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U. S. DEPARTMENT OF AGRICULTURE,
STATES RELATIONS SERVICE.

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## HOW TEACHERS OF RURAL ELEMENTARY SCHOOLS MAY USE FARMERS' BULLETIN 937, THE FARM GARDEN IN THE NORTH.

Range of use.—Rural districts and small villages in the North.¹
Relation to the course of study.—To be used in classes in agriculture or economic nature study for the purpose of stimulating more and better garden work rather than for information only. Especially helpful in emergency courses in food production. To be used in correlations to vitalize other subjects.

Class exercises.—(Develop fully only such phases of this outline as may be applied by pupils at their homes, preferably as their own projects. Aim to get practice rather than information alone.)

I. Preliminary. In what ways is the home garden important on the farm; for profit, for health, and for pleasure? Do the families in this district have gardens sufficient for the needs of the family in summer? For canning and for winter storage? Examine the data obtained in the survey (see correlations) and find what vegetables are raised in adequate quantity. Which of the vegetables listed in the bulletin are not grown? Have each pupil obtain information as to the size and location of the proposed gardens for the coming season, with a diagram showing the surrounding buildings, fences, and hedges. Consider all the following topics in terms of these particular gardens and not in a general sense. Where the pupil may select his own garden spot, consider location, light, drainage, etc., with care. How and where shall the perennials, such as asparagus and rhubarb, be arranged? Why? Find the best location for the hotbed or cold Study the list of vegetables and then choose the ones to be raised in the home garden. Encourage the increase in number of varieties to be grown. Use the printed charts as suggestions and plan the home garden with care. What quantity of seed will this require for each variety? Plan also for succession crops and rotation crops. Use the seed catalogues and the advice of expert gardeners, so as to procure the right quantity of good seeds at an early date.

For cities and large villages use Farmers' Bulletin 936, The City and Suburban Vegetable Garden. In the South use Farmers' Bulletin 934, Home Gardening in the South.

II. Getting an early start. What plants shall we start in a seed box? Why? What are the most convenient sizes and shapes for seed boxes? How sow the seeds? Are hotbeds or cold frames used in this district? Will any pupil construct one at home in connection with his project gardens? Take up with him the construction of this and its management. Get State college extension circulars on this topic for specific application to this district. How "harden off" the plants? How transplant? How and when set in the open? What means for occasional protection?

III. Spring practice. What tools are available at the homes for preparing the soil and for cultivating the garden crops? What other tools are needed for efficient work? What useful implements may be made by the pupils? Check up on the seeds ordered to be sure the supply is on hand. What are the steps in preparing the soil? Discuss with each pupil the character of soil in his garden, its recent use and latest steps in preparation. How may the texture of the soil in each garden be improved? How much manure is available and what similar material has been worked into the soil recently? Discuss the question of commercial fertilizers as it concerns each case. Study the tables and maps for planting in the open in this section and inquire as to any exceptional local factors such as elevation, etc., which may modify the general information. Disinfect seeds now before sowing. (See Farmers' Bulletin 856.) Also test seeds. (See Farmers' Bulletin 428.)

Take up with the class the methods of planting the crops which all are to raise and with each pupil the other crops in which he may be especially interested. How deep shall the different seeds be sown? What space is to be allowed for each? Follow the garden plan as it was first drawn. Look over the early cultural directions for each variety to be grown.

IV. Summer practice. As school may close before summer practice begins, take up with care the steps in cultivation, in control of pests (Farmers' Bulletin 856), and in irrigation. Also go into details on succession crops to follow the early vegetables, the methods of utilizing or marketing the vegetables at the right stage. Which vegetables may remain in the garden until used and which must be preserved or stored in some way as soon as they reach the best stage?

V. Fall practice. Encourage the increase of cold-weather plants to be grown up to frost time. Succession crops. How? Study harvesting and storage thoroughly. How best protect each of the perennials during the winter? For special adaptation to local conditions, consult the county agent or write to the State college of agriculture. The cooperation with the club leaders of the extension service of the State agricultural college should be considered wherever

possible. Obtain all the bulletins on gardening issued in the State, also Department of Agriculture and State publications on canning, drying, and storing. Assistance in the problems of teaching agriculture may be obtained by addressing the Specialist in Agricultural Education, States Relations Service, United States Department of Agriculture.

Illustrative material.—Catalogues of seed firms. Pictures of good methods of gardening, ideal plantings, etc., from farm papers. Plans for seed boxes, cold frames or hotbeds. Plans or charts of gardens issued by reliable authorities. Specimens of seeds, fertilizer material, etc. (See Farmers' Bulletins 586 and 606.) Smaller garden tools, seed flats, spraying equipment and materials. Specimens of insect pests and evidences of damage done. Pictures of diseased specimens. Spraying charts and calendars. Specimens of unusual vegetables which may be desirable in this section. Charts showing food values and uses of vegetables. A cold frame or hotbed on the school grounds if it may be used to good advantage.

Practical exercises.—Each pupil should carry on a home-garden project to furnish a home supply of vegetables, to can, dry, or store the surplus, or to market a supply if this is feasible. The inspection of home gardens, with the cooperation of club leaders or others, is desirable, but at any rate the pupils' plans and problems should all be worked out at school. A few seed flats at school, still better a cold frame or hotbed, may provide practice at school and furnish early plants to be used by all the pupils on their home projects. Test seeds at school. Demonstrate spray mixing and spraying methods. Take field trips to observe the work of any successful market gardener or any home project which can teach a definite lesson. Be sure to hold a school exhibit of vegetables at the time when it will best fit the local gardens. Study garden produce at local and county fairs.

Correlations.—Have pupils gather information as to the garden practice in the neighborhood; area of each garden; varieties grown and quantities of each; utilization of vegetables, especially the surplus; labor on garden, amount, and by whom; cost of seed, fertilizer, and other costs, so far as available; estimated value of food furnished home; garden produce sold; vegetable surplus wasted; amount canned or dried, and estimated value; amount of canned food bought which might have been furnished by home-grown garden; pests which destroyed crops, and estimated loss. Add other desirable data and tabulate results for computation or comparison. Chart forms are suggested, to be modified as may be needed.

## General garden survey.

Family.	Garden area.	Cost.		Income.		Income		Number
		Material.	Labor.	Home use.	Sold.	per person.	Care by—	Number of varie- ties.
Mr. A. Etc.								
Total								

## Form to show range of garden.

!Check with quantity or area.

Family.	Beans,	Beans, bush lima.	Beans, pole lima.	Beets, early.	Beets,	Cabbage, early.	Cabbage,	Carrot.	Etc.
Mr. A									
Total Number of families using									

Have pupils keep accurate accounts of their projects, including costs, time, material, income, vegetables used, vegetables preserved, and amount sold. In arithmetic classes have the accounts put into form and balanced. In language lessons have reports on projects written and revised. Have pupils use, spell, and pronounce correctly the names of all vegetables grown.

Geography: Locate on the map the market for all vegetables sold from this district, also the sources of either fresh or canned vegetables from outside which are sold in the district at any time of the year. Find the probable origin of as many as possible of vegetables and locate these homes on the map of the world. Where is each now grown on a large scale? Where are the great market garden areas? Where are our garden seeds grown?

Nature study: The relationships of groups of vegetables such as cabbage, turnip, cauliflower, etc., are of interest and of some practical value. Also note that some weeds are related to useful vegetables.

Manual training: Have pupils make seed flats, markers, and other needed equipment, also repair any tools so far as they may be able. If hotbeds or cold frames are to be made have the pupils draw plans and construct these under proper supervision. Stakes and trellises will be needed for summer use, and pupils who may plan to market vegetables will need boxes and crates.

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