quality of streamflow in the White River Basin, Colorado and Utah /by Jeanne M. Boyle, Kenneth J. Covay, and Daniel P. Bauer. -.**  
Boyle, Jeanne M. Covay, Kenneth J.; Bauer, Daniel P.,\_1941. Lakewood, Colo. : U.S. Dept. of the Interior, Geological Survey ; Denver, Colo. : Open-File Services Section, Western Distribution Branch, USGS distributor , 1984. vii, 84 p. : ill., maps ; 28 cm. -. Bibliography: p. 73. (NAL Call No.: DNAL GB701.W375 no.84-4022).

0739

**Reconnaissance of water-quality characteristics of streams in the City of Charlotte and Mecklenburg County, North Carolina /by William H. Eddins and J. Kent Crawford ; prepared in cooperation with the City of Charlotte, North Carolina, and Mecklenburg County, North Carolina. -.**  
Eddins, William H. Crawford, J. Kent. Raleigh, N.C. : U.S. Geological Survey ; Denver, Colo. : Open-File Services Section, Western Distribution Branch, U.S. Geological Survey distributor , 1984. viii, 105 p. : ill., maps (some col.) ; 28 cm. -. Bibliography: p. 104-105. (NAL Call No.: DNAL GB701.W375 no.84-4308).

0740

**Regional and state water resources planning and management proceedings of a symposium held in San Antonio, Texas /edited by Randall J. Charbeneau and Barney P. Popkin ; sponsored by American Water Resources Association. -.**  
Charbeneau, Randall J.; Popkin, Barney P. Bethesda, Md. : American Water Resources Association, c1984. vii, 366 p. : ill., maps ; 28 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL TC401.A5 no.83-1).

0741

**Retrieval procedures for hydrologic data from ARS experimental watersheds in the United States (REPHLEX) /by J.L. Thurman, R.T. Roberts, J.B. Burford. -.**  
Thurman, J. L. Roberts, Ralph T.; Burford, J. B.\_1920. Beltsville, Md. : U.S. Dept. of Agriculture, Agricultural Research Service, 1984. "August 1984.". v, 116 p. : ill. ; 28 cm. -. Includes bibliographical references. (NAL Call No.: DNAL aS21.R44A7 no.2).

## WATER RESOURCES AND MANAGEMENT

0742

**Runoff and water-quality characteristics of surface-mined lands in Illinois /by Timothy P. Brabets ; prepared in cooperation with the U.S. Environmental Protection Agency. -.**  
Brabets, Timothy P. Urbana, Ill. : U.S. Geological Survey ; Denver, CD : Open-File Services Section, Western Distribution Branch, U.S. Geological Survey, 1984. vii, 78 p. : ill., maps ; 28 cm. -. Bibliography: p. 77-78. (NAL Call No.: DNAL GB701.W375 no.83-4265).

0743

**Sanitary quality of the Jordan River in Salt Lake County, Utah /by Kendall R. Thompson ; prepared in cooperation with the Salt Lake County Division of Flood Control and Water Quality. -.**  
Thompson, Kendall R. Salt Lake City, Utah : U.S. Geological Survey, 1984. 29 leaves, 13 leaves of plates : ill., map ; 28 cm. -. Bibliography: leaves 28-29. (NAL Call No.: DNAL GB701.W375 no.83-4252).

0744

**Sediment-phosphorus relationships in Deer Creek Reservoir /Jay J. Messer, Thomas B. Hardy, Jean M. Ihnat. -.**  
Messer, Jay. Hardy, Thomas B.; Ihnat, Jean M. Logan, Utah : Utah Water Research Laboratory, Utah State University, 1984. vi, 45 p. : charts, map ; 28 cm. -. Bibliography: p. 35-37. (NAL Call No.: DNAL TD224.U8W38 no.84/01).

0745

**Sedimentologic history of the Loxahatchee River Estuary, Florida /by Harold Wanless and Victor Rossinsky, Jr., and Benjamin F. McPherson ; prepared in cooperation with the Florida Department of Environmental Regulation ... et al. -.**  
Wanless, Harold. Rossinsky, Victor.; McPherson, Benjamin F. Tallahassee, Fla. : U.S. Dept. of the Interior, Geological Survey ; Denver, Colo. : Open-File Services Section, Western Distribution Branch, U.S. Geological Survey, 1984. "Contract number: 14-08-0001-G-759, name of contractor: University of Miami.". vi, 58 p. : ill., maps ; 28 cm. -. Bibliography: p. 57-58. (NAL Call No.: DNAL GB701.W375 no.84-4120).

0746

**Selected papers on water quality and pollution in New Mexico proceedings of a Symposium on Water Quality and Pollution in New Mexico, April 12, 1984, Socorro, NM /compiled by William J. Stone ; sponsored by Water Pollution Control Bureau, New Mexico Environmental Improvement Division ... et al. -.**  
Stone, William J. 1941. Socorro : New Mexico

Bureau of Mines & Mineral Resources, 1984. Errata sheet inserted. vi, 300 p. : ill. ; 28 cm. -. Includes bibliographies. (NAL Call No.: DNAL TD224.N6S9 1984).

0747

**Sewage plume in a sand and gravel aquifer, Cape Cod, Massachusetts /by Denis R. LeBlanc ; prepared in cooperation with the Massachusetts Department of Environmental Quality Engineering, Division of Water Pollution Control. -.**  
LeBlanc, Dennis R. Boston, Mass. : U.S. Geological Survey ; Alexandria, Va. : for sale by Distribution Branch, U.S. Geological Survey, 1984. iv, 28 p. : ill. ; 28 cm. -. Bibliography: p. 27-28. (NAL Call No.: DNAL 407 G29W no.2218).

0748

**Simulated ground-water flow in the Potomac aquifers, New Castle County, Delaware /by Mary M. Martin ; prepared in cooperation with U.S. Army Corps of Engineers and the Delaware Department of Natural Resources and Environmental Control. -.**  
Martin, M. M. Towson, Md. : U.S. Dept. of the Interior, U.S. Geological Survey ; Denver, Colo. : Open-File Services Section, Western Distribution Branch, U.S. Geological Survey, 1984. One folded map in pocket. ~ "December 1984.". vii, 85 p. : ill., maps ; 28 cm. -. Bibliography: p. 84-85. (NAL Call No.: DNAL GB701.W375 no.84-4007).

0749

**Streamflow augmentation at Fosters Brook, Long Island, New York a hydraulic feasibility study /by Keith R. Prince ; prepared in cooperation with the Nassau County Department of Public Works and the Suffolk County Department of Health Services. -.**  
Prince, Keith R. Washington, D.C. : U.S. G.P.O. ; Alexandria, Va. 22304 : For sale by Distribution Branch, Text Products Section, U.S. Geological Survey, 1984. iv, 43 p. : ill., map ; 28 cm. -. Bibliography: p. 31. (NAL Call No.: DNAL 407 G29W no.2208).

0750

**Streamflow gain-and-loss and suspended-sediment characteristics of the South Platte River and three irrigation canals near Fort Morgan, Colorado /by Barbara C. Ruddy. -.**  
Ruddy, Barbara C. Lakewood, Colo. : U.S. Geological Survey ; Denver, Colo. : Open-File Services Section, Western Distribution Branch, 1984. Chiefly tables. iv, 82 p. : maps ; 28 cm. -. Bibliography: p. 17. (NAL Call No.: DNAL GB701.W375 no.84-4220).



0751

Suspended-sediment yields in the Taylor Run and Shavers Fork Basins, Randolph County, West Virginia, 1973-80 /by Stephen M. Ward. -. Ward, Stephen M. Charleston, W.Va. : U.S. Geological Survey, 1984. v, 49 p. : ill., maps ; 28 cm. -. Bibliography: p 25. (NAL Call No.: DNAL GB701.W375 no.83-4040).

0752

Test well DO-CE 88 at Cambridge, Dorchester County, Maryland /by Henry Trapp, Jr. ... et al. -. Trapp, Henry.; Geological Survey (U.S.). Washington, D.C. : U.S. G.P.O. ; Alexandria, Va. : For sale by Distribution Branch, Text Products Section, U.S. Geological Survey, 1984. A summary of information derived from a test well drilled to basement on the Delmarva Peninsula, Atlantic Coastal Plain. iv, 48 p. : ill., maps ; 28 cm. -. Bibliography: p. 45, 47. (NAL Call No.: DNAL 407 G29W no.2229).

0753

Trihalomethane compounds and their precursors in Salt Lake County evaluation of trihalomethane source and production /by Kyle R. Cook ... et al. -. Cook, Kyle R. Logan, Utah : Utah Water Research Laboratory, Utah State University, 1984. "November 1984.". xii, 154 p. : ill., maps ; 28 cm. -. Bibliography: p. 107-112. (NAL Call No.: DNAL TD224.U8W38 no.84/3).

0754

Use of the routing procedure to study dye and gas transport in the West Fork Trinity River, Texas /by H.E. Jobson and R.E. Rathbun. -. Jobson, H. E. Rathbun, R. E. Washington, D.C. : U.S. G.P.O. ; Alexandria, VA : For sale by the Distribution Branch, U.S. Geological Survey, 1984. iv, 21 p. : ill. ; 28 cm. -. Bibliography: p. 19-20. (NAL Call No.: DNAL 407 G29W no.2252).

0755

Village of Verona, Grundy County, Illinois Floodplain Management Reconnaissance Study /prepared by U.S. Department of Agriculture, Soil Conservation Service, Champaign, Illinois ; in cooperation with State of Illinois, Department of Transportation, Division of Water Resources. -. Champaign, Ill. : The Service : The Division, 1984. Cover title: Floodplain management reconnaissance study report, Verona, Grundy County.~ "September 1984.". 11 leaves, 2 leaves of plates : maps ; 28 cm. (NAL Call No.: DNAL aTC424.I3V52).

0756

Water-data program of the U.S. Geological Survey in Kansas, fiscal year 1983 /by R.K. Livingston and K.D. Medina. -. Livingston, Russell K. Medina, K. D. Reston, Va.? : U.S. Dept. of the Interior, Geological Survey : Open-File Services Section, Western Distribution Branch, U.S. Geological Survey distributor, 1984. iv, 33 p. : ill., maps ; 22 x 28 cm. -. Bibliography: p. 32-33. (NAL Call No.: DNAL GB701.W375 no.84-4306).

0757

Water management on claypan soils in the Midwest /by S.K. Sipp ... et al. -. Sipp, S. K. Urbana, Ill. : University of Illinois at Urbana-Champaign, Water Resources Center, 1984. "Final technical completion report to Bureau of Reclamation, USDI ..."-- "June 1984."~ "UILU-WRC-84-186."-- Cover.~ Project no.: B-141-111. viii, 66 p. : ill., 1 map ; 28 cm. -. Bibliography: p. 66. (NAL Call No.: DNAL TC424.I3I4 no.186).

0758

Water-quality assessment of the Illinois River Basin, Arkansas /by J.E. Terry ... et al. ; prepared in cooperation with Arkansas Department of Pollution Control and Ecology. -. Terry, J. E. Little Rock, Ark. : U.S. Geological Survey, 1984. 1 v. in various pagings (some folded) : ill. ; 28 cm. -. Bibliography: p. 260-263. (NAL Call No.: DNAL GB701.W375 no.83-4092).

0759

Water quality in the New River from Calxico to the Salton Sea, Imperial County, California /by James G. Setmire ; prepared in cooperation with the California Department of Water Resources. -. Setmire, James G. Washington, D.C. : U.S. Govt. Print. Off. ; Alexandria, Va. : For sale by the Branch of distribution, U.S. Geological Survey, 1984. iv, 42 p. : ill., maps ; 28 cm. -. Bibliography: p. 42. (NAL Call No.: DNAL 407 G29W no.2212).

0760

A Water-quality study of the tidal Potomac River and estuary an overview /edited by Edward Callender ... et al. -. Callender, Edward. Washington, D.C. : U.S. G.P.O. : For sale by the Supt. of Docs., 1984. viii, 46 p. : ill. (some col.), maps (some col.) ; 28 cm. -. Bibliography: p. 46. (NAL Call No.: DNAL 407 G29W no.2233).

## WATER RESOURCES AND MANAGEMENT

0761

**Water resources and potential hydrologic effects of oil-shale development in the southeastern Uinta Basin, Utah and Colorado /by K.L. Lindskov and B.A. Kimball. -.**  
Lindskov, K. L. Kimball, Briant A. Washington, D.C. : U.S. G.P.O. ; Alexandria, Va. : for sale by the Branch of Distribution, U.S. Geological Survey, 1984. iv, 32 p. : ill., maps ; 29 cm. -. Bibliography: p. 30-32. (NAL Call No.: DNAL 407 G29Pr no.1307).

0762

**Water resources in the southern Rockies and high plains forest recreational use and aquatic life /Loren D. Potter, James R. Gosz, Clarence A. Carlson, Jr. -.**  
Potter, Loren D. Gosz, James R.; Carlson, Clarence A. Albuquerque : University of New Mexico Press, c1984. Includes index. xvi, 331 p. : ill., maps ; 24 cm. -. Bibliography: p. 309-329. (NAL Call No.: DNAL GV191.42.R63P67 1984).

0763

**Water scarcity impacts on western agriculture /edited by Ernest A. Engelbert with Ann Foley Scheuring. -.**  
Engelbert, Ernest A.; Scheuring, Ann Foley. Berkeley : University of California Press, c1984. "This publication is the product of an interdisciplinary conference on water problems in the western United States held in Monterey, California, in September, 1982"--Pref. 484, 15 p. : ill., maps ; 24 cm. Includes bibliographical references and index. (NAL Call No.: DNAL TD223.6.W3).

0764

**Water table levels and water contents of some Indiana soils /D.P. Franzmeier ... et al. . -.**  
Franzmeier, D. P. West Lafayette, Ind. : Dept. of Agronomy, Agricultural Experiment Station, Purdue University, 1984. "January 1984.". 49 p. : ill. ; 28 cm. -. Bibliography: p. 16-17. (NAL Call No.: DNAL 100 In2P (1) no.976).

0765

**Water use and management in the Texas rice belt region /Ronald C. Griffin, Gregory M. Perry, Garry N. McCauley. -.**  
Griffin, Ronald C. Perry, Gregory M.; McCauley, Garry N. College Station, Tex. : Texas Agricultural Experiment Station, Texas A&M University, 1984. "June 1984". iv, 87, 15 p. : ill., maps ; 28 cm. -. Bibliography: p. 82-86. (NAL Call No.: DNAL 100 T31M no.1559).

0766

**Water-use coefficients and resource multipliers for O'ahu, Hawai'i /Richard L. Bowen, PingSun Leung, Mary H. Vesenka ; prepared for U.S. Department of the Interior. -.**  
Bowen, Richard L. Honolulu : Water Resources Research Center, University of Hawaii at Monoa, 1984. "August 1984."~ Project completion report for estimation of water use coefficients and multipliers for Islands of Oahu, project no.: 371306, grant agreement no.: CT371300, principal investigator: Richard L. Bowen, co- The research on which this report is based was financed in part by the U.S. Department of the Interior, as authorized by the Water Research and Development Act of 1978 (P.L. 95-467). viii, 36 p. : ill. ; 28 cm. -. Bibliography: p. 26-28. (NAL Call No.: DNAL GB705.H3H3 no.164).

0767

**Drip and trickle irrigation 1982-1984.**  
MacLean, J.T. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Updates 82-08.~ Bibliography. Dec 1984. (85-08). 23 p. (NAL Call No.: DNAL aZ5071.N3).

0768

**The feasibility of subirrigation on claypan soils in the Midwest /by Saied Mostaghimi, Walter D. Lemke, Charles W. Boast. -.**  
Mostaghimi, Saied. Lemke, Walter D.; Boast, Charles W. Urbana, Ill. : University of Illinois at Urbana-Champaign, 1984. "Project completion report to U.S. Department of the Interior."~ "September 1984."~ "UILU-WRC-84-189." -- Cover. vii, 50 p. : ill. ; 28 cm. -. Bibliography: p. 48-50. (NAL Call No.: DNAL TC424.I3I4 no.189).

0769

**Geohydrology of the High Plains aquifer in parts of Colorado, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, and Wyoming High Plains RASA Project /by Edwin D. Gutentag ... et al. . -.**  
Gutentag, Edwin D., 1931. Washington, D.C.? : U.S. Dept. of the Interior, Geological Survey, 1984. "Regional aquifer-system analysis"--Cover. viii, 63 p. : ill., maps ; 29 cm. -. Bibliography: p. 59-63. (NAL Call No.: DNAL 407 G29Pr no.1400-B).

0770

**Groundwater irrigation 1970-1984.**  
Pisa, M.G. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Bibliography. Nov 1984. (85-04). 20 p. (NAL Call No.: DNAL aZ5071.N3).



0771

Improved emitter and network system design for wastewater reuse in drip irrigation /Donald R. McDonald ... et al. ; prepared for U.S. Department of the Interior. -.  
McDonald, Donald R. Honolulu : Water Resources Research Center, University of Hawaii at Manoa, 1984. "July 1984."~ Project completion report for hydraulic study of drip irrigation tubes and design to minimize plugging for reuse of wastewater, proposal no.: C10073-R, grant agreement no.: 14-34-0001-1464, project per The research on which this report is based was financed in part by the U.S. Department of the Interior, as authorized by the Water Research and Development Act of 1978 (P.L. 95-467). x, 87 p. : ill., map ; 28 cm. -. Bibliography: p. 66-67. (NAL Call No.: DNAL GB705.H3H3 no.163).

0772

Low flow hydraulics in alluvial channels final report /by Barbara A. Miller, Harry G. Wenzel. -.  
Miller, Barbara A. Wenzel, Harry G. Urbana, Ill. : University of Illinois at Urbana-Champaign, 1984. "September, 1984."~ "Project no. 371506; grant no. 14-08-001-G840"--Cover. vii, 51 p. : ill. ; 28 cm. -. Bibliography: p. 49-50. (NAL Call No.: DNAL TC424.I3I4 no.192).

# LAND RESOURCES

0773

Annotated bibliography, the Metropolitan landscape planning model (METLAND) research bulletins, journal articles, professional papers, conference proceedings, doctoral and master's theses generated through METLAND's research during the years, 1971-1984 /edited by, Daniel Bucko; principal investigator, Julius Gy. Fabos. -.

Bucko, Daniel. Fabos, Julius Gy. Amherst : Massachusetts Agricultural Experiment Station, College of Food and Natural Resources, University of Massachusetts of Amherst, 1984. "July 1984.". ix, 48 p. ; 23 cm. -. (NAL Call No.: DNAL 100 M38H (1) no.694).

0774

Draft environmental impact statementland and resource management plan, Cherokee National Forest. -.

Atlanta, Ga. : U.S. Dept. of Agriculture, Forest Service, Southern Region, 1984. Cover title: Draft environmental impact statement, Cherokee National Forest. 1 v. (various pagings) : ill. ; 28 cm. + 1 envelope (12 col. maps on 6 folded sheets). Includes bibliographies. (NAL Call No.: DNAL ASD428.C4D74).

0775

Draft Jacks Creek wilderness environmental impact statement /prepared by Bureau of Land Management, Department of the Interior. -.

Boise, Idaho : The Bureau, 1984. Cover title: Jacks Creek wilderness environmental impact statement, draft.~ Includes index. vi, 211 p. : ill., maps ; 28 cm. Bibliography: p. 203-207. (NAL Call No.: DNAL QH76.5.I2D7).

0776

Draft wilderness suitability environmental impact statement Grass Creek and Cody resource areas /prepared by U.S. Department of the Interior, Bureau of Land Management, Worland District. -.

Worland, Wyo. : The District, 1984. Cover title: Grass Creek/Cody resource areas, wilderness suitability EIS, draft.~ "June 1984."~ "BLM-WY-ES-84-016-4332"--P. 3 of cover. iii, 113 p. : ill., maps (some folded) 28 cm. Bibliography: p. 113. (NAL Call No.: DNAL QH76.5.W8D7).

0777

The estuary as a filter proceedings of the Seventh Biennial International Estuarine Research Conference, Virginia Beach, Virginia, October 23-26, 1983 /edited by Victor S. Kennedy. -.

Kennedy, Victor S. Orlando : Academic Press, 1984. xv, 511 p. : ill., maps ; 24 cm. Includes

bibliographies and index. (NAL Call No.: DNAL GC96.I57 1983).

0778

Final environmental impact statement for the river management plan Upper Delaware National Scenic and Recreational River, Delaware, Sullivan, and Orange Counties, New York, Pike and Wayne Counties, Pennsylvania /United States Department of the Interior, National Park Service ; prepared in cooperation with State of New York ... et al. . -.

Narrowsburg, NY : The Service, 1984. Cover title.~ "Preliminary discussion draft."~ Includes index. xviii, 520 p. : ill., maps ; 28 cm. Bibliography: p. 512-517. (NAL Call No.: DNAL TC425.D3F5).

0779

Land and resource management plan for the Nantahala and Pisgah National Forestsdraft environmental impact statement. -.

Atlanta, Ga. : U.S. Dept. of Agriculture, Forest Service, Southern Region, 1984. Cover title: Draft environmental impact statement, land and resource management plan, Nantahala & Pisgah National Forests.~ Includes index. 1 v. (various pagings) : ill., maps ; 28 cm. Bibliography: p. IX-1 - IX-9. (NAL Call No.: DNAL ASD428.N3L3).

0780

Land and resource management planPike and San Isabel National Forests, Comanche and Cimarron National Grasslands. -.

Pueblo, Colo. : U.S. Dept. of Agriculture, Forest Service, 1984. Cover title.~ Two col. maps on 2 folded sheets in pocket.~ Includes index. 1 v. (various pagings) : ill., maps (some col.) ; 28 cm. Includes bibliographies. (NAL Call No.: DNAL ASD428.P5L3).

0781

Landscape planning and evaluation a combined goal-oriented and benefit/loss approach : part IV of the Metropolitan landscape planning model (METLAND) /Meir Gross ... et al. . -.

Gross, Meir. Amherst : Massachusetts Agricultural Experiment Station, College of Food and Natural Resources, 1984. "July 1984.". xiv, 99 p. : ill., maps ; 23 cm. -. Bibliography: p. 97-99. (NAL Call No.: DNAL 100 M38H (1) no.692).

0782

**Managing forested lands for wildlife /developed in cooperation with U.S. Department of Agriculture, Forest Service, Rocky Mountain Region ; Robert L. Hoover and Dale L. Wills, editors. -.**

Hoover, Robert L.; Wills, Dale L. Denver : Colorado Division of Wildlife, 1984. vii, 459 p. : ill., maps ; 28 cm. Includes bibliographies. (NAL Call No.: DNAL SK355.M36).

0783

**Mineral resources of the Charles Sheldon Wilderness Study Area, Humboldt and Washoe counties, Nevada, and Lake and Harney counties, Oregon /by U.S. Geological Survey and U.S. Bureau of Mines. -.**

Washington, D.C. : U.S. G.P.O., 1984. An evaluation of the mineral potential of the area, summary and chapters A through D.~ Cover title: Charles Sheldon Wilderness Study Area, Nevada and Oregon.~ No longer available for sale by GPO. v, 139 p. : ill., maps ; 24 cm. + 2 folded col. maps in envelope. - . Includes bibliographies. (NAL Call No.: DNAL 407 G29B no.1538).

0784

**Modeling forest scenic beauty concepts and application to ponderosa pine /Thomas C. Brown and Terry C. Daniel. -.**

Brown, Thomas C. Daniel, Terry C. Fort Collins, Colo. : USDA, Forest Service, Rocky Mountain Forest and Range Experiment Station, 1984. "November 1984.". 35 p. : ill. (some col.), maps ; 28 cm. -. Bibliography: p. 28-30. (NAL Call No.: DNAL A99.9 F7632U no.256).

0785

**Nursery crops and landscape designs for agribusiness studies careers, basic subject matter, and work experience practices /George S. Williams, Ronald L. Shumack. -.**

Williams, George S. 1906. Shumack, Ronald L. Danville, Ill. : Interstate Printers & Publishers, c1984. Includes index. xiv, 369 p. : ill. ; 28 cm. Bibliography: p. 359-360. (NAL Call No.: DNAL SB119.W57 1984).

0786

**People and islands resource management issues for islands in the Gulf of Maine /P.W. Conkling, W.H. Drury and R.E. Leonard. -.**

Conkling, P. W. Drury, W. H.; Leonard, R. E. Maine : Island Institute, 1984. "Support for this publication came from the U.S. Forest Service Backcountry Research Project."--Introd. 253 p. : ill., maps ; 28 cm. Includes bibliographies. (NAL Call No.: DNAL QH105.M2C6).

0787

**Public Lands Acquisition Alternative Act of 1983 hearing before the Subcommittee on Energy and Agricultural Taxation of the Committee on Finance, United States Senate, Ninety-eighth Congress, second session, on S. 1675, February 6, 1984. -.**

United States.~Congress.~Senate.~Committee on Finance.~Subcommittee on Energy and Agricultural Taxation. Washington, D.C. : U.S. G.P.O., 1984. Distributed to some depository libraries in microfiche.~ Item 1038-A, 1038-B (microfiche). iii, 117 p. : ill. ; 24 cm. -. Bibliography: p. 117. (NAL Call No.: DNAL KF26.F5526 1984a).

0788

**Public lands and the U.S. economy balancing conservation and development : proceedings of a conference /sponsored by the Wilderness Society ; edited by George M. Johnston and Peter M. Emerson. -.**

Johnston, George M.; Emerson, Peter M. Boulder, Colo. : Westview Press, 1984. xx, 309 p. : ill. ; 22 cm. -. Includes bibliographical references and index. (NAL Call No.: DNAL HD216.P83).

0789

**Tahoe, an environmental history /Douglas H. Strong. -.**

Strong, Douglas H. Lincoln : University of Nebraska Press, c1984. Includes index. xviii, 252 p. : ill., maps ; 23 cm. Bibliography: p. 201 -231. (NAL Call No.: DNAL HT392.5.T3S77).

0790

**Trail planning, construction, and maintenance : a bibliography / compiled by Jean Albrecht and Timothy B. Knopp.**

Albrecht, Jean.; Knopp, Timothy Bushnell.; 1935. St. Paul, Minn. Agricultural Experiment Station, University of Minnesota (1984). Includes index. 68 p. ; 28 cm. -. (NAL Call No.: S1.M52 no.26).

0791

**The Value of roaded, multiple-use areas as recreation sites in three national forests of the Pacific Northwest /Roger N. Clark ... et al. . -.**

Clark, Roger N. Portland, Or. : U.S. Dept. of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station, 1984. Cover title.~ Distributed to depository libraries in microfiche.~ "June 1984.". 40 p. : ill., 1 map ; 28 cm. -. Bibliography: p. 38-40. (NAL Call No.: DNAL A99.9 F7625Uni no.319).

## LAND RESOURCES

0792

**The vegetation of Theodore Roosevelt National Park, North Dakota a habitat type classification /Paul L. Hansen, George R. Hoffman, and Ardele J. Bjugstad. -.**  
Hansen, Paul L. Hoffman, George R.; Bjugstad, Ardele J. Fort Collins, Colo. : U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station, 1984.  
Distributed to depository libraries in microfiche.~ "October 1984.". 35 p. : ill., 1 map ; 28 cm. -. Bibliography: p. 19-20. (NAL Call No.: DNAL aSD11.A42 no.113).

0793

**Visual vulnerability of the landscape control of visual quality /R. Burton Litton, Jr. -.**  
Litton, R. Burton. Washington, DC : U.S. Dept. of Agriculture, Forest Service, 1984 .  
Distributed to depository libraries in microfiche.~ "December 1984.". 35 p. : ill. (some col.) ; 28 cm. -. Bibliography: p. 34. (NAL Call No.: DNAL A99.9 F76Us no.39).



# FOOD SCIENCE AND FOOD PRODUCTS

0794

**Food facts a compendium of information for a whole foods cuisine /by Evelyn Roehl. -.**  
Roehl, Evelyn. Winona, Minn. : Food Learning Center, c1984. Includes index. 212 p. : ill. ; 28 cm. Bibliography: p. 202-207. (NAL Call No.: DNAL TX353.R62).

0795

**Snack food technology /Samuel A. Matz. -.**  
Matz, Samuel A. Westport, Conn. : AVI Pub. Co., c1984. xiii, 415 p. : ill. ; 24 cm. Includes bibliographies and index. (NAL Call No.: DNAL TP451.S57M37 1984).

0796

**Statistical methods in food and consumer research /Maximo C. Gacula, Jr., Jagbir Singh. -.**

Gacula, Maximo C. Singh, Jagbir. Orlando Fla. : Academic Press, 1984. Includes index. xiii, 505 p. : ill. ; 24 cm. - . Bibliography: p. 490-499. (NAL Call No.: DNAL TX367.G33).

0797

**Ultrasonic techniques in the food industry (1972-Aug 84) citations from the Food Science and Technology Abstracts data base /National Technical Information Service. -.**  
Springfield, Va. : NTIS, 1984. Report period covered: 1972-Aug 84.~ "Sep 84."~ Supersedes PB83-867713.~ NX5441.~ Includes index. 1 v. (various pagings) ; 29 cm. (NAL Call No.: DNAL Z7914.F63U4 1984).

0798

**The book of edible nuts /Frederic Rosengarten, Jr. -.**

Rosengarten, Frederic. New York : Walker, 1984. Includes indexes. xxv, 384 p. : ill. ; 26 cm. Bibliography: p. 351-361. (NAL Call No.: DNAL SB401.A4R67).

0799

**Cereal polysaccharides in technology and nutrition /edited by Vladimir F. Rasper. -.**  
Rasper, Vladimir F. St. Paul, Minn. : American Association of Cereal Chemists, c1984. "Based on presentations from a symposium ... held in conjunction with the Annual Meeting of the American Association of Cereal Chemists, October 3, 1983, in Kansas City, MO"--T.p. verso. viii, 184 p. : ill. ; 22 cm. Includes bibliographies. (NAL Call No.: DNAL TX557.C38).

0800

**Select bibliography.**

Berkeley, Los Angeles : University of California, 1984. The University of California/Sotheby book of California wine / editors, Doris Muscatine, Maynard A. Amerine, Bob Thompson. Bibliography. p. 560-571. (NAL Call No.: DNAL TP557.U64).

# FOOD PROCESSING

0801

**Food Irradiation, 1979-1984.**

Gilbert, Henry. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Aug 1984. Bibliography. Aug 1984. (84-58). 25 p. (NAL Call No.: aZ5071.N3).

0802

**Food processing waste treatment (1976 - Sep 84) citations from the NTIS data base /National Technical Information Service, Springfield, VA.**

- .  
Springfield, Va. : NTIS, 1984. "Sep 84."~  
"Report period covered: 1976-Sep 84."~  
"Supersedes PB83-801605."~ "PB84-874999."~  
Includes index. v, 9, 91, 26 leaves ; 29 cm.  
(NAL Call No.: DNAL Z5862.2.W3F6 1984).

0803

**Information materials for the food and cosmetic industries. - .**

Center for Food Safety and Applied Nutrition (U.S.). Washington, D.C. : U.S. Dept. of Health and Human Services, Public Health Service, Food and Drug Administration, Center for Food Safety and Applied Nutrition, 1984. Cover title.~  
Includes index. 43 p. : 2 forms ; 24 cm. -.  
(NAL Call No.: DNAL TP368.4.C4 1984).

0804

**The status of the technical infrastructure to support domestic food irradiationhearing before the Subcommittee on Energy Research and Production of the Committee on Science and Technology, House of Representatives, Ninety-eighth Congress, second session, July 26, 1984. - .**

United States.~Congress.~House.~Committee on Science and Technology.~Subcommittee on Energy Research and Production. Washington, D.C. : U.S. G.P.D., 1984. Distributed to some depository libraries in microfiche.~ "No. 122." iii, 442 p. : ill. ; 24 cm. Includes bibliographical references. (NAL Call No.: DNAL KF27.S3936 1984).

0805

**The University of California/Sotheby book of California wine /editors, Doris Muscatine, Maynard A. Amerine, Bob Thompson. - .**

Muscatine, Doris.; Amerine, M. A.\_1911-; Thompson, Bob. Berkeley : University of California Press ; London : Sotheby Publications, 1984. Half title: Book of California wine.~ Includes index. xxxviii, 615 p. : ill. (some col.), maps ; 29 cm. Bibliography: p. 560-571. (NAL Call No.: DNAL TP557.U64).

0806

**The literature of California wine.**

Brady, R. Berkeley, Los Angeles : University of California, 1984. The University of California/Sotheby book of California wine / editors, Doris Muscatine, Maynard A. Amerine, Bob Thompson. Bibliography. p. 304-317. (NAL Call No.: DNAL TP557.U64).

0807

**Processed meats /A.M. Pearson and F.W. Tauber. - .**

Pearson, A. M. Tauber, F. W.\_1910-; Kramlich, W. E. Westport, Conn. : AVI Pub. Co., c1984. Rev. ed. of: Processed meats / by W.E. Kramlich, A.M. Pearson, F.W. Tauber. 1973. x, 427 p. : ill. ; 24 cm. Includes bibliographies and index. (NAL Call No.: DNAL TK612.M4K7 1984).

0808

**Fresh seafood, the commercial buyer's guide buying, choosing, handling, and using fresh fish and shellfish /Ian Dore. - .**

Dore, Ian, 1941. Huntington, N.Y. : Dsprey Books, c1984. Includes indexes. 375 p. : ill. ; 23 cm. -. Bibliography: p. 359-364. (NAL Call No.: DNAL HD9450.5.D67).

0809

**Developments in industrial microbiology. - .**

Arlington, Va. : Society for Industrial Microbiology, 1984. "Proceedings of the Fortieth General Meeting of the Society for Industrial Microbiology held at Sarasota, Florida August 14-19, 1983." xiv, 806 p. : ill. ; 24 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL 448.3 D49 v.25).

# FOOD CONTAMINATION AND TOXICOLOGY

0810

**Nutritional and toxicological aspects of food safety /edited by Mendel Friedman. -.**  
Friedman, Mendel. New York : Plenum, c1984.  
"Based on the Symposium on Food Safety: Metabolism and Nutrition, sponsored by the Pacific Conference on Chemistry and Spectroscopy, held October 27-29, 1982, in San Francisco, California"--T.p. verso. xii, 584 p. : ill. ; 26 cm. -. Includes bibliographical references and index. (NAL Call No.: DNAL QP901.A33 v.177).

0811

**The safe food book your kitchen guide / writer, Mary Ann Parmley. -.**  
Parmley, Mary Ann. Washington, D.C. : U.S. Dept. of Agriculture, Food Safety and Inspection Service, 1984. Cover title.~ "July 1984."~ Includes index. 32 p. : col. ill. ; 22 cm. -. Bibliography: p. 31. (NAL Call No.: DNAL 1 Ag84Hg no.241).

0812

**Strontium-90 in the U.S. diet, 1982 /by C.S. Klusek. -.**  
Klusek, C. S. New York, N.Y. : U.S. Dept. of Energy, Environmental Measurements Laboratory ; Springfield, Va. : available from NTIS, 1984. "July 1984."~ "DE84015737.". ii, 45 p. : ill. ; 28 cm. -. Includes bibliographies. (NAL Call No.: DNAL TX571.R3K57).

0813

**Electromagnetic radiation properties of foods and agricultural products /Nuri N. Mohsenin. -.**  
Mohsenin, Nuri N. New York : Gordon and Breach, c1984. Includes indexes. xiv, 673 p., 2 p. of plates : ill. (some col.) ; 24 cm.  
Bibliography: p. 635-660. (NAL Call No.: DNAL TX551.M55).

0814

**Methods for assessing the economic benefits of food safety regulations a case study of PCBs in fish /by Marion S. Gold and Eileen O. van Ravenswaay. -.**  
Gold, Marion S. East Lansing : Dept. of Agricultural Economics, Michigan State University, 1984. "November 1984.". v, 112 p. : ill. ; 28 cm. -. Bibliography: p. 106-112. (NAL Call No.: DNAL 281.9 M5842 no.460).

0815

**Seafood toxins based on a symposium sponsored by the Division of Agricultural and Food Chemistry at the 186th meeting of the American Chemical Society, Washington, D.C., August 28-September 2, 1983 /Edward P. Ragelis, editor. -.**  
Ragelis, Edward P.,\_1932. Washington, D.C. : The Society, 1984. xii, 460 p. : ill. ; 24 cm. -. Includes bibliographies and indexes. (NAL Call No.: DNAL QD1.A45 no.262).

# FOOD ADDITIVES

0816

**Food additives (June 83 - Mar 84) : citations from the Food Science and Technology Abstracts data base / National Technical Information Service.**

Springfield, Va. The Service 1984. Report period covered: Jun 83 - Mar 84 ~"May 84.  
~Supersedes PB83-865758 ~PB84-865377 ~NX3338  
~Includes index. 1 v. (various pagings) ; 29 cm. (NAL Call No.: Z5776.C4F62 1984).

0817

**Sugar substitutes and alternative sweeteners, 1979-1984 (Includes adverse effects).**

MacLean, J.T. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. July 1984. Bibliography. July 1984. (84-49). 16 p. (NAL Call No.: aZ5071.N3).



# FOOD COMPOSITION

0818

**Capillary chromatography of foods (Jul 73-Aug 84) citations from the Food Science and Technology Abstracts Database /National Technical Information Service.** -.  
Springfield, Va. : The Service, 1984. Report period covered: Jul 73-Aug 84.~ "Sep 84."~ Supersedes PB83-869941.~ PB84-874338.~ Includes index.~ NX5445. 1 v. (various pagings) ; 29 cm. (NAL Call No.: DNAL Z5776.C4C37 1984).

0819

**Food analysis principles and techniques /edited by Dieter W. Gruenwedel, John R. Whitaker.** -.  
Gruenwedel, Dieter W.,\_1931-; Whitaker, John R. New York : Dekker, c1984-1985. 3 v. : ill. ; 24 cm. Includes bibliographies and indexes. (NAL Call No.: DNAL TX541.F64).

0820

**Food constituents and food residues their chromatographic determination /edited by James F. Lawrence.** -.  
Lawrence, James F. New York : M. Dekker, c1984. viii, 617 p. : ill. ; 24 cm. -. Includes bibliographical references and indexes. (NAL Call No.: DNAL TX569.F66).

0821

**Modern methods of food analysis /edited by Kent K. Stewart, John R. Whitaker.** -.  
Stewart, Kent K.; Whitaker, John R. Westport, Conn. : AVI Pub. Co., c1984. Papers presented at Symposium on Modern Methods of Food Analysis held June 17 and 18, 1983 in New Orleans; sponsored jointly by the Institute of Food Technologists and the International Union of Food. xx, 421 p. : ill. ; 24 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL TX541.M56 1984).

0822

**Composition of foods nut and seed products : raw, processed, prepared /by Nutrition Monitoring Division ; principal investigators, Marie A. McCarthy, Ruth H. Matthews.** -.  
McCarthy, Marie A.; Matthews, Ruth H. Washington, D.C.? : USDA, Human Nutrition Information Service : for sale by Supt. of Docs., 1984. "A major revision of the 1963 edition of USDA Agriculture handbook no. 8"--P. ii.~ Chiefly tables.~ Loose-leaf for updating. v, 137 p. (loose-leaf) ; 30 cm. -. Bibliography: p. 8-10. (NAL Call No.: DNAL 1 Ag84Ah no.8-12 1984).

0823

**Composition of foods vegetables and vegetable products : raw, processed, prepared /by Nutrition Monitoring Division ; principal investigators David B. Haytowicz, Ruth H. Matthews.** -.  
Haytowicz, David B.; Matthews, Ruth H. Washington, D.C.? : USDA, Human Nutrition Information Service : for sale by Supt. of Docs., 1984. "A major revision of the 1963 edition of USDA Agriculture handbook no. 8, "Composition of foods...raw, processed, prepared"-- P. iii.~ Chiefly tables.~ Loose-leaf for updating. vi, 502 p. (loose-leaf) ; 30 cm. -. Bibliography: p. 7-8. (NAL Call No.: DNAL 1 Ag84Ah no.8-11 1984).

# FEED PRODUCTS

0824

**Growth and structure of the Mexican feedstuffs industry /by Andrew C. Burst, Philip F. Warnken, Maury E. Bredahl. -**  
Burst, Andrew C. Columbia : University of Missouri-Columbia, College of Agriculture International Series 1984. "November 1984.". xv, 128 p. : ill. ; 23 cm. -. Bibliography: p. 125-128. (NAL Call No.: DNAL 100 M693Sp no.315).

# FEED COMPOSITION

0825

**Livestock feed additives 1979-1983.**

MacLean, J.T. Beltsville, Md. : The Library.  
Quick bibliography series - National  
Agricultural Library. May 1984. Bibliography.  
May 1984. (84-32). 24 p. (NAL Call No.:  
aZ5071.N3).

# HUMAN NUTRITION

0826

**Crops as sources of nutrients for humans**  
proceedings of a symposium /sponsored by  
divisions S-4 and C-6 of the Soil Science  
Society of America, Crop Science Society of  
America, and the American Society of Agronomy  
in Anaheim, Calif., 28 Nov.-Dec. 1982 ;  
editorial committee, R.M. Welch, W.H. Gabelman.  
-

Welch, R. M.; Gabelman, W. H. Madison, Wis. :  
Soil Science Society of America, 1984. vii, 89  
p. : ill. ; 23 cm. -. Includes bibliographies.  
(NAL Call No.: DNAL 64.9 Am3 no.48).

0827

**Growth in the health and natural foods industry**  
/Charlene C. Price, Judy Brown. -.

Price, Charlene C. Brown, Judy A. Washington,  
D.C. : U.S. Dept. of Agriculture, Economic  
Research Service, National Economics Division ;  
Springfield, Va. : reproduced by NTIS, 1984.  
"May 1984"--P. i.~ "PB84-208057.". iii, 32 p. :  
ill., 1 map ; 28 cm. -. Includes  
bibliographical references. (NAL Call No.: DNAL  
HD9005.P74).

0828

**Low sodium diets, January 1982-December 1983.**

MacLean, J.T. Beltsville, Md. : The Library.  
Quick bibliography series - National  
Agricultural Library. Apr 1984. Updates 83-13  
-Bibliography. Apr 1984. (84-23). 17 p. (NAL  
Call No.: aZ5071.N3).

0829

**Nutrient intakes individuals in 48 states, year**  
**1977-78.** -.

Hyattsville, Md. : U.S. Dept. of Agriculture,  
Human Nutrition Information Service, Consumer  
Nutrition Division ; Washington, D.C. : For  
sale by the Supt. of Docs., U.S. G.P.O. , 1984.  
Cover title.~ "Issued May 1984"--P. 2 of  
cover.~ Forms in pocket.~ Chiefly tables. viii,  
439 p. : ill., forms ; 22 x 27 cm. -.  
Bibliography: p. 58-62. (NAL Call No.: DNAL  
aHD9004.N88 1977/78).

0830

**Nutrition in the 20th century /edited by Myron**  
**Winick.** -.

Winick, Myron. New York : J. Wiley, c1984. "A  
Wiley-Interscience publication.". viii, 197 p.  
: ill. ; 24 cm. -. Includes bibliographical  
references and index. (NAL Call No.: DNAL  
QP141.A1C8 v.13).



# NUTRITION EDUCATION

0831

**Nutrition education for native Americansa guide for nutrition educators. -.**

Washington, D.C.? : U.S. Dept. of Agriculture, Food and Nutrition Service, 1984 . Cover title.~ "September 1984"--P. 2 of cover.~ "FNS-249.". iii, 67 p. : 1 map ; 27 cm. -. Includes bibliographies. (NAL Call No.: DNAL aTX353.U5 no.249).

0832

**Promoting nutrition through education a resource guide to the Nutrition Education and Training Program /compiled under contract no. 53-3K06-1-13 by the Maxima Corporation for the Food and Nutrition Information Center, National Agricultural Library. -.**

Beltsville, Md. : U.S. Dept. of Agriculture, Food and Nutrition Information Center, National Agricultural Library, 1984. "August 1984."~ Includes indexes. 269 p. ; 28 cm. -. (NAL Call No.: DNAL aZ5076.A1U54 no.31).

0833

**Foodservice systems management /Lewis J. Minor, Ronald F. Cichy. -.**

Minor, Lewis J. Cichy, Ronald F. Westport, Conn. : AVI Pub. Co., c1984. xiii, 285 p. : ill. ; 24 cm. Includes bibliographies and index. (NAL Call No.: DNAL TX911.3.M27M56).

0834

**Recipes for quantity food service /Lois Fulton, Carole Davis, Evelyn Matthews. -.**

Fulton, Lois. Davis, Carole.; Matthews, Evelyn. Hyattsville, Md. : U.S. Dept. of Agriculture, Nutrition Education Division, Human Nutrition Information Service ; for sale by the Supt. of Docs., U.S. G.P.O., 1984. Cover title.~ "September 1984."--p. 2 of cover.~ "Supersedes "Recipes for quantity service", HERR-5, revised 1972.". i, 202 p. ; 22 x 28 cm. -. Bibliography: p. 20-21. (NAL Call No.: DNAL A321.9 Ag8 no.47).

# PHYSIOLOGY OF HUMAN NUTRITION

0835

**Genetic factors in nutrition /edited by Antonio Velazquez, Hector Bourges ; editorial assistant, Isabel Perez Montfort. -**  
Velazquez Arellano, Antonio.; Bourges, Hector.  
Orlando : Academic Press, 1984. "Proceedings of  
an International Workshop on Genetic Factors in  
Nutrition held in Teotihuacan, Mexico, August  
4-8, 1982"--P. preceding t.p. xv, 441 p. : ill.  
; 24 cm. Includes bibliographies and index.  
(NAL Call No.: DNAL QP141.A1G46).

# DIET AND DIET RELATED DISEASES

0836

**Fatty fish and human nutrition resource notebook /principal investigator: Marine Chemurgics.**  
Washington, D.C. : U.S. Dept. of Commerce, NOAA, National Marine Fisheries Service ; Springfield, Va. : available from NTIS, 1984.  
"Conducted under a grant to: Gulf & South Atlantic Fisheries Development Foundation."~  
"May 1984."~ "PB84-240647."--P. i. iii, 172 leaves : ill. ; 28 cm. "Literature citations": leaves 154-171. (NAL Call No.: DNAL TX556.5.F3).

0837

**Handbook of vitamins nutritional, biochemical, and clinical aspects /edited by Lawrence J. Machlin. -.**  
Machlin, Lawrence J.,\_1927. New York : M. Dekker, c1984. x, 614 p. : ill. ; 27 cm. -.  
Includes bibliographical references and index. (NAL Call No.: DNAL QP771.H36).

0838

**The sodium-watcher's guide easy ways to cut salt and sodium /by Kathleen Mayes. -.**  
Mayes, Kathleen, 1931. Santa Barbara, Calif., U.S.A. : Pennant Books, c1984. Includes index. xiii, 121 p. ; 23 cm. Bibliography: p. 113. (NAL Call No.: DNAL RM237.8.M39).

# HOME ECONOMICS

0839

**Abuse of the elderly a guide to resources and services / edited by Joseph J. Costa. -**  
Costa, Joseph J. Lexington, Mass. : Lexington Books, c1984. Includes index. xiii, 289 p. ; 24 cm. Bibliography: p. 225-289. (NAL Call No.: DNAL HV1461.A28).

0840

**Family caregivers and dependent elderly minimizing stress and maximizing independence /Dianne Springer, Timothy H. Brubaker. -**  
Springer, Dianne. Brubaker, Timothy H. Beverly Hills : Sage Publications, c1984. "Published in cooperation with the University of Michigan School of Social Work.". 159 p. : forms ; 22 cm. - Bibliography: p. 153-158. (NAL Call No.: DNAL HV1461.S67).

0841

**Food preservation publications.**  
Little Rock, Ark. : The Service. Leaflet EL - Arkansas University, Cooperative Extension Service. May 1984. Bibliography. May 1984. (662). 5 p. (NAL Call No.: 275.29 AR4LE).

0842

**Textile fabrics and their selection /Isabel B. Wingate, June F. Mohler. -**  
Wingate, Isabel B. Mohler, June F., 1925. Englewood Cliffs, N.J. : Prentice-Hall, c1984. Includes index. xvi, 704 p. : ill. ; 25 cm. Bibliography: p. 684-690. (NAL Call No.: DNAL TS1449.W5 1984).

0843

**4-H leader's guide intermediate clothing /Ellen Goldsberry. -**  
Goldsberry, Ellen. Tucson, Ariz.? : Cooperative Extension Service, University of Arizona?, 1984? . Cover title. 62 p. : ill. ; 28 cm. Bibliography: p. 60-62. (NAL Call No.: DNAL TX340.G6).



Short log & timber building book a handbook for  
traditional and modern post and beam houses

/James Mitchell. -.

Mitchell, James. Pt. Roberts, WA : Hartley &  
Marks, c1984. Includes index. 282 p. : ill.,  
plans ; 24 cm. Bibliography: p. 272 -273. (NAL  
Call No.: DNAL TH4818.W6M5).

# POLLUTION

0845

**Acid precipitation effects on the aquatic ecosystem (1977 -Sep 84) : (citations from the U.S. Department of Energy (EDB) database) /National Technical Information Service. -**.  
Springfield, Va. : The Service, 1984. Report period covered: 1977-Sep 84.~ "Dct 84."~ Supersedes PB83-872242.~ PB84-876879.~ Includes index.~ NX5667. 1 v. (various pagings) ; 29 cm. (NAL Call No.: DNAL Z5322.A25A253).

0846

**Acid rain and transported air pollutantsimplications for public policy. -**.  
Washington, D.C. : Congress of the U.S., Dffice of Technology Assessment : For sale by the Supt. of Docs., U.S. G.P.O., 1984 . "June 1984"--P. 4 of cover.~ "DTA-D-204"--P. 4 of cover. vii, 1, 323 p. : ill., maps ; 26 cm. Includes bibliographies and index. (NAL Call No.: DNAL TD196.A25A282 1984).

0847

**The Acid rain sourcebook /Thomas C. Elliott, Robert G. Schwieger, editors. -**.  
Elliott, Thomas C.; Schwieger, Robert G. New York : McGraw-Hill, c1984. Based on papers presented at the First International Conference on Acid Rain, held in Washington, D.C. on Mar. 27-28, 1984. vi, 290 p. : ill. ; 24 cm. Includes bibliographies and index. (NAL Call No.: DNAL TD196.A25A33 1984).

0848

**Agricultural wastes recycling, 1981-1984 (Includes biomass energy sources).**  
MacLean, J.T. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. July 1984. Bibliography. July 1984. (84-50). 22 p. (NAL Call No.: aZ5071.N3).

0849

**Air pollution effects on plants (Apr 76-Jun 84) citations from the NTIS database /National Technical Information Service, Springfield, VA. -**.  
Springfield, Va. : NTIS, 1984. "Jul 84."~ "Report period covered: Apr 76-June 84."~ "Supersedes PB83-800730."~ "PB84-870989."~ Includes index. v, 17, 184, 50 leaves ; 29 cm. (NAL Call No.: DNAL Z5354.P57A4 1984).

0850

**Anaerobic digestion and carbohydrate hydrolysis of waste /edited by G.L. Ferrero, M.P. Ferranti, and H. Naveau. -**.  
Ferrero, G. L.; Ferranti, M. P.; Naveau, H. London ; New York : Elsevier Applied Science Publishers, 1984. "Proceedings of the information symposium under the EEC programme on recycling of urban and industrial waste, Luxembourg, 8-10 May 1984.". xii, 517 p. : ill. ; 23 cm. Includes bibliographies. (NAL Call No.: DNAL TD794.5.A5).

0851

**Animal waste problems and management techniques--a review and bibliography.**  
El-Ahraf, A. Willis, W.V.; Saleh, R. Ames, Iowa : International Association of Milk, Food and Environmental Sanitarians, Inc. Dairy and food sanitation. May 1984. Literature review. v. 4 (5). p. 168-173. Includes references. (NAL Call No.: SF221.D342).

0852

**Beneficial uses of nuclear byproducts/sewage sludge irradiation project progress report, October 1982 - March 1983 / J.D. Pierce. -**.  
Pierce, J. D. Albuquerque, N.M. : Prepared for U.S. Dept. of Energy, Albuquerque Dperations Dffice, Energy Research and Technology Div. by Sandia National Laboratories ; Springfield, Va. : available from NTIS, 1984. "Printed November 1984."~ "UC-23.". vi, 41 p. : ill. ; 28 cm. -. Bibliography: p. 34. (NAL Call No.: DNAL TD769.8.P5).

0853

**Beyond dumping new strategies for controlling toxic contamination /edited by Bruce Piasecki. -**.  
Piasecki, Bruce. Westport, Conn. : Quorum Books, 1984. xix, 239 p. : ill. ; 25 cm. Includes bibliographical references and index. (NAL Call No.: DNAL KF3946.B49).

0854

**Characteristics of terrestrial and aquatic ecosystems of two locations in Deaf Smith and Swisher Counties, Texas technical report /prepared by NUS Corporation. -**.  
Columbus, Dnio : Prepared for Dffice of Nuclear Waste Isolation, Battelle Memorial Institute : available from NTIS, 1984. Prepared under subcontract E512-01400 with Battelle Project Management Division, Dffice of Nuclear Waste Isolation under contract nos. DE-AC06-76RLO1830 and DE-AC02-83CH10140 with the U.S. Dept. of En~ "November 1984.". xvi, 154 p. : maps ; 28 cm. -. Bibliography: p. 121-131. (NAL Call No.: DNAL QH543.5.C45).

0855

**Characterization of chemical waste site contamination and its extent using bioassays /J.M. Thomas ... et al. . - .**  
 Thomas, J. M. Richland, Wash. : Pacific Northwest Laboratory, 1984. Cover title.~ "December 1984."~ Prepared for the U.S. Environmental Protection Agency under a related services agreement with the U.S. Dept. of Energy, contract DE-AC06-76RLO 1830.~ DE85 005428. vii i.e. xii , 37 leaves : ill. ; 28 cm. -. Bibliography: leaves 35 -37. (NAL Call No.: DNAL TD811.5.C45).

0856

**Dissolved-oxygen regime of the Jordan River, Salt Lake County, Utah /by Doyle W. Stephens ; prepared in cooperation with the Salt Lake County Division of Flood Control and Water Quality . - .**  
 Stephens, Doyle W. Salt Lake City, Utah : U.S. Geological Survey ; Lakewood, Colo. : Open-File Services Section, Western Distribution Branch, U.S. Geological Survey, 1984. "WRI 84-4056"--P. 4 of cover. viii, 56 p. : ill., map ; 28 cm. -. Bibliography: p. 53-56. (NAL Call No.: DNAL GB701.W375 no.84-4056).

0857

**Early biotic responses to advancing lake acidification /edited by George R. Hendrey. - .**  
 Hendrey, George R. Boston : Butterworth, c1984. "An Ann Arbor science book."~ Papers presented at a symposium on acid precipitation at the annual meetin of the American Chemical Society, Las Vegas, Nev., Mar. 1982. xiv, 173 p. : ill. ; 25 cm. -. Includes bibliographical references and index. (NAL Call No.: DNAL QH545.A17E18).

0858

**The Ecological impacts of wastewater on wetlands : an annotated bibliography / U.S. Environmental Protection Agency, Region V, and U.S. Fish and Wildlife Service, Eastern Energy and Land Use Team.**  
 Chicago, Ill. (230 South Dearborn Street, Chicago 60604) The Region 1984. "Portions of this document were prepared under EPA Contracts No. 68-01-5989 and No. 68-04-5017. ~"February 1984. ~"EPA-905/3-84-002. ~Includes index. 336 p. in various pagings ; 28 cm. (NAL Call No.: Z697.S53E32).

0859

**Economic valuation of acid deposition-induced changes in the productivity of commercial forests /John M. Callaway, Jr.**  
 Callaway, John M. Richland, Wash. : Pacific Northwest Laboratory, 1984. Caption title.~ "Presented at the National Acid Precip. Assessment Program, Burlington, Vermont,

February 13-17, 1984."--cover.~ "February 1984."~ Supported by the U.S. Dept. of Energy under contract DE-AC06-76RLO 1830.~ Task group project: I1-01.6.~ PNL-SA-11979.~ CONF-840269--7.~ DE84 010701. 9 leaves ; 28 cm. Bibliography: leaf 8 . (NAL Call No.: DNAL QH545.A17C32).

0860

**Effects of acid precipitation on forest soils and watershed biogeochemistry in New England a technical progress report for U.S. DOE contract EV10750 /by Christopher S. Cronan ; collaborators, James Balogh ... et al. ; submitted to Ecological Research Division, Office of Health and Environmental Research, U.S. Department of Energy. - .**  
 Cronan, Christopher S. Balogh, James. Orono, Maine? : Dept. of Botany and Plant Pathology, University of Maine at Orono? , 1984. Cover title.~ "May 1984."~ DOE/EV/10750--T1.~ DE84 012966. 75 leaves : ill., map ; 28 cm. Bibliography: leaves 56-59. (NAL Call No.: DNAL QH545.A17C7).

0861

**Effects of acid rain on plant microbial associations in California report to the California Air Resources Board /prepared by D. Harris and E.A. Paul. - .**  
 Harris, D. Paul, E. A. Berkeley, Calif. : Dept. of Plant and Soil Biology, University of California, 1984. Cover title.~ "April 13th, 1984."~ Project no. A2 087-32.~ "PB84-242122." 66 p. : ill. ; 28 cm. Bibliography: p. 62-65. (NAL Call No.: DNAL QH545.A17H3).

0862

**Environmental policy under Reagan's executive order the role of benefit-cost analysis /edited by V. Kerry Smith. - .**  
 Smith, V. Kerry\_1945. Chapel Hill : University of North Carolina Press, c1984. Includes index. xii, 266 p. : ill. ; 24 cm. -. Bibliography: p. 247 -259. (NAL Call No.: DNAL HC110.E5E49878).

0863

**Environmentalists, vanguard for a new society /Lester W. Milbrath ; with the advice and assistance of Barbara V. Fischer. - .**  
 Milbrath, Lester W. Fischer, Barbara V. Albany : State University of New York Press, 1984. Includes index. xv, 180 p. : ill. ; 26 cm. -. Bibliography: p. 167-176. (NAL Call No.: DNAL HC79.E5M47).



## POLLUTION

0864

**EPA oversight on dioxin contamination hearing before the Subcommittee on Natural Resources, Agriculture Research, and Environment of the Committee on Science and Technology, U.S. House of Representatives, Ninety-eighth Congress, first session, March 23, 1983. - .**

United States.~Congress.~House.~Committee on Science and Technology.~Subcommittee on Natural Resources, Agriculture Research, and Environment. Washington, D.C. : U.S. G.P.O. ; 1984. "No. 68.". iii, 430 p. : ill., maps ; 24 cm. Includes bibliographies. (NAL Call No.: DNAL KF27.S3978 1983).

0865

**Estimating PM10 and FP background concentrations from TSP and other measurements /by Pedco Environmental, Inc. ; project officer: Thompson G. Pace. - .**

Pace, Thompson G. Research Triangle Park, N.C. : U.S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards ; Springfield, Va. : Reproduced by NTIS, 1984. "August 1984."~ PB85-106383.~ EPA-450/4-84-021. v, 69 p. : map ; 28 cm. Bibliography: p. 43-44. (NAL Call No.: DNAL TD884.5.E8).

0866

**Groundwater contamination, 1979-1984 (Pollution).**

Gilbert, H. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Aug 1984. Bibliography. Aug 1984. (84-54). 18 p. (NAL Call No.: aZ5071.N3).

0867

**How mole ratio of UF (urea-formaldehyde) resin affects formaldehyde emission and other properties: a literature critique (Air pollutants).**

Myers, G.E. Madison, Wis. : Forest Products Research Society. Forest products journal. May 1984. First in a series of six critical summaries of the literature on formaldehyde emission from bonded wood products ~Literature review. v. 34 (5). p. 35-41. Includes references. (NAL Call No.: 99.9 F7662J).

0868

**Implication of temporal variations and vertical stratification of groundwater nitrate-nitrogen in the Hall County special use area completion report /Mary Exner Spalding. - .**

Spalding, Mary Exner. Lincoln, Neb. : Conservation and Survey Division, Institute of Agriculture and Natural Resources, University of Nebraska-Lincoln, 1984. Partially funded by the U.S. Dept. of the Interior.~ "September

1984."~ Project G854-06; grant no. 14-08-0001-G854.~ "PB85-22726.". 33 leaves, 9 leaves of plates : ill., maps ; 28 cm. Bibliography: leaves 32-33. (NAL Call No.: DNAL TD427.N5563).

0869

**Influence of landfills on ground water quality /Robert D. Allen and John R. Raymond. - .**

Allen, Robert D. Raymond, John R. Richland, Wash. : Pacific Northwest Laboratory, 1984. Caption title.~ November 1984.~ Presented at the International Conference on Ground-water Technology in Johannesburg, South Africa, November 13-15, 1984.~ Supported by the U.S. Dept. of Energy under Contract De-AC06-76RL01830.~ PNL-SA--12151.~ CONF-8411132--1.~ DE85 004537. 20 leaves ; 28 cm. Bibliography: leaves 19 - 20 . (NAL Call No.: DNAL TD795.7.A4).

0870

**Microbial degradation of sludge and sewage (1977-1983) : citations from the Selected Water Resources Abstracts Data Base.**

(Springfield, Va.) N.T.I.S. (1984). "NX2288.~"PB84-860741.~"Feb. 84.". v, 4, 51, 15 leaves ; 28 cm. (NAL Call No.: Z5862.2.W3M52).

0871

**The New book of California tomorrow reflections and projections from the Golden State /John Hart, editor. - .**

Hart, John, 1948. Los Altos, Calif. : W. Kaufmann, c1984. Includes index. xv, 433 p. : ill., maps ; 23 cm. Bibliography: p. 415-416. (NAL Call No.: DNAL TD181.C2N48).

0872

**Non-photochemical interactions of sulfur and nitrogen compounds in acid deposition final report /prepared by Larry O. Edwards ... et al. - .**

Oak Ridge, Tenn. : U.S. Dept. of Energy, Office of Scientific and Technical Information ; Springfield, Va. : Available from NTIS, 1984. "DOE/EP/12086-TC."~ "DCN 84-205-013-09-03."~ "Task assignment no. 09; DOE contract no. DE-AC01-84EP12086."~ "22 August 1984.". 64 p. in various pagings : ill. ; 28 cm. Includes bibliographies. (NAL Call No.: DNAL TD196.A25N6).



0873

**Nonpoint source pollution: an agricultural concern, 1981-1984.**

MacLean, J.T. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. May 1984. Updates 82-03 -Bibliography. May 1984. (84-36). 22 p. (NAL Call No.: az5071.N3).

0874

**Organic contamination of ground and surface waters: a selected bibliography.**

Longmire, P. Oppenheimer, S.; Jercinovic, D.; McQuillan, D. Socorro : New Mexico Bureau of Mines & Mineral Resources, 1984. Selected papers on water quality and pollution in New Mexico : proceedings, Symposium on Water Quality and Pollution in New Mexico, April 12, 1984, Socorro, NM / compiled by W.J. Stone. Bibliography. p. 217-228. (NAL Call No.: DNAL TD224.N6S9 1984).

0875

**Ozone and acid deposition an economic perspective on agricultural and forestry impact /Duane Chapman and Robert Kohut. -.**

Chapman, Duane. Kohut, Robert. Ithaca, N.Y. : Dept. of Agricultural Economics, Cornell University Agricultural Experiment Station, New York State College of Agriculture and Life Sciences, 1984. Cover title.~ "November 1984.". 19 p. : ill. ; 28 cm. -. Bibliography: p. 19. (NAL Call No.: DNAL HD1407.C6 no.84-28).

0876

**Pollution control for agriculture /Raymond C. Loehr. -.**

Loehr, Raymond C. Orlando : Academic Press, 1984. xvii, 467 p. : ill. ; 24 cm. Includes bibliographies and index. (NAL Call No.: DNAL TD930.L63 1984).

0877

**Proceedings of the Second New York State Symposium on Atmospheric Deposition, October 26-27, 1983, Hilton Hotel, Albany, New York /editor, Jay S. Jacobson ; assistant editor, Lyle S. Raymond, Jr. ; sponsors, New York State Department of Environmental Conservation ... et al. -.**

Jacobson, Jay S., 1934-; Raymond, Lyle S. Ithaca, N.Y. (468 Hollister Hall, Cornell University, Ithaca 14853) : Center for Environmental Research, 1984? . 291 p. : ill. ; 28 cm. Includes bibliographies. (NAL Call No.: DNAL TD196.A25N48 1983).

0878

**A process analysis of electroplating firm response to alternative environmental policies /Gilbert Metcalf, Cleve Willis, and Daniel Dudek. -.**

Metcalf, Gilbert. Dudek, Daniel.; Willis, Cleve. Amherst, Mass. : Massachusetts Agricultural Experiment Station, College of Food and Natural Resources, University of Massachusetts at Amherst, 1984. "May 1984.". 78 p. : ill. ; 23 cm. -. Bibliography: p. 67-70. (NAL Call No.: DNAL 100 M38H (1) no.689).

0879

**Remedial actions at the former Vitro Chemical Company site, South Salt Lake, Salt Lake County, Utahfinal environmental impact statement. -.**

Washington, D.C.? : U.S. Dept. of Energy, 1984. "July, 1984."~ "DOE/EIS-0099-F.". 2 v. : ill., maps ; 28 cm. Includes bibliographies and index. (NAL Call No.: DNAL TD812.R4).

0880

**Report on the Oak Ridge sewage sludge land-farming experience /T.W. Oakes ... et al ; prepared by the Oak Ridge National Laboratory. -.**

Oakes, T. W. Oak Ridge, Tenn. : The Laboratory ; Springfield, Va. : available from NTIS, 1984. "August 1984."~ Prepared for U.S. Dept. of Energy, Contract no. DE-AC05-84OR21400.~ Category UC-41. 2 v. : ill., map ; 28 cm. -. Includes bibliographies. (NAL Call No.: DNAL TD767.R4).

0881

**Review of ground water protection strategy recently proposed by the Environmental Protection Agencyhearings before a subcommittee of the Committee on Government Operations, House of Representatives, Ninety-eighth Congress, second session, April 11 and 12, 1984. -.**

United States.~Congress.~House.~Committee on Government Operations.~Environment, Energy, and Natural Resources Subcommittee. Washington, D.C. : U.S. G.P.O., 1984. Distributed to some depository libraries in microfiche. iv, 611 p. : ill., forms ; 24 cm. Includes bibliographical references. (NAL Call No.: DNAL KF27.G655 1984a).

0882

**Selective isolation of dissolved organic matter from aquatic systems /by John R. Tuschall, Jr. and Gregory George. -.**

Tuschall, John R. George, Gregory. Urbana, Ill. : University of Illinois at Urbana-Champaign, 1984. "Project completion report to U.S. Department of the Interior."~ "June 1984."~

## POLLUTION

"UILU-WRC-84-190." -- Cover.~ Project no. G  
840-05. ii, 40 p. : ill., map ; 28 cm. -.  
Bibliography: p. 36-39. (NAL Call No.: DNAL  
TC424.I3I4 no.190).

0883

### **A social tariff global wage and pollution standards /by Duane Chapman. -.**

Chapman, Duane. Ithaca, N.Y. : Dept. of  
Agricultural Economics, Cornell University  
Agricultural Experiment Station, New York State  
College of Agriculture and Life Sciences, 1984.  
Cover title.~ "January 1984.". 8 p. ; 28 cm. -.  
Bibliography: p. 7-8. (NAL Call No.: DNAL  
HD1407.C6 no.83-27).

0884

### **Sulfur input, output and distribution in two oak forests /J.M. Kelly. -.**

Kelly, J. M. S.l. : s.n., 1984? . Cover  
title.~ CONF-830692--2.~ DOE/OR/21363--1.~ DE84  
O11139. 25 leaves : ill. ; 28 cm.  
Bibliography: leaves 21-25 . (NAL Call No.:  
DNAL TD878.K4).

0885

### **Sustaining tomorrow a strategy for world conservation and development /edited by Francis R. Thibodeau, Hermann H. Field. -.**

Thibodeau, Francis R.,\_1953-; Field, Hermann  
H.,\_1910. Hanover : Published for Tufts  
University by University Press of New England,  
1984. Includes index. xii, 186 p. : ill. ; 27  
cm. Bibliography: p. 172-177. (NAL Call No.:  
DNAL HC79.E5S87).

# AUXILIARY DISCIPLINES

0886

**E.C. Stakman, statesman of science /C.M. Christensen. -.**

Christensen, Clyde M. 1905. St. Paul, Minn. : American Phytopathological Society, c1984.  
Stakman, E. C (Elvin Charles) 1885-1979. x, 156 p. : ill. ; 24 cm. Bibliography: p. 141-144. (NAL Call No.: DNAL SB729.6.S73C48).

# DOCUMENTATION

0887

**CLIMACS a computer model of forest stand development for western Oregon and Washington /Virginia H. Dale and Miles Hemstrom. -.**  
Dale, Virginia H. Hemstrom, Miles A. Portland, Dr. : U.S. Dept. of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station, 1984. Distributed to depository libraries in microfiche.~ "December 1984.". 60 p. : ill., 1 map ; 28 cm. -. Bibliography: p. 33-35. (NAL Call No.: DNAL A99.9 F7625Uni no.327).

0888

**Computer program documentation for the LAC data directory location processor project /M.J. Nieves. -.**  
Nieves, M. J. Houston, Tex. : Lyndon B. Johnson Space Center, NASA ; Springfield, Va. : for sale by National Technical Information Service, 1984. AgRISTARS (Agriculture and Resources Inventory Surveys Through Aerospace Remote Sensing) is a joint program of the U.S. Dept. of Agriculture, the National Aeronautics and Space Administration, the Nat~ Research conducted for United States National Aeronautics and Space Administration under contract NAS 9-15800.~ "March 1984."~ Early warning and crop condition assessment EW-L4-00319. 31 p. in various pagings : ill. ; 28 cm. -. Bibliography: p. 3-1. (NAL Call No.: DNAL S494.5.R4N5).

0889

**Computer technology in the federal and state agricultural network, 1979-1983.**  
Pisa, M.G. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. July 1984. Bibliography. July 1984. (84-52). 28 p. (NAL Call No.: aZ5071.N3).

0890

**Current awareness literature service (CALIS) : user's guide.**  
Beltsville, Md. U.S. Dept. of Agriculture, National Agricultural Library, Information Systems Division 1984. Distributed to depository libraries in microfiche ~"March 1984.". 1 v. (loose-leaf) : ill., forms ; 28 cm. (NAL Call No.: aZ695.95.A5U5 1984).

0891

**The economic value of consumer information: a selected, annotated bibliography.**  
Pope, R.D. Washington, D.C. : The Service. Extract: This annotated bibliography contains references on the economic value of information. The citations are listed under three topic areas: Consumer Surplus and Welfare Theory, Stabilization and Economic Welfare, and Information and Efficiency. With a few

exceptions, books and lengthy reports are not annotated. Also not annotated is some literature which is superceded or judged ancillary to these topics. ERS staff report - United States Dept. of Agriculture, Economic Research Service. Literature review. July 1984. (AGES840312). 149 p. (NAL Call No.: DNAL AGE 916762(AGE)).

0892

**Forestry in a brave new world proceedings of a computer symposium and First Annual Meeting of the Forest Resources Systems Institute ; March 19, 20 and 21, 1984, Knoxville Hilton, Knoxville, Tennessee /edited by Timothy M. Cooney. -.**  
Cooney, Timothy M. Florence, Ala. (Suite 24, 201 N. Pine St., Florence 35630) : The Institute, c1984. iii, 30 p. : ill. ; 28 cm. Includes bibliographies. (NAL Call No.: DNAL SD381.5.F67).

0893

**Human factors engineering selected references.**  
Wilkinson, R.H. Baker, L.D. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1984 Winter Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, . Winter 1984. (84-1647). 15 p. (NAL Call No.: DNAL FICHE 290.9 AM32P).

0894

**Input guidelines for the spruce budworms literature data base /Susanne C. Hacker. -.**  
Hacker, Susanne C. Orono, Me. : University of Maine at Orono, Maine Agricultural Experiment Station, 1984. On cover: Prepared by College of Forest Resources, University of Maine at Orono. v , 147 p. ; 28 cm. -. Bibliography: p. 145-147. (NAL Call No.: DNAL 100 M28M no.301).

0895

**It's easy to use FAIRS a computerized source of agricultural information /Howard W. Beck, Fred A. Johnson, Jerry L. Stimac. -.**  
Beck, Howard W. Johnson, Fred A.; Stimac, Jerry L. Gainesville? : Institute of Food and Agricultural Sciences, University of Florida, 1984? . Caption title. 17 p. : ill. ; 28 cm. Bibliography: p. 7. (NAL Call No.: DNAL S494.5.I47B4).



0896

**Joint congressional hearing on the changing information needs of rural America the role of libraries and information technology : July 21, 1982.** -.

Washington, D.C. : U.S. Dept. of Agriculture : National Commission on Libraries and Information Science, 1984. Cover title.~ Hearings cochaired by Senator Mark Andrews, chairmen of the Senate Subcommittee on Rural Development, Oversight, and Investigations; and Representative George E. Brown, Jr., chairman of the House Subc~ "Issued August 1984.". ix, 83 p. : ill., forms ; 28 cm. Includes bibliographical references. (NAL Call No.: DNAL aZ675.V7J6).

0897

**Literature searching in science, technology, and agriculture / Eileen Pritchard and Paula R. Scott.**

Pritchard, Eileen. Scott, Paula R. Westport, Conn. Greenwood Press 1984. x, 174 p. : ill. ; 25 cm. Includes bibliographies and index. (NAL Call No.: Z699.5.S3P74).

0898

**Notes from National Union Catalogue, Southwest Collection, Texas Tech University.** -.

Texas Tech University.~Southwest Collection. Lubbock, Tex. : The University, 1984? . Cover title.~ Includes pamphlet entitled: A cattle-log of the Southwest Collection, a repository for ranch research, 1968. 5, 18 leaves : ill. ; 28 cm. (NAL Call No.: DNAL Z6611.A33T49 R).

0899

**Printed and computer sources for retrieval and publication of agronomic literature.**

Hall, J. Davis, M.; Wolf, D. Madison, Wis. : American Society of Agronomy. Journal of Agronomic education. Spring 1984. v. 13. p. 57-61. Includes 16 references. (NAL Call No.: DNAL S530.J6).

0900

**Unpublished sic guide to agricultural collections /University of Maryland, College Park Libraries, Special Collections Division, Manuscripts & Archives Department.** -.

University of Maryland, College Park.~Libraries.~Archives. College Park, Md. : The University, 1984? . Amoss, William L Manuscripts Indexes. Cover title.~ "The William L. Amoss collection"--p. 1. 4, 7 leaves ; 28 cm. (NAL Call No.: DNAL Z6621.U62A6 R).

0901

**WGEN a model for generating daily weather variables / Richardson, C.W. and D.A. Wright .** -.

Richardson, C. W., 1903. Wright, D. A. Washington, D.C. : U.S. Dept. of Agriculture, Agricultural Research Service ; Springfield, Va. : National Technical Information Service (NTIS) distributor , 1984. "August 1984.". 83 p. : ill., maps ; 28 cm. -. Bibliography: p. 15. (NAL Call No.: DNAL aS21.R44A7 no.8).

0902

**What every engineer should know about engineering information resources /Margaret T. Schenk, James K. Webster.** -.

Schenk, Margaret T., 1919. Webster, James K. New York : M. Dekker, c1984. viii, 216 p. ; 24 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL T10.7.S34).

0903

**Where to find information on the food industry: a researcher's guide.**

McLaughlin, E.W. Ithaca, N.Y. : The Department. A.E. Ext. - New York State College of Agriculture and Life Sciences, Cornell University, Dept. of Agricultural Economics. Bibliography. June 1984. (84-19). 38 p. Includes references. (NAL Call No.: DNAL 281.9 C81AE).

# LIFE SCIENCES

0904

**Abstracts of papers presented at the meeting on RNA processing, May 16 - May 20, 1984 /arranged by Michael Mathews, Hugh Robertson, Aaron Shatkin. -.**  
Mathews, Michael.; Robertson, Hugh D.; Shatkin, Aaron J. Cold Spring Harbor, N.Y. : Cold Spring Harbor Laboratory, 1984. xxiii, 153 p. : ill. ; 22 cm. Includes bibliographical references and index. (NAL Call No.: DNAL QD434.A2 1984).

0905

**Abstracts of papers presented at the 1984 meeting on molecular biology of the photosynthetic apparatus, May 9-May 13, 1984 /arranged by Charles Arntzen, Lawrence Bogorad, Susan Bonitz. -.**  
Arntzen, Charles Joel, 1941-; Bogorad, Lawrence, 1921-; Bonitz, Susan. Cold Spring Harbor, N.Y. : Cold Spring Harbor Laboratory, 1984. xv, 87 p. ; 22 cm. Includes bibliographical references and index. (NAL Call No.: DNAL QK882.A2).

0906

**Arizona's tree squirrels /David E. Brown. -.**  
Brown, David E., 1938. Phoenix, Ariz. : Ariz. Game and Fish Dept., 1984. "A contribution of Federal Aid to Wildlife W-53-R." -- t.p. ix, 114 p. : ill. (some col.), maps ; 23 cm. Bibliography: p. 105-111. (NAL Call No.: DNAL QL737.R68B76).

0907

**Biological mechanisms of dioxin action /edited by Alan Poland, Renate D. Kimbrough. -.**  
Poland, Alan, 1940-; Kimbrough, Renate D. Cold Spring Harbor, N.Y. : Cold Spring Harbor Laboratory, 1984. Comprised of formal papers and edited transcripts of discussions from an international conference hosted by the Banbury Center of Cold Spring Harbor laboratory in April 1984. xiv, 500 p. : ill., ports. ; 24 cm. - Includes bibliographies and indexes. (NAL Call No.: DNAL QH426.B35 no.18).

0908

**Current perspectives in microbial ecology proceedings of the Third International Symposium on Microbial Ecology, Michigan State University, 7-12 August 1983 /edited by M.J. Klug, C.A. Reddy. -.**  
Klug, M. J.; Reddy, C. A. Washington, D.C. : American Society for Microbiology, 1984. xii, 710 p. : ill. ; 26 cm. Includes bibliographies and indexes. (NAL Call No.: DNAL QR100.I57 1983).

0909

**DNA methylation, biochemistry, and biological significance /edited by Aharon Razin, Howard Cedar, and Arthur D. Riggs ; with contributions by K.F. Conklin ... et al. -.**  
Razin, Aharon, 1935-; Cedar, Howard, 1943-; Riggs, Arthur D. New York : Springer-Verlag, c1984. xiii, 392 p. : ill. ; 25 cm. - Includes bibliographies and index. (NAL Call No.: DNAL QP624.D15).

0910

**Enzyme catalysis and control /editors, Marlene DeLuca, Henry Lardy, Richard L. Cross. -.**  
Cross, Richard L.; DeLuca, Marlene A.; Lardy, Henry A. Orlando, Fla. : Academic Press, 1984. "This book is derived in part from the proceedings of the Conference on Enzyme Catalysis and Control, held at the University of California, Los Angeles, on June 3-5, 1983, to honor Dr. Paul Boyer on t~ Includes index. xxii, 509 p. : ill. ; 23 cm. - Bibliography: p. 483. (NAL Call No.: DNAL QH573.CB v.24).

0911

**Federal biotechnology funding sources /Oskar R. Zaborsky, Brenda K. Young. -.**  
Zaborsky, Oskar R. Young, Brenda K. Washington, D.C. : OMEC Publ. Co., 1984. Includes indexes. x, 262 p. ; 23 cm. Bibliography: p. 245. (NAL Call No.: DNAL TA164.Z3).

0912

**Frequencies of chromosomal aberrations and sister chromatid exchanges in the benthic worm Neanthes arenaceodentata exposed to ionizing radiation /by Florence L. Harrison, David W. Rice, Jr., Dan H. Moore. -.**  
Harrison, Florence L., 1926. Rice, David W.; Moore, Dan H. Washington, D.C. : Office of Radiation Programs, U.S. Environmental Protection Agency, 1984. "This report was prepared as an account of contract work sponsored by the United States Environmental Protection Agency under Interagency Agreement No. AD-89-F00070 with Lawrence Livermore National La~ "December 1984."~ "EPA 520/1-84-020."~ "UCRL-53524." v, 57 p. : ill. ; 28 cm. Bibliography: p. 52-57. (NAL Call No.: DNAL QH445.H3).

0913

**Genetic variability in responses to chemical exposure /edited by Gilbert S. Omenn, Harry V. Gelboin. -.**  
Omenn, Gilbert S.; Gelboin, Harry V., 1929. Cold Spring Harbor, N.Y. : Cold Spring Harbor Laboratory, 1984. Proceedings of a conference held Oct. 1983 at Banbury Center. xi, 421 p. : ill. ; 24 cm. - Includes bibliographies and indexes. (NAL Call No.: DNAL QH426.B35 no.16).

0914

**Genetics and biotechnology of bacilli proceedings of the Second International Conference on Genetics and Biotechnology of Bacilli, held at Stanford University, Stanford, California, July 6-8, 1983 /edited by A.T. Ganesan, James A. Hoch. -.**  
 Ganesan, A. T.; Hoch, James A. Orlando : Academic Press, 1984. xix, 421 p. : ill. ; 24 cm. Includes bibliographies and index. (NAL Call No.: DNAL QR82.B3I58 1983).

0915

**The interpretation of ecological data a primer on classification and ordination /E.C. Pielou. -.**  
 Pielou, E. C., 1924. New York : Wiley, 1984. "A Wiley-Interscience publication."~ Includes index. xi, 263 p. : ill. ; 24 cm. Bibliography: p. 257-259. (NAL Call No.: DNAL QH541.15.S72P54).

0916

**Introduction to molecular immunology /Alfred Nisonoff. -.**  
 Nisonoff, Alfred. Sunderland, Mass. : Sinauer Associates, c1984. ix, 256 p. : ill. ; 23 cm. Includes bibliographical references and index. (NAL Call No.: DNAL QR183.6.N57 1984).

0917

**Iowa birds /by James J. Dinsmore ... et al. -.**  
 Dinsmore, James J. Ames : Iowa State University Press, 1984. Includes index. x, 356 p. : ill. ; 26 cm. Bibliography: p. 338-345. (NAL Call No.: DNAL QL684.I8I58 1984).

0918

**Mechanisms of photosensitization by furocoumarins /Leonard I. Grossweiner. -.**  
 Grossweiner, Leonard I. Springfield, Va. : Available from NTIS, 1984? . Caption title.~ "Conf-8203198--1; DE85 004289; DOE/EV/Q2217--51.". 14, 12 leaves ; 28 cm. Bibliography: leaves 15-21 . (NAL Call No.: DNAL QH651.G7).

0919

**Microbial development /edited by Richard Losick, Lucy Shapiro. -.**  
 Losick, Richard.; Shapiro, Lucy. Cold Spring Harbor, N.Y. : Cold Spring Harbor Laboratory, 1984. xi, 303 p. : ill. ; 24 cm. Includes bibliographies and index. (NAL Call No.: DNAL QR73.4.M53).

0920

**Modern genetics /Francisco J. Ayala, John A. Kiger, Jr. -.**  
 Ayala, Francisco Jose, 1934. Kiger, John A. Menlo Park, Calif. : Benjamin/Cummings Pub. Co., c1984. xviii, 923, 89 p. : ill. (some col.) ; 24 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL QH430.A92 1984).

0921

**Molecular biology of host-parasite interactions proceedings of a UCLA symposium held in Park City, Utah, January 30-February 4, 1983 /editors, Nina Agabian, Harvey Eisen. -.**  
 Agabian, Nina.; Eisen, Harvey. New York : A.R. Liss, c1984. xix, 351 p. : ill. ; 27 cm. -. Includes bibliographical references and index. (NAL Call No.: DNAL QH506.U34 v.13).

0922

**Nuclear genetics /edited by J.F. Danielli. -.**  
 Danielli, James Frederic, 1911. Orlando, Fla. : Academic Press, 1984. viii, 196 p. : ill. ; 24 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL 442.8 In82 v.92).

0923

**Optical techniques in biological research /edited by Denis L. Rousseau. -.**  
 Rousseau, Denis L. Orlando : Academic Press, 1984. xi, 430 p. : ill. ; 24 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL QH324.9.S6067).

0924

**Oxygen transport to tissue--VI /edited by Duane Bruley, Haim I. Bicher, and Daniel Reneau. -.**  
 Bruley, Duane F.; Bicher, Haim I.; Reneau, (Daniel D.) Daniel. New York : Plenum Press, c1984. "Proceedings of the meeting of the International Society on Oxygen Transport to Tissue, held August 16-20, 1983, in Ruston, Louisiana"--T.p. verso. xix, 924 p. : ill. ; 26 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL QP901.A33 v.180).

0925

**A Passion to know 20 profiles in science /Allen L. Hammond, editor. -.**  
 Hammond, Allen L. New York : Scribner, c1984. Includes index. xii, 240 p., 1 leaf of plates : ports. ; 24 cm. Bibliography: p. 225-234. (NAL Call No.: DNAL Q141.P374).



## LIFE SCIENCES

0926

**Posttranslational modifications /edited by Finn Wold, Kivie Moldave. -.**  
Wold, Finn, 1928-; Moldave, Kivie, 1923.  
Orlando : Academic Press, 1984. v. : ill. ; 24 cm. -. Includes bibliographical references and indexes. (NAL Call No.: DNAL QP601.M49 v.106 etc.).

0927

**The potential environmental consequences of genetic engineering hearings before the Subcommittee on Toxic Substances and Environmental Oversight of the Committee on Environment and Public Works, United States Senate, Ninety-eighth Congress, second session, September 25 and 27, 1984. -.**  
United States.~Congress.~Senate.~Committee on Environment and Public Works.~Subcommittee on Toxic Substances and Environmental Oversight.  
Washington, D.C. : U.S. G.P.O., 1984.  
Distributed to some depository libraries in microfiche. iii, 204 p. ; 24 cm. -.  
Bibliography: p. 145-146. (NAL Call No.: DNAL KF26.E678 1984c).

0928

**Prolactin secretion proceedings of a Symposium on Frontiers and Perspectives of Prolactin Secretion : a multidisciplinary approach held at the Universidad Nacional Autonoma de Mexico, Mexico City on September 3-6, 1982 /edited by Flavio Mena, Carlos Valverde-R. ; editorial assistant Marcella W. Vogt. -.**  
Mena, Flavio.; Valverde-Rodriguez, Carlos.; Vogt, Marcella W. Orlando : Academic Press, 1984. xvii, 432 p. : ill. ; 24 cm. Includes bibliographical references and index. (NAL Call No.: DNAL QP572.P74S96 1982).

0929

**Protein transport and secretion proceedings of the CETUS-UCLA symposium held in Keystone, Colorado, April 23-29, 1983 /editor, Dale L. Oxender. -.**  
Oxender, Dale. New York : A.R. Liss, c1984.  
"Pages 1-290 of this volume are reprinted from the Journal of cellular biochemistry, volumes 22, 23, and 24"--P. ix, xxi, 422 p. : ill. ; 26 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL QH506.U34 v.15).

0930

**Regulation of leukocyte function /edited by Ralph Snyderman. -.**  
Snyderman, Ralph. New York : Plenum Press, c1984. xix, 410 p. : ill. ; 24 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL QR180.C6 v.14).

0931

**Regulation of the immune system proceedings of an Ortho-UCLA symposium held in Park City, Utah, March 18-25, 1984 /editors, Harvey Cantor, Leonard Chess, Eli Sercarz. -.**  
Cantor, H.; Chess, Leonard.; Sercarz, Eli E. New York : A.R. Liss, 1984. Proceedings of the Ortho-UCLA Symposium on "Regulation of the Immune System."~ Includes bibliographies and index. xxxi, 976 p. : ill. ; 24 cm. -. (NAL Call No.: DNAL QH506.U34 v.18).

0932

**The science of biological specimen preparation for microscopy and microanalysis proceedings of the 2nd Pfefferkorn Conference, held April 23 to 28, 1983, at the Sugar Loaf Mountain Resort, Traverse City, MI /edited by Jean-Paul Revel, Tudor Barnard, Geoffrey H. Haggis ; managing editor, Sudha A. Bhatt. -.**  
Revel, Jean-Paul.; Barnard, Tudor.; Haggis, Geoffrey H. AMF O'Hare, Ill. : Scanning Electron Microscopy, 1984. vi, 245, vii-x p. : ill. ; 29 cm. -. Includes bibliographies and indexes. (NAL Call No.: DNAL QH231.P5 1983).

0933

**Sperm competition and the evolution of animal mating systems /edited by Robert L. Smith. -.**  
Smith, Robert L. Orlando : Academic Press, 1984. xxi, 687 p. : ill. ; 24 cm. Includes bibliographies and index. (NAL Call No.: DNAL QP255.S64).

0934

**Structural and resonance techniques in biological research /edited by Denis L. Rousseau. -.**  
Rousseau, Denis L. Orlando : Academic Press, 1984. xi, 476 p. : ill. ; 24 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL QH505.S74).

0935

**Thymic hormones and lymphokines basic chemistry and clinical applications /edited by Allan L. Goldstein. -.**  
Goldstein, Allan L. New York : Plenum Press, c1984. Papers presented at the Third Annual Symposium on Health Sciences, held at the National Academy of Sciences in Washington, D.C., May 31-June 3, 1983. xiii, 669 p. : ill. ; 24 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL QP572.T46T48 1984).



0936

**Ultrastructure of endocrine cells and tissues /edited by P.M. Motta. -.**  
Motta, Pietro M. Boston : M. Nijhoff ; Hingham, MA : Distributors for the U.S. and Canada, Kluwer Boston, c1984. xi, 339 p. : ill. ; 27 cm. -. Includes bibliographical references and index. (NAL Call No.: DNAL QM550.E43 v.1).

0937

**Ultrastructure of reproduction gametogenesis, fertilization, and embryogenesis /edited by Jonathan Van Blerkom and Pietro M. Motta. -.**  
Van Blerkom, Jonathan, 1947-; Motta, Pietro M. Boston : Martinus Nijhoff ; Hingham, MA, USA : Distributor for the U.S. and Canada, Kluwer Boston, 1984. x, 273 p. : ill. ; 27 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL QM550.E43 v.2).

0938

**Ultrastructure of the connective tissue matrix /edited by A. Ruggeri and P.M. Motta. -.**  
Ruggeri, A.; Motta, Pietro M. Boston : M. Nijhoff Publishers ; Hingham, MA, USA : Distributors for the U.S. and Canada, Kluwer Boston, 1984. 217 p. : ill. ; 27 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL QM550.E43 v.3).

0939

**Understanding DNA and gene cloning a guide for the curious /Karl Drlica ; with an introduction by Arthur Kornberg. -.**  
Drlica, Karl. New York : Wiley, c1984. Includes index. xiii, 205 p. : ill. ; 23 cm. Bibliography: p. 165-168. (NAL Call No.: DNAL QH442.2.D75).

0940

**Dioxin--the impact on human healthhearings before the Subcommittee on Natural Resources, Agriculture Research and Environment of the Committee on Science and Technology, U.S. House of Representatives, Ninety-eighth Congress, first session, June 30, July 13, 28, 1983. -.**  
United States. ~Congress. ~House. ~Committee on Science and Technology. ~Subcommittee on Natural Resources, Agriculture Research, and Environment. Washington, D.C. : U.S. G.P.O., 1984. Distributed to some depository libraries in microfiche. ~ "No. 78.". iii, 252 p. : ill. ; 24 cm. Includes bibliographical references. (NAL Call No.: DNAL KF27.S3978 1983d).

0941

**Environmental health law /Sanford M. Brown, Theodore R. Forrest. -.**  
Brown, Sanford M. 1933. Forrest, Theodore R. New York : Praeger, c1984. ix, 133 p. ; 24 cm. Bibliography: p. 126-127. (NAL Call No.: DNAL KF3775.B73).

0942

**Environmental sampling for hazardous wastes based on a workshop sponsored by the Committee on Environmental Improvement of the American Chemical Society, the U.S. Environmental Protection Agency, and the University of Nevada--Las Vegas, Las Vegas, Nevada, February 1-3, 1984 /Glenn E. Schweitzer, editor, John A. Santolucito, editor. -.**  
Schweitzer, Glenn E., 1930-; Santolucito, John A. Washington, D.C. : American Chemical Society, 1984. x, 133 p. : ill. ; 24 cm. -. Includes bibliographies and indexes. (NAL Call No.: DNAL QD1.A45 no.267).

0943

**Fleas, ticks and cockroaches -- disease transmitters /compiled and edited by Walter J. Weber. -.**  
Weber, Walter John, 1911. Fresno, CA : Thomson Publications, 1984. "A companion book to Health hazards from pigeons, starlings and English sparrows, and Diseases transmitted by rats and mice."~ "Health hazards to humans and domesticated animals"--Cover.~ Includes index. x, 42 p. : ill. ; 23 cm. Bibliography: p. 28-30. (NAL Call No.: DNAL RA641.F5W4).

0944

**It's not all sunshine and fresh airchronic health effects of modern farming practices. -.**  
Strange, Marty. Walthill, Neb. (Box 405, Walthill 68067) : Center for Rural Affairs, 1984. Cover title.~ "Marty Strange, editor ... et al. "--Prelim. iii, 108 p. ; 28 cm. Includes bibliographies. (NAL Call No.: DNAL RC965.A5I7).

0945

**Macrolide antibiotics chemistry, biology, and practice /edited by Satoshi Omura. -.**  
Omura, Satoshi, 1935. Orlando : Academic Press, 1984. xiv, 635 p. : ill. ; 24 cm. Includes bibliographies and indexes. (NAL Call No.: DNAL RM666.M25M33).

## LIFE SCIENCES

0946

**Public health administration and practice /John J. Hanlon, George E. Pickett. -.**

Hanlon, John J. 1912. Pickett, George E. St. Louis : C.V. Mosby, 1984. x, 637 p. ; 24 cm. Includes bibliographies and index. (NAL Call No.: DNAL RA425.H29 1984).

0947

**Surveillance of the flow of salmonella and campylobacter in a community /prepared for United States Dept. of Health & Human Services, Public Health Service, Food and Drug Administration, Bureau of Veterinary Medicine ; by Communicable Disease Control Section, Seattle-King County Department of Public Health. -.**

Seattle? : Seattle-King County Dept. of Public Health? , 1984. "Contract number: 223-81-7041."~ "August, 1984.". 1 v. (various foliations) : ill. ; 28 cm. Bibliography: leaves 180-184. (NAL Call No.: DNAL RA644.S15S7).

# PHYSICAL SCIENCES

0948

**Ball clay and bentonite deposits of the central and western Gulf of Mexico coastal plain, United States /by John W. Hosterman. -**  
Hosterman, John W. 1923. Washington, D.C. : U.S. G.P.O., 1984. One folded map in pocket. iii, 22 p. : ill., map ; 24 cm. -  
Bibliography: p. 20-22. (NAL Call No.: DNAL 407 G29B no.1558-C).

0949

**The base of the Upper Jurassic Morrison Formation in east-central Utah a review of the first description of the base of the Morrison Formation in east-central Utah and some later modifications /by Robert B. O'Sullivan. -**  
O'Sullivan, Robert B. Washington, D.C. : U.S. G.P.O. ; Alexandria, Va. : for sale by the Branch Distribution, U.S. Geological Survey, 1984. iii, 17 p. : ill., map ; 24 cm. -  
Bibliography: p. 16-17. (NAL Call No.: DNAL 407 G29B no.1561).

0950

**Bibliography of repeat photography for evaluating landscape change /compiled and annotated, with an introduction by Garry F. Rogers, Harold E. Malde, Raymond M. Turner. -**  
Rogers, Garry F., 1946. Malde, Harold E. 1923-; Turner, R. M. Salt Lake City : University of Utah Press, c1984. Includes index. xxxvi, 179 p. : ill. ; 24 cm. (NAL Call No.: DNAL Z7136.R46R63).

0951

**Biosafety in microbiological and biomedical laboratories /editors: John H. Richardson, W. Emmett Barkley. -**  
Richardson, John H.; Barkley, W. Emmett. Atlanta, Ga. : U.S. Dept. of Health and Human Services, Public Health Service, Centers for Disease Control ; Bethesda, Md. : National Institutes of Health, 1984. "March 1984."~ Includes index. ix, 100 p. : ill. ; 22 cm. -  
Bibliography: p. 91-96. (NAL Call No.: DNAL Q183.B56 1984).

0952

**Chemistry of particles, fogs, and rain /edited by Jack L. Durham. -**  
Durham, Jack L., 1940. Boston : Butterworth Publishers, c1984. "An Ann Arbor science book."~ Papers presented at a symposium on acid precipitation at the annual meeting of the American Chemical Society, Las Vegas, Nev., Mar. 1982. xiii, 262 p. : ill. ; 25 cm. -  
Includes bibliographical references and index. (NAL Call No.: DNAL QC925.C44).

0953

**Coral zonation of the Mississippian system in the western interior province of North America /by William J. Sando and E. Wayne Bamber ; a biostratigraphic zonation of the Mississippian rocks of parts of the Western United States and Western Canada, based on corals. -**  
Sando, William J. Bamber, E. W. Washington D.C. : U.S. G.P.O., 1984. Includes index. iii, 61 p., 10 leaves of plates : ill. ; 30 cm. -  
Bibliography: p. 56-61. (NAL Call No.: DNAL 407 G29Pr no.1334).

0954

**Deposition both wet and dry /edited by Bruce B. Hicks.**  
Hicks, Bruce B. Boston : Butterworth Publishers, c1984. -  
Papers presented at a symposium on acid precipitation at the annual meeting of the American Chemical Society, Las Vegas, Nev., Mar. 1982.~ "An Ann Arbor Science book." xvi, 197 p. : ill. ; 25 cm. -  
Includes bibliographical references and index. (NAL Call No.: DNAL TD196.A25D45).

0955

**Distribution of clay minerals in the suspended and bottom sediments from the northern Bering Sea shelf area, Alaska /by Fredrika C. Moser and James R. Hein. -**  
Moser, Fredrika C. Hein, J. R. Washington, D.C. : U.S. G.P.O. ; Alexandria, VA : For sale by the Distribution Branch, Text Products Section, U.S. Geological Survey, 1984. iii, 19 p. : maps ; 28 cm. -  
Bibliography: p. 14-17. (NAL Call No.: DNAL 407 G29B no.1624).

0956

**Economic perspectives on acid deposition control /edited by Thomas D. Crocker. -**  
Crocker, Thomas D. 1936. Boston : Butterworths, c1984. "An Ann Arbor science book."~ Papers presented at a symposium on acid precipitation at the annual meeting of the American Chemical Society, Las Vegas, Nev., Mar. 1982. xiv, 180 p. : ill. ; 25 cm. -  
Includes bibliographical references and index. (NAL Call No.: DNAL TD196.A25E26).

0957

**The Evolution of the Southern California uplift, 1955 through 1976 /by Robert O. Castle ... et al. . -**  
Castle, Robert O. Washington, D.C. : U.S. G.P.O., 1984. 1 portfolio (vii, 136 p.) : ill. ; 30 cm. + 17 folded leaves in pocket. -  
Bibliography: p. 131-136. (NAL Call No.: DNAL 407 G29Pr no.1342).



## PHYSICAL SCIENCES

0958

**Geological aspects of acid deposition /edited by Owen P. Bricker.**  
Bricker, Owen P., 1936. Boston : Butterworth Publishers, c1984. "An Ann Arbor science book."~ Papers presented at a symposium on acid precipitation at the annual meeting of the American Chemical Society, Las Vegas, Nev., Mar. 28-Apr. 3, 1982. xiii, 143 p. : ill. ; 25 cm. -. Includes bibliographical references and index. (NAL Call No.: DNAL QE515.G525).

0959

**Geology of Emmons County, North Dakota /by John P. Bluemle ; prepared by the North Dakota Geological Survey in cooperation with the U.S. Geological Survey, North Dakota State Water Commission, and the Emmons County Board of Commissioners. -.**  
Bluemle, John P. Grand Forks, N.D. : North Dakota Geological Survey, 1984. vi, 69 p. : ill. ; 23 cm. -. Bibliography: p. 65-69. (NAL Call No.: DNAL 406 N813B no.66 pt.1).

0960

**Geology of the Nanshuk Group and related rocks, North Slope, Alaska /by A. Curtis Huffman, Jr., editor. -.**  
Huffman, A. Curtis. Washington, D.C. : U.S. G.P.O., 1984. v, 129 p. : ill., maps ; 28 cm. -. Bibliography: p. 124-129. (NAL Call No.: DNAL 407 G29B no.1614).

0961

**High-temperature, large-volume, lavalike ash-flow tuffs without calderas in southwestern Idaho /by E.B. Ekren, D.H. McIntyre, and E.H. Bennett. -.**  
Ekren, E. B. 1923. McIntyre, David H.; Bennett, E. H. Reston, Va.? : U.S. Dept. of the Interior, Geological Survey ; Alexandria, VA : For sale by the Branch of Distribution, U.S. Geological Survey, 1984. Includes index. iv, 76 p. : ill., 2 maps ; 29 cm. + 2 folded maps in pocket. -. Bibliography: p. 70-73. (NAL Call No.: DNAL 407 G29Pr no.1272).

0962

**Mariposa quadrangle, Mariposa and Madera Counties, California--analytic data /by Konrad B. Krauskopf. -.**  
Krauskopf, Konrad Bates, 1910. Washington, D.C. : U.S. G.P.D., 1984. iii, 14 p. : ill., maps ; 28 cm. -. Bibliography: p. 2-3. (NAL Call No.: DNAL 407 G29B no.1613).

0963

**Meteorological aspects of acid rain /edited by Chandrakant M. Bhumralkar. -.**  
Bhumralkar, Chandrakant M. Boston : Butterworths, c1984. "An Ann Arbor science book."~ Papers presented at a symposium on acid precipitation at the annual meeting of the American Chemical Society, Las Vegas, Nev., Mar. 1982. xiv, 243 p. : ill. ; 25 cm. -. Includes bibliographical references and index. (NAL Call No.: DNAL QC925.M37).

0964

**Microscopic determination of the nonopaque minerals /by Michael Fleischer, Ray E. Wilcox, and John J. Matzko.**  
Fleischer, Michael, 1908. Wilcox, Ray E. 1912-; Matzko, John J. Washington, D.C. : U.S. Dept. of the Interior, Geological Survey : For sale by the Supt. of Docs., U.S. G.P.D., 1984. "A revision of bulletin 848 by Larsen and Berman (1934) including new optical data and new methods of determination."~ Chiefly tables.~ Includes index. vii, 453 p. : ill. ; 28 cm. -. Bibliography: p. 402-406. (NAL Call No.: DNAL 407 G29B no.1627 1984).

0965

**The mid-Cretaceous frontier formation near the Moxa arch, southwestern Wyoming /by E.A. Merewether, Paul D. Blackmon, and J.C. Webb. -.**  
Merewether, E. A. 1930. Blackmon, Paul D.; Webb, J. C. Washington D.C. : Dept. of the Interior, U.S. Geological Survey ; Alexandria, Va. : for sale by the Distribution Branch, USGS, 1984. iii, 29 p. : ill., maps ; 28 cm. -. Bibliography: p. 28-29. (NAL Call No.: DNAL 407 G29Pr no.1290).

0966

**Mineral resources of the Citico Creek wilderness study area, Monroe County, Tennessee /by John F. Slack ... et al. -.**  
Slack, John F. Washington, D.C. : U.S. G.P.D., 1984. Two folded maps in pocket. vi, 32 p. : ill., maps ; 24 cm. -. Bibliography: p. 31-32. (NAL Call No.: DNAL 407 G29B no.1552).

0967

**Mineral resources of the Tracy Arm-Fords Terror Wilderness study area and vicinity, Alaska /by U.S. Geological Survey and U.S. Bureau of Mines. -.**  
Reston, Va.? : U.S. Dept. of the Interior, Geological Survey ; Washington, D.C. : For sale by the Supt. of Docs., U.S. G.P.D., 1984. Cover title: Tracy Arm-Fords Terror area, Alaska.~ Text and 3 maps on folded sheets issued in slipcase. ix, 308 p. : ill., maps (some col.) ; 24 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL 407 G29B no.1525).



0968

**Modeling of total acid precipitation impacts /edited by Jerald L. Schnoor. -.**  
Schnoor, Jerald L. Boston : Butterworths, c1984. "An Ann Arbor science book."~ Papers presented at a symposium on acid precipitation at the annual meeting of the American Chemical Society, Las Vegas, Nev., Mar. 1982. xii, 222 p. : ill. ; 25 cm. -. Includes bibliographical references and index. (NAL Call No.: DNAL TD196.A25M62).

0969

**Mount St. Helens an annotated bibliography /by Caroline D. Harnly and David A. Tyckoson. -.**  
Harnly, Caroline D. Tyckoson, David A. Metuchen, N.J. : Scarecrow Press, 1984. Includes index. xi, 249 p. ; 23 cm. (NAL Call No.: DNAL Z6033.E1H36).

0970

**A naturalist's Blue Ridge Parkway /by David T. Catlin. -.**  
Catlin, David T. Knoxville : University of Tennessee Press, c1984. Includes index. xii, 208 p., 12 p. of plates : ill. (some col.), maps ; 22 cm. Bibliography: p. 198-199. (NAL Call No.: DNAL QH104.5.B5C38).

0971

**New names for units in the lower part of the Green River Formation, Piceance Creek Basin, Colorado /by Ronald C. Johnson. -.**  
Johnson, Ronald C. Washington, D.C. : U.S. G.P.O. ; Alexandria, Va. : for sale by Branch of Distribution, U.S. Geological Survey, 1984. 1 folded leaf in pocket. iii, 20 p. : ill., maps ; 24 cm. -. Bibliography: p. 18-20. (NAL Call No.: DNAL 407 G29B no.1529-I).

0972

**Porvenir formation (new name)--and other revisions of nomenclature of Mississippian, Pennsylvanian, and lower Permian rocks, southeastern Sangre de Cristo Mountains, New Mexico /by Elmer H. Baltz and Donald A. Myers. -.**  
Baltz, Elmer H. 1927. Myers, Donald A.,\_1921. Washington, D.C. : U.S. G.P.O. ; Alexandria, Va. : for sale by the Branch of Distribution, U.S. Geological Survey, 1984. iii, 39 p. : ill., maps ; 23 cm. -. Bibliography: p. 36-39. (NAL Call No.: DNAL 407 G29B no.1537-B).

0973

**Possible correlations of basement rocks across the San Andreas, San Gregorio-Hosgri, and Rinconada-Reliz-King City faults, California /by Donald C. Ross. -.**  
Ross, Donald C. (Donald Clarence), 1924. Washington, D.C. : U.S. G.P.O. ; Alexandria, VA : For sale by the Distribution Branch, Text Products Section, U.S. Geological Survey, 1984. iv, 37 p. : ill., maps ; 29 cm. -. Bibliography: p. 24-26. (NAL Call No.: DNAL 407 G29Pr no.1317).

0974

**Remote monitoring of processes that shape desert surfaces the desert winds project /by J.F. McCauley ... et al. . -.**  
McCauley, J. F. Washington, D.C. : U.S. G.P.O. ; Alexandria, VA : For sale by the Distribution Branch, Text Products Section, U.S. Geological Survey, 1984. iv, 19 p. : ill., map ; 28 cm. -. Bibliography: p. 18-19. (NAL Call No.: DNAL 407 G29B no.1634).

0975

**The Richmond and Greenwich slices of the Hamburg klippe in Eastern Pennsylvania stratigraphy, sedimentology, structure, and plate tectonic implications /by Gary G. Lash and Avery Ala Drake, Jr. -.**  
Lash, Gary G. Drake, Avery Ala,\_1927. Washington, D.C. : U.S. G.P.O. ; Alexandria, VA. : For sale by the Branch of Distribution, USGS, 1984. "A stratigraphic, sedimentologic, and structural study of a major Taconic-type allochthon in the Great Valley of eastern Pennsylvania.". iv, 40 p. : ill., maps ; 29 cm. -. Bibliography: p. 37-40. (NAL Call No.: DNAL 407 G29Pr no.1312).

0976

**The routine mineralogical analysis of clay-bearing samples /by Harry C. Starkey, Paul D. Blackmon, and Phoebe L. Hauff. -.**  
Starkey, Harry C. Blackmon, Paul D.; Hauff, Phoebe L. Washington, D.C. : U.S. G.P.O., 1984. One folded chart in pocket.~ Includes index. iv, 32 p. : ill., chart ; 23 cm. -. Bibliography: p. 26-32. (NAL Call No.: DNAL 407 G29B no.1563).

0977

**Sand-calcite crystals from Garfield County, Utah /by K.A. Sargent and H.D. Zeller. -.**  
Sargent, K. A. Zeller, H. D.\_1922. Reston, Va.? : U.S. Dept. of the Interior, Geological Survey ; Alexandria, Va. : for sale by Branch of Distribution, USGS, 1984. iii, 15 p. : ill., maps ; 28 cm. -. Bibliography: p. 3. (NAL Call No.: DNAL 407 G29B no.1606).

## PHYSICAL SCIENCES

0978

**Sandstone units of the Lee Formation and related strata in eastern Kentucky /by Charles L. Rice ; with a section on Lee and Breathitt Formations along the northwestern part of the eastern Kentucky coal field by Charles L. Rice and Gordon W. Weir ; prepared in cooperation with the Kentucky Geological Survey. -**  
Rice, Charles L. Weir, Gordon W. 1922. Reston, Va.? : U.S. Dept. of the Interior, Geological Survey, 1984. G.P.O. sales statement incorrect in publication. iv, 53 p. : ill., maps ; 29 cm. -. Bibliography: p. 50-53. (NAL Call No.: DNAL 407 G29Pr no.1151-G).

0979

**The Schultze Granite, the Tea Cup Granodiorite, and the Granite Basin Porphyry a geochemical comparison of mineralized and unmineralized stocks in southern Arizona /by S.C. Creasey. -**  
Creasey, S. C. 1917. Washington, D.C. : U.S. G.P.O. ; Alexandria, VA : For sale by the Distribution Branch, Text Products Section, U.S. Geological Survey, 1984. Map on folded leaf in pocket. iii, 41 p. : ill., maps (1 col.) ; 29 cm. -. Bibliography: p. 40-41. (NAL Call No.: DNAL 407 G29Pr no.1303).

0980

**The search for data in the physical and chemical sciences /Linda Ray Arny. -**  
Arny, Linda Ray, 1945. New York : Special Libraries Association, c1984. viii, 150 p. : ill. ; 23 cm. Bibliography: p. 145-150. (NAL Call No.: DNAL QC5.3.A76).

0981

**Slade and Paragon formations new stratigraphic nomenclature for Mississippian rocks along the Cumberland Escarpment in Kentucky /by Frank R. Ettensohn ... et al. ; prepared in cooperation with the Kentucky Geological Survey. -**  
Ettensohn, Frank R. Washington, D.C. : U.S. G.P.O., 1984. iv, 37 p. : ill., map ; 28 cm. -. Bibliography: p. 33-37. (NAL Call No.: DNAL 407 G29B no.1605-B).

0982

**Storm-induced slope movements at East Brady, northwestern Pennsylvania description of the August 1980 debris avalanching and other slope movements and a discussion of the factors involved /by John S. Pomeroy. -**  
Pomeroy, John S., 1929. Washington, D.C. : U.S. G.P.O., 1984. iii, 16 p. : ill. ; 28 cm. -. Bibliography: p. 16. (NAL Call No.: DNAL 407 G29B no.1618).

0983

**Stratigraphic nomenclature for the upper Devonian and lower Mississippian(?) Kanayut conglomerate, Brooks Range, Alaska /by Tor H. Nilsen and Thomas E. Moore. -**  
Nilsen, Tor Helge. Moore, Thomas E. Washington, D.C. : U.S. G.P.O., 1984. iv, 64 p. : ill. ; 24 cm. -. Bibliography: p. 63-64. (NAL Call No.: DNAL 407 G29B no.1529-A).

0984

**Stratigraphic notes, 1983. -**  
Reston, Va.? : Dept. of the Interior, U.S. Geological Survey ; Alexandria, VA : For sale by the Distribution Branch, USGS ; Washington, D.C. : Supt. of Docs., U.S. G.P.O., distributor, 1984. 83 p. : ill., maps ; 24 cm. -. Includes bibliographies. (NAL Call No.: DNAL 407 G29B no.1537-A).

0985

**Stratigraphy and structure of the western Kentucky fluorspar district /by Robert D. Trace and Dewey H. Amos ; prepared in cooperation with the Kentucky Geological Survey. -**  
Trace, Robert D. 1917. Amos, Dewey H. 1925. Washington, D.C. : U.S. G.P.O., 1984. One folded col. map in pocket. iv, 41 p. : ill., maps ; 29 cm. -. Bibliography: p. 38-41. (NAL Call No.: DNAL 407 G29Pr no.1151-D).

0986

**Submarine canyon deposits, central California coast, and their possible relationship to an Eocene low sea-level stand /by Victor M. Seiders and James M. Joyce. -**  
Seiders, Victor M. Joyce, James M. Washington : U.S. G.P.O., 1984. iii, 16 p. : ill. ; 24 cm. -. Bibliography: p. 14-16. (NAL Call No.: DNAL 407 G29B no.1539).

0987

**Tertiary stratigraphy of the southeastern San Joaquin Valley, California /by J. Alan Bartow and Kristin McDougall. -**  
Bartow, J. Alan. McDougall, Kristin. Washington D.C. : U.S. G.P.O. : For sale by the Supt. of Docs., U.S. G.P.O., 1984. v, 41 p. : ill., map ; 24 cm. -. Bibliography: p. 39-41. (NAL Call No.: DNAL 407 G29B no.1529-J).

0988

**Texas, a geography /Terry G. Jordan with John L. Bean, Jr., and William M. Holmes. -**  
Jordan, Terry G. Bean, John L.; Holmes, William M. Boulder : Westview Press, 1984. xix, 288 p., 2 p. of plates : ill., maps ; 26 cm. Includes bibliographies and index. (NAL Call No.: DNAL

F386.J7).

0989

**Third Biennial Symposium on Surface Coal Mine Reclamation on the Great Plains Sheraton Hotel, Billings, Montana, March 19-21, 1984 /sponsored by Reclamation Research Unit, Montana State University ... et al. -.**

Bozeman, Mont.? : The Unit?, 1984? . Two articles inserted not included in original publication. iii, 371 p. : ill. ; 30 cm. Includes bibliographies. (NAL Call No.: DNAL TN291.S9 1984).

0990

**The thrust belt in southwest Montana and east-central Idaho an interpretation of the leading part of the Cordilleran fold and thrust belt in southwest Montana and east central Idaho /by Edward T. Ruppel and David A. Lopez. -.**

Ruppel, Edward T. Lopez, David A. Washington : U.S. G.P.O. ; Alexandria, Va. : For sale by the Branch of Distribution, U.S. Geological Survey, 1984. One map on folded leaf in pocket. 41 p. : ill., maps ; 29 cm. -. Bibliography: p. 38-41. (NAL Call No.: DNAL 407 G29Pr no.1278).

0991

**Turonian (Eaglefordian) stratigraphy of the Atlantic Coastal Plain and Texas /by Page C. Valentine. -.**

Valentine, Page C. Reston, Va.? : Dept. of the Interior, U.S. Geological Survey ; Alexandria, VA : For sale by the Distribution Branch, USGS, 1984. iii, 21 p. : ill., 1 map ; 29 cm. -. Bibliography: p. 19-21. (NAL Call No.: DNAL 407 G29Pr no.1315).

0992

**Uppermost Oligocene and lowermost Miocene ash-flow tuffs of western Nevada /by Paul T. Robinson and John H. Stewart. -.**

Robinson, Paul T. Stewart, J. H. 1928. Washington, D.C. : U.S. G.P.O. ; Alexandria, Va. : for sale by the Distribution Branch, U.S. Geological Survey, 1984. iv, 53 p. : ill., maps ; 24 cm. -. Bibliography: p. 52-53. (NAL Call No.: DNAL 407 G29B no.1557).

0993

**White clays of Pennsylvania /by John W. Hosterman. -.**

Hosterman, John W. 1923. Washington, D.C. : U.S. G.P.O. ; Alexandria, VA : for sale by the Distribution Branch, U.S. Geological Survey, 1984. iv, 38 p. : ill., maps ; 23 cm. -. Bibliography: p. 37-38. (NAL Call No.: DNAL 407 G29B no.1558-D).



# CHEMISTRY

0994

**Commercial biotechnology an international analysis /Office of Technology Assessment, Congress of the United States. -.**  
New York : Pergamon Press, 1984. x, 612 p. : ill. ; 29 cm. Includes bibliographies and index. (NAL Call No.: DNAL HD9999.B443U62).

0995

**Enzyme engineering 7 /edited by A.I. Laskin, G.T. Tsao, and L.B. Wingard, Jr. -.**  
Laskin, Allen I., 1928-; Tsao, George T., 1931-; Wingard, Lemuel B. New York, N.Y. : New York Academy of Sciences, 1984. Papers presented at the Seventh International Enzyme Engineering Conference, sponsored by the Engineering Foundation and held in White Haven, Penn., Sept. 25-30, 1983. 596 p. : ill. ; 24 cm. -. Includes bibliographical references and index. (NAL Call No.: DNAL 500 N484 v.434).

0996

**HPLC in nucleic acid research methods and applications /edited by Phyllis R. Brown. -.**  
Brown, Phyllis R. New York : M. Dekker, c1984. xiv, 403 p. : ill. ; 24 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL QD271.A1C45 v.28).

0997

**The Impact of energy and environmental concerns on chemical engineering in the forest products industry /Howard N. Rosen, editor. -.**  
Rosen, Howard N. New York : American Institute of Chemical Engineers, 1984. "Reviewed and edited papers from the Forest and Products Divisions sessions of the 1983 summer national meeting in Denver, Colorado, August 28 to 31, 1983, and the 1983 diamond jubilee meeting in Wash. 106 p. : ill. ; 28 cm. -. Includes bibliographical references. (NAL Call No.: DNAL TS921.I47).

0998

**A mass spectrometric approach to peptide sequencing applied to beta -lactamase I of bacillus cereus 569/H /by Alfred Kornel. -.**  
Kornel, Alfred. 1983, c1984. Thesis (Ph.D.)--University of Cincinnati, 1983. Photocopy. Ann Arbor, Mich. : University Microfilms International, 1985. viii, 150 p. : ill. ; 21 cm. Bibliography: p. 137-141. (NAL Call No.: DNAL DISS 83-28,311).

0999

**NIOSH manual of analytical methods /Peter M. Eller, editor. -.**  
Eller, Peter M. Cincinnati, Ohio : U.S. Dept. of Health and Human Services, Public Health Service, National Institute for Occupational Safety and Health, Division of Physical Sciences and Engineering ; Washington, D.C. : For sale by the Supt. of Docs., U.S. G.P.O., 1984. "Sampling and measurement methods... are revisions and additions to those contained in the second edition"--P. iv.~ "February, 1984.". 2 v. (loose-leaf) : ill. ; 28 cm. -. Includes bibliographical references and index. (NAL Call No.: DNAL QD75.2.N5 1984).

1000

**Petroleum microbiology /edited by Ronald M. Atlas. -.**  
Atlas, Ronald M., 1946. New York : Macmillan ; London : Collier Macmillan, c1984. x, 692 p. : ill. ; 25 cm. Includes bibliographies and index. (NAL Call No.: DNAL QR53.P48).

1001

**Receptor purification procedures /editors, J. Craig Venter, Len C. Harrison. -.**  
Venter, J. Craig.; Harrison, Len C. New York : A.R. Liss, c1984. xii, 171 p. : ill. ; 26 cm. -. Includes bibliographies and index. (NAL Call No.: DNAL QH506.R44 v.2).

1002

**Spin labeling in pharmacology /edited by Jordan L. Holtzman. -.**  
Holtzman, Jordan L. Orlando : Academic Press, 1984. xii, 229 p. : ill. ; 24 cm. Includes bibliographies and index. (NAL Call No.: DNAL QP519.9.E43S68).

1003

**Strategies and tactics in organic synthesis /edited by Thomas Lindberg. -.**  
Lindberg, Thomas, 1952. Orlando : Academic Press, 1984. xiv, 370 p. : ill. ; 24 cm. Includes bibliographies and index. (NAL Call No.: DNAL QD262.S85).



# TECHNOLOGY

1004

**The Agricultural technology delivery system a study of the transfer of agricultural and food-related technologies /by Irwin Feller ... et al. . -.**

Feller, Irwin. University Park, Pa. : Institute for Policy Research and Evaluation, Pennsylvania State University, 1984. "December 1984.". 5 v. in 6 : ill., forms ; 28 cm. + 1 summary book. Includes bibliographies. (NAL Call No.: DNAL S494.5.I5A35).

1005

**Biotechnology and the dairy industry production costs and commercial potential of the bovine growth hormone /prepared for Cornell University, Center for Biotechnology, Committee for Economic Development ; prepared by Cornell University, Department of Agricultural Economics, Department of Animal Science, Ithaca, New York ; Robert J. Kalter ... et al. . ; Project associates Anya McGuirk, Elaine Andruysick, Margaret Grosh. -.**

Kalter, Robert J. Ithaca, N.Y. : Department of Agricultural Economics, Cornell University Agricultural Experiment Station, New York State College of Agriculture and Life Sciences, 1984. "December 1984.". viii, 192 p. : ill. ; 28 cm. -. Bibliography: p. 92-95. (NAL Call No.: DNAL 281.9 C81A no.84-22).

1006

**Computers in flavor and fragrance research /Craig B. Warren, editor, John P. Walrad, editor. -.**

Warren, Craig B., 1939-; Walrad, John P., 1942. Washington, D.C. : American Chemical Society, 1984. "Based on a symposium sponsored by the Division of Agricultural and Food Chemistry at the 186th Meeting of the American Chemical Society, Washington, D.C., August 28-September 2, 1983.". ix, 163 p. : ill. ; 24 cm. -. Includes bibliographies and indexes. (NAL Call No.: DNAL QD1.A45 no.261).

1007

**Desalination.**

Pisa, M. Beltsville, Md. : The Library. Quick bibliography series - National Agricultural Library. Bibliography. Sept 1984. (84-62). 27 p. (NAL Call No.: DNAL a25071.N3).

1008

**East-West technology transfer a congressional dialog with the Reagan administration : a dialog /prepared for the use of the Joint Economic Committee, Congress of the United States. -.**

Washington, D.C. : U.S. G.P.O., 1984. Cover title.~ At head of title: 98th Congress, 2d session. Joint committee print.~ Distributed to

some depository libraries in microfiche.~ "December 19, 1984."~ Includes index. xi, 160 p. : ill. ; 24 cm. -. Bibliography: p. 134-156. (NAL Call No.: DNAL T174.3.E2).

1009

**Finite element simulation of saturated-unsaturated subsurface flow /by George E. Blandford, principal investigator. -.** Blandford, George E. Lexington, Ky. : Water Resources Research Institute, University of Kentucky ; Springfield, Va. : Available from NTIS, 1984. Financed in part by the U.S. Dept. of the Interior, agreement no. G-844-O3 (FY 1983).~ "August 1984."~ PB85-214658. x, 61 leaves : ill. ; 28 cm. -. Bibliography: leaves 59-61. (NAL Call No.: DNAL TC176.B54).

1010

**IPASS an interactive policy analysis simulation system /Doug Olson, Con Schallau, and Wilbur Maki. -.**

Olson, Doug. Schallau, Con H., 1931-; Maki, Wilbur R. Portland, Or. : U.S. Dept. of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station, 1984. Cover title.~ Distributed to depository libraries in microfiche.~ "July 1984.". 70 p. : ill. ; 28 cm. -. Includes bibliographical references. (NAL Call No.: DNAL aSD11.A46 no.170).

1011

**The myth of TVA conservation and development in the Tennessee Valley, 1933-1983 /William U. Chandler. -.**

Chandler, William U., 1950. Cambridge, Mass. : Ballinger Pub. Co., c1984. Includes index. xvi, 240 p. : ill., maps ; 24 cm. Bibliography p. 187-225. (NAL Call No.: DNAL TC425.T2C43).

1012

**Solar photochemical process engineering for production of fuels and chemicals /J.R. Biddle, D.B. Peterson, T. Fujita. -.**

Biddle, J. R. Peterson, D. B.; Fujita, T. Springfield, Va. : available from NTIS, 1984. "DOE/JPL-1060-72."~ "May 1, 1984."~ "Prepared for U.S. Department of Energy through an agreement with National Aeronautics and Space Administration, by Jet Propulsion Laboratory."~ "Work performed under contract no. AMO4-80AL13137"--Cover. 1 v. (various pagings) : ill. ; 28 cm. -. Bibliography: p. 8-1 - 8-6. (NAL Call No.: DNAL TJ810.B49).

## TECHNOLOGY

1013

**Structural lumber an overview of research needs /by William L. Galligan, David W. Green. -**  
Galligan, William L. Green, David W. New York : American Society of Civil Engineers, 1984 .  
Originally published: Structural wood research: state-of-the-art and research needs: proceedings of the workshop; 1983 October 5-6, Milwaukee, WI. New York: American Society of Civil Engineers, 1984, . p. 3-27 ; 28 cm.  
Bibliography: p. 23-27. (NAL Call No.: DNAL TA419.G3).

1014

**Submerged vanes for flow control and bank protection in streams /by A. Jacob Odgaard and Hong-Yuan E. Lee ; submitted to the Highway Division of the Iowa Department of Transportation and the Iowa Highway Research Board, project HR-255. -**  
Odgaard, A. Jacob. Lee, Hong-Yuan E. Iowa City, Iowa : Iowa Institute of Hydraulic Research, The University of Iowa, 1984. xi, 92 p. : ill. ; 28 cm. Bibliography: p. 76. (NAL Call No.: DNAL TC530.034).

1015

**Thermal infrared user manual /John R. Warren. -**  
Warren, John R. 1929. Washington, D.C.? : U.S. Dept. of Agriculture, Forest Service, 1984 . "July 1984." ii, 51 p. : ill. ; 28 cm.  
Bibliography: p. 36. (NAL Call No.: DNAL aTA1570.W3).

1016

**1984 Corrugated Containers ConferenceAtlanta Marriott, Atlanta, GA, October 14-17. -**  
Atlanta, Ga. : TAPPI Press, 1984. iii, 47 p. : ill. ; 28 cm. -. Includes bibliographies. (NAL Call No.: DNAL TS1138.C6 1984).

1017

**1984 Engineering ConferenceSheraton-Boston, Boston, MA, September 17-20. -**  
Atlanta, Ga. : TAPPI Press, 1984. On spine: TAPPI Engineering Conference. 3 v. (v, 661 p.) : ill., forms ; 28 cm. -. Includes bibliographies. (NAL Call No.: DNAL TS1080.E5 1984).

1018

**1984 International Printing & Graphic Arts/Testing ConferenceHilton, Niagara Falls, NY, October 23-25. -**  
Atlanta, Ga. : TAPPI Press, c1984. On spine: TAPPI International Printing & Graphic Arts/Testing Conference. iv, 155 p. : ill. ; 28

cm. -. Includes bibliographies. (NAL Call No.: DNAL Z120.5.I5 1984).

1019

**1984 Research and Development ConferencePaper Valley Hotel, Appleton, WI, September 30-October 3. -**  
Atlanta, Ga. : TAPPI Press, c1984. On spine: TAPPI Research and Development Conference, '84. vi, 301 p. : ill. ; 28 cm. -. Includes bibliographies. (NAL Call No.: DNAL TS1080.R4 1984).

# ECONOMICS AND ADMINISTRATION

1020

**Cabinet departments with domestic responsibilities /Matthew Holden. -.**  
Holden, Matthew. Charlottesville, Va.? : M. Holden? , 1984. "A working note and bibliography, 1933-1981"-- Preface. ~ Errata sheet inserted. xvii, 64 p. ; 28 cm. (NAL Call No.: DNAL Z7164.A2H6).

1021

**Dissaving after retirement testing the pure life cycle hypothesis /B. Douglas Bernheim. -.**  
Bernheim, B. Douglas. Cambridge (1050 Massachusetts Avenue, Cambridge, Mass., 02138) : National Bureau of Economic Research, 1984. "July 1984.". 63, 4 p. ; 28 cm. -. Bibliography: p. 53-54. (NAL Call No.: DNAL HB1.A2N3 no.1409).

1022

**Effect of variable interest rates on the financial performance of dairy farm businesses /by Eddy L. LaDue and Gordon A. Zook. -.**  
LaDue, Eddy L. Ithaca, N.Y. : Dept. of Agricultural Economics, Cornell University Agricultural Experiment Station, New York State College of Agriculture and Life Sciences, 1984. Cover title.~ "June 1984.". 16 p. ; 28 cm. -. Bibliography: p. 16. (NAL Call No.: DNAL HD1407.C6 no.84-11).

1023

**Foreign-owned land /Jonathan Eaton. -.**  
Eaton, Jonathan. Cambridge (1050 Massachusetts Avenue, Cambridge, Mass., 02138) : National Bureau of Economic Research, 1984. "December 1984.". 25, 14 p. ; 28 cm. -. Bibliography: p. 26-27. (NAL Call No.: DNAL HB1.A2N3 no.1512).

1024

**Latin American-U.S. economic relations, 1982-1983 /Latin American Economic System. -.**  
Boulder : Westview Press, 1984. Translation of: Relaciones economicas de America Latina con Estados Unidos, 1982-1983. viii, 119 p. : ill. ; 24 cm. Includes bibliographies and index. (NAL Call No.: DNAL HF1456.5.L3R45).

1025

**Measuring the social impact of natural resource policies /William R. Burch, Jr., Donald R. DeLuca, with the assistance of Laurel Burch-Minakan, Carol Zimmerman, Gary Machlis. -**  
Burch, William R., 1933. DeLuca, Donald R. Albuquerque : University of New Mexico Press, c1984. Includes index. xvi, 216 p. : ill. ; 25 cm. Bibliography: p. 195-209. (NAL Call No.:

DNAL HD9502.U52B86 1984).

1026

**R&D activities and the technology game a dynamic model of U.S.-Japan competition /Ryuzo Sato. -.**  
Sato, Ryuzo. Cambridge, Mass. (1050 Massachusetts Avenue, Cambridge 02138) : National Bureau of Economic Research, 1984. "December 1984.". 38, 4 p. : ill. ; 28 cm. -. Bibliography: p. 37-38. (NAL Call No.: DNAL HB1.A2N3 no.1513).

1027

**Regulatory structure in futures markets jurisdictional competition among the SEC, the CFTC, and other agencies /Edward J. Kane. -.**  
Kane, Edward J. Cambridge, Mass. (1050 Massachusetts Avenue, Cambridge 02138) : National Bureau of Economic Research, 1984. "April 1984.". 31, 4 p. ; 28 cm. -. Bibliography: p. 31. (NAL Call No.: DNAL HB1.A2N3 no.1331).

1028

**The structure of tax incentives for regulated electric utilities /by Duane Chapman. -.**  
Chapman, Duane. Ithaca, N.Y. : Dept. of Agricultural Economics, Cornell University Agricultural Experiment Station, New York State College of Agriculture and Life Sciences, 1984. Cover title.~ "June 1984.". 20 p. : ill. ; 28 cm. -. Bibliography: p. 17-18. (NAL Call No.: DNAL HD1407.C6 no.84-12).

# SOCIAL SCIENCES AND HUMANITIES

1029

**The changing rural village in America  
demographic and economic trends since 1950**  
/Harley E. Johansen, Glenn V. Fuguitt. -.  
Johansen, Harley E. Fuguitt, Glenn V. \_1928.  
Cambridge, Mass. : Ballinger Pub. Co., c1984.  
Includes index. xix, 259 p. : ill. ; 24 cm.  
Bibliography: p. 231-248. (NAL Call No.: DNAL  
HN57.J63).

1030

**Ecological communities conceptual issues and  
the evidence /edited by Donald R. Strong, Jr.**  
... et al. . -.  
Strong, Donald R., \_1944. Princeton, N.J. :  
Princeton University Press, c1984. Includes  
indexes. xiii, 613 p. : ill. ; 24 cm.  
Bibliography: p. 525 -584. (NAL Call No.: DNAL  
QH541.145.E258).



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- Aquatic Plant Control  
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- Center for Food Safety and  
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