

# MAINE PUBLIC DOCUMENTS 1950-52

(in three volumes)

VOLUME I

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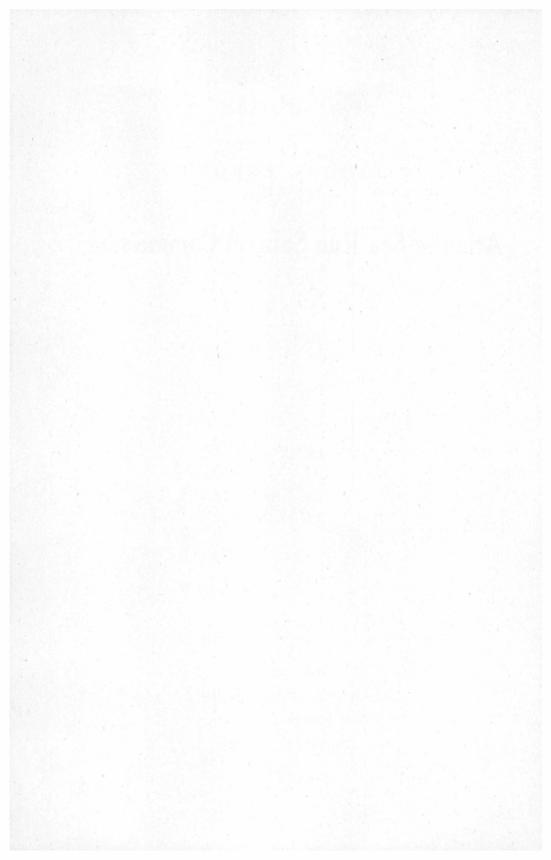
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# STATE OF MAINE

## BIENNIAL REPORT

# **Atlantic Sea Run Salmon Commission**

For Period July 1, 1950, to June 30, 1952 with additional information from 1948 to 1950



# STATE OF MAINE BIENNIAL REPORT OF

## ATLANTIC SEA RUN SALMON COMMISSION

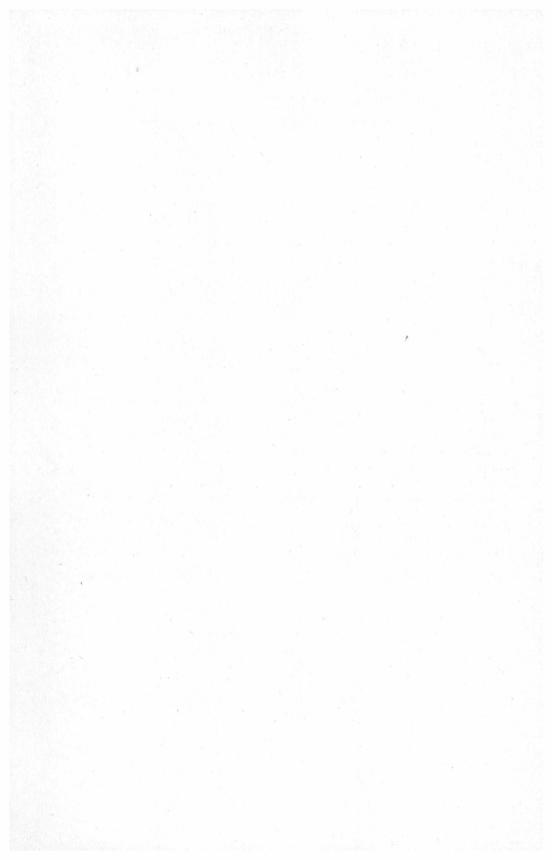
Augusta, Maine

## To the Honorable Governor and Executive Council

Sirs:

I hereby transmit, in compliance with the law, the report of the Atlantic Sea Run Salmon Commission for the two years ending June 30, 1952, together with statistics and other pertinent information.

HORACE P. BOND Chairman



## ATLANTIC SEA RUN SALMON COMMISSION

The Atlantic Sea Run Salmon Commission, created by the Ninetythird Legislature, has as its major duties the promulgation of "rules and regulations providing for the times, number and manner in which Atlantic Sea Run Salmon may be taken in all waters of the State."

In order that the Commission may carry out its duties and provide "such regulations as may be deemed remedial of any adverse condition proven to exist," a propagation and research program has been established.

The research program, designed to furnish scientific information on the environmental requirements of Atlantic salmon during those periods of their life cycle in which they are present in brackish and fresh waters, is provided by the U. S. Fish and Wildlife Service and the Maine Atlantic Sea Run Salmon Commission.

Contracting parties involved in the Sea Run Salmon program consist of the University of Maine, the U. S. Fish and Wildlife Service, the Department of Inland Fisheries and Game, the Department of Sea and Shore Fisheries, and the Salmon Commission. The Research Committee, which serves as a scientific advisory body for the Commission, includes biologists from the U. S. Fish and Wildlife Service, the Department of Inland Fisheries and Game, the Department of Sea and Shore Fisheries, and the Salmon Commission.

The three-member Commission determines policy and, within the framework of State law and the terms of the negotiated contract among the several contracting parties, gives direction to the Salmon program.

The principal research and propagation duties carried on by the Commission are:

- 1. Stream and fishway surveys and improvements
- 2. Stocking
- 3. Population and survival studies
- 4. Ecological investigations.

# ATLANTIC SEA RUN SALMON COMMISSION Vickery-Hill Building, Augusta, Maine

## **Organization Chart**

## Commissioners

H. P. Bond, *Chairman*R. H. CobbR. L. Dow, *Sec.-Treas*.

\*Act. Co-ordinator (1) Biologist II (1) †Laborer II (2) ‡Biology Aide (3)

\*Federal employee; State pays half of annual salary \*\*Part-time †One vacancy ‡Three vacancies

\*\*Clerk Stenog. III (1)

1	Fiscal Years l	Ended June 30		이상 전 방송 전	
	1952	1951	1950	1949	1948
Balance Forward July 1   Appropriation	\$ 1,305.30 16,150.00	\$ 2,134.04 15,000.00	\$ 649.99 15,000.00	\$ 1,575.69	\$
Revenue: Resident Salmon Fishing Licenses Non-resident Salmon Fishing Licenses			·	$161.00 \\ 295.00$	1,200.00 890.00
Total Available	\$17,455.30	\$17,134.04	\$15,649.99	\$2,031.69	\$2,090.00
Expenditures: Personal Services. Contractual Services. Commodities. Grants, Subsidies and Assessments. Capital Expenditures. Total Expenditures. Balance:	\$8,380.28 2,803.99 558.32 2,492.50 \$14,235.09	$\begin{array}{r} \$7,864.69\\ 2,334.83\\ 248.69\\ \hline 1,925.73\\ \hline \$12,373.94 \end{array}$	\$6,368.86 2,100.98 1,070.37 2.25 3,961.09 \$13,503.55	\$530.12 440.49 90.45 320.64 \$1,381.70	\$ 120.00 192.51 201.80  \$ 514.31
Carried Forward June 30 Lapsed to General Fund	2,664.34 *555.87	1,305.30 3,454.80	2,134.04 12.40	649.99	1,575.69
Total	\$17,455.30	\$17,134.04	\$15,649.99	\$2,031.69	\$2,090.00
*Funds encumbered during previous fiscal year	$$531.66\ 24.21$				

## ATLANTIC SEA RUN SALMON COMMISSION—COMPARATIVE STATEMENT OF OPERATIONS

\$555.87

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#### STREAMS

#### Surveys

Stream survey work was commenced in the field season of 1950. During that year the Sheepscot and Duck Trap Rivers were surveyed by Floyd G. Bryant and John Mahoney. Hobart and Tunk Streams and the Narraguagus River were surveyed by the above personnel, James S. Fletcher, and Richard E. Cutting. The stream survey work during that season was under Floyd G. Bryant.

During the 1951 field season the Machias and Dennys Rivers were surveyed. The Aroostook River was surveyed in part during this same season. The survey crew during the 1951 season consisted of Lewis M. Hurxthal, Jr., Richard E. Cutting, and Roger P. Auclair in charge, of James S. Fletcher, Commission biologist.

Data resulting from these surveys have been tabulated but at the present time only one report has been completed for publication. This report, A Survey of the Narraguagus River and its Tributaries, by Floyd G. Bryant, can be obtained from the Sea Run Salmon Commission at Augusta, Maine.

#### Improvements

Stream improvement work was commenced by the Commission in 1949. During that year construction was carried out to improve the Gorge on the Machias River at Machias.

During 1951 the Narraguagus River was cleared of obstructions through to Deer Lake. That same year stream improvements to the Sheepscot River were commenced and additional work was carried on in this stream during 1952.

Several other stream improvement projects have been authorized but water conditions have not been suitable to carry them out.

JAMES S. FLETCHER, Biologist

	Dennys River		Bangor Pool, Penobscot River				Narraguagus River					
Year	Number	Weight in Pounds		Number	Wei	Weight in Pounds		NT 1	Weight in Pounds			
	Number Caught	Largest	Smallest	Average	Number Caught	Largest	Smallest	Average	Number Caught	Largest	Smallest	Average
1948	79	14.5	6.5	9.1	15	17.0	7.0	9.8	110	20.0	4.5	9.8
1949	63	12.0	6.3	9.4	14	11.0	6.5	9.0	94	21.8	7.5	10.2
1950	39	15.5	6.0	9.0	9	10.0	6.2	8.0	34	18.5	4.2	9.6
1951	31	15.5	7.5	10.0	2	12.5	8.5	10.5	53	20.5	3.0	11.2
*1952	39	23.0	7.5	10.4	35	11.5	2.5	8.5	39	19.5	7.0	10.5

Table I-Atlantic salmon Rod catches on certain Maine salmon streams

\*To July 1, 1952

## Source of salmon reared at Craig Brook Fishery Station, 1948 to 1951:

Brood Year	SOURCE AND NU Canada	UMBER OF EGGS Maine	Total Salmon Eggs
1948		140,217	140,217
1949	304,806	558,815	863,621
1950	200,000	203,400	403,400
1951	415,000		415,000
Total	919,806	902,432	1,822,238

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Experiment Number	Total Stocked	Number Marked	Mark Used	Fish per pound	Waters Stocked	Year of Majority Return
47A1-1048	7,036	7,036	L&R	70.2	Little Falls Stream	1952
47A2-1048	61,000			86.0	Penobscot River	1952
47A3-1048	12,000			168.2	Sheepscot River	1952
47A4-549	8,241	8,241	D&L	53.1	Sheepscot River	1952
47A5-549	7,322			104.0	Machias River	1952
47A6-542	7,810			126.2	Penobscot River in East Branch	1952
47A7-549	2,991			56.0	Penobscot River in Passadumkeag River	1952
47A8-549	5,820			67.5	Penobscot River in Sebois River	1952
47A9-549	5,007	5,007	D&R	46.1	Denny's River	1952
47A10-549	2,308	2,308	A&N	51.2	Little Falls Stream.	1952
47A11-649	1,198			28.2	Penobscot River in Passadumkeag	1952
47A12-749	5,182			35.4	Penobscot River in Passadumkeag	1952
48A1-649	10,084			1420.0	Orland River in Gully Brook	1953
48A2-649	50,000			1517.0	Tunk Stream	1953
48A3-749	29,279			1036.0	Narraguagus River	1953
48A4-1049	30,247	30,247	L&R	170.8	Sebois River of Penobscot River	1953
48A5-1049	25,002	25,002	D&R	177.3	Machias River	1953
48A6-1049	24,837	24,837	D&L	152.5	Machias River	1953
48A7-1049	10,072	10,072	D&R	198.3	Sheepscot River	1953
48A8-1049	6,141	6,141	A & R	181.3	Little Falls Stream	1953
	101,000				St. Croix River; Stocking done by Department	
1010 550					of Fisheries of Canada	
48A9-550	5,615	5,615	A&L	67.8	Little Falls Stream	1953
48A10-550	17,032	17,032	D & A	66.2	Machias River	1953
48A11-550	19,605	19,605	N&L	74.4	Penobscot River in Sebois River	1953
48A12-550	19,605	19,605	N&R	67.0	Penobscot River in Sebois River	1953
48A13-550	20,200	20,200	D & N	72.5	Sheepscot River	1953
48A14-850	394	394	N&L	10.5	Little Falls Stream	1953
48A15-551	2,011	2,011	D & N	9.5	Little Falls Stream	1953

TABLE II—Atlantic Salmon Stocking October, 1948 to July, 1952

Experiment Number	Total Stocked	Number Marked	Mark Used	Fish per pound	Waters Stocked	Year of Majority Returned
49A1-750	100,149			1121.6	Machias River	1954
49A2-750	35,000			1140.0	Narraguagus River	1954
49A3-750	25,000			1237.0	Tunk Štream Orland River in Gully Brook	1954
49A4-750	9,895			1499.2	Orland River in Gully Brook	1954
49A5-750	14,793	· ·		1648.3	Somesville Stream	1954
49A6-950	10,769	10,769	D & A	148.2	Little Falls Stream	1954
49A7-1050	10,004	<u> </u>		190.9	Pleasant River	1954
49A8-1050	9,856	9,856	A & L	210.0	Narraguagus River	1954
49A9-1050	9,918	9,918	D&R	212.5	Tunk Stream	1954
49A10-1050	9,956	9,956	D&L	185.1	Denny's River	1954
49A11-1050	19,800	19,800	A & L	230.6	Sheepscot River	1954
49A12-1050	29,547	29,547	D&L	228.1	Penobscot River in Sebois River	1954
49A13-1050	29,502	29,502	L&R	185.3	Machias River	1954
49A14-551	19,935	19,935	A&N	72.1	Machias River	1954
49A15-551	20,333	20,333	D&A	64.0	Narraguagus River	1954
50A1-1051	14,988	14,988	D&N	99.0	Narraguagus River	1955
50A2-1051	14,978	14,978	D&R	100.3	Narraguagus River	1955
50A3-1051	5,962	5,962	D&L	101.2	Little Falls Stream.	1955
50A4-1051	5,941			83.3	Little Falls Stream	1955
50A5-1051	4,988	4,988	D	65.9	Somesville Stream	1955
50A6-1051	45,708	45,708	N&L	62.5	Machias River	1955
50A7-1051	10,001			67.9	Tunk Stream	1955
50A8-1151	10,224	10,224	D & A	69.9	Dennys River	1955
50A9-1151	10,010	· · · · ·		67.3	Sheepscot River	1955
50A10-1151	20,064	20,064	N&R	62.4	Aroostook River	1955
50A11-552	15,551	15,551	D&L	36.4	Narraguagus River and Tributaries	1955
50A12-552	21,504	21,504	N&R	36.4	Machias River and Tributaries	1955
50A13-652	16,072	16,072	D&L	24.1	Narraguagus River and Tributaries	1955
50A14-652	3,325			29.9	Little Falls Stream	1955
51A1-652	6,680			*1663.7	Little Falls Stream	1955

TABLE II—Atlantic Salmon Stocking October, 1948 to July 1952 (Continued)

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Experiment Number*	Total Stocked	Number Marked	Mark Used†	Fish per pound	Waters Stocked	Year of Majority Return
$\begin{array}{r} 48S1-649\\ 48S2-649\\ 48S3-649\\ 48S4-649\\ 48S5-550\\ 49S1-950\\ 49S2-950\\ 49S2-950\\ 49S3-950\\ 49S4-1050\\ 49S5-651\\ 49S6-552\\ 50S1-951 \end{array}$	$\begin{array}{c} 50,000\\ 25,000\\ 12,000\\ 9,994\\ 7,248\\ 9,992\\ 10,002\\ 9,983\\ 12,002\\ 3,290\\ 731\\ 18,229\end{array}$		A & L 	535.9	Tunk Stream. Chandler River. Ducktrap River. Bald Hill Cove Brook. Ducktrap R., Rt. 137. Chandler. Tunk Stream. Bald Hill Cove. Ducktrap R. Chandler, North Jonesboro. Chandler, Jonesboro. Chandler, North Jonesboro.	$1951 \\ 1951 \\ 1952 \\ 1052 \\ $

TABLE III-Silver Salmon Stocking June, 1949 to July, 1952

\*The first two digits show the year the eggs were taken, followed by a letter indicating species (S—Silvers, A—Atlantics) and a number, in chronological order for the lot. After the hyphen is given the month and year of liberation. Thus, 50S1-951 indicates the first lot of Silvers to be planted from eggs stripped in 1950 and that the fish were liberated in September, 1951.

†The letters indicate fins removed from the fish in order that they may be recognized if they are recaptured. The letters refer to the following fins: A—adipose fin, D—dorsal fin, L—left ventral fin, R—right ventral fin, N—anal fin.

#### MEMORANDUM OF AGREEMENT

THIS AGREEMENT by and between the Atlantic Sea Run Salmon Commission of the State of Maine, hereinafter referred to as the Salmon Commission; the Department of Inland Fisheries and Game of the State of Maine, hereinafter referred to as the Inland Department; the Department of Sea and Shore Fisheries of the State of Maine, hereinafter referred to as the Sea and Shore Department; the Fish and Wildlife Service of the United States Department of the Interior, hereinafter referred to as the Service; and the University of Maine, hereinafter referred to as the University,

WITNESSETH, That

WHEREAS, the formerly abundant sea run salmon in New England rivers has become seriously depleted through a variety of adverse circumstances, with a consequent loss of valuable recreational and commercial fishing assets, and

WHEREAS, the adverse circumstances that caused the severe depletion of salmon have become mitigated to the extent in many areas that restoration of the runs is practicable in certain rivers in the State of Maine, and

WHEREAS, the Salmon Commission, the Inland Department, the Sea and Shore Department, the Service, and the University, are individually and collectively interested and concerned, through the exercise of their legally prescribed and respective functions, in a restoration program for sea run salmon to be conducted through scientific research and fishery management, and

WHEREAS, the cooperation and collaboration herein provided will result in more efficient utilization of funds, facilities, and personnel available for furthering restoration of sea run salmon,

#### NOW, THEREFORE, IT IS MUTUALLY AGREED, as follows:

1. This agreement will supersede the agreement of April 15, 1948 between the Inland Department, the Sea and Shore Department, the Salmon Commission, the University and the Service.

2. A research committee shall be established through the appointment by responsible officials of one biologist to represent the Inland Department, one biologist to represent the Sea and Shore Department, one biologist to represent the Salmon Commission and one biologist to represent the Service, whose function shall be to serve as a coordinating agency for all sea run salmon restoration and management work. The duties of the Committee shall be to advise concerning the research program and to develop and recommend to the Salmon Commission a general policy with respect to numbers to be artificially reared and stocking of sea run salmon, and plans and specific recommendations covering fishways, dams, stocking, fishing regulations, pollution abatement, and other needed measures.

3. The Salmon Commission agrees to base the regulation of salmon fishing on the recommendations of the research committee established by Section 2 of this agreement. 4. The Service agrees, within the limitations of appropriations, to furnish a biologist to plan with, work with, and advise the Commission and its personnel on a research program, for which all parties agree to furnish such facilities in the way of personnel, equipment or other services as they individually deem advisable. The equipment so furnished shall remain the property of the party purchasing or contributing it and be subject to that party's disposition.

5. The headquarters for the personnel conducting this above-mentioned joint program of research shall be at the University of Maine for Salmon Commission employees, and Beaufort, North Carolina for Service employees. The University agrees to furnish suitable office and laboratory quarters including usual services and utilities.

6. The University further agrees to appoint as collaborators and extend the same privileges and courtesies accorded the staff of the University to those staff members of the cooperating agencies as may be mutually agreed upon.

7. The Salmon Commission will attempt to secure Atlantic Salmon eggs from Canada and will provide eggs of other species in exchange. If the Salmon Commission does not have sufficient eggs for exchange, the Service will attempt to make up the deficit with such eggs as it may have available.

8. The Service agrees, within the limitations of appropriations, to continue to propagate and rear sea run salmon at the Craig Brook fishery station. The Inland Department also agrees to propagate and rear sea run salmon within the limit of its appropriations, whenever the program calls for a larger output than can be handled at Craig Brook.

9. The Inland Department, the Sea and Shore Department, the Service and the Salmon Commission further agree within the limit of their appropriations, to furnish personnel and facilities for marking and stocking young salmon, catching and transporting adult spawning salmon (in the event eggs of this species are not available from other sources), attending weirs and traps and such other field tasks as may be required.

10. The research and stocking programs described above will be carried on in the Narraguagus River, the Machias River and Little Falls Stream (Hobart Stream) in Moosehorn National Wildlife Refuge, except that surveys of other streams to determine their suitability for Atlantic salmon will be made.

11. Stocking in other suitable waters of the balance of the young salmon not stocked as specified in Section 9 of this agreement shall be based on recommendations of the research committee.

12. Data and results acquired independently or in collaboration, related to problems of mutual interest and concerning restoration of sea run salmon shall be exchanged freely between the cooperating agencies, and each shall be free to publish reports and scientific papers resulting from the Cooperative investigations. All such reports and publications shall give due credit to each of the cooperating parties. 13. No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or agreement or to any benefit to arise thereupon; provided that this shall not be construed to extend to any incorporated company where such contract or agreement is made for the general benefit of such incorporation or company (Sec. 3741 Revised Statutes).

14. This agreement, dated May 3, 1951, and executed in quintuple, shall become effective on the date of final signature and shall remain in force until cancelled. Any one of the parties to this agreement may effect its termination by giving six months' advance notice of its intention to withdraw.

IN WITNESS WHEREOF the authorized officers of the parties hereto have executed this agreement on the dates opposite their respective signatures.

Date: June 14, 1951.

s/ ROLAND H. COBB Commissioner of Inland Fisheries and Game Commissioner, Atlantic Sea Run Salmon Commission State of Maine — (in both capacities)

Date: June 14, 1951.

s/ RICHARD E. REED Commissioner of Sea and Shore Fisheries Commissioner, Atlantic Sea Run Salmon Commission State of Maine — (in both capacities)

Date: June 14, 1951.

s/ HORACE P. BOND Commissioner, Atlantic Sea Run Salmon Commission State of Maine

Date: June 18, 1951.

s/ ARTHUR A. HAUCK President, University of Maine State of Maine

Date: July 9, 1951.

s/ M. C. JAMES Director, Fish and Wildlife Service United States Department of the Interior

#### AMENDMENT TO MEMORANDUM OF AGREEMENT

AGREEMENT dated May 3, 1951, covering the cooperative investigation of ways and means of rehabilitation of the sea run salmon in the State of Maine, is hereby amended as follows:

1. The Service biologist mentioned in Section 4 shall coordinate the operations of the parties hereto.

2. Appointments of personnel by the parties hereto shall be in accordance with the law and rules and regulations to which each is subject, but within the limits thereof such appointments shall be mutually agreed upon by all parties.

The Service biologist mentioned in Section 4 will direct the activities of all of the employees of the Service and the State of Maine engaged in sea run salmon research in that State.

3. The Salmon Commission and the Service shall each pay approximately one-half of the annual salary of the Service biologist mentioned in Section 4, which salary shall be fixed pursuant to the Federal Classification Act of 1949, and the said Service employee shall have all rights and be subject to all laws and rules and regulations applicable to a Federal employee.

The Service shall from time to time advise the Salmon Commission by letter of the salary payable by it and the method of payment and the Salmon Commission agrees to make payments accordingly. The amount payable by the Salmon Commission during the fiscal year, beginning July 1, 1952, will be \$2,980.

4. Section 5 is hereby amended by striking out the words "for Salmon Commission employees, and Beaufort, North Carolina for Service employees."

5. This amendment shall become effective on the date of assignment of the Service biologist to the duties set forth in the agreement of May 3, 1951, as hereby amended, and shall remain in force until further amended or modified, or cancelled in accordance with the provisions of Section 14 of the May 3, 1951 agreement. The Service biologist shall be assigned as above on July 1, 1952.

IN WITNESS WHEREOF the authorized officers of the parties hereto have executed this agreement on the dates opposite their respective signatures.

Date: May 6, 1952.

s/ ROLAND H. COBB Commissioner of Inland Fisheries and Game Commissioner, Atlantic Sea Run Salmon Commission State of Maine — (in both capacities)

Date: May 5, 1952.

s/ ROBERT L. DOW Commissioner of Sea and Shore Fisheries Commissioner, Atlantic Sea Run Salmon Commission State of Maine — (in both capacities)

s/ HORACE P. BOND Commissioner, Atlantic Sea Run Salmon Commission State of Maine

> s/ ARTHUR A. HAUCK President, University of Maine State of Maine

s/ ALBERT M. DAY Director, Fish and Wildlife Service United States Department of the Interior

Date: April 15, 1952.

Date: April 15, 1952.

Date: May 2, 1952.