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ANNUAL REPORT Div. of MISC.

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Mar. 23 1916

DIRECTOR OF FORESTRY

OF THE

PHILIPPINE ISLANDS

FOR THE PERIOD

JULY 1, 1908, TO JUNE 30, 1909

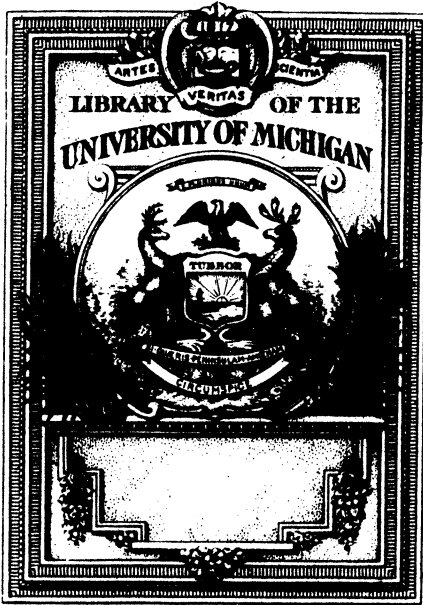


MAJOR GEORGE P. AHERN

DIRECTOR OF FORESTRY

MANILA
BUREAU OF PRINTING
1909

91621



THE GIFT OF
P. I. Bureau Forestry

Philippine Islands. Bureau of forestry.

ANNUAL REPORT
OF THE 45
DIRECTOR OF FORESTRY

OF THE
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FOR THE PERIOD
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ANNUAL REPORT OF THE DIRECTOR OF FORESTRY, FISCAL YEAR 1908-9.

MANILA, P. I., *June 30, 1909.*

SIR: I have the honor to submit herewith a report of the work of the Bureau of Forestry for the period July 1, 1908, to June 30, 1909.

The work of the year has progressed rapidly and satisfactorily, according to the programme laid down at the beginning of the fiscal year. The work in the field shows the results of the labors of men much interested in their work, a majority of whom have had from three to eight years' service in the Philippine forests. The difficulties in the way of rapid field work in the Philippines are many, due to the great number of comparatively unknown tree species, the lack of transportation, and lack of reliable data. Men need at least one year in the field before rapid work can be accomplished. Much credit for the rapid field work now being accomplished is due to the assistance furnished by well-trained subordinate officers.

Two of the experienced foresters have, after three years of field work, recently taken their accrued leave and are using part of their time in studying the forests of the East and of Europe. One of them has been granted an additional year's leave of absence to enable him to take special work at the Yale Forest School.

The appropriation allotted to the Bureau during the past few years has been too small to properly care for the vast property committed to its charge. The Forest Act provides as follows:

SEC. 2. The public forests and forest reserves of the Philippine Islands shall be held and administered for the protection of the public interests, the utility and safety of the forests, and the perpetuation thereof in productive condition by wise use.

The experience of European and Eastern governments has been that the returns from the administration of forest properties are in direct proportion to the amount expended (according to size and distance of market).

The following table tells the story of the remarkable results obtained from a businesslike administration of such properties. In this table

there is no statement of the enormous rise in value of the original capital stock.

State.	Forest area (hectares).	Cost per hectare.	Net revenue per hectare.	Force.		Total expenses.	Net revenue.
				Foresters.	Rangers and guards.		
Germany (Prussia) --	2,465,000	₱6.90—	₱6.30	806	3,739	₱17,000,000	₱15,776,000
India-----	19,000,000	.45—	.39	312	9,203	8,532,000	7,416,000
Java-----	2,700,000	.64	.61—	30	1,000	1,728,000	1,628,000
Japan-----	12,000,000	.08	.16	325	1,434	1,000,000	2,000,000
Philippine Islands---	6,000,000	.018	.016	9	25	110,000	100,000

The virgin forest area of the Islands comprises approximately 40,000 square miles, or one-third of the total area. Besides this there is estimated to be 20,000 square miles of second-growth timber which will yield considerable quantities of small-sized timber and firewood.

To illustrate the results to be obtained by using a larger number of forest officers, the Bureau will place as large a permanent force as circumstances will permit in the Provinces of Bataan and Occidental Negros, in order to begin a more intensive management of the forests in the two provinces mentioned. These forest areas will be carefully mapped, their resources studied, trails will be improved, and an effective patrol inaugurated. This work will stop much of the present forest destruction by makers of caiñgins; and it will enable the Government to collect revenues from people who are gathering forest products for commercial use without paying the Government charges on the same.

An additional appropriation of ₱20,000 has been granted for this special work in the two provinces mentioned. It is the aim of this Bureau to extend the area of intensive management as means are provided and men are trained. Thirteen thousand pesos have been allowed for educational work to be used in training high school students, both in the school and in the field.

Although the older and well-established forest services throughout the civilized world cost from 55 per cent to 60 per cent of the total forest revenues, a young service such as ours, which must train new men, build trails, carry on independent investigations and other lines of work that bring in no immediate return, should at first receive a more liberal allowance. The present forest revenues (₱250,000) could all be used to good advantage by this Bureau. We would be willing, however, to vouch for good results should 75 per cent of the forest revenues be allowed for the first few years. Good results from this liberal treatment of the Bureau would be so apparent within a few years that no further begging pleas would be necessary.

CONFERENCE OF FOREST OFFICERS.

In accordance with a precedent established in 1906, all of the foresters were called to Manila during the latter part of June, 1908, for the purpose of holding the annual conference. Filipino forest officers were also ordered to Manila to attend a school of instruction.

The conference lasted from July 27 to August 3, and was opened with an address by the undersigned, which was followed by papers and discussions on the following subjects:

Forest administration: Annual reports; inspections; exploitation problems; milling problems; coöperation with other Bureaus.

Forest investigation: Annual reports; botanical collections; forest resources of Mindanao; forest maps.

Educational work: Methods of propaganda; instruction of Filipino forest officers; instruction in schools.

Forest policy: Forest reserves; communal forests; homesteads; forest laws and regulations.

Minor forest products: Paper-pulp material.

Mangrove products.

Plan of work for coming year.

The programme of instruction for the Filipino forest officers included the following subjects: Office work; preparation of trail notes; land classification; determination of wood specimens; methods of interesting the public in the importance of forests; quiz on forest manual, circulars, etc.

In the field the work was practical and consisted of trail notes to cuttings near Limay; inspection of cuttings; measurement of felled timber and reports on same; estimation of stands of timber; tree studies; botanical and wood collections; working-plan notes, etc.

The object of bringing together all of the forest officers into the field in one locality was to obtain uniformity of methods of work, as well as to instruct subordinate officers in the details of forest work, and also to make a preliminary cutting plan for the Cadwallader Lumber Company.

The fourth annual conference of Philippine foresters was held in Manila June 7 to 12, 1909, at which all of the foresters serving in the Philippines were present. The programme of the conference, including an address by the undersigned, was as follows:

Office methods; annual reports of foresters; reorganization plans; conservation and forest reserves; homesteads, land laws, and cañigins; education and propaganda plans; reforestation plans, forest nurseries, etc.; forest types; licenses, concessions, and communal forests; forest law; timber testing, durability tests; museum; future needs of the Bureau and resumé of Indian forest service; principal timbers of the East; botanical notes; plans for forestry course in Agricultural School; coöperation with the Bureau of Internal Revenue; grading and Government inspection of lumber.

PERSONNEL.

The personnel of the Bureau is practically the same as that authorized after the passage of the Reorganization Act (No. 1407) of 1905.

In view of the increased field work of the Bureau it has been necessary to employ a number of young Filipino students, who are employed during vacation periods with the various field parties. Some are also given work after school hours, in the office, preparing and labeling the large botanical and wood collections sent in by the various field parties. Two additional American foresters, and one Filipino who has studied forestry in the United States, have entered the service.

DIVISION OF ADMINISTRATION.

The field force of this division consists of four foresters, nine head rangers, four rangers, two assistant rangers, and five temporary rangers; a small force to distribute over 60,000 square miles. This division is charged with the supervision of the work of conservation of our forest resources.

All applications for licenses to gather forest products must receive the recommendation of a forest officer of this division. The following licenses were in operation during the past year: 1,058 timber; 555 firewood; 819 minor products; 624 gratuitous. Many licensees take out a very small quantity of forest products, or none at all, during the year. Three hundred and seventeen cutting areas were inspected by forest officers, special attention being paid to the larger operators. Seven areas, where these large operations are being conducted, were studied in detail and reports and maps submitted.

Approximately 3,000 kilometers of trail notes were taken by officers of this division on trips through regions which had not been previously mapped.

Eight hundred botanical specimens were collected by members of this division and sent to Manila.

Fourteen hundred and eighty-eight parcels of land, desired either for homesteads or for lease or sale were inspected; 1,357 of these were reported as being more valuable for agricultural purposes, and 131 more valuable for forest purposes and therefore not available for transfer to private use.

CAIÑGINS.

Renewed efforts were made during the year to suppress the making of caiñgins in good forests, with some success in regions frequently inspected; but it will be impossible to suppress this evil until a larger force is provided.

During the fiscal year, 343 permits to make caiñgins on public woodlands were granted by forest officers, and 30 permits on private wood-

lands were granted by municipal presidents. Complaints for making cañings without permit against 181 persons have been filed for prosecution in accordance with section 25 of the Forest Act.

COMMUNAL FORESTS.

A circular from this Office was addressed to forest officers, requesting them to invite the attention of municipal officials to the provisions of the Communal Forest Act (No. 1872).

Ninety-four municipalities, townships, etc., have made application for communal forests. These requests are forwarded to forest officers, with instructions to examine a suitable tract, to map and report on same. When the forest is set aside, a forest map (in colors) is forwarded to the municipality, with the papers duly authorizing the establishment of the forest tract for municipal use. During the year twenty-one communal forests were duly established.

FIRE PROTECTION.

Fire wardens are employed in the pine regions of Benguet and Lepanto-Bontoc. The Igorots employed in this work take much interest in suppressing fires and in awakening a sentiment against the indiscriminate setting of fires in the pine forests and vicinity. This work will be extended during the coming year.

REGISTRATION OF PRIVATE WOODLANDS.

Four titles to private woodlands, with a total area of 713 hectares, were registered in the Bureau during the fiscal year. The total number of titles to private woodlands registered in the Bureau is 179, with an area of 285,026 hectares (704,014 acres), of which approximately 50 per cent to 75 per cent contain commercial wood.

DIVISION OF INVESTIGATION.

The main work of this division during the past year has been concentrated along two lines: inventory of forest resources and educational work.

INVENTORY OF FOREST RESOURCES.

MAPS, EXTENT, AND STAND OF FORESTS.

Since the close of last year, data for land classification maps have been collected for the following regions: Northern Luzon, Masbate, Ticao, and parts of Leyte, Negros, and Mindanao. This work, together with that done in previous years, places the Bureau in a position to know more accurately than ever before what forest wealth the Islands contain.

CHARACTER OF THE FORESTS.

From a commercial standpoint, the forests can be divided roughly into two classes; the dipterocarp forests and all others. While the divisions overlap in some instances, yet in the main they are distinct. All the large bodies of forests show that from 33 per cent to 89 per cent of their total stand of trees over 40 centimeters (16 inches) in diameter is composed of members of the Dipterocarpaceæ, and, furthermore, that the main bulk (46 per cent to 95 per cent of the total) of these forests is composed of so few species that they can, from a lumberman's standpoint, be regarded as *pure stands*. As these stands are heavy, running from 5,000 to 40,000 or more board feet per acre, with an estimated average of 10,000 board feet for the whole, they are readily adapted to lumbering on a large scale. It is roughly estimated that 75 per cent of the forest area of the Islands is found in the dipterocarp forests. The Islands must look to them for the bulk of timber handled for export. They produce woods of all grades, from the hard and durable Yacal, through the hard but less durable Apitong and Guijo, to the soft grades of Tanguile and Lauan.

The remaining 25 per cent of the forest area is found in the "mixed hardwood" type, the mangrove swamps, and the pine forests. The mixed hardwood type furnishes, among others, the hard and durable Molave and Ipil, and the highly prized Narra, Tindalo, Acle, and Banuyo. The forests that contain these are ill adapted to lumbering on a large scale, as the trees are scattered over large areas. Exceptional stands will yield as high as 5,000 board feet per acre for very limited areas. The local demand for these is so great, and the cost of lumbering so high, that it is not expected that they will produce any great amount for export trade.

EDUCATIONAL WORK.

The need of this work was outlined in the last report. Progress has been made along two lines: instruction and propaganda.

INSTRUCTION.

A number of young Filipinos have been taken into the Bureau as student assistants and given the title of temporary rangers. These men have been given instruction in the various lines of forestry work. During part of the month of August, a rangers' school was conducted, as mentioned above, on the forest tract of the Cadwallader Lumber Company, at Limay, Bataan Province. The instruction was given in connection with the making of a preliminary working plan for the company's logging operation. This made the work practical. During the year, fourteen temporary rangers were carried on the pay roll. Of these, nine have

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been kept, as adapted to the work. Some idea of the amount of work done by these men can be obtained from the following figures:

Number of kilometers of trails run and plotted.....	6,015
Number of homesteads inspected	184
Number of cuttings inspected	29

Considerable office work has also been done by these men, and a large number of herbarium and wood specimens have been collected. The Bureau has for some time recognized that Filipinos must be the backbone of the forest service. With a view to increasing the efficiency of the service, by educating the Filipino in things forestry, there has been established a course in that science in the new Agricultural College.

The immediate educational work of the coming fiscal year will be along the lines of the past year. A number of high school men, graduates and third year students, have been obtained. After some instruction in Manila, they will be divided among the various field parties, and will actually perform, under the direction of foresters, all forms of forest work.

The position of head ranger is open to these men, and the most promising will be encouraged and assisted to obtain such training, either here or in American forest schools, as will enable them to pass the forest assistant examination. Those who succeed in passing this examination will be appointed foresters, and will then be eligible to any position in the upper grades of the service. As soon as practicable, the greater part of the actual management of the public forest will be turned over to these men, and the small American force will be used for the general direction and inspection of the forest work.

PROPAGANDA WORK.

Forestry, although practiced in the Philippines since 1863, has never been well understood by the Filipinos. They realized neither the value of the forests nor the benefit which might be derived from them if properly managed. To attempt the proper care of the forests without the aid of the people would be a difficult undertaking. It was, therefore, thought necessary to start a systematic campaign of propaganda. A Filipino forest officer, a graduate of the Yale Forest School, was detailed to give a course of illustrated lectures. Besides awakening interest in forests, his object was to interest high school boys in the forest service.

In all, sixty-one lectures, mostly illustrated, have been delivered by him and other forest officers, and it is estimated that 50,000 people have been reached in this way. With the same object in view, 40 newspaper bulletins relating to forestry matters were issued to 36 newspapers and other periodicals printed in English, Spanish, Tagalog, Visayan, Bicol, and other languages.

The result of this propaganda has created widespread interest.

MUSEUM AND HERBARIUM COLLECTION.

The museum in Calle Anloague is ready for occupation, and the exhibition part of the collection will be moved there at the beginning of the new fiscal year.

During this fiscal year, there have been added to the museum collection about 1,900 wood specimens, making a total of over 4,200 numbers now on hand, representing nearly 800 species. Of the important woods, a large number of duplicate hand specimens have been prepared, so that there are available for distribution practically all of the commercial woods commonly found in the Manila market, besides many species of importance locally in other parts of the Islands. There have been distributed during the year to other Bureaus, to the trade both in America and Europe, to educational and scientific institutions, etc., about 2,400 hand specimens.

As the number of species in the collection increases, it becomes constantly more practicable to determine specimens submitted for identification. Hundreds of specimens have been submitted during the year. It may be stated that it is now possible to identify, either positively or with a fair degree of certainty, about 90 per cent of such samples.

The work of collecting herbarium specimens with wood samples has continued during the past as in previous years. The Bureau of Forestry series of botanical specimens in the Bureau of Science herbarium now show a total of 18,109 numbers, an increase of approximately 4,000 over last year. The collecting of both herbarium and wood samples has usually been incidental to the work in mapping and inspecting cuttings and homesteads, so that the actual cost of making the collections has been little.

Collecting is the best means of focusing the attention sufficiently on the tree to become acquainted with it. Thus, not only are the museum and herbarium enriched by the work done, but foresters and other officials are obtaining a working knowledge of the trees in the forest. New men should, therefore, be encouraged to make such collections. Special attention to this work is to be given in regions in which collections have not previously been made, in order to increase our knowledge of the distribution of the principal forest trees.

DURABILITY TESTS AND TIMBER-TESTING LABORATORY.

Durability tests have been continued on the same lines as last year. At the testing ground in Lamao, Bataan, 577 additional tests have been started. The data on many of the tests begun in previous years are now available. Also, there have been marked by forest officers in various parts of the Islands a number of timbers actually employed in construction, with the purpose of inspecting them periodically and recording data thus obtained.

As no manager could be obtained for the laboratory at the beginning of the year, no work has been done except the preparation of museum specimens, hand specimens, and test pieces. In November a manager was engaged, who has had charge of the laboratory and museum work. It is expected that a large number of woods will be tested during the coming year.

PUBLICATIONS.

The following publications have been issued during the present fiscal year:

Bulletin No. 8.—The Forests of Mindoro.

Bulletin No. 9.—Philippine Lignum-vitæ.

Circular No. 3.—A Few Pertinent Facts Concerning the Philippine Forests and Needs of the Forest Service That Should Interest Every Filipino.

The following is nearly ready for the printer:

Bulletin No. 10.—Preliminary Working Plan of a Timber Concession at Port Banga, Zamboanga, Mindanao.

Partial data have been collected for the following:

1. Easy Identification of the Principal Philippine Trees.
2. A Primer of Philippine Forestry.
3. The Forests of Luzon.

GEORGE P. AHERN,
Director of Forestry.

The SECRETARY OF THE INTERIOR,
Manila, P. I.



APPENDIX.



STATISTICS.

Statement of applications for homesteads, purchase and lease of public lands, certified to Bureau of Lands as more valuable for agricultural or forest purposes.

Fiscal year.	Homesteads.			Sale.			Lease, agricultural-purposes.	Grand total.
	Agricultural purposes.	Forest purposes.	Total.	Agricultural purposes.	Forest purposes.	Total.		
1905.....	80	6	86	8		8		94
1906.....	818	16	834	28	1	21	12	856
1907.....	881	19	900	20		23	12	935
1908.....	2,456	51	2,507	49	1	50	26	2,583
1909.....	1,523	187	1,710	26	8	29	27	1,766
Total.....	5,258	279	5,537	126	5	131	66	5,734

NOTE.—Number of applications for homesteads, purchase or lease of public lands, pending inspection and certification on June 30, 1909, 1,093.

Under the law of Congress of 1902 (Philippine Act) no public land can be sold, leased, or homesteaded unless it is certified by the Bureau of Forestry as being more valuable for agricultural than for forest purposes.

Report of the utilization of forest products from public and private forests, July 1, 1908, to June 30, 1909.

Provinces.	Timber.			Minor products.		
	First group.	Lower groups.	Total.	Firewood.	Charcoal.	Dyewood.
	<i>Cu. meters.</i>	<i>Cu. meters.</i>	<i>Cu. meters.</i>	<i>Cu. meters.</i>	<i>Cu. meters.</i>	<i>Quintals.^a</i>
Agusan.....	10		10			
Albay.....	811	499	810	991		
Ambos Camarines.....	1,101	1,610	2,711	4,047	7	
Antique.....	5	24	29	126		
Bataan.....	34	16,161	16,195	22,201	1,166	
Batangas.....	83	1,282	1,866	8,652	1	
Benguet.....	66	7,890	7,976	99		
Bohol.....	185	1,269	1,454	4,618		
Bulacan.....	127	5,918	6,045	8,270	29	
Cagayan.....	3,607	1,633	5,240	2,284		
Capiz.....	139	2,797	2,936	17,606	24	
Cavite.....	1	81	82	3,709	118	
Cebu.....	72	349	421	8,798	498	18
Ilocos Norte.....	163	58	821	311		
Ilocos Sur.....	455	890	1,345	565	10	
Iloilo.....	202	591	793	14,875	424	13,198
Isabela.....	634	589	1,273			
La Laguna.....		873	873	2,529		
La Union.....	213	81	294	275		
Lepanto-Bontoc.....	112	714	826	102		
Leyte.....	363	2,010	2,363	4,242		
Mindoro.....	1,817	8,601	10,416	5,457	12	4
Misamis.....	17	133	155			
Moro.....	7,014	8,745	15,759	1,328		
Nueva Ecija.....	931	1,357	2,288	463		
Nueva Vizcaya.....	23	7	30			
Occidental Negros.....	1,229	19,743	20,972	14,766	185	3
Oriental Negros.....	364	400	764	826		
Palawan.....	6,722	100	6,822	1,033		
Pampanga.....	11	1,339	1,350	21,860	2,086	
Pangasinan.....	896	1,458	2,354	5,242	77	
Rizal.....	120	139	259	19,983	58	
Samar.....	432	672	1,104	3,950		
Sorsogon.....	2,057	1,993	4,050	9,049		
Surigao.....	87	180	247	8		
Tarlac.....	339	1,606	1,945	3,271	8	
Tayabas.....	4,365	9,342	14,307	85,881		5
Zambales.....	990	6,685	7,675	5,468	1,584	
Total.....	35,357	108,404	143,761	221,685	6,182	13,223

Report of the utilization of forest products from public and private forests, July 1, 1908, to June 30, 1909—Continued.

Provinces.	Minor products.				
	Tan bark.	Dye bark.	Wood oils.	Gum mastic (almaciga).	Rattan.
	Quintals.*	Quintals.*	Liters.	Quintals.*	Kilos.
Agusan					5,990
Albay	13			82	82,088
Ambos Camarines	36			296	1,045,017
Antique	23				3,585
Bataan					38,970
Batangas	31	29			129
Benguet					752
Bohol	326		224		2,068
Bulacan	8			19	33,983
Cagayan	122				336,698
Capiz	25	127	6,016	147	8,963
Cavite					1,375
Cebu	355	11	11,300		30,914
Ilocos Norte					275
Ilocos Sur					11,231
Iloilo	116			310	75
La Laguna					2,449
La Union					403,620
Leyte	613	13	17,047	1	50,582
Mindoro	3,410	306			127,315
Misamis				73	9,331
Moro	5,864			7,896	205,920
Nueva Ecija	394				54,037
Occidental Negros	189	6	85,691		172,334
Oriental Negros	323		9,373		80,598
Palawan	632	638	184,035	694	30,924
Pampanga					196
Pangasinan	74				18,398
Rizal				14	34,165
Samar	611		1,246		41,262
Sorsogon	528			12	424,371
Surigao	13				16,706
Tarlac	13			16	16,309
Tayabas	394			388	108,663
Zambales	91	18		19	240,106
Total	14,204	1,148	314,982	9,967	3,639,389

* Metric quintal of 220.46 pounds.

^b Approximately 4,763 cubic meters, or 3.3 per cent, cut from registered private woodlands.

Gutta-percha and rubber	metric quintals	375
Pitch	do.	462
Dillman (vine used for tying fish traps)	kilos	10,152

Statement showing amounts of important timbers cut in the Philippine Islands, during the fiscal year 1909, according to invoices received by Bureau of Internal Revenue.

Species.	Amount cut.	Species.	Amount cut.
	<i>Cu. meters.</i>		<i>Cu. meters.</i>
Lauan	24,649	Supa	1,312
Apitong	9,535	Calantas	815
Guijo	9,452	Amuguis	696
Ipil	7,926	Macaasin	688
Yacal	7,745	Tindalo	650
Molave	6,140	Acle	587
Narra	3,735	Betis	429
Tanguile	2,637	Malugay	122
Dufigon	1,984		

Imports and exports of lumber in the Philippine Islands.

IMPORTS.

Fiscal year.	From the United States.				From other countries.	Total.
	Dutiable.	For United States Army (free of duty).				
		Oregon Pine.	Redwood.	Other woods.		
	<i>Feet B. M.</i>	<i>Feet B. M.</i>	<i>Feet B. M.</i>	<i>Feet B. M.</i>	<i>Feet B. M.</i>	<i>Feet B. M.</i>
1907.....	10,734,000	3,008,000			2,574,000	16,316,000
1908.....	5,791,198	5,008,897	19,110	63,190	2,888,483	13,768,828
1909.....	5,420,520	8,010,228	10,000		1,179,756	14,620,486

EXPORTS.

	To the United States.	To other countries.	Total.
	<i>Feet B. M.</i>	<i>Feet B. M.</i>	<i>Feet B. M.</i>
1907.....	181,000	71,000	252,000
1908.....	615,000	310,000	925,000
1909.....	573,600	136,900	694,500

Imports and exports of other forest products, fiscal year 1909.

Charcoal imported from countries other than the United States.....	kilos.....	15,433
Almaciga exported to the United States	do.....	339,506
Almaciga exported to other countries	do.....	515,573
Gutta-percha and rubber exported to countries other than United States	kilos.....	42,809
All other gums and resins exported to the United States.....	do.....	15,916
All other gums and resins exported to other countries.....	do.....	39,766
Sapan wood exported to other countries.....	cubic meters.....	3,670

Revenue from sale of forest products, fiscal year 1909.

Province.	Amount.	Province.	Amount.
Agusan	₱199.71	Mindoro	₱4,626.70
Albay	4,005.95	Misamis	497.58
Ambos Camarines	11,093.17	Moro	22,497.97
Antique	224.66	Mountain	5,398.86
Bataan	4,962.43	Nueva Ecija	5,518.60
Batangas	1,461.36	Nueva Vizcaya	104.26
Bohol	1,161.88	Occidental Negros	7,892.77
Bulacan	4,736.75	Oriental Negros	1,788.76
Cagayan	7,144.07	Palawan	2,172.32
Capiz	3,065.68	Pampanga	2,486.18
Cavite	1,235.02	Pangasinan	5,860.83
Cebu	5,995.13	Rizal	1,628.55
Ilocos Norte	966.21	Samar	2,400.45
Ilocos Sur	2,665.67	Sorsogon	7,097.79
Iloilo	15,083.48	Surigao	970.89
Isabela	3,437.85	Tarlac	1,548.10
La Laguna	1,042.96	Tayabas	4,533.16
La Union	1,571.25	Zambales	2,302.63
Leyte	6,497.24		
Manila	96,043.63	Total	251,380.00

Expenditures of Bureau of Forestry, July 1, 1908, to June 30, 1909.

OFFICE FORCE AND GENERAL EXPENSES.

Salaries and wages	₱22,636.62	
Per diems	59.45	
Postage and telegrams	614.94	
Transportation	578.80	
Other field expenses	32.07	
Office rent	1,431.40	
Printing and binding	1,262.47	
Supplies, etc	2,346.99	
Purchase wood samples, etc.....	464.45	
Refunds after expiration of contract service.....	1,565.03	
Repairs and miscellaneous expenses.....	2,326.01	
		₱33,318.23

DIVISION OF ADMINISTRATION.

Salaries and wages	₱34,120.06	
Labor hire	788.02	
Per diems	4,913.47	
Postage and telegrams	256.81	
Transportation	4,494.42	
Other field expenses	1,430.35	
Office rent	384.00	
		46,387.13

DIVISION OF INVESTIGATION.

Salaries and wages	₱25,885.33	
Labor hire	3,233.24	
Per diems	2,382.51	
Postage and telegrams	34.40	
Transportation	1,871.86	
Other field expenses	146.20	
		33,553.54

Expenditures of fiscal year 1909.....	113,258.90
Outstanding liabilities, fiscal year 1908 (paid during fiscal year 1909)	1,790.18
Total expenditures fiscal year 1909.....	115,049.08
Outstanding liabilities fiscal year 1909.....	186.07
	115,235.15

RECAPITULATION.

Appropriation for fiscal year 1909.....	₱110,000.00
Balance from fiscal year 1908.....	5,382.14
Miscellaneous receipts	488.15
Total amount available	115,870.29
Total expenditures, fiscal year 1909.....	115,049.08
Balance on hand June 30, 1909.....	821.21
Outstanding obligations	186.07

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