

Twenty-seventh biennial report of the Wisconsin Conservation Department for the fiscal years ending June 30, 1959 and June 30, 1960. 1961

Wisconsin. Conservation Dept. Madison, Wisconsin: [s.n.], 1961

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CIRCULATING

Twenty-Seventh

Biennial Report

of the

Wisconsin Conservation Department

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TWENTY-SEVENTH BIENNIAL REPORT

OF THE

WISCONSIN CONSERVATION DEPARTMENT

For the Fiscal Years Ending June 30, 1959 and June 30, 1960



MADISON, WISCONSIN 1 9 6 1

THE WISCONSIN PUBLIC HERITAGE

- To Be Conserved and Wisely Managed -

- Over 10,000 square miles of water area in the Great Lakes and more than 500 miles of shore line on Lakes Michigan and Superior.
- Over 1¼ million acres of interior surface water including more than 8,700 lakes and 33,000 miles of mapped waterways.
- About 1,400 trout streams with over 8,000 miles of trout habitat.
- About 200 bass streams with approximately 3,500 miles of bass habitat.
- Over one-half million acres of land under Conservation Department management in state parks, forests and wildlife conservation areas containing almost 1,000 miles of water frontage on lakes and streams.
- Over 2½ million acres of lands entered under the Forest Crop Law open to public fishing and hunting.
- Over 1½ million acres of lands in national forests and wildlife refuges dedicated to public recreational use.
- Almost 150,000 acres of State Land Commission lands containing significant timber and wildlife values.
- Over 650 kinds of wild animals including 78 mammals, 336 birds and 174 fish.
- Over 16 million acres of commercial forest land with important timber and outdoor recreational possibilities.

LETTER OF TRANSMITTAL

HONORABLE GAYLORD A. NELSON Governor of Wisconsin State Capitol Madison, Wisconsin

Sir:

In compliance with the provisions of section 14.61 of the state statutes, I have the honor to submit for your consideration the twenty-seventh biennial report of the State Conservation Department concerning its work for the two fiscal years ending June 30, 1960.

The State Conservation Commission joins with me in an expression of appreciation for the Executive Office support we have received for the conservation program without which these accomplishments could not have been achieved. As problems in the conservation of our renewable natural resources multiply even more rapidly than our population increases, we look forward to a future in which the State Conservation Department will have even greater and more significant opportunities for service to the citizens of Wisconsin. In this endeavor we feel assured of your continuing cooperation.

I trust the report transmitted herewith will meet with your approval.

Respectfully,

STATE CONSERVATION DEPARTMENT L. P. VOIGT, *Director*

CONSERVATION COMMISSION

ARTHUR R. MACARTHUR, Janesville JOHN R. LYNCH, Gordon Chairman PAUL J. OLSON, Madison

Russell D. Stouffer, Shell Lake
Secretary

Guido R. Rahr, Manitowoc
Charles F. Smith, Wausau

CONSERVATION DEPARTMENT

L. P. Voigt Director

JOHN A. BEALE Chief State Forester

ELOY T. BAXTER Finance

A. W. JORGENSEN
Information and Education

G. S. HADLAND Law Enforcement

ROMAN H. KOENINGS Forests and Parks

> Lulu M. Korn Clerical

GEORGE SPRECHER Assistant Director

NEIL LEMAY Forest Protection

LAURENCE F. MOTL Engineering

Edward Schneberger Fish Management

J. R. SMITH Game Management

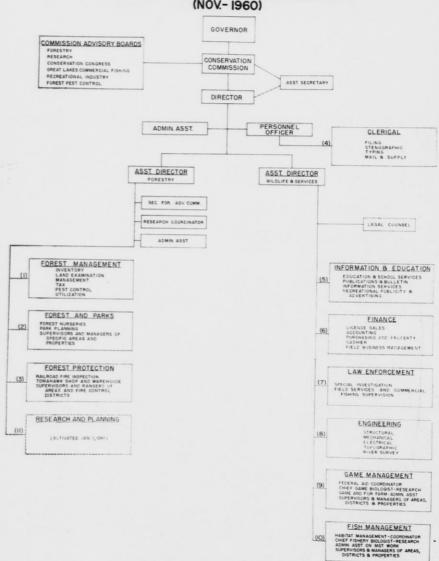
S. W. Welsh Forest Management

WILLIAM A. MATSON
Personnel and
Administrative Officer

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WISCONSIN CONSERVATION DEPARTMENT BASIC ORGANIZATION CHART (NOV.- 1960)



Report of the Director

HIGHLIGHTS AND GENERAL TRENDS

A look back over the past biennium shows some bright spots, and some tight spots. The sign of the times is still an increasing population with more outdoor leisure time and a greater competition between different interests for the same piece of land—a combination of events which places continually increasing pressures on our natural resources. Even more clearly etched, therefore, is the Conservation Department's obligation to maintain and increase fish, forests and wildlife so that the supply will meet the demand in the months and the years ahead.

Trends in conservation activity in which the Department has participated during the past two years fall generally into four major categories:

Increased cooperation and coordination. It has become more and more apparent that the only way to adequately manage the land for a variety of uses is through a coordinated effort undertaken with the mutual agreement of all agencies and interests concerned-e.g. soil and water, agricultural, forestry, wildlife, highway, industrial, etc. The Conservation Department has active representation on a number of special "interagency" committees which are tackling such problems as the use of pesticides, watershed management, weed control and brush management, and erosion control in the red clay areas of northwestern Wisconsin, Similar inter-agency cooperation takes place regularly through many formal and informal agreements. It also is the primary function of the Natural Resources Committee of State Agencies and the six-agency agreement for planning and developing community watersheds in Wisconsin which was revised and strengthened in this biennium.

Greater emphasis on the protection of the public interest. By working hand in hand with the public and with other agencies that are using the land to produce agricultural crops, to build highways or to construct power lines, the Conservation Department advances fish, forest and wildlife management as a part of total land use. With increasing competition for land and water between public and private interests, however, special efforts often must be made to maintain certain lands and waters for public use. The Legislature has, for example, given the Conservation Commission "veto power" in cases of diversion of water from trout streams for purposes of agricultural irrigation. The revised water policy of the Commission now clearly upholds the rights and interests of the public in the waters of the state, and indicates that "the use of public waters by fish and other wildlife must always in all cases be recognized as a public interest and a natural use equal with any domestic use."

Another type of approach to this problem has been a heightening of the land acquisition program to provide more public hunting and fishing areas. As of June 30, 1960, a total of 6,177,559 acres of land was open to public hunting and fishing. Of this, 196,536 acres are owned and 304,483 acres leased by the state as public hunting and fishing grounds. All state lands managed by the Department for multiple uses including hunting and fishing total over one-half million acres. An increasing number of gifts to the Department have given a great boost to

land acquisition. Most significant during the past biennium was the 20,000 acres in the valley of the Little Eau Pleine River given to the Commission by the Consolidated Water Power and Paper Company. Still another approach has been a new program of state aid to local communities on a 50:50 basis for providing water access sites.

The promotion of better public safety has been advanced through a boat registration and safety program, authorized by recent legislative action.

Greater strides in research and planning. Part and parcel of activities aimed toward better cooperation between land users and better protection of the public interest is increased research and planning. Three efforts in the past two years exemplify the attempts being made to devise the best methods for managing and utilizing natural resources:

(1) New research stations have been established in three areas: a forestry research center, under cooperative agreement with the Lake States Forest Experiment Station, will conduct forestry and watershed studies on lands provided by the Conservation Commission in the rugged coulee region of southwestern Wis-

consin; a pest control center, located at the southern area headquarters, provides facilities for the identification and study of forest insect pests and for work on pesticides; and the Westfield trout hatchery has been converted into a research station for studies on disease and nutrition.

- (2) A study of the use of state forests and parks, based on extensive onthe-spot public interviews, provided real impetus to more refined and detailed park planning efforts.
- (3) An inventory of all lakes in Wisconsin, which will provide the foundation for the classification of lakes by use now is underway.

More private conservation efforts. Reflecting the same trend which motivates the state to promote greater recreational opportunities, more and more private individuals are acquiring land for hunting, fishing and conservation purposes. Outstanding has been the purchase of land, which has then been leased to the state, in Portage County for prairie chicken management, in this case by the Prairie Chicken Foundation. The number of private fish hatcheries and shooting preserves is increasing.

FINANCES: A PROBLEM

The department's biggest problem came to light late in the biennium and was connected with the "conservation dollar." The cost of providing the conservation programs demanded by the public have risen almost five million dollars. It costs almost twice as much to keep a conservation worker in the field as it did 10 years ago, and the price of almost everything purchased has gone up about 20 to 200 per cent. Additional expenses were incurred by such things as extra public hunting ground, school taxes and bounty payments. At the same time, the unexpected loss of certain fed-

eral aid funds and a decrease in fish and game license sales and forestry and reforestation funds resulted in lower revenues and insufficient income to meet expenses and still maintain the necessary reserve fund. A budget curtailment in proposed expenditures of about two million dollars therefore was necessary. Approximately 100 positions were dropped from the budget plans, reducing the total permanent personnel to 1,142 but at least a score of these were vacant and such vacancies were to be filled only in key positions while this financial emergency continued.

CONSERVATION COMMISSION ACTIONS AND POLICIES

The Wisconsin Conservation Commission is a six-man, non-paid, policy-forming body, with members appointed by the Governor for staggered six-year terms. During the biennium, Governor Gaylord Nelson appointed two new commissioners: John R. Lynch of Gordon and Paul J. Olson of Madison, replacing Leonard J. Seyberth and A. W. Schorger, whose terms had expired.

During the past two years, the Conservation Commission adopted significant policy statements on the following subjects:

- 1. Establishment of coniferous plantations (September 17, 1958).
- Protection, development and use of water (Revised January 9, 1959 and August 14, 1959).
- 3. Boat safety and registration act enforcement (March 25, 1960).
- Construction of dams and impoundment of water (June 10, 1960).

Six advisory committees on research, forestry, forest pest control, recreational advertising, commercial fishing and wild-life conservation (Conservation Congress) continued to aid the Conservation Commission in its effort to establish wise policies and intelligent rules. The members of these committees, including only the Executive Council of the Conservation Congress, were as follows at the end of the biennium:

Research Advisory Committee

°Lyle Christenson °D
William DeYoung Jo
°James B. Hale R.
Arthur D. Hasler
°Cyril Kabat, F.
Ex. Sec. Fr

*Donald J. Mackie John W. Macon Robert A. McCabe Herman Olson Fred B. Trenk Fred G. Wilson

Forestry Advisory Committee

Folke Becker Ivan Branham George Corrigan Frank Fixmer Willard J. Fahrenkrug Ex. Sec.
Allan Haukom F. G. Kilp A. E. Swanke

Forest Pest Control Steering Committee

Bruce Buell *Do
E. L. Chambers 1
Frank Fixmer Dr.
James Kuntz *S.

*Donald W. Renlund Dr. Roy Shenefelt *S. W. Welsh

Recreational Industry Advisory Committee

*Harry Thoma E. A. Conforti Ralph M. Cooper John Gerlach Art Huebner A. G. Hundt Jack B. Olson Pat Wilsie

Great Lakes Commercial Fishery Advisory Committee

Ever W. Bodin Joseph Cayner Cornelius Claffin Joe DeWitt Melvin Erickson Ralph Hubbard Everett Johnson Frank Korchak Raymond E.
McDonald

*Edward Schneberger
Clarence Schultz
Marcel Schwartz
Cliff Wenniger

Executive Council of the Wisconsin Conservation Congress

Keith Ackley
W. M. Alexander
Ernest Bauer
Donald Braatz
Ross Bennett
Charles Brees
John Cross
Glen L. Garlock
Joe Hanke
Walter Haupt
Edward F. Keip
Irvin Lange
Marvin E.
Lederer

Nick Jensen
Walter Klunk
Carl Mathwig
Edward J.
Morse, Jr.
G. E. Otten
Foster Patch
Wm. Ruth
L. C. Sykes
Daniel O. Trainer
Edward Young
*Herbert Lemke

The asterisk (°) indicates members of the Conservation Department who served as liaison representatives in cooperation with these advisory bodies at this time.

The Congress consists of three regular delegates and two alternates who are elected at public hearings held in each of the 71 counties of the state in May of each year. The Executive Council,

implementing its activities, recommended continuation of the several study committees for the purpose of advising the Council on recommendations to the Wisconsin Conservation Commission. The following study groups were continued: Big Game, Waterfowl, Trout, Fish, Upland Game, Fur, and Education and Public Relations and Waters and Forestry.

ADMINISTRATIVE SERVICES

The administrative section of the Department includes, besides the director and two assistant directors, the following positions and service sections: administrative assistant to the director, personnel officer and his staff, legal counsel, executive secretary of the Forest Advisory Committee, research coordinator, administrative assistant to the chief state forester, assistant secretary to the Conservation Commission and an aviation operation consultant.

Organization changes which have occurred during the biennium include: the reorganization of the Forests and Parks Division on a five-area basis; changes in the supervisory responsibilities and functional assignments of members of the Information and Education Division; and the dissolution of all Department area and functional boards. With the approval of the Commission, plans and preparations were made to organize a Research and Planning Division.

In carrying out Commission policies and the increasing administrative functions of the Department, 259 directives were issued. Director's orders and memoranda totalled 105, general letters by division chiefs and administrative staff, 110, and technical specifications by individuals responsible for special functions, 44.

Forest Management

This Division provides technical forestry advice and assistance to counties in the management of county forests, to private woodland owners, and to other divisions of the Conservation Department. Assistance is given to other state agencies in the management of publicly owned forest land.

Assistance provided includes the inventory of forests and preparation of long-range plans for management. Planning guidance and field supervision are given in the establishment of forest plantations and in the conduct of cultural cuttings in plantations and natural stands. Foresters of this Division select and mark mature timber for harvest and give advice on timber marketing procedures. The Division is also responsible for the prevention and control of infestations of forest pests and for the administration of the forest tax laws.

The following are highlights of the Division activities for the report period:

- The number of private woodland owners assisted increased 32.5 per cent over the previous biennium.
- Cultural cutting increased 28.8 per cent on private woodlands and 11.8 per cent on county forests.
- Thirty-seven county and area forest inventory reports were published.
- Field work was completed on the intensive county forest inventories.
- Total value of timber sales on county forests increased to the alltime high of \$999,796, 18.7 per cent over the previous report period.
- An improved system of county forest management plans and recordkeeping was installed.
- A forest pest control center was established and began operating at the Nevin Hatchery, Madison.

PRIVATE FORESTRY

Forestry services to farmers and others who own and manage woodlands were more adequately extended to all counties of the state during the biennium. The purpose of this assistance program is to establish more productive management on the nine million acres of privately owned woodland, and to assist in stabilizing sources of raw materials for the many wood-using industries of the state.

The forecasted short supply of quality raw materials for these wood-using industries is of prime concern. Improved management practices on private timber tracts are not progressing rapidly enough to supply the demand for the products these tracts must provide. There are 176,000 small or private woods owners in the state. Since the inception of the serv-

ice in 1949, some 35,000 requests for technical forestry assistance have been handled. However, too many small woodlands are still unmanaged, and new and improved methods for remedying the situation are constantly being studied.

Nine additional foresters were assigned to aid private woodland owners during this biennium. They have helped to ease the large backlog of requests for assistance. A total of 15,071 woodland owners were assisted on 272,242 acres of forest land. This area is similar in size to the total land area of Washington County. An additional 1,757 private woodland owners were given management assistance on 53,099 acres in districts where the principal duty is with county forests.



Department foresters helped 15,071 landowners in managing their forests.

Timber harvesting carried out with tree selection and marketing assistance provided by Department foresters reached new records of accomplishment during the report period. Some 14,115,000 board feet of timber were harvested under improved management. This is enough timber to build over 2,100 fiveroom frame houses. Gross income reported earned by these woods owners during the two-year period was over one million dollars for the first time. As the level of management increases, the qual-

ity of the timber being harvested is of higher grades. As in any business, quality products pay dividends to the producer.

Foresters, during the biennium, supervised the state's reforestation program which has maintained a high level of activity since the start of the last decade. Some 35,763 acres of successful forest plantations were established by landowners on idle or marginal lands best suited for permanent tree cover. A record number of tree planting machines



Woodland owners received more than \$1,000,000 from timber selected for harvest by state foresters in a two-year period,

was in operation throughout the state. Landowners have the opportunity to use these machines at a nominal cost and better tree survival is usually the result.

The procedure for ordering trees from Conservation Department nurseries was modified so that the local Department forester processed all applications for trees planted in his area. This enabled the 14,000 landowners who ordered trees to better avail themselves of information on proper selection of species, soil analysis, and tree planting techniques.

Again during the report period, foresters were the Department representatives in the federally sponsored Agricultural Conservation Program and the Soil Bank Act. Many landowners planted trees under these programs. The forester's approval is necessary before federal cost sharing payments are made.

Timber Stand Improvement (TSI) cuttings were performed on 10,587 acres

of privately owned woodland. This type of cutting, as compared to the harvest cutting, is aimed at improving the quality and growth of the valuable species in the woodland. The federal cost sharing provision of the Agricultural Conservation Program (ACP) provided a stimulus for this type of cutting. As in tree planting, the specifications for this work are prescribed by Department foresters.

As Wisconsin landowners become more aware of the value of their woodlands, they protect these lands from livestock, insects, disease, and fire. One hundred and sixty thousand acres were protected from these destructive agents as a result of the private forestry program. This protection included woodland fence construction, the removal of diseased trees, use of insecticides, and new fire lanes and accessways.

As an aid to the wood-using industries and woodland owners, a directory of



Foresters supervised the planting of trees on 35,763 acres of private land.

wood-using industries was issued. This directory makes available information regarding the location, materials purchased, and products sold by Wisconsin wood-using industries. The publication was helpful in providing marketing information to the public.

Department foresters aided 588 forest products industries by giving assistance in the location of raw material, the improvement of manufacturing techniques, and the marketing of finished products.

Forest Management Division effort in the Public Law 566 Small Watershed Program has been directed primarily toward the driftless area counties along the western edge of the state. Forestry resource development programs providing basic facts and information were completed on six new watershed applications. This brings to 15 the number of watersheds on which the private woodland owners are provided technical assistance in managing their woodlands for a high level of watershed protection. Considerable effort was expended by foresters in those areas to stress protection of the forested portion of the watersheds from fire, grazing of livestock, excessive timber cutting and careless logging practices. Division cooperation with organized watershed associations, individuals and other vitally interested persons in stabilizing their essential forest resource has been strengthened by making available three foresters to work primarily on watershed forestry problems. Watershed forestry measures will continue to be stressed in a concentrated effort by the foresters assigned to accomplish the desired result as rapidly as possible.

Foresters of the Division cooperated extensively with the Wisconsin Soil and Water Needs Inventory. Results indicated the scope of the forestry needs on private lands by 1975. The inventory showed the need for 3,247,584 acres of timber stand improvement, and 4,711,732 acres in need of protection from livestock.

Division personnel made 1,677 public appearances to promote good forest practices. The majority of Wisconsin landowners has not yet fully accepted the stewardship of their woodland resources. Continued educational efforts coupled with available technical in-the-woods assistance, should hasten the practice of good forestry in the private woodlands of the state.



New equipment is making better forest management and utilization possible. This is a mechanical pulpwood peeler,

COOPERATIVE FOREST MANAGEMENT SERVICES

	Item	1958-1959	1959-1960	Total
1.	Number of projects—full timepart time			
0	Owners given assistance—number	7.388	7.683	15,071
4.	Woodland involved—acres	132,522	139,720	272,242
	Timber marked—MBF	9,045	14,015	23,060
	Timber marked—cords	24,056	23,194	47,250
	Timber marked—acres	20,887	16,834	37,721
3.	Timber inventoried for management plans—acres	3,756	19,036	22,792
	Woodlands with improved practices—number	4,466	4,658	9,124
4.	Commercial timber cut—acres	6.013	8.566	14.579
	Forest improvement cut—acres	5,362	5,225	10.587
	Tand planted name	16.998	18,765	35,763
	Woodland protected—fire, pests, and grazing—acres			
5	Products harvested under improved management			
٠.	Sawlog, veneer, etc.—MBF	5.778	8,337	14,115
	Cords	13,693	17,162	30,855
	Total converted to MBF	12,624	16,918	29,542
6.	Products harvested, marketing assistance only-MBF	3,245	2,745	5,990
7.	Total products harvested—MBF	15,869	19,663	35,532
0	Stumpage returns to owners—estimated	251,489	340,190	591.679
٥.	Stumpage returns to owners—estimated	440,357	560,352	\$1,000,079
9.	Forest Products Operators advised			

COUNTY FORESTS

Wisconsin County Forests are a prime example of the success of the Wisconsin idea of keeping the business of government close to the people. The responsibility for the administration of the forests rests with the local people who stand to benefit most from good management. The county forests have operated successfully for 30 years under a cooperative agreement between the counties and the state.

The primary management objective is timber production; however, the multiple use idea is stressed. This broadens the usefulness and value of the county forests. These forests are demonstrations of the worth of wise forest management.

There are now 27 county forests with 2,198,229.69 acres entered under the Forest Crop Law. There was a net increase of 24.616.02 acres during the bien-

nium. This increase is the result primarily of efforts by the counties to consolidate or block their forest holdings for more efficient management.

County forest income from timber sales has increased from one sale of \$23.49 in 1935 to nearly a million dollars from 1,473 timber sales in the 1959–1960 biennium. This increase in income parallels the increase in volume growth and productivity of the county forests. It is expected that income will continue to increase as the effects of management are felt and as the 106,242 acres of plantation and vast areas of natural reproduction come into production.

The county forests are managed as a joint forestry enterprise by the counties and the Conservation Department representing the state. The counties provide the land, forest administration, and local

supervision. The Conservation Department furnishes technical advice and field assistance by foresters of the Forest Management Division.

The state makes two annual aid payments: (1) forestry aid to the county of 10¢ per acre per year for lands entered under the Forest Crop Law for the development of the forest, (2) 10¢ per acre per year to the civil towns in which Forest Crop land is located. The state, in turn, collects a severance tax of 50 per cent of the stumpage value of timber sold. The value of the timber for severance tax purposes is based on a conservative severance tax schedule of stumpage prices established annually at public hearings.

When the county forests were first established, emphasis was placed on surveying, tree planting on denuded land, establishment of firebreaks, and such essential primary activities. Now the emphasis is on the sale of mature timber, improvement of immature timber stands through cultural cutting, insect and disease control, access road construction, game management, and recreation.

During the biennium revised management plans were prepared for most county forests. Intensive forest inventories were completed. An improved record-keeping system was installed.

An improved system for forest land examination to determine treatment needs was developed during the biennium. The system provides information on which to base assignment of priorities for work projects and timber sales. It is now possible to select the areas most in need of harvest cutting, tree planting, and timber stand improvement for planning purposes.

Evidence of increased intensity of management is the 11.8% increase in acreage of timber stand improvement accomplished. In addition to the 4,283 acres of non-commercial timber stand improvement reported, thousands of

acres were cut by commercial timber sales operations in thinnings and other improvement cutting in young stands to improve the remaining forest growth. Considerable work of this nature was done in the pine type.

Many early plantations are now at the stage where they require thinning. Further increases in timber stand improvement accomplishment acreage are anticipated.

All Forest Crop lands are open to the public for hunting and fishing. The county forests are the largest public ownership open to public recreation in Wisconsin. There are now 60 developed recreational areas. As the population increases, the people will look to the county forests for further recreational opportunity.

SUMMARY OF TREE PLANTING ON COUNTY FORESTS

July 1, 1958-June 30, 1960

	A			
	Prior to July 1, 1958	1958- 1960	Total	
Ashland	471	46	517	
Barron	97	43	140	
Bayfield	9,546	233	9.779	
Burnett	7.112	77	7.189	
Chippewa	439	4	443	
Clark	6,746	681	7,427	
Douglas	7,497	170	7.667	
Eau Claire	2,785*	259	3.044	
Florence	2,468	78	2.546	
Forest	500		500	
Iron	4,341	37	4.378	
Jackson	7,704	300	8,004	
Juneau	4,171*	275	4.446*	
Langlade	4,842	33	4,875	
Lincoln	3,138	70	3,208	
Marinette	14,337	620	14,957	
Monroe	160*	75	354	
Oconto	7,267		7,267	
Polk	1,584	85	1,669	
	786	36	822	
Price	1,269	95	1,364	
Rusk	1,078*	65	1,143*	
Faylor	4,235	81	4,316	
Vilas	398	.17	415	
Washburn	2,856	117	2,973	
Wood	1,928	213	2,141	
	4,586	191	4,777	
Totals	102,341	3,901	106.242*	

^{*}Changes made in figures from previous biennium due to failure or sale of plantations.

COUNTY FOREST TIMBER SALES July 1, 1958-June 30, 1960

					I	Products ar	nd Volume	s Cut					
County	Number	Logs-	Bd. Ft.	Pulpwood and Miscellaneous Bolts—Cords					Piece Products			Total Sales	
	of Sales	Conifers	Hardwoods	Pine	Spruce	Balsam	Other Conifers	Aspen	Other Hard- woods	Christ- mas Trees	Posts	Poles	Value
AshlandBarron	24	9,450	400,120		254	1,005	411	1,360	30	54			\$ 30,800.50 762,14
Bayfield Burnett Chippewa	96 86 15	$156,580 \\ 24,370$	553,450	3,918 8,630	$\frac{1}{125}$	382	1,864 534	9,185 1,377 2,641	127	4,503	3,756 1,208	75	67,984.76 47,952.93 4,598.96
Clark Douglas Eau Claire	85 141 43	49,180 31,280 25,340	76,770 479,580 26,630	1,607 6,195 2,596	12 397	1,173	122 26	2,308 23,955 765	28 341 72	12,905	1,947 1,511 1,145	42 153	24,705.00 91,759.3 21,975.6
Florence Forest	9 4 103	4,330	36,190 1,223,820	49	209	258 3,343	21 2,600	4,073 1,042 3,162	427 26 115	130		189	16,677.0 3,622.9 75,585.2
Jackson Juneau Langlade	64 13 31	48,010 78,570	280	9,188 570 330	57	449	54	1,654 324 6,351	341 331 946	8,178 350 229			83,394.2 4,715.6 52,580.1
Lincoln	67 104	6,290 362,430 590	109,180 167,890	9,404	127 903	759 2,163	459 361	5,382 30,099	948 3,680	4,400	14,788 17,138	27	24,543.7 184,579.2 11.8
Oconto Oneida	27 29 17	$46,880 \\ 33,250$	$22,320 \\ 136,180$	270 36 1,120	108 404	57 724	114 352 119	2,219 5,976	$\frac{261}{1,265}$		7,590 500	65 160	11,556.0 29,307.9 5,996.1
Polk Price Rusk Sawyer	112 65 85	40,300 28,810 163,170	72,930 833,200 275,100	8	145 22 132	545 88 142	1,256 18 708	10,277 4,536 2,417	3,061 125 44	2,340 651 7,853	1,362 9,397	1,261	43,995.7 34,295.4 20,445.3
Taylor Vilas Washburn	9 15 197	3,880 $56,100$ $50,980$	6,500	2,706 10,562	72 113	28 132 58	122	300 1,091 5,074	305 30 112	12 8,691		241	2,024.1 19,466.7 91,728.6
Wood	1.473	1,233,200	76,260	15 57,249	3.716	11.306	9.760	1,325	140	60,362	60,342	2,213	4,730.4 \$999,796.0

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SUMMARY OF WORK PROJECTS ON COUNTY FORESTS July 1, 1958-June 30, 1960

	Plantations Acres			Forest	Forest Stand Improvement					1
County				Acres			Forest Road	Firebreak		Insect and
	Prior to July 1, 1958	1958-60	Total	Prior to July 1, 1958	1958-60	Total	Construction Construction Miles Miles	Construction	Total to Date	Disease Control Acres Total to Date
Ashland Barron. Bayfield Burnett Chippewa Clark Douglas	$\begin{array}{c} 471 \\ 97 \\ 9,546 \\ 7,112 \\ 439 \\ 6,746 \\ 7,497 \end{array}$	46 43 233 77 4 681	517 140 9,779 7,189 443 7,427	0 12 2,722 3,635 23 330	52 11 295 43 102 92	52 23 3,017 3,678 125 422	22.4 25.5 31 2.9 7.5	37 42	181 465 66	40 8,538 4,530 344*
Eau Claire Florence Forest Iron	2,785* 2,468 500 4,341 7,704	170 259 78 37 300	7,667 3,044 2,546 500 4,378 8,004	644* 196 50 6 1,189	471 46 128 105	1,115 242 178 111 $1,189$	41.5 .5 3.1	26.5 12.2 2.9 15	600 408 2.5 174.5	2,599 496 $3,949$ 19
uneau Langlade Lincoln Marinette Monroe	4.171* 4.842 3.138 14.337 160*	275 33 70 620 75	4,446 4,875 3,208 14,957 235	1,661 396 1,120 585 6,266* 80	311 39 166 108 993	1,972 435 1,286 693 7,259	56 3 5 18.3 42.8	20 10.2 16	3.5 48 413 244 938.5	$ \begin{array}{r} 450 \\ 2,728 \\ 20 \\ 2.472 \\ 238 \\ 10,616 \end{array} $
peonto Dneida Price Uusk	7,267 1,584 786 1,269 1,078*	85 36 95 65	7,267 1,669 822 1,364	2,657 1,394 33 401	99 37 	2,756 1,431 33 528	56.7 22.3	35.2	136	12,165 485 1,640
awyer 'aylor 'ilas Vashburn	4,235 398 2,856 1,928	81 17 117 213	1,143 $4,316$ 415 $2,973$ $2,141$	6,107* 4,830 95 158 1,680	94 274 19 5	6,201 5,104 114 163	20 30.7 38 11.1 15	4 32	362.5 256 141 46.5 25	2,010 20 $31,636$ 425 175
m	4,586	3,901	106,242	36,763	4,283	$\begin{array}{r} 2,326 \\ 513 \\ \hline 41,046 \end{array}$	7.5	14 10.5	285 32	1,495

^{*}Corrections made in figures from previous biennium due to sale of land, plantation failure or error in previous figures.

FOREST INVENTORY

Forest inventory reports for the state-wide forest survey have been published; the last four of thirty-seven individual reports were distributed during 1959. Preparations and calculations for a report covering the entire state have been completed. This report will be released as a Station Paper by the Lake States Forest Experiment Station during 1961. All of the above-mentioned inventory reports cover the inventory field work conducted in the state from July 1950 to June 1958. Following is a list of the reports along with their respective number:

WISCONSIN FOREST INVENTORY PUBLICATIONS

No.	Title
1	Forest Resources of Waushara County
	Forest Resources of Waupaca County
2 3	Forest Resources of Portage County
4	Forest Resources of Adams County
5	Forest Resources of Marquette County
6	Forest Resources of Jackson County
6 7 8	Forest Resources of Wood County
8	Forest Resources of Juneau County
9	Forest Resources of Monroe County
10	Forest Resources of Vilas County
11	Forest Resources of Oneida County
12	Forest Resources of Forest County
13	Forest Resources of Chippewa County
14	Forest Resources of Eau Claire County
15	Forest Resources of Clark County
16	Forest Resources of Marathon County
17	Forest Resources of Burnett County
18	Forest Resources of Washburn County
19	Forest Resources of Douglas County
20	Forest Resources of Bayfield County
21	Forest Resources of Sawyer County
22	Forest Resources of Rusk County
23	Forest Resources of Taylor County
24	Forest Resources of Ashland County
25	Forest Resources of Iron County
26	Forest Resources of Shawano County
27	Forest Resources of Langlade County
28	Forest Resources of Florence County
29	Forest Resources of Marinette County
30	Forest Resources of Oconto County
31	Forest Resources of Lincoln County
32	Forest Resources of Price County
33	Forest Resources of 32 Northern and Central
99	Wisconsin Counties
34	Forest Resources of 10 Counties in East Cen- tral Wisconsin
35	Forest Resources of 13 Counties in South- eastern Wisconsin
36	Forest Resources of 8 Counties in West Cen- tral Wisconsin
37	Forest Resources of 8 Counties in South-

Western Wisconsin

County Forest Inventories

Major emphasis during this biennium was on the inventory of county forests. Twenty-seven county forests are entered under the Forest Crop Law. Inventories were conducted to collect basic forest statistics for management purposes. The work performed by the forest inventory section on the county forests is divided into four major phases:

 Aerial Photo Mapping—Timber type maps are made directly from aerial photographs. These maps are of individual sections of land. Mapping was completed on Ashland, Barron, Monroe, Oconto, and Rusk for a total of 170,762 acres during this reporting period. In addition to the



Foresters measured 6,107 sample plots to complete the county forest inventory.

aerial photo mapping, these areas were also ground field checked to verify the type mapping by the photo interpreter.

- Sample Plots—Measured on twenty county forests in this biennium. These sample plots are one-fifth acre in size and a total of 6,107 plots were measured on these county forests.
- A Statistical Report—Covering the forest resources of the county forests was published for 16 individual county forests. The remaining reports will be published during 1961.
- A Township Timber Type Atlas— Has been prepared for each county forest. These maps have been pre-

Twenty-seven timber-type maps for county forests were prepared.

pared for the Conservation Department forester and the County Forest Crop Administrator.

All 27 county forests have been inventoried. Additions to the various county forests have also been mapped.

Watersheds

Increased interest in watersheds led to the preparation of seven land-use maps during this biennium:

Name	County	Acreage
Bay City South Nelson Diamond Valley-Hay-	PierceBuffalo	6.080 7.257
creek Trout Run West Branch Kickapoo	Eau Claire Jackson	$\frac{11,476}{8,513}$
River Twin Parks Plum Creek	Vernon Iowa	75,294 76,227
rum Oreek	Pierce, Pepin, Dunn	89,848
Total		274,695

An acreage summary along with field work collecting basic forest statistics was completed on the above watersheds. This information was then published and distributed to the cooperating agencies concerned with the various watersheds.

Cooperative Mapping

During this biennium, all cooperative industrial mapping was completed. In addition, that portion of the Flambeau River State Forest lying in Price County was also mapped. Along with the industrial forest mapping, portions of these areas were field checked. The remaining field checking will be completed during the next biennium.

Game and Fish Management Divisionswere also given assistance in the aerial photo mapping of various wildlife areas throughout the state.

FOREST TAX LAWS

Forest Crop Law

The Forest Crop Law continues to encourage wise forest management by protecting private forests from unfair taxation and by financial aid to develop county forests. The acreage entered by individuals, corporations, and counties increased by 28,221 acres during the past biennium. As of June 30, 1960, there was a total of 2,567,423 acres entered, of which 369,193 acres are privately owned lands and 2,198,230 acres are county owned lands. Of the privately owned lands 33,523 acres are located outside of forest protection districts and are under the special classification provision.

For more than thirty years the forest industries of Wisconsin have been using wood products from sustained yield forests that will continue to grow trees forever under a favorable tax program. This program stabilizes the supply of wood and encourages investment in Wisconsin wood-using industries.

Lands are entered under this law in 60 counties and furnish public hunting and fishing on over two and a half million acres of land.

Woodland Tax Law

The Woodland Tax Law has been favorably received by the small woodland owners throughout the state. This law provides for a reduced tax on tracts of land which are devoted to forestry but are too small to qualify for entry under the Forest Crop Law.

During the past biennium there were 22,369 acres entered, making a total on June 30, 1960 of 71,305 acres located in 69 counties and 716 towns. There have been few cancellations for non-practice of forestry or for use of the lands for purposes other than forestry. This law has only been in effect since 1954 and 3,317 orders of entry have been approved.

Most of the entries are in the agricultural areas of the state where small wooded tracts are managed by farmers for the production of timber for home use or for sale. These wooded areas also furnish cover and winter food sources for small game and wild birds.

The owners of lands under this law may request the services of a forester to advise them on forestry practices and prepare a management plan for their woodland. Information is also provided concerning markets for their wood products.

FOREST PEST CONTROL

Construction of the forest pest survey and control laboratory at Nevin Hatchery was started in the spring of 1958, and the building was ready for occupancy in December of the same year. In addition to serving as headquarters for Forest Pest Control Section activities in the state, it provides office space for the pest control supervisor, the southern area entomologist, the district forester, the utilization specialist, and the forest management section. Laboratory and greenhouse facilities are provided for

rearing pests for identification. A collection of the more important forest pests has been started, and information from the state-wide network of pest observers is routed through the five area entomologists to the laboratory where it is processed and filed for future use in evaluating pest problems. A soil testing laboratory in the building is used for testing pH, colloidal content, and organic material in samples from various planting sites throughout the state. A map reproduction service also is provided for

the Forest Management Division and others requiring such service.

Foresters and field personnel from other divisions in the Department were trained in pest detection and reporting at two training sessions held at Trees for Tomorrow Camp in Eagle River in 1959 and 1960. Members of the Forest Pest Control Section and specialists from the University, the U. S. Forest Service, and the Wisconsin Department of Agriculture participated in the training programs. The observers, numbering about 140, provide valuable assistance in the detection of insect and disease problems in the state.

Most forest insects were not cause for any great concern during the biennium, others showed signs of increasing activity, and a few hitherto insignificant pests came into the limelight. More than 70 forest insects and 15 diseases were reported during each of the 1958 and 1959 seasons.

Chemical control was restricted largely to the Saratoga spittlebug. In 1958 more than 30,000 acres of red pine plantations were surveyed and 1,271 acres required spraying at a cost of \$3,051.09, \$2,569.33

of which was paid by the state. The treated acreage was distributed over six northeast area counties. In 1959 over 25,000 acres were surveyed, and 1,534 acres required treatment in a five-county area of the northeast. The state paid \$2,617.14 of the total cost of \$3,021.98. Post-spray checks showed that effective control was obtained in both years.

Pine seedlings treated with aldrin for protection against white grubs were planted on approximately 4,700 acres in 1958 and again in 1959. Most of the treated trees were planted in the east central area, and records show that use of planters with insecticide applicators is increasing in the other areas.

At the start of the biennium, jack pine budworm populations were generally at a low level with little defoliation occurring anywhere in the state, but subsequent surveys indicated that a few stands in eastern Douglas and western Bayfield Counties had moderate to heavy early instar larval populations. In 1959, however, an increase in larval populations throughout the northwest area was noted. Some stands in Washburn and Douglas Counties received moderate de-



The forest pest control laboratory at Nevin hatchery, near Madison, brings the facilities of science to bear on pest control problems.

foliation and egg counts were fairly high over a large portion of the area, while egg parasitism was low. Budworm populations were low in other areas of the state. By the end of June, 1960, moderate to severe defoliation had occurred over an area of about 100,000 acres including parts of Burnett, Washburn, Douglas, and Bayfield Counties. Some top-killing and mortality now threaten older or suppressed trees, and the possibility of a chemical control program is under consideration for 1961. Continuous surveillance of budworm activity, parasitism, predation, mortality of overwintering and late instar larvae, timber cutting operations, and evaluation of the hazard to various types of stands in the affected area will be made to keep the size of any chemical control operation to a minimum that will provide necessary protection.

The numbers of walking sticks in the Town of Stephenson, Marinette County, have built up to the point where nearly 12,000 acres of scrub oak were defoliated in 1959, much of it completely. Egg counts from duff samples indicated high populations can be expected again in 1961 in the same area unless egg parasitism and other natural factors act to reduce the potential hatch.

Root collar weevil damage is still prevalent in many plantations in the northern and central counties of the state. An increased number of reports of damage to the roots of young natural pine reproduction and in plantations by unidentified we evil have been received from the northwest, west central, and central counties.

Several forest insect pests were observed to be locally damaging but were in such reduced numbers that they are not a present danger. They were the large aspen tortrix, pine bark beetles, black pine leaf scale, and the forest tent caterpillar. They are being kept under surveillance.



This white pine in Burnett county was defoliated by the introduced pine sawfly.

The maple blight problem in Florence County, which resulted in heavy mortality of maple on a limited area, and similar problems which appeared on two very small areas in Ashland and Price Counties in 1957, diminished sharply in intensity. No outward spread of the condition was evident in any of the areas by the end of the biennium. Research by University personnel linked the presence of two species of leaf rollers and a webworm with the damage that resulted. Populations of these insects were endemic the last two seasons.

Recent small scale tests for control of the white pine weevil on white pine, Scotch pine, and Norway spruce with lindane and aroclor produced encouraging results.

Populations of most sawfly species continued at an endemic level, except in small, localized infestations throughout the state. The introduced pine sawfly has increased in numbers in the northern

tiers of counties where it has caused light to very heavy defoliation of white pine. Although defoliation of larch by the larch sawfly was generally less wide-spread in 1959 than in 1958, fairly heavy defoliation in scattered stands has been reported in some northern and west central counties. Top-killing of this tree species has occurred in the latter location.

European pine shoot moth populations were extremely low in early 1959 along Lake Michigan, but surveys completed in the spring of 1960 indicated that this species was again increasing in numbers.

Aerial surveys for Dutch Elm Disease were conducted during 1959 in the southern and western counties of the state in cooperation with the Wisconsin Department of Agriculture. A number of suspect trees spotted from the air were later ground checked. This disease was quite prevalent along the river bottoms in the Beloit vicinity, and has spread as far west as Lafayette County.

Forest Protection

The principal responsibilities of the forest protection division are, (1) prevention and suppression of forest fires, and (2) enforcement of laws relating to forest protection as defined in Chapter 26 and elsewhere in the Wisconsin statutes.

To carry out these responsibilities, twelve forest protection districts covering a gross area of 16,933,000 acres have been established by law. A limited form of forest protection has been provided for in six cooperative districts covering the balance of the state. The chief forest ranger is charged with responsibility for administration of the forest protection division. An annual forest fire report sets forth in detail all items pertaining directly to prevention and suppression of forest fires in Wisconsin.

Forest fire control has improved greatly in the past three decades. For instance, the 1930-1932 biennial report indicates that 5,508 fires were reported during that biennium; and these fires burned 760,437 acres. In comparison, during the 1958-1960 biennium, 2,440 fires burned 36,340 acres. This progress has caused a feeling to develop among many that a forest fire control problem does not exist or is at least of minor importance in Wisconsin today. Because of this misconception, there is a resultant complacency developing which is dangerous. Forests and forest values are ever increasing. Generally overlooked are other values which far exceed forest values-soil, water, wildlife, recreational development and property, resorts, summer homes, cabins, watershed storages, mining properties, utility lines and installations, and other related items which can be quickly consumed by large fires. We have only to look to the west coast conditions of the past season to be reminded of what could happen. A recent fire which occurred near Webster in western Wisconsin also confirms the foregoing statement. Maintaining a constant alertness and forest-fire consciousness is a primary consideration in continuing and improving forest protection in Wisconsin.

Notable achievements during the biennium are:

- Development of a standard attack plan to be used in suppression action taken on crown fires, and resultant training of division personnel in operation of this plan including influences of weather on fire behavior.
- Introduction of a system providing for a detailed inventory of crownfire-threat areas throughout protection districts.
- Measurement of fire danger at all ranger stations.
- Detailed enforcement of the Christmas tree cutting and transportation law principally and added enforcement effort relating to other laws dealing with forest protection.
- Acquisition of army surplus equipment especially suited for forest protection and related work.
- Development of new fire suppression equipment such as the fire-line plow with built-in semiautomatic backfiring device and the Bombardier tanker.
- Accelerated fire prevention programs in schools at all levels and with special groups.
- 8. Completion of new forest protection movie.

FIRE PREVENTION

As a direct result of effective forest fire control over the past three decades, forest areas are now producing more merchantable timber and there is an ever-increasing timber harvest. The early logging effort in Wisconsin demonstrated forcibly that slash resulting from cutting operations creates a tremendous fire hazard which makes fire control extremely difficult and at times almost impossible. Present and future timber production and harvest make the forest protection problem even more complex as public and private forest management practices become more intensive.

The most serious hazard is present in the conifer types in natural stands and plantations; although hardwood forests present an even greater threat during periods of prolonged drought, as is evident from a survey of major fires of the past.

No one can say how much fire prevention effort is enough, but one fact is outstanding; the only really successful way to cope with the forest fire menace is to prevent fires from starting! In this state, fire prevention effort is being applied by two basic methods, (1) through education, and (2) by law enforcement and regulation.

During the biennium, planning has been done to provide for added fire prevention effort in crown-fire-threat areas. Such plans provide for, (1) detailed inspection work, (2) hazard reduction, (3)



A ranger gives instruction in forest fire prevention and suppression to a Trees for Tomorrow Camp group.

personal contact and information, and (4) application and enforcement of the special regulatory measures.

Individual features may provide for closing down logging operations during periods of critical hazard; elaborate air and ground patrols; rigid controls over burning permits; elimination of special risks and hazards; a detailed and complete information and warning system,

and zoning these areas so that emergency fire regulations can be readily installed.

This type of fire prevention effort is necessary in these crown-fire-threat areas in order to reduce the probability of fire occurrence to an absolute minimum. There is only one way to successfully cope with crown fires; that is to keep them from starting!

ENFORCEMENT OF LAWS

For over 30 years, one of the main functions of the forest protection division has been primary responsibility for enforcement of laws relating to forest protection. This involves principally Chapter 26, Wisconsin statutes, but includes laws in other sections of the statutes concerned with forest protection.

First attention is given to laws regulating use of fire. This division is the agency primarily responsible for administration of the burning permit laws and system. Over 75,000 burning permits were issued, checked, and processed during the biennium. This necessitated many miles of field inspection and much supervisory work. A division requirement is that every reported smoke must be accounted for. Regulation of burning will continue to be one of the major responsibilities and work assignments of the ranger force. This function is growing rapidly as the population of forest areas, both resident and transient, increases steadily year after year.

Rapid forward strides in forest management and the resultant increased timber production have necessitated an accelerated effort by this division in enforcement of laws relating to all types of timber cutting and harvest. This program gained new momentum in 1954 and reached an all-time high in 1959 when the Christmas Tree Growers Association of Wisconsin through its president commended members of the ranger force in the outstanding job that had been done in enforcing the Christmas tree cutting and transportation laws. Although maximum effort is hindered annually by assignment of most of the field force of this division to assisting in enforcement of big game laws, forest rangers have continued to do an excellent job. The division's efforts have received substantial aid from other division personnel.

During the biennium, rangers inspected over 7,500 cutting operations involving in excess of 18,000 land descriptions. The trend in this enforcement field continues upward as timber production and harvest programs expand at a fantastic rate.

EQUIPMENT AND FACILITIES

The fire-fighting equipment complement was improved considerably during the biennium. A new type of tanker was developed and put into use. This unit is comprised of a Bombardier tractor (a high-speed crawler-type unit developed in Canada for use primarily in

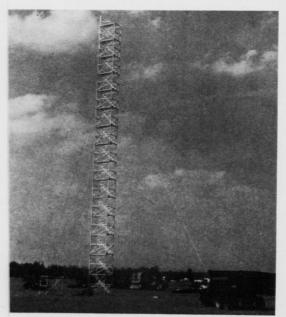
swamp forests) with twin water tanks and a power-take-off pump. The primary purpose behind development of this unit is to provide for a fast, mobile, attack vehicle for fire suppression in large grass marsh areas.

A fire-line plow with a built-in semi-

automatic power backfiring attachment was constructed, and four of these units are being tested in the field now. Information relative to this equipment indicates that it is performing very satisfactorily. Details regarding construction have been published in all leading firecontrol literature.

A mobile lookout tower was purchased. This 100' sectional structure can be assembled in one hour, dismantled in even less time, and relocated as need for supplementary detection arises. It is also very useful in locating tower sites, mapping seen areas, and for radio and microwave communications path surveys.

Through use of this portable lookout, many permanent towers have been relocated more advantageously during the biennium. The full importance of this phase of detection work becomes even more positive in view of realization by experienced forest protection personnel



A portable fire tower, 100 feet high, can be set up in an hour and taken down in even less time.

that there is no satisfactory over-all replacement for the lookout tower system at this time. Use of aircraft continues to be a valuable supplement to the tower system, but detection by aircraft alone has proved to be inadequate. This type of detection is being used in the extensive forest protection districts at present because forest areas are interspersed with open fields.

Break-away connectors have now been installed in all hydraulic systems on fire-line plows. All fire-line plows are now equipped so that they can be kept in operation on the fire line at all times regardless of any breakage in the depth regulator system. Depth regulation can be accomplished manually if the hydraulic system fails.

Army surplus has supplied some excellent fire suppression equipment. There is now a complete complement of trucktankers of all sizes available for immediate use in protection districts. Heavyduty pumpers have been obtained to replace the obsolete models formerly located at ranger stations. Auxiliary power plants have been assigned to most districts for use in the field and as an auxiliary power supply for operation of the communications system in the event of power line failures. All kinds of field and office equipment developed for use by the armed services have been converted to the same type of usage by this division. Much time and money was spent in travel and labor to acquire and adapt this equipment, but the program cost is an item of minimum importance when consideration is given to the improvement in machines and vehicles now available for fire suppression and other

A new storage warehouse was constructed at forest protection headquarters; and a ranger station office was constructed at Whiting. The communications system consisting of approximately 2,000 miles of telephone and microwave lines



Here a tractor-tanker is equipped with an automatic backfiring device which the Conservation Department developed.

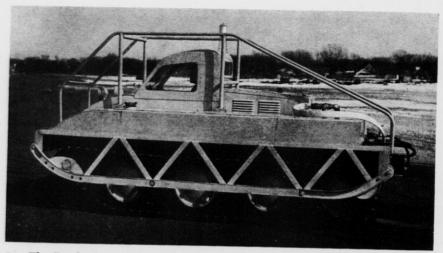
has been expanded during the biennium to cover all forest protection districts. Improvement work, such as cutting and placement of new treated pine poles, high-strength wire, modern switchboards, etc. has steadily progressed in accord with a standard operation and maintenance plan developed on a protection district basis. Although this communications system has been constructed and is maintained by this division for forest fire control, the entire department uses

it. At the close of the biennium, a change-over in the radio communications system is in the planning stage.

The ranger force continues to strive for new and better equipment and accessory items. The same type of imaginative thinking, which produced such items as the break-away plow hitch, fire-line plow depth regulator chain, fiberglass backpack cans and water tanks, and many others, is still very much in evidence throughout the division.

These truck-tankers were adapted for fire suppression from army surplus equipment.





The Bombardier, a high-speed crawler tractor developed in Canada, was used in building this tanker. It excels in getting around on soft ground, as in marshes and swamps.

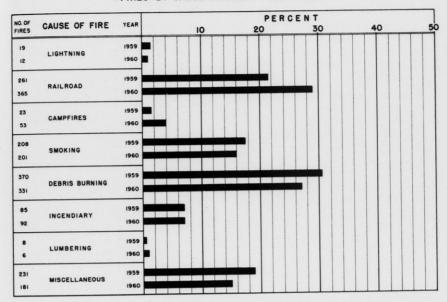
PLANS AND TRAINING

Basic forest protection planning was done on a forest protection district level. These plans were developed on a unit basis and are reviewed and revised annually and currently as required. Specific items covered in the district fire plan pertain to fire prevention; general organization; inspection; training; measurement of fire danger; detection; dispatching; communications; equipment and facilities; and emergency supervision, equipment, and labor supply sources. The ranger force does the necessary contact work, develops contracts and agreements, provides general and specialized training, and keeps this emergency organization available and in contact during high hazard periods.

Specialized training courses have been given to forest rangers at drivers institutes and at the ranger school conducted annually at the State College at Stevens Point to better equip them to perform their various duties and assignments.

A notable forward step was taken dur-

ing the biennium to better prepare those who may be concerned for combat with crown fires. Field personnel who were best qualified from past experience developed a standard attack plan to be used on crown fires. This plan was written into a field manual covering in detail the most practical procedures to follow in building and operating a complete supervisory, manpower, equipment, and facilities complement on a crown fire. The manual is a part of every ranger's equipment. Three training sessions were conducted by the rangers who developed the plan to thoroughly inform other members of the ranger force in standard operating procedure. An integral part of this training program was the session on influences of weather on fire behavior presented by the regional forecaster for the U. S. Weather Bureau. Representatives of forest industry attended these. training sessions. This training program was then carried on further in forest protection areas and districts. A state-



wide training session involving use of the plan was conducted at the ranger school held at the Stevens Point College in June 1960. This training program is being continued in the field using actual crown-fire-threat areas in connection with the individual training operations. The program will be continued and expanded.

Periodic training sessions were held in connection with the division's assignment in relation to the Civil Defense effort. This training involved use of equipment designed to locate and register radioactive fallout. Division supervisors took part also in state-wide Civil Defense training programs.

COOPERATION

Much of the success of the forest protection program in Wisconsin has been due to cooperation both interdepartmental and from the general public. The ranger force constantly strives to maintain and further develop this important aid to forest fire prevention and over-all forest protection by extending cooperation to others. During the biennium, over 60,000 man-hours were devoted to cooperative efforts wth other divisions and agencies. This cooperative effort cost the

forest protection division over \$215,-000.00. Principal cooperative efforts extended to other divisions and agencies have been in the following fields:

Law Enforcement—issuance of special gun permits prior to special bear hunting season; full-time assignment of members of the ranger force to game law enforcement during deer seasons as requested by conservation wardens; registration of archery-killed deer; tagging beaver and other animals; investigation of complaints of dogs running deer; informing the public on boating, hunting, fishing, and other fish and wildlife regulations; picking up and disposing of carkilled deer, bear, and other animals; and taking care of complaints when wardens were not available.

Game Management—assist in conducting prescribed burning operations; conduct daily deer and other game census; prepare and seed game food plots; plan, supervise, and operate deer registration programs; aid in dissemination of information as in rabies control program; pump water into dry flowages on game management areas; assist on dam, dike, and other construction and maintenance work.

Fish Management—assist in fish planting operations; fish census surveys; spring pond surveys; accessway surveys; and fish netting and spawning operations.

Forest Management—assist in county and private forest tree distribution program; supply labor, supervision, and equipment used in setting up special programs like Farm Progress Days; transport and supply equipment on special forestry projects or at meetings; provide communications setup and other assistance on forest spraying and other improvement projects; and conduct field inspection work to locate insect infestations and tree and plant disease.

Forests and Parks-general supervision of assigned state forests or units thereof;

assist in campsite and other construction projects; cut timber, saw lumber, and aid in construction and maintenance work on park and campsite equipment and facilities; collect camping fees, and assist on cruising and survey work.

Nondepartmental-cooperate with and assist Soil Conservation Service on field surveys and project work; U. S. Forest Service on fire prevention and suppression; Civil Defense organization on planning, organization and training programs; fire departments and other rescue squads on emergency field rescue operations; sheriff's departments on lost or missing persons and drowning searches and removal of bodies; schools on forest planting and improvement practices; sportsmen's clubs on special conservation projects and development work; Geological Survey and University of Wisconsin on field surveys; local fire departments on suppressing fires in buildings; and community, school, and civic groups on miscellaneous development and improvement programs.

License sales records of department personnel indicate that employes of the the forest protection division sold the major portion of fish, game, and other licenses. In the organized protection districts, district forest rangers have been given the assignment of principal field disbursing agents for licenses. Since the return of the bounty system, the ranger force has taken over most of the bountying of animals in the field.

Forests and Parks

The division operates nine state forests, 32 state parks and six state tree nurseries. The acquisition of properties managed by this division extends back to 1900 when the first park land, Interstate State Park, was acquired. The first nursery and state forest headquarters were established at Trout Lake in the Northern Highland State Forest almost 50 years ago. Active management of these properties has continued since that time. The activities and operations of the division continued to increase during the biennium.

Timber management programs received more attention than ever before. Public use of the forests and parks for recreational purposes reached an all-time high. Nursery production reached a peak during 1959 but is expected to level off. This past biennium has not been a plateau for the division but only a point on a curve which will show even further increases in timber management and recreational use in the future.

The Park and Forest Travel Study was completed during the biennium. Twenty thousand personal interviews were taken from visitors to the state parks and state forests. A great deal of valuable information was obtained and will be useful in planning the future development for administration of the state parks and for-

ests. A popular report was published during the biennium. A complete technical report will be published early in 1961.

The park planning section was very active during the biennium. Recreation plans were prepared for 18 areas in the state forests and parks. New areas were inspected for state park or recreational area potential; eight were recommended for possible acquisition and five were not recommended. A county park survey was completed and the park planning section assisted with plans for recreational areas in 13 counties. The section cooperated with the National Park Service in inspecting 820 miles of shore line on Lake Superior and Lake Michigan. Seven major areas on Wisconsin's Great Lakes shores have been recommended for acquisition as state parks or forests.

Two new parks-Blue Mound and Copper Culture Mound-were added to the state park system.

A memorandum of understanding between the Commission and the U. S. Forest Service was approved establishing the Coulee Experimental Forest in La Crosse County in cooperation with the Lake States Forest Experiment Station. During the biennium 1,830.92 acres of land were purchased in connection with the project.

STATE FORESTS

The state forests of Wisconsin are an important public resource. Over 350,000 acres dedicated to multiple-use management provide timber and jobs to bolster the state's economy, offer unexcelled opportunities for hunting and fishing, and furnish summer vacationists with well-planned recreational areas and outstand-

ing scenery. The forest cover acts to retard rapid runoff and conserves the rain and snowfall on the upper watersheds of the state's more important river systems. The goal is to manage these areas in order that each acre be utilized in the way for which it is best suited.



The Kettle Moraine state forest receives heavy recreational use. This is the picnic area at Mauthe lake.

Land Acquisition

A total of 11,973.91 acres of land was purchased at a cost of \$584,625.51. Land exchanges included 1,040 acres of state forest lands outside the boundaries of state forests in Vilas County for county lands inside the boundary of the North-

ern Highland State Forest. An exchange with the Wisconsin Valley Improvement Company was made to reimburse the department for 73.39 acres of state lands which were flowed. Several small tracts amounting to 5.88 acres, with a value of \$11,405.00, were sold or traded to settle trespasses and disputes.

LAND ACQUISITION AND OWNERSHIP

Forest	Acres Purchased	Cost	Total Acreage
American Legion State Forest Black River State Forest Brule River State Forest Coulee Experimental Forest Council Grounds State Forest	1,373.31 $1,921.21$ 862.49 $1,830.92$	\$ 33,275.80 77,671.53 32,361.50 90,775.00	39,748.61 61,461.69 25,145.73 1,830.92
Flambeau River State Forest Kettle Moraine State Forest Northern Unit. Southern Unit. Cedarburg Bog Wilderness Area	1,074.93 1,844.31 535.30 80.00	29,561.50 201,578.80 72,073.38 2,100.00	278.17 74,589.49 14,262.29 7,786.36
Northern Highland State Forest Point Beach State Forest	2,417.84 33.60	37,728.00 7,500.00	125,844.82 2,271.64
Total	11,973.91	\$584,625.51	353,219.72

Cultural Work

Improvement of young timber stands to enhance the value or growth of the trees by thinning dense stands and pruning selected crop trees was done with prison and nursery crews for winter and off-season projects. The following is a summary of cultural work:

CULTURAL WORK-ACRES

		Cultural 1	Cultural Work—Acres		
Forest	Prune	Release or Thin	Release and Prune	Total	
American Legion Brule River Flambeau River	347	1 99 5 56 347	229 59	675 115 347	
Northern Highland	428	148		576	
Total	775	650	288	1.713	

Improvements Buildings and Grounds

A 32 by 100 foot steel garage and repair shop was erected at the McNaughton Prison Camp on Lake Tomahawk on the American Legion State Forest. A concrete block garage of similar size was constructed at the Flambeau Prison Camp on the Flambeau River State Forest.

Highways

A two-mile segment of the Pickerel Lake-Stone Lake road was completed with force account funds on the American Legion State Forest, giving access to a large area of timber and a deer yard. On the Flambeau River State Forest two miles of road were constructed to the Lake of the Pines.

Highway improvement projects accomplished through the State Park Road Fund include a bridge and boat landing between Dam and Sand Lakes on State Forest Road D on the American Legion State Forest; three miles of State Forest Road N were reconstructed and resurfaced on the Northern Highland State Forest; and on the Black River State Forest roads were constructed to the Pigeon Creek Flowage and to the East Fork of the Black River.

Forest Planting

A total of 2,285,150 trees was planted to establish 2,071.92 acres of new plantations and to replant 106.5 acres of plantations that had failed. The following is a summary of the planting done on each forest:

Forest	No. Trees	Acres Planted		
10700	140. 17668	New Planting	Replanting	
American LegionBlack River	564,290 186,000	412.80 221.80	11.5	
Brule River Flambeau River Kettle Moraine	123,225 $353,225$	68.00 321.90	81.0 14.0	
Northern UnitSouthern Unit	587,985 322,140	499.57 307.00		
Northern Highland Point Beach	132,285 $16,000$	149.00 91.85		
Total	2,285,150	2,071.92	106.5	

Forest Protection—Fire, Disease, Insects

An annual insect survey system using permanent plots was initiated on the American Legion and Northern Highland State Forests in cooperation with the University of Wisconsin.

On the Northern Highland Forest 942 acres of pine plantations were sprayed to control infestations of saratoga spittlebug.

Currant and gooseberry eradication work was completed on 672 acres of land on the Flambeau River State Forest to protect white pine from blister rust.

There were eight fires on state-owned land, burning a total of 114 acres.

Recreation Development

More effort and money were expended on the development of new recreation areas and to improve areas already in use than any other activity.

New recreation areas which were completed during the biennium are as follows:

American Legion State Forest—An 18unit campground at Bearskin Lake and boat landings at Hasbrook, Long and Muskellunge Lakes.

Black River State Forest—A 30-unit campground at Castle Mound.

Flambeau River State Forest-Scenic areas were developed at Little Falls and Slough Gundy.

Kettle Moraine State Forest—A 24-unit campground at LaGrange.

Northern Highland State Forest—A 27unit campground at Upper Gresham Lake, a 62-unit campground at Big Muskellunge Lake, and 8 canoe campsites.

Point Beach State Forest—A 40-unit tent camping area and 10-unit trailer camping area. Work was started on a picnic ground on Clear Lake on the American Legion Forest, three public use areas on the Black River Forest, and a 25-unit campground on Lake of the Pines on the Flambeau River Forest.

Work was done on the following recreational areas to enlarge or improve them:

On the American Legion State Forest two four-unit changing buildings were constructed at the Lake Tomahawk picnic grounds, and the Clear Lake campground is being enlarged and rebuilt.

Two campgrounds on the Brule River State Forest are being redeveloped. A new toilet building was completed on the Council Grounds State Forest.

On the Kettle Moraine State Forest a new modern bath and toilet building with sewage system and water supply was completed at Long Lake. The Mauthe Lake campground was enlarged; and four new toilet buildings, a new well and water system and trail shelter were completed. The Scout Area near Eagle and the Whitewater Lake tent camping and picnic area were also enlarged.

On the Northern Highland Forest an 18-car parking lot and boat landing were built on Sandy Beach Lake and two fourunit changing buildings were completed at the Crystal Lake Beach.

Some of the items constructed to develop and enlarge recreation areas include 435 picnic tables, 20 pit-type toilet buildings, 13 wells, 4 changing buildings, and 1 modern bathhouse and toilet building.

Recreational Use

Camping increased 35 per cent over the last biennium. The following are summaries of camping use and visitations at intensive recreation areas:

CAMPER DAYS—STATE FORESTS 1959-1960 Calendar Years

Forest	1959	1960
American Legion Black River Brule River Council Grounds Flambeau River Kettle Moraine Northern Highland Point Beach	28,673 3,707 1,511 2,136 2,745 89,958* 87,521* 26,220	29,948 4,848 1,891 2,946 2,243 105,603* 93,019* 25,346
Total	242,471	265,844

^{*}Includes estimate of canoe campers and groups at Mauthe Lake.

VISITATIONS—INTENSIVE RECREATION AREAS

1959-1960 Calendar Years

Forest	1959	1960
Black River—Castle Mound Council Grounds Kettle Moraine Point Beach	79,387 43,193 535,022 241,779	79,965 46,005 648,576 201,535
Total	899,381	976,081

Sale of Forest Products

The sale of timber has remained fairly stable. The average amount of money apportioned to counties amounted to nine cents per acre per year. In addition to the sale of timber, the Black River Forest is promoting the sale of moss from state lands.

Miscellaneous Forestry Work

A concerted effort is being made to locate or establish survey corners and property boundary lines on state lands. A survey crew began a systematic resurvey of the Northern Highland State Forest, and the field work for T.40N, R.7E was completed during the biennium. The following is a summary of the work completed during the biennium:

Forest	Miles of Survey Line	Monu- ments Set
American Legion Northern Highland	27 75	21 254
Total	102	275

STATE FOREST INCOME

Source	1959	1960
Camping fees Concessions Mess hall Rentals and land use State road refunds Timber sales Miscellaneous	\$ 35,060.37 4,669.44 2,035.30 9,441.40 11,404.03 123,486.42 13,409.49	\$ 58,000.20 2,971.29 2.248.55 9,046.40 11,481.36 126,341.27 15,755.48
Total	\$199,506.45	\$225,844.55

SUMMARY OF PRODUCTS SOLD

Forest	Pulpwood and Bolts— Cords	Saw-timber Board Feet	Misc. Products Piece	Christmas Trees	Christmas Greens Pounds
American LegionBlack RiverBrule River	7,815.18 6,337.19 2,050.12	487,530 51,840	131	4,132	16,000
Flambeau River Kettle Moraine Northern Highland	763.52	196,870 6,100 1,102,340	25	3,719	42,020
Total	58,489.04	1,844,680	156	7,851	48,020

STATE PARK ATTENDANCE-1959-1960 CALENDAR YEARS

	Number	of Visitors	Numbe	er of Cars	Camp	er Days
	1959	1960	1959	1960	1959	1930
Aztalan	28,773	30,702	8,221	8,772		
Big Foot Beach	213.446	209,159	60,940	59.757	91 900	
Blue Mound	55,225	42.186	15.557	12.053	21,298	22,493
Brunet Island	221.725	194,320	61.780		10 450	
Copper Falls	104.768	140.048	28,810	55,520	13,479	14,14
Cushing Memorial	32,654	33,194	9,330	39,943	8,419	10,16
Devil's Lake	1,450,845	1.399.035	414,527	9,484		
First Capitol	6.002	6,330	1.715	399,812	232,507	184,60
Governor Dodge	94.843	133,608	27,076	1,807		
High Cliff		55,653		38,174	2,268	6,529
Interstate	389.730	359,519	29,069	15,900	603	1,998
Lizard Mound	35,429	37,001	111,360	102,720	15,72)	17,313
Lost Dauphin	5,250		10,125	10,572		
Lucius Woods	124.634	5,985	1,500	1,710		
Merrick	147.149	119,620	35,610	34,177	6,424	8,773
Mill Bluff	45,607	143,440	42,060	40,983	8,907	8,42
Nelson Dewey		79,964	13,080	22,847	732	1,62
New Glarus	55,314	70,752	15,804	20,215	926	2,139
Ojibwa	6,496	13,572	1,812	3,884		1,25
Old Wade House	11,320 26,370	17,496	3,240	4,999	1,131	1,329
Parfrey's Glen		31,458	7,534	9,039		
Pattison	19.298	21,602	5,512	6,172		
Peninsula	232,623	286,335	66,463	81,819	16,443	19,814
Perrot	544,492	540,222	155,549	154,346	98,198	97,475
Potawatomi	110,147	166,827	31,380	47,665	4,577	7,258
Rib Mountain	222,079	189,547	63,231	54,156	11,379	14,569
Cooks a Coi	249,949	338,577	71,634	95,258	4,124	3.883
Roche a Cri	73,414	54,652	20,974	15,615	2,292	3.981
Rocky Arbor	13,598	112,882	38,320	32,252	15,508	13,643
Terry Andrae	176,369	217,167	50,397	62,049	31,405	27,951
Ower Hill	51,907	52,489	14,851	14.997	3,636	3.869
Wildcat Mountain	53, 86	70,331	15,396	20.095	1,284	1,641
Wyalusing	130,018	116,253	34,289	33,212	12,957	15,193
Total	5,157,972	5,289,926	1,467,146	1,510,004	484,220	490,062

APPORTIONMENT TO COUNTIES OF REVENUE FROM SALE OF WOOD PRODUCTS CUT ON STATE FOREST LANDS (SECTION 25.30, WISCONSIN STATUTES)

The following apportionment was made on the basis of state forest acreage as of June 30, 1959

Forest, County and Town		Town Acreage	County Acreage	Per Cent of County to Forest Total	Total Revenue by Forest	25% Due Counties
American Legion Oneida	Lake Tomahawk Newbold Sugar Camp Woodruff	8,497.81 11,202.48 7,944.69 11,359.56	39,004.54	100		
Black River Forest	Woods and a second seco	11,339.30	39,004.34	100	\$ 18,868.61	\$ 4,717.13
Jackson	Brockway Knapp W. Komensky Manchester Millston	3,174.38 44.00 $17,747.55$ 129.73 $38,556.77$	59,652.43	100	25,445.64	6,361.41
Brule River Douglas	Bennett Brule Slone Springs Wascott Slone Springs Bruscott Slone Slone Springs Bruscott Brusc	720.00 6,550.07 10,132.78 4,422.24 1,987.69	23,812.78	100	2.067.87	516.97
Flambeau River Price	Flambeau Lake Lake	1,316.98 5,991.30	7,308.28	9.847		76.21
Rusk	Cedar Rapids South Fork	5,246.21 4,322.11	9,568.32	12.893		99.80
Sawyer	Draper Winter	11,261.19 46,077.95	57,339.14	77.260		598.02
			74,215.74		\$ 3,096.12	\$ 774.03

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APPORTIONMENT TO COUNTIES OF REVENUE FROM SALE OF WOOD PRODUCTS CUT ON STATE FOREST LANDS (SECTION 25.30, WISCONSIN STATUTES)—(Continued)

For	rest, County and Town	Town Acreage	County Acreage	Per Cent of County to Forest Total	Total Revenue by Forest	25% Due Counties
Kettle Moraine Fond du Lac	Auburn. Osceola.	$^{2,722.30}_{1,632.03}$	4,354.33	21.179		\$ 53.85
Jefferson	Palmyra	1,117.32	1,117.32	5.435		13.82
Sheboygan	Greenbush Mitchell Plymouth Scott	2,753.60 $3,941.70$ 41.03 $1,324.11$	8,060.44	39.206		99.68
Walworth	La Grange Whitewater	1,120.97 453.44	1,574.41	7.658		19.47
Washington	Kewaskum	636.52	636.52	3.096		7.87
Waukesha	Delafield Eagle Ottawa	$80.00 \\ 2,279.88 \\ 2,456.20$	4,816.08	23,426		59.56
			20,559.10		1,017.00	\$ 254.25
Northern Highland Iron	Mercer Sherman	7,244.96 5,113.77	12,358.73	9.880		\$ 1,802.88
Vilas	Arbor Vitae Boulder Junction Land O' Lakes Manitowish Waters Plum Lake Presque Isle St. Germain Winchester	25,042.87 34,707.84 5,776.16 4,689.54 31,850.92 4,912.66 3,873.31 1,880.00	112,733.30	90.120		16,444.92
Totals			125,092.03 342,336.62		\$ 72,991.18 \$123,486.42	\$18,247.80 \$30,871.61

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APPORTIONMENT TO COUNTIES OF REVENUE FROM SALE OF WOOD PRODUCTS CUT ON STATE FOREST LANDS (SECTION 25.30, WISCONSIN STATUTES)

The following apportionment was made on the basis of state forest acreages as of June 30, 1960

Forest, Co	ounty and Town	Town Acreage	County Acreage	Per Cent of County to Forest Total	Total Revenue by Forest	25% Due Counties
American Legion Oneida	Lake Tomahawk Newbold Sugar Camp- Woodruff	8,657.81 11,507.75 8,105.32 11,477.73	39,748.61	100	\$ 20,020.95	\$ 5,005.24
Black River Forest Jackson	Adams Brockway Knapp Komensky	600.88 3,341.23 44.00 18,409.53				
Brule River Douglas	Manchester Millston	349.28 38,716.77 920.00	61,461.69	100	30,278.77	7,569.69
	Brule Highland. Solon Springs Wascott	6,766.99 10,372.78 5,098.27 1,987.69	25,145.73	100	3,700.33	925.08
Flambeau River Price	Flambeau Lake	$1,436.18 \\ 5,999.10$	7,435.28	9.968		138.49
Rusk	Cedar Rapids South Park	5,246.21 $4,322.11$	9,568.32	12.828		178.23
Sawyer	DraperWinter	11,399.44 46,186.15	57,585.89	77.204		1,072.66
			74,589.49		\$ 5,557.50	\$ 1,389.38

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APPORTIONMENT TO COUNTIES OF REVENUE FROM SALE OF WOOD PRODUCTS CUT ON STATE FOREST LANDS (SECTION 25.30, WISCONSIN STATUTES)—(Continued)

Forest, County and Town		Town Acreage	County Acreage	Per Cent of County to Forest Total	Total Revenue by Forest	25% Due Counties	
Kettle Moraine Fond du Lac	Auburn Osceola	2,998.42 1,632.03	4,630,45	21.001		\$ 62.95	
Jefferson	Palmyra	1,117,57	1,117.57	5.069		15.19	
Sheboygan		3,084.17 4,200.36 41.03	8,701.67	39,465		118.29	
Walworth	La Grange	1,140.97 475.44	1,616.41	7.331		21.97	
Washington	Kewaskum	930.17	930.17	4.219		12.65	
Waukesha	Delafield Eagle Ottawa	2 378 68	5,052.38	22.915		68.69	
			22,048.65		1,198.97	\$ 299.74	
Northern Highland Iron	MercerSherman	7,288.33 5,113.77	12,402.10	9.855		\$ 1.615.84	
Vilas	Arbor Vitae Boulder Junction Land O' Lakes Manitowish Waters PlumLake Presque Isle St. Germain Winchester	35,040.06 5,776.16 4,689.54 31,850.92 4,912.66 3,901.21	113,442.72	90.145		14,780,35	
			125,844.82		\$ 65,584.75	\$16,396.19	
Totals			348.838.99		\$126,341.27	\$31.585.32	

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STATE NURSERIES

The number of trees distributed during the biennium was the highest in the history of forest nursery operation by the Conservation Department. The six state nurseries produced about 74,000,000 trees. Including the stock produced by the U. S. Forest Service under contract, more than eighty-two million trees were distributed for field planting.

Trees available for distribution exceeded the demand for the first time in many years and as a result about 2,350,000 trees were surplus. In order to cut back future production, the contract with the U. S. Forest Service for seeding was cancelled.

The Boscobel Nursery produced 3,701,575 game food trees and shrubs for the Game Division. This was less than one-fourth of the Boscobel production.

During 1960 the inventory of nursery stock reached an all time high of over 158 million trees. More important is the fact that as the demand for nursery stock is met, more trees of three-year-old seedling and transplant size will be produced. During the spring season of 1961 over twenty-seven million three-year-old trees and about four million transplants will be available for distribution.

Insects, diseases and soil problems continue to tax the ingenuity of the nursery managers. Damping off fungi still take some toll of seedlings in spite of pelleting seed with fungicides. Soil fumigants are being tested also to try to reduce this cause of mortality. Loss of white spruce seedlings and transplants by some unknown agent is rather serious in several northern nurseries. Greater efforts are being made to improve the organic content of nursery soils as well as to correct deficiencies of trace elements.

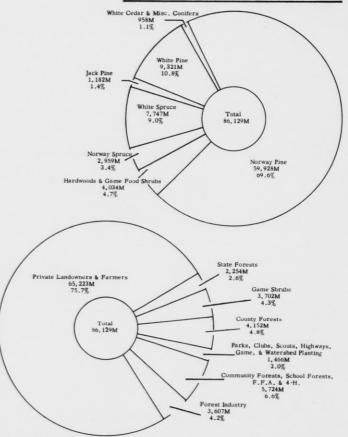
Improvements in packing buildings at Gordon and Hugo Sauer Nurseries and the completion of the new seed extractory at Hayward were major capital improvements. Tree grading tables were constructed for all nurseries. A new entrance road was built at the Griffith Nursery to eliminate a traffic hazard. With the exception of a shop building at Griffith, most of the major improvement projects have been completed.

Supplies of seed in storage are adequate for most species; the cone purchasing program was curtailed somewhat. Some cones were purchased each year to maintain inventories. During the past two years the following quantities of cones were purchased:

CONE AND SEED PURCHASING

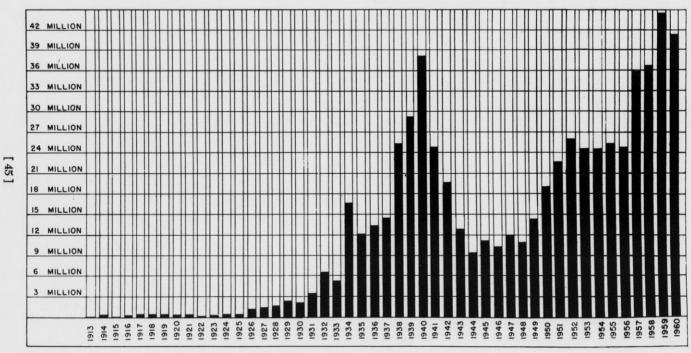
	195	1960		
Species	No. Bushels	Price	No. Bushels	Price
Norway pine White pine Black spruce	1,407.08 2,839.12	\$ 5.00 2.00	81.55 1,748.15 48.00	\$ 4.00 2.00 6.50
White spruce Black Walnut (seed)	20.70 37.80 163.50	3.50 10.00 1.00	471.46 1,390.65 312.00	3.00 8.00 1.00

FIELD PLANTING BY SPECIES



FIELD PLANTING of TREES by PLANTING AGENCIES

DISTRIBUTION BY STATE NURSERIES 1913 — 1960



(FIGURE A4-1960 NURSERY REPORT)

STATE NURSERY TREE DISTRIBUTION BY COUNTY ALL NURSERIES—State, County and Federal Years of 1959–1960

County	State Forests	County Forests	*Extension	**Private	†General	Total	No. o Order
AdamsAshlandBarronBayfield		45,000 49,400 190,660	91,350 31,200 140,275 13,950	4,218,100 538,900 417,200 401,310	21,500 2,100 10,000 3,500	617,200 616,875	40 8 15 10
Brown Buffalo Burnett Calumet		296,300	52,150 60,100 79,300 11,325	515,325 387,550 1,785,055 23,225	22,800 3,950 3,000	590,275 447,650 2,164,605 37,550	14 11 23 3
Chippewa Clark Columbia Crawford		15,000 446,880	$\begin{array}{c} 129,575 \\ 118,525 \\ 111,175 \\ 60,175 \end{array}$	909,950 790,095 1,091,875 14,800	5,500 21,500 35,400 1,250	1,060,025 1,377,000 1,238,450 76,225	26 19 32 4
Dane Dodge Door Douglas	81,700	148,575	54,450 $21,500$ $37,350$ $25,850$	477,150 139,675 143,400 1,478,155	92,275 6,125 1,000 68,250	623,875 167,300 181,750 1,802,530	22 8 8
Dunn		185,200 94,500	79,500 155,900 14,050 20,050	2,321,905 1,047,800 311,700 167,400	14,600 126,530 4,000 8,000	2,416,005 1,515,430 424,250	329 340 62
Forest Grant Green Green Lake Green Lake			25,275 49,150 53,075 41,450	543,430 734,825 295,500 502,900	10,600 16,600 11,600	356,485 568,705 794,575 365,175 555,950	95 185 99
owa ron lackson efferson			74,000 20,700 95,500 44,375	771,050 117,250 1,156,250 306,525	6,500 22,750 56,075	851,550 195,450 1,791,968 410,475	139 130 55 222 204
uneau Kenosha Kewaunee La Crosse		395,200	595,050 16,700 53,000 118,475	1,737,955 200,325 173,075 491,200	1,000 $22,200$ $4,000$ $38,050$	2,729,205 239,225 230,075 647,725	229 65 83 172
afayette anglade incoln Ianitowoc	16,000	35,000 88,700	15,425 60,750 81,700 88,775	18,625 530,000 1,278,915 391,675	8,500 23,000 6,000 11,715	42,550 648,750 1,455,315 508,165	33 145 231 198
Iarathon Iarinette Iarquette Iilwaukee		711,070	389,025 98,170 91,675 21,700	1,711,635 3,130,635 2,794,530 18,950	24,500 18,000 33,000 7,075	2,125,160 3,957,875 2,919,205 47,725	359 457 413 32
fonroe conto neida utagamie	564,290	30,000	132,000 110,750 38,800 39,950	1,062,250 1,154,250 2,376,170 325,150	83,000 11,100 35,300 27,050	1,307,250 1,276,100 3,114,560 392,150	260 277 215 120
zaukee epin ierce olk		25,000	11,950 19,600 69,500 190,300	219,975 120,350 304,300 495,840	7,950 1,000 19,730 4,600	239,875 140,950 393,530 715,740	94 82 145 225
ortage riceacineichland		82,850	121,600 63,825 15,300 107,950	2,852,180 517,250 264,950 217,350	63,700 5,500 8,300 1,100	3,037,480 669,425 288,550 326,400	448 136 75 81
	18,100 335,125	40,000	55,200 53,625 166,725 23,500	285,800 511,650 1,230,425 1,560,120	39,000 2,500 47,125 11,000	380,000 625,875 1,444,275 1,999,745	168 116 262 186
nawano neboygan . Croix aylor	318,562	25,000	109,725 39,825 72,125 76,625	1,588,490 250,425 1,836,360 769,850	11,100 2,000 14,850	1,709,315 610,812 1,923,335 871,475	287 183 366 187

STATE NURSERY TREE DISTRIBUTION BY COUNTY—Continued

County	State Forests	County Forests	*Extension	**Private	†General	Total	No. of Orders
Trempealeau _ Vernon			129,300 72,100	1,284,095 166,925	4,100 21,000	1,417,495 260,025	318 108
Vilas Walworth	132,285 281,140	271,000	100,500 42,350	1,172,900 672,375	7,500 27,325	1,684,185 1,023,190	181 229
Washburn Washington Waukesha Waupaca	109,499 28,000	168,300	75,575 38,525 41,100 134,200	1,424,080 434,150 1,034,305 2,625,775	48,775 9,900 25,700 14,750	1,716,730 $592,074$ $1,129,105$ $2,774,725$	190 174 305 517
Waushara Winnebago Wood		268,000	105,250 15,600 109,425	5,680,205 107,150 1,902,015	79,000 16,000 38,300	5,864,455 138,750 2,317,740	709 70 336
Sub-Total ***Game Food ***Game	2,253,704 s of 1958	4,152,135 (Not Previo	5,724,520 usly Reporte	301,000 68,833,930 d)	1,463,260	303,560 82,427,549 268,900	11 14,059 44
Foods GRAND TOTAL	2,253,704	4,152,135	5,724,520	68,833,930	1,463,260	3,432,675 86,129,124	1,701

^{*}Extension—Stock distributed through the State Extension Forester, the State Club Leader, the Agricultural Instructors and the County Agricultural Agents. This column includes Community Forests.

**Private—Individuals purchasing under the Tree Application and Agreement form.

†General—Public hunting grounds, parks, clubs, institutions, highway plantings, etc.

***Game Foods—Deciduous shrubs and vines distributed from the Boscobel State Nursery.

ACTUAL NURSERY PRODUCTION-1959-1960

All Nurseries-State, County and Federal

Nursery	Total Shipments	Plus Trees Shipped to Other Nurseries	Minus Trees Received from Other Nurseries	Actual Nursery Production
Boscobel State	14,109,150	5,507,550	1,894,225	17,722,475
Gordon State	10,241,420	351,700	3,974,825	6,618,295
Griffith State	32,732,495	1,284,075	13,438,000	20,578,570
Hayward State	10,539,635	6,716,525	1,074,750	16,181,410
Hugo Sauer State Trout Lake State	12,607,595	2,326,575 230,775	1,213,900	13,720,270
Tourney Federal	3,609,375 1,538,820	7.048.000	973,425	2,866,725 8,586,820
Clark County	446,880	7,048,000	479,100	-32,220
Marathon County	110,000		60,000	50,000
Marinette County	193,750		356,975	-163,225
Total Trees Produced for				
Field Planting	86,129,120	23,465,200	23,465,200	86,129,120

STATE PARKS

Wisconsin state parks have always played a major role in the total recreation picture of Wisconsin. With the rapid growth of population, more leisure, higher incomes and improved transportation, our parks are receiving everincreasing pressures.

To meet the demand for additional parks, Blue Mound State Park was acquired and development and use began immediately. A historical area, Copper Culture Mounds, was granted to the state as a gift by the City of Oconto. The Castle Mound Roadside Park was transferred to the Black River State Forest for administration with adjoining lands. Over 937 acres of park land were acquired at a cost of \$108,304.61.

Much effort is being made to improve facilities in public use areas. Because of the rapid increase in camping during the past several years, sanitary facilities and space available for camping have not been adequate. For the first time in the history of Wisconsin state parks, the number of units permitted in each campground were limited to the facilities available, and during periods of heavy use some campers were turned away. However, the camping load was spread out and in general camping was improved.

LAND ACQUISITION, 1959-1960

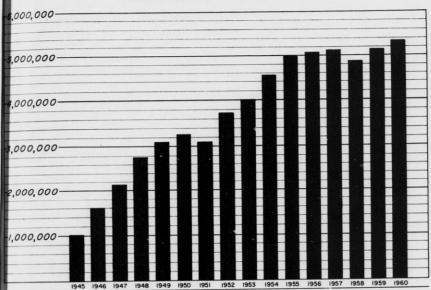
Park	Acres	Cost
Blue Mound	705.00	\$ 80,000.00
Copper Culture	24.00	Gift
Copper Falls	80.00	718.74
High Cliff	18.57	27.585.87*
Rib Mountain	110.00	Gift
Total	937.57	\$108,304.61

*Purchased with Southern Wisconsin Forests portion of the Forestry Mill Tax.

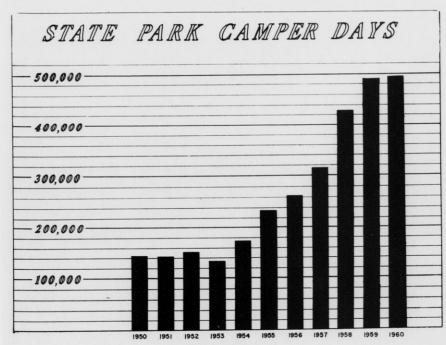


Here is the swimming beach at Terry Andrae state park, on Lake Michigan near Sheboygan.

STATE PARK VISITATIONS



The number of visitations increased from a little over 1,000,000 in 1935 to almost 1,800,000 in 1941, then dropped to about 750,000 in 1944.



Improvements Highways

Most of the highway construction was done to improve recreation areas and parking lots. The following is a summary of completed projects:

STATE PARK ROADS-1959-1960

Park	New Con- struction Miles	Bitu- minous Surfacing Miles	Parking Lots
Copper Falls Big Foot Beach Merrick	.75 .50	.75	1
Peninsula Perrot	2.50 1.00	2.25	3 2 8
Potawatomi Roche a Cri Governor Dodge	.94	.50	2 4 2 4
Wyalusing	.35		4
Total	6.04	4.95	26

Recreational Developments

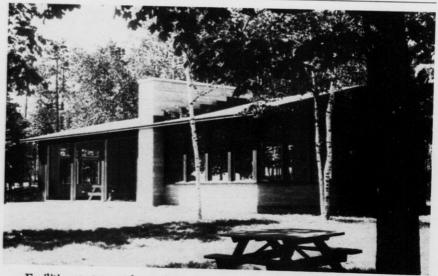
Most of the developments were made to improve areas already being used by the public. A boat marina was built at Governor Dodge Park and a new campground road completed at Wyalusing Park. New shelter buildings were completed at Merrick and Potawatomi Parks. A modern toilet building in the picnic area at Brunet Island, a shelter and toilet building at Terry Andrae and a shower building at Devil's Lake were finished. The bathhouse at Pattison was remodeled.

Among the items constructed at various parks were 885 picnic tables, 10 pit-type toilets, 2 wells and 40 fireplaces.

A new ski run was started at Rib Mountain. Hiking trails were built at Brunet Island and Lucius Woods.

STATE PARK INCOME

Source	1959	1960
Camping Golf. Concessions and skiing Rentals, land use. State road refunds Miscellaneous	15,294.28 16 931 03	\$113,401.40 28,060.70 27,954.87 16,004.14 7,729.02 1,545.84
Total	\$140,884.00	\$194,695.97



Facilities at state parks are being improved to the limited extent that funds permit. The picnic ground shelter at Potawatomi, illustrated here, was built in 1959.

Law Enforcement

The Law Enforcement Division is responsible for the enforcement of all the laws pertaining to fish and game as well as various sections of the statutes dealing with water pollution, illegal water diversion and forestry.

Another very important aspect of the Law Enforcement Division's duties is the Boat Safety and Registration Act, which was enacted by the 1959 Legislature. This division began enforcing this act during the spring of 1960.

The Law Enforcement Division is composed of 111 field wardens, five area supervisors and their assistants, the chief warden and his assistant, and a division training officer. The division also operates two patrol boats for work on the Great Lakes and in enforcing the commercial fishing regulations; two aircraft and warden pilots are used for statewide enforcement. The section of special investigation is composed of a supervisor and three men, and this section works on commercial type violations and handles special investigative type work pertaining to the fish and game laws. Seasonal men are employed during heavy work load periods to assist the regular field wardens.

LAW COMPLIANCE

The goal of the Law Enforcement Division is compliance, for if management of the fish and game resources of this state is to be effective, then regulations must be complied with. To gain compliance of the regulations a number of methods are pursued other than direct enforcement.

The youth educational program has been in operation for over 12 years and continued in this biennium. This effort is directed to the end that the youth will appreciate the need for regulations and will want to comply. This phase of the Law Enforcement Division's program is conducted largely through field contacts with the youth. The division has also worked through the schools in gun safety and boat safety education and with such organizations as 4-H Clubs, Future

This is how boating activity looks to a flying warden. Here all is well, but in other instances the warden may see a situation that calls for law enforcement action,



Farmers, Boy Scouts, Girl Scouts, etc. During the past biennium work on these lines was considerably stepped up.

Keeping the public informed is a very important aspect of gaining compliance. Starting in 1958 considerable effort was put forth to better inform the public through the newspapers of this state of the fish and game regulations. Several wardens in each area wrote columns for newspapers in their districts. These columns were so written that they answered questions most asked by the public. In excess of 100 newspapers in Wisconsin use this material. Wardens appeared before more than 2,500 groups to give talks and explain their work. They also appeared on television and radio pograms. There were 48 articles published in the Wisconsin Conservation Department Bulletin which were written by wardens. The chief warden's office made press releases for out-of-state newspapers, wherein he made an appeal to the nonresident hunter-fisherman to comply with our laws. These persons were especially reminded of our license laws and other laws which are most often offended by the nonresident. The wardens are called

thousands of times at their homes in regard to questions requesting hunting, fishing, and Department information.

The Law Enforcement Division operated an office in Milwaukee, the records of which show the following activity for the biennium: There were 13,450 telephone calls and 7,050 persons visited the office for information concerning hunting, fishing and problems concerning recreational sports and facilities in Wisconsin. The man assigned to this office was periodically assigned to various regions of the state for training so that he would be familiar with the entire state and thereby able to give better service. Conservation wardens from throughout the state assisted in giving this man information on various Department programs and some were assigned to duty in the office. Professors Fine and Werner, of the University of Wisconsin, while conducting a study of the economic significance of hunting and fishing, found that the conservation warden and forest ranger gave out more information to the public concerning hunting and fishing facilities than any other media, nearly 33 per cent.

NEW EQUIPMENT AND METHODS

Aircraft were brought into general use by the Law Enforcement Division in the last months of this biennium. Their use exceeded all expectations and proved that they could be counted on to improve efficiency and cut costs. These ships were equipped with two-way radios, a public address system and cameras. They were extensively used in boat law enforcement and especially for informing the public of new laws and

safety regulations via the public address system.

Several new pieces of optical equipment were added such as spotting scopes, evidence collection kits, and more modern radio equipment. There were 12 new boats and motors purchased for boat law enforcement, and we also acquired three additional airboats for use on Green Bay, Lake Winnebago, and the Mississippi river.

TRAINING

The Law Enforcement Division's Inservice Training Program for the 1958– 1959 biennium developed a Law Enforcement Procedure Manual and con-

ducted In-service Training Sessions in the five conservation areas of the state on the following subjects: Evidence, Law Enforcement Ethics, Law Enforcement



In-service training makes better law enforcement officers, more skilled and competent to cope with tough problems. This man is learning to take fingerprints from a rifle.

Public Relations, Investigative Procedures and Techniques, Field Note Taking, Court Procedures, Warden Testifying, and Standard Law Enforcement Operating Procedures. Two state-wide annual three-day warden schools were conducted during the biennium. The total amount of actual training participated in by each warden averages 50 hours annually, which was supplemented further by area meetings covering subjects of current and localized nature. Twenty-one wardens participated in FBI training courses conducted in Wisconsin. The

biennium saw the development and distribution of the Physical Evidence Collection Kit, which is used to properly collect, preserve, and identify evidence for submission to the Wisconsin Crime Laboratory and to court.

The division's training officer attended a three-month course at the FBI Academy at Washington, D. C. He was the second conservation enforcement officer to be accepted for such training. This training has and will prove valuable in training Wisconsin's wardens to be more valuable and efficient men.

CRIME LABORATORY LIAISON

The administrative assistant is the liaison officer to the Wisconsin Crime Laboratory and assists in the processing of evidence to the laboratory for analyzation. During the biennium 63 cases involving conservation violations were processed by the laboratory. The major-

ity of cases processed by the laboratory involve habitual and commercial violators who with their experience have become more difficult to apprehend in the usual or routine manner and, therefore, necessitate the need for technical analytical assistance. This service has saved the



A warden checks a northern Wisconsin beaver trapper. Modern law enforcement techniques have not eliminated need to get back into the bush, often on snowshoes,

Department and the courts a considerable sum of money inasmuch as lengthy trials are eliminated by the clear-cut factual evidence obtained through assistance by the laboratory.

The Crime Laboratory conducted basic research in the field of investigative equipment such as the potential use of infra-red photography, various stains and dyes, infra-red telescopes, and metal detectors. They also assist in developing investigative techniques which are taught in the In-service Training Sessions such as new methods of lifting latent finger prints, foot prints, and tire impressions. The laboratory conducts research in the field of species and sex determination from hair, blood, and tissues of samples of the various species of fish and game.

SPECIAL INVESTIGATION

The Special Investigation Section increased in value to a high degree during this biennium. Their main operation is in the field of commercial violations and the success in this regard was outstanding. During each year reported here there were on an average of 35 cases prosecuted involving the sale of game illegally, in which the wardens assigned to duty in this section were witnesses in court. There were many more violations un-

covered through the efforts of this section wherein it was not necessary for them to appear as witnesses or reveal their role. These cases are acted upon by the local warden.

There are many other purposes for which this section has been used other than direct or indirect enforcement. They, have conducted research for the division and the Department in various fields and on new equipment. The use of new mini-



When commercial fishermen on Green Bay were unable to recover their nets because of bad weather and ice conditions, wardens went to their aid with two airboats. Nets valued at more than \$15,000 were saved.

ature cameras, underwater photography and telescopic lens to gather and preserve evidence are a few.

All the members of this section are qualified skin divers and have been used in various assignments in this connection. Some of these assignments have been the recovery of bodies, making studies of existing regulations, and to propose changes in laws governing spear fishing and skin diving. They also worked

on such things as arson in our forests, destruction of state property, and so on.

Last, but by no means least, one of the greatest values of this section has been the intelligence information they have been in a position to secure. This has unquestionably improved the efficiency of the Law Enforcement Division and enabled the field force to give more value to the conservation dollar.

DEER AND BEAR DAMAGE

Section 29.595 of the Wisconsin Statutes provides that damages may be paid upon complaint in writing by an owner or lessee of land that deer or bear are causing damage thereon. This section also provides for the investigation of this complaint or claim for damages and this law is administered in its entirety by the Law Enforcement Division. For the past several years the Wisconsin Legislature has determined that an amount of \$40,-000 should be set aside annually for the paying of deer and bear damage claims. Should the total amount of approved claims exceed this figure, then all claims are paid on a pro rata basis. It is necessary that each one of these claims be carefully inspected by a conservation

warden to determine that all requirements of the Statute are met. After it has first been established that the claimant is entitled to damages, the amount of actual damage must be determined. In cases where the claimant and the Department cannot agree upon the amount of damage, the judge of the circuit court of the county where the claimant resides shall try the matter and determine the issues. During the 1958-1959 fiscal year there were 208 bear damage claims asking a total amount of \$16,108 and 299 deer damage claims totaling \$41,495.82. In 1959-1960 there were 74 bear damage claims for a total amount of \$4,879.78 and 170 deer damage claims for a total amount of \$27,384.80.

COOPERATIVE ENFORCEMENT AND INVESTIGATION

The Law Enforcement Division cooperates with various other agencies such as the State Board of Health, Aquatic Nuisance Control Section, and during the past biennium there were 179 applications for permits for aquatic nuisance control investigated by the Law Enforcement Division. There were also several investigations conducted wherein illegal aquatic nuisance control activities were alleged to have been conducted. The division also cooperates with the Public Service Commission to assist that agency in enforcing against such things as, illegal water diversion, illegal construction of dams, and the removal or deposit of materials from or on the beds of our lakes and streams.

The Law Enforcement Division is responsible for the direct enforcement of several sections of the Statutes dealing with water pollution. They also cooperate with the State Committee on Water Pollution and all instances of water pollution which are of a continuing nature and require the attention of that agency are referred to it. The basin engineers of the Committee on Water Pollution and the conservation wardens have a very close working relationship.

The use of toxic insecticides for the destruction of injurious insects on forest and non-crop areas can have very serious effects on the fish and wildlife of our state as well as the human inhabitants thereof. The use of such insecticides is regulated jointly by the Conservation Department, the State Board of Health, and the State Department of Agriculture. No treatments with toxic insecticides can



Wardens investigate complaints of water pollution, and offenders are prosecuted if the facts warrant such action under the law.

be undertaken without filing an intention to treat the area intended. Conservation wardens are ever on the alert for instances of illegal treatment and investigate all reports of numbers of small animals and birds being found dead in an area. With the spread of Dutch elm disease into Wisconsin, this has become a very acute problem in some sections. The Law Enforcement Division has also cooperated with all the various sheriff's departments, city police departments, state traffic patrol and the FBI. We are very happy to report that each of these agencies has likewise cooperated with the Law Enforcement Division and we feel that it has resulted in economies for law enforcement in Wisconsin in the over-all picture, as well as increased efficiency.

COOPERATION WITH OTHER DIVISIONS

erated with all divisions of the Department. Following are some of the ways:

- 1) Game Division. Assisted in game surveys, winter bird feeding, damage claims investigations where permits are required for abatement. Land acquisition, both purchase and lease.
- 2) Fisheries Division, Assisted in fish stocking and with management problems. Assisted in lake access acquisition pro-

The Law Enforcement Division coop- gram, Assisted with surveys and collection of data. Supplied information and tabulated data on lake use.

- 3) Forest Protection Division, Assisted in fire fighting and educational program.
- 4) Forests and Parks Division. Assisted with enforcement problems in the state parks and forests.
- 5) Information and Education Division. Participated in numerous school educational programs at grade schools, high



To enforce commercial fishing regulations, wardens operate on the Great Lakes and the Mississippi river.

schools, and colleges. Submitted a weekly report of state-wide fishing conditions during the open water fishing seasons, reports on seasonal scenic beauties of the state, and reports on winter sports opportunities. These were incorporated into Department news releases for recreational publicity.

Engineering Division. Did considerable of the required field investigations

connected with highway relocations and new construction, the deposit of sand in lakes for swimming areas, dredging and drainage projects.

 Finance Division. Sale and distribution of various licenses and tags.

 Forest Management Division. Advised public of services available by this division and investigated illegal timber trespass violations.

GAME FARMS, SHOOTING PRESERVES, HATCHERIES

Each new shooting preserve, and annually thereafter, must be inspected by the warden to determine that it complies with the Statutes for issuance of a license for such an area. There are at the present time 88 shooting preserves licensed

in Wisconsin. There are also 791 game farms and 694 private fish hatcheries, each of these require the attention of the conservation warden throughout the year.

ARRESTS

During the year of 1958 there were 5,271 arrests for violations of laws involving conservation resources. Of this total there were 1,961 arrests made for various fishing violations, 996 of these arrests were for license violations or in excess of 50 percent. There were 2,606 hunting violations, 188 of these were for license violations or just in excess of 8 percent. The remainder of the arrests were for such violations as commercial fishing, trapping and miscellaneous activities such as transportation of Christmas trees without a license, state park violations, water pollution, etc. During 1959 there was a grand total of 4,988 violations for which arrests were made, 1,920 of these were for fishing violations, 1,033 were for violations pertaining to fishing licenses or 53 percent. There were 2,613

total hunting violations, 276 of these were for license violations or slightly in excess of 10 percent. During 1958 there were 20 prosecutions for water pollution and 15 during 1959. There were six cases of resisting arrest in 1958 and 15 during 1959. Sixteen arrests were made during each of the hunting seasons of 1958-59 for violations of hunting safety laws. The percentage of convictions for both years was in excess of 99 percent. Since the Conservation Department fish and game operations are dependent upon the revenues collected through the sale of licenses, it is significant to note that the sales of licenses decreased by about 3 percent in 1959 over 1958 and that the percentage of arrests for license violations increased by about the same percentage.

Engineering

The engineering division of the Conservation Department exists in accordance with the provisions of Sections 16.85 (6) and 16.86 of the Wisconsin Statutes. Engineering work is carried out in accordance with four basic principles.

- (1) An engineering project approval system is utilized which insures that a clear understanding of the engineering job is first worked out between the engineering division and the division to be served. Then before any engineering is done required supervisory personnel, including the Conservation Director, have the opportunity to approve or reject the contemplated work.
- (2) A centralized engineering file is kept and a standard drawing system used. Thus engineering plans in connection with any design are readily rendered available for modification and reuse, or for record purposes.
- (3) A cost accounting record system is followed whereby all engineering labor and materials are charged to the particular project concerned, and then costs are billed back against the cost of the development requiring the engineering service.
- (4) The engineering division is organized into groups of personnel working in specialized phases of engineering work so that individual engineers progressively develop into specialists and the highest degree of engineering efficiency is attained.

In addition to carrying out what is normally thought of as strictly engineering work the engineering division supervises the activities of the rivers survey

section. This means that in addition to normal engineering work the division is charged with the determination of affects on relative conservation values of water level changes, highway relocations, water diversions and other physical changes. These problems are coordinated through the required operating divisions which may be affected. The rivers survey section is a part of the engineering division because a fundamental part of the engineering involves water levels and water level controls, water table studies, and studies of soil conditions. These are the factors, of course, which are also basic considerations in rivers survey analysis work.

Because the Conservation Department is a continually growing organization, the work load imposed upon the engineering division has continually increased. Due to increased efficiency and by taking advantage of normal personnel turnover the increased work load has been carried while actually reducing the number of engineering personnel from those existing at the time of original organization in 1950. In consequence even though salary rates have been substantially raised, the over-all engineering costs have been held to a minimum. The accompanying table summarizes the situation in this connection on a fiscal year basis. It will be noted that rivers survey salary and expense accounts are listed separately in this table to keep such activities and their associated costs apart from engineering costs as originally tabulated before rivers survey became a part of engineering.

It is felt that probably the various items listed in the table are self-explanatory. For comparative purposes, the table includes costs over the past eight years. It should be pointed out that in connection with Item 8 for each of the eight



Conservation projects often require the services of engineers, one example being the design of this dam at Germania marsh.

years shown a \$5,000.00 cash payment to the U. S. Geological Survey is included which covers cooperative planimetric mapping. In addition, for 1959-60 a \$12,000.00 cash cooperative expenditure with Federal agencies is included for the purpose of conducting research on the affects of water diversion in connection with stream flow and water table. It will be noted that this new item of \$12,000.00 included under Item 8 essentially accounts for the substantial increase in this figure over the general average of past years. Other costs under Item 8 are made up of maintenance of equipments, rent, telephone service, office supplies, printing, etc.

Of the total expenditures shown in the table, generally speaking about 40 per cent of the funds were provided by the fixed budget of the engineering division and the remaining 60 per cent of costs

have been billed back to the divisions served and charged against the particular project involved.

All engineering administration coordination within the department and relations with other engineering agencies such as the State Bureau of Engineering, Industrial Commission, Board of Health, Federal Aid engineering office, etc., is taken care of through the Chief Conservation Engineer. He also works with and assists engineering personnel in carrying out specific project assignments. The engineering division is organized into four basic engineering sections. Each section is headed by a section chief. Then in addition the rivers survey section is set up as an independent section functioning on the same level as the four engineering sections. The work carried out by each section is generally outlined as follows:

MECHANICAL SECTION

In order to carry on required activities the department owns and operates approximately 675 trucks together with numerous tractors, trailers, fire plows, pumpers and many other mechanical devices. The efficient purchase, development, use, and in some cases manufacture of such equipment poses many mechanical engineering problems which require solution, continuous observation

and study. These are carried on and in addition many heating and refrigeration problems arise which must be handled. The mechanical section is required to be on the alert to insure that the most up-to-date and proper equipment is used to obtain maximum efficiency in the various operations carried on by the Conservation Department.



The new Horicon headquarters building will provide modest but convenient and adequate facilities.

ELECTRICAL AND COMMUNICATIONS SECTION

In order to carry out its responsibilities, especially with respect to fire fighting, the Conservation Department owns, operates and maintains approximately 2,000 miles of telephone line, 20 switchboards, many telephone instruments and associated telephone gear. To further extend this point-to-point communication net the Conservation Department has cooperated with the Motor Vehicle Department in the construction, by the latter agency, of a rather extensive microwave communications system. Supplementing these point-to-point facilities, a land mobile radio service is operated from the

various field stations and fixed communication points to mobile field units. Several hundred mobile units are operated in this connection. The resulting communications engineering demands both from the standpoint of planning, operations and maintenance is therefore great. The electrical and communications section assumes this responsibility. In addition, they must make continuous studies to insure that the Department keeps up to date in this rapidly developing field. Also, they provide such electrical power and lighting engineering services as may be required.

STRUCTURAL SECTION

Throughout the Department's several divisions the Conservation Department owns and maintains approximately 1,200 buildings of varying size and located in all parts of the state. The structural engineering problems resulting from the standpoint of maintenance, disposal, and new construction are numerous. The structural section in cooperation with the

topographic and hydrology section is also called upon to design dam structures for water impoundments required in connection with game and fish habitat developments and for recreational developments. Special structures such as water control devices, fish hatchery raceways and other structural design problems are encountered.

TOPOGRAPHIC AND HYDROLOGY SECTION

This section provides or arranges for land surveys and topographic surveys. It carries on all departmental topographic and planimetric mapping, provides necessary geological services and conducts hydrological studies. As a result of this work, engineering recommendations are made relative to water impoundments, water tables, runoff, and various water supplies. Since the establishment of Pittman-Robertson and Dingell-Johnson Federal Aid for development of fish and game habitat this activity, too, engineeringwise has of necessity been cooordinated through the topographic and hydrology section.

Under Wisconsin Statute 84.28, funds are provided in the Highway Commission's appropriation for the construction. reconstruction and improvement of highway facilities on state-owned lands. Projects established for such work on lands owned by the Conservation Department must receive the approval of both the Highway Commission and the Conservation Commission. All engineering planning for such projects is done by the Highway Commission's engineering department. Liaison for such engineering and for coordination of the work within the Conservation Department is carried out by the topographic and hydrology section of engineering.

RIVERS SURVEY SECTION

This section is charged with five specific responsibilities as follows:

- To maintain an up-to-date river and stream survey with respect to priority listing of the streams for preservation in the natural state.
- (2) Make an evaluation as to affects on conservation of water level changes in our public waters.
- (3) Make recommendations relating to affects on conservation values of highway moves and relocations.
- (4) Make recommendations concerning water diversion from streams for agricultural irrigation purposes.
- (5) Make recommendations concerning applications for sand blanket placements, dredging requests, and proposed construction or removal of dams.

All of the above five classes of activities have, of course, involved numerous specific assignments and are carried out on the basis of coordinating information gathered from the various other conservation divisions concerned, and in many cases through direct investigation and representation at public hearings when such is required by the particular circumstances.

Records show that the four basic engineering sections of engineering, exclusive of the rivers survey section, each year handle about 90 to 100 separate specific assignments. Some of these assignments are minor tasks requiring only a few hours, while others are major tasks calling for hundreds of hours of work spread over many months. Most of the assignments received to date have been completed but some are continuing and in the process of completion. Also, a considerable number of long-range projects are still in process which will actually be done prior to the biennium here being reported.

ENGINEERING DIVISION ANNUAL REPORTS

July 1, 1952 to June 30, 1960

_	No.	Item	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60
	1 2	Engineering Personnel (Man-months) Number of Personnel at End of Year	175 12	147 13	149.2 12	144 12	146 13	156 13	156 1/3 14	168 14
	3	Total Annual Engineering Salaries Average Monthly Salary Per Man	\$64,247.53 367.13	\$58,891.27 400.62	\$60,912.27 408.26	\$61,124.00 424.47	\$ 65,420.03 448.08	\$ 77,523.00 496.94	\$ 81,419.43 520.92	\$ 93,912.09 559.00
	5	Total Annual Expense Account	9,603.78	8.083.00	6,924.81	6.723.01	7,173.53	8,611.30	7,509.09	9,142.20
	6	Capital Investments Costs	292.90	994.74	496.27	1,887.96	1,966.16	1,353.57	1,803.97	947.03
	7	Consulting Engineering Costs (Includes Bureau of Engineering)						2.512.78	9.105.13	2,833.13
	8	All other Engineering Costs	10.368.15	9.838.13	9,917.99	11,315.60	15,051.06	10.987.41	9,039.31	22,103.56
	9	Total Engineering Costs	84,512.36	76,812.40		81,050.57	89,610.78	100,988.06	108,876.93	128,938.01
	10	Item (9) Less Items (6) + (7)	84,219.46	75,817.66	77,258.80	79,162.61	87,644.62	97,121.71	97,967.83	125,157.85
	11	Rivers Survey (Man-months)				12.5	24	24	24	24
	12 13	Rivers Survey Personnel at End of Year Rivers Survey Annual Salary				4,969.17	8.880.00	10.337.00	11.852.76	13.098.00
	14	River Survey Expense Accounts				1.836.08	2.576.00	2,851.72	2.565.78	2.394.17
	15	Total River Survey Costs				6,805.24	11,456.00	13,188.72	14,418.54	15,492.17
	16	Total Engineering Division Costs	\$84,512.36	\$76,812.40	\$77,755.07	\$87,855.82	\$101,066.78	\$114,176.78	\$123,295.47	\$140,650.02

[63]

Fish Management

The basic law establishing the Conservation Commission (Wisconsin Statutes 23.09) states: "The purpose of the Commission is to provide an adequate and flexible system for the protection, development and use of forests, fish and game, lakes, streams, plant life, flowers and other outdoor resources." That portion of this mandate which applies to waters and fish in effect establishes the basic function of the fish management division, that of managing water resources. The division's broad tasks then can be stated as follows:

- Provide fishing opportunities for anglers.
- Maintain and improve the fish habitat.
- Maintain balanced, productive fish populations.
- Develop regulations for satisfactory harvest.
- Protect public rights to waters and preserve water quality.

These tasks have multiple solutions. For example, fishing opportunities can be provided by building new lakes, acquiring public ownership of the stream side or lake shore for access, and building brush shelters to concentrate the small fish crops in clear, infertile lakes and in some few cases controlling excessively thick weed beds to create openings. Balancing a fish population may require intensive netting to control a rough fish population, partial poisoning to remove excessive undersized panfish, protection of predator fish by regulation or stocking of depleted species.

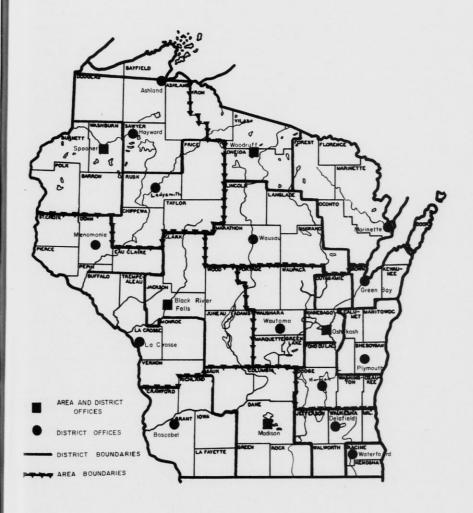
To meet these diverse needs on the 915,036 acres of inland lake area, 8,930

miles of trout stream, the rivers and the 6,439,700 acres of Great Lakes under the jurisdiction of the State of Wisconsin requires an organization possessed with technical know-how, experience, and geographic distribution. Increasing fishing pressure results in a greater harvest of fish and necessitates an intensification of research and management, and a greater utilization of previously unproductive waters.

The division functions through a line organization in which the state is broken down into five areas and each area into three or four districts. The district fish manager is the local representative through whose investigations and public contacts the management plans are evolved and problems resolved. Each district manager is assigned to an area comprising two to five counties and is responsible for all the waters within his district. The state has been divided into 18 districts and the staffing of all districts was completed during the biennium.

The division's activities during 1958–59 cost a total of \$2,117,521.68. The proportion spent for various functions follows: propagation and distribution—29.3 per cent, rough fish control—16.0 per cent, habitat development—13.5 per cent, investigations and mapping—12.7 per cent, research—11.2 per cent, capital outlay—7.8 per cent, land acquisition—1.9 per cent, lamprey control—1.5 per cent, and other activities—6 per cent. Rough fish costs were partially offset by sales of rough fish.

Staff service: An important staff service is guiding fishing regulations from conception to administrative law, final-



FISH MANAGEMENT AREAS AND DISTRICTS

ized with the Governor's signature. In brief this process starts with a recommendation by field personnel or the public, generalization for state-wide use by the fish management staff, adaption for effective enforcement by the law enforcement staff, tentative approval by the Commission, public hearings, review by advisory committees and the Conservation Congress, modification to conform to management needs and public acceptance, Commission approval and Governor's signature.

Staff services provide technical control for data collection on surveys, lake mapping, land acquisition, habitat improvement devices, stream bank fencing, lake classification, fish propagation and they to a large degree bear responsibility for training of new personnel and infusion of and spread of new ideas, planning and preparation of statistics.

All personnel contribute useful public information in cooperation with the information and education division necessary to achieve good fish management. Eighty-six articles dealing with fish management appeared in the Conservation Bulletin. A number of technical bulletins also were written and published (listed elsewhere).

The division has technical responsibility for operation of the private fish hatchery licensing law (Wisconsin Statutes 29.52). Applications are processed and investigations and hearings conducted. There is also the continuing responsibility of reinspection to conform to the law. Private fish hatcheries now number over 750. Other administration problems are issuance of permits for private fish management (Wisconsin Statutes 29.513) and permits for private stocking (Wisconsin Statutes 29.535).

HABITAT DEVELOPMENT

This activity witnessed a big increase during the biennium, that of acquisition of public fishing grounds. The list of active projects and the acreage within them is a table in this report.

The fish habitat development section has a twofold purpose: maintaining and increasing fishing opportunities for anglers, and maintaining and improving living or spawning conditions for fish. Specific functions are acquisition and leasing of land, installation of improvement devices, fencing, planting trees and shrubs, and promoting soil and water conservation.

Some typical specific tasks on streams are fencing stream banks to protect them from cattle, building deflectors to create holes in otherwise flat water, repair of eroded banks, establishing bank vegetation and cover, and improving springs. Leasing or purchase of stream frontage

assures fishermen of fishing opportunities and gives eroding banks protection as natural vegetation grows up. These areas also provide excellent hunting opportunities.

The Department now has 76 stream projects with Commission approval on which acquisition and development can take place. Others have been leased. During the biennium 7,054.98 acres of land were approved for purchase on these projects, and 2,719 devices and 9,802 rods of fence were constructed. This provided 216,491 feet of frontage.

In addition to stream bank access, access to two lakes and ponds was acquired through gift or purchase. Habitat improvement on lakes has consisted of constructing 1,348 brush shelters placed in 80 lakes. New trout fishing ponds were constructed in Monroe and Grant Counties.

FISH MANAGEMENT APPROVED ACQUISITION PROJECTS

B .		Date	Amount	Purchase
* Project	County	Activated	Purchased	Goal
Alta Springs	Lincoln	5/14/59		160
Beaver Creek (No. Branch)	Marinette	5/14/59 10/10/58	299.12	2,504.2
Renson Creek	Sawver	5/17/60		372
Big Roche a CriBlack Earth Creek	Sawyer Waushara	5/17/60 10/10/58	298.50	954
Black Earth Creek	Dane	8/14/59	17.52 67.38* 79.0*	64.2
		0/11/00	67.38*	01.2
Bohemian Valley Creek	La Crosse		79.0*	
Castle Marsh	Dane	8/54	13.0	13.0
	Waushara	0,01	9.0*	10.0
Jam River Jato Creek Jead Springs Jam River Jaton Creek Jead Creek Springs	Waushara	10/10/58	209	314
haffee Creek	Marquette	10/14/58	440	5,169
lam River	Burnett	10/10/58	1,000	3,376
Oalton Creek	Langlade	6/52	80	80
load Crook Springs	Sawver	7/10/50	80.29	80.29
Demlow Lake	Sawyer Langlade	6/53 7/10/59 3/20/58	59.40	59.40
Devils Creek	Rusk	3/20/38	80	
Jevils Creek	Rusk	11/51	139*	80
Oorn Creek Marsh	Dane	12/12/58 5/14/59 9/55		300
Lagle Lake Marsh	Racine	5/14/59		268
ddy Creek	Sawyer	9/55	263.22	263.23
	E- CI-:		80*	
lk Creek	Eau Claire	10/10/58	10.83 156.71*	2,803.11
mbarrass River	Waupaca	12/12/58 10/10/58		325
mmons Creek	Waupaca	10/10/58	39.0	2,149.98
vergreen River	Langlade		6*	
rindstone Springs	Sawyer	11/57	80	708
innickinnic River	St. Croix	10/10/58	8.84	1,042
		2.1100.000.000	306.16*	
aBudde Creek	Sheboygan	12/12/58 11/14/58 9/ 6/57 4/19/56 2/12/60	104.24	577
a Crosse River	Monroe	11/14/58	31.97	762.10
ake Ellen R.O.W	Sheboygan	9/ 6/57	40.0	40.0
ake Koshkonong R.O.W	Jefferson	4/19/56	.37 27.15 823.66	.37
	Dunn	2/12/60	27.15	27.15
awrence Creek. ittle Granite Lake R.O.Wttle Plover River	Marquette	1944		897.0
ittle Granite Lake R.O.W	Barron	11/51 3/12/59	3.10	3.10
ittle Plover River	Portage	3/12/59		1,122.0
	Kewaunee	11/14/58	298	534
ittle Wolf River	Waupaca	11/14/58		430
unyvilla Public Landing	Crawford	12/12/58	32.33	32.33
CDermott Creek	Sawyer		5*	
Colore to the Landing liddle Eau Claire Lake	Sawyer Bayfield	12/ 9/59		63
cGlynn Creek	Richland		2.4	
ilwaukee River	Washington	3/12/59		360
t. Hope Springs	Grant	5/ 6/55	200	200
ine Springs Creek	Dane	6/10/60		147.60
ine Springs Creek orth Branch Ten Mile	Portage	-,,	10.5*	
tter Creek	Sauk		19.27*	
eterson Creeketerson Creek	Polk	11/14/58	202.42	285.27
eterson Creek	Portage	11/11/00	74.25*	0 200.21
ckerel Lake R.O.W.	Polk	3/20/58	6.50	6.50
ne River	Waushara	12/12/58		2,270
ne Rivernnacle Rock Pond	Monroe	8/10/56	27.33	27.33
over River	Marathon	12/12/58 8/10/56 2/52	406.10	2,139.66
		-,	587*	2,100.00
um Creektters Lake R.O.W	Vilas		10*	
tters Lake R.O.W.	Walworth	5/54	.50	.50
aire River	Lincoln	5/14/59	.50 80.0	2,291.94
dley Creek			168* 11.3	
	Waupaca	10/10/58	3.54*	2,780
emnant Marsh Areas	Waukesha, Jefferson, Walworth	5/17/60		1 100
oche a Cri	Waushara	5/17/60	15.75*	1,160
bin Springs	Richland	2/19/50	4.96	10
lmo Pond	Dane	3/12/59 11/49	3.90	16
nd Creek	DaneBurnett	6/50	645.55	3.90
nd Crook	Polls	6/52	83.65*	2,451.50
Wyon Crook	Polk	11/14/50	160	1 700
nd Creek wyer Creek ver Creek ver Lake Marsh	Washburn	11/14/58		1,732
ver Creek	BarronKenosha	11/1/27	15	
ver Lake Marsh		11/14/58	147 00	297.70
ules Creek	Waushara	11/14/58	147.80 635*	1,404.51
oth Deanch Oceants				
uth Branch Ocontothe Branch Ten Mile	Oconto Portage Crawford		12*	

FISH MANAGEMENT APPROVED ACQUISITION PROJECTS—(Continued)

Project	County	Date Activated	Amount Purchased	Purchase Goal
Token Creek	IDane		6.0*	
Trout Creek	Iowa	5/17/60	0.0	163
Trout Creek	Waupaca	12/12/58	30*	1,552.0
Twin Lakes R.O.W.	Polk	11/57	.85	.85
Upper Tomorrow River	Portage	10/10/58	183.64 29.75*	12,775.00
Upper Waubesa Marsh	Dane	10/10/58	1	960
Waukau Creek	Winnebago	3/20/58	26.0	26.0
Waupaca River	Waupaca	12/12/58	2010	120
Wedde Creek (So. Branch)	Marquette	11/14/58	240	3,400
Whalen Creek	Washburn	5/17/60	210	382
White River (West Branch)	Waushara	10/10/58	107	2.106
Wind Lake Marsh	Racine	5/14/59	101	250
Woods Flowage	Langlade	8/53	82	242
Yellow River	Barron	11/14/58		743
Joint fish and yame projects				
Beaver Brook	Washburn	5/52	866	866
Dell Creek	Sauk	5/55	948.78 193.12*	2,751.96
Mecan River	Waushara	11/57	518.86	2.375.66
Nichols Creek	Sheboygan	11/46	361.34	1.012.34
Scattered Wetlands	Jackson	8/14/59	134.12	134.12
Spring Lake	Lincoln	10/11/57	160	240
Tichigan	Racine	11/ 8/57	640.30	1,552.00
Trempealeau River (No. Branch)	Jackson	5/17/60		710.65
Turtle Creek	Walworth	12/12/58	393.39	2,320.00
Weirgor Creek	Sawyer	8/47	1,899.78	3,109.78
Willow Creek	Waushara	11/53	1,180.58 59.54*	3,238.57
Total purchased and planned	for purchase		205,064.75	390,176.31
Total under lease (*)			2,391.66	

SURVEYS AND INVESTIGATIONS

Through testing waters and sampling fish populations and anglers' creels, the division obtains a picture of the state's waters which enables it to apply the required management practices. The surveys and investigations give guidance for stocking, formulation of regulations and more specific management such as rehabilitation, rough fish control, panfish control, and weed control. This work is the most important function of the area biologists and district fish managers.

The capability for conducting effective surveys was greatly enhanced by development of a boom shocker. By mounting booms on the forepart of a work boat and suspending electrodes from them which are powered by a generator in the boat, electric shocking gear can be used to effectively sample fish populations in a short period of time. The time required to carry out a survey has been cut to one-fourth the former time, and as a consequence, many more lakes can be sampled during open water periods. Through boom shocking we have become aware of the presence of good walleye populations on waters where complaints about fishing were rife. During the last summer season about 200 lake surveys were completed in contrast to 100 in the past years. The boom shocking gear has also permitted sampling of rivers, always a difficult task in past years.

Stream surveys with electrical shocking gear are now carried out with precision. Even soft waters with little conductance and high resistivities can be modified to create good sampling conditions by the introduction of some type



Electro-fishing gear or "shockers" now make it possible to obtain accurate information on fish populations through surveys and research.

of electrolyte, usually salt. Through extensive stream surveys, a better appreciation of trout management is emerging. We are finding that some streams are absolutely dependent upon stocked trout, especially those in the coulee region. While in others, the natural reproduction is sufficient in itself to support the fishing. A better allocation and utilization of hatchery-reared trout is expected to flow from the mosaic of surveys, which

have now covered a substantial portion of all the trout streams. About 90 stream surveys are carried out annually.

Upon completion of a survey, a report is written and recommendations for management are made. Survey results and management recommendations are reviewed at an annual fish management meeting with representatives of each county.

NEW PROGRAMS

A program for state aid to provide access to lakes was initiated in 1960. The 1959 Legislature passed a law appropriating \$125,000 of Fish and Game Funds for providing aid to the amount of fifty per cent for access sites acquired and developed by towns and counties. The administrative machinery was organized by early 1960. The Department had 14 applications for aid during the succeeding months to July 1, and one

project reached the final approval stage and the state's share encumbered. Although the program got off to a slow start, it appears to have much potential for growth.

Another new program was lake classification. The 1959 Legislature appropriated \$35,000 to initiate a program for classification of lakes by use. Initial activity consisted of carrying out an inventory of waters on a county-by-county

basis. The inventory results in production of a waters map for a given county upon copies of which the status of access, types of fishing and water fertility are imposed. The summary of data for a given county contains the amount of water and shore line of various types, the size of the waters, water quality information, fish resources, and public use opportunities and suggests lines for improvement. By July 1, 1960, the summary for one county (Green County) was complete and field work was under way on several others.

The Green County report illustrated the heavy dependence of this county on its rivers for water recreational opportunities and noted there was very little public use frontage on county waters.

A second phase of the activity is preparation of classification plans for individual bodies of water. Through means of a plan the required protection of the water and water derived resources and a reconciliation of uses is suggested. The pilot plan for one body of water was completed, that for Rock Lake, Kenosha County.

LAKE RENOVATION AND MANAGEMENT

Use of toxicants for lake renovation continues as an accepted and highly rewarding management measure. During the last two years 49 lakes (2,380 acres) were treated with toxicants and restocked with trout or warm-water fish. As a result of this type of management, turbid, carp-infested waters are converted to thriving game fish populations, or infertile, stunted panfish waters to

trout. Although there have been failures, this type of management is proving to be very practical, will produce quick returns, and is well accepted by the public.

By stocking trout after waters have detoxified, almost immediate fishing can be attained. The trout grow rapidly and fill the gap as the slower growing warmwater species gain in size.

ROUCH FISH CONTROL

Four permanent stations deal with the rough fish problem and they are assisted by auxiliary services at area headquarters and Lake Delton. They are located at Calumet Harbor on Lake Winnebago, Horicon, McFarland at Lake Waubesa and Kegonsa, and Newville on the Rock River near Lake Koshkonong, points central to problem waters. Also participating in rough fish control are 19 commercial fishermen who have been given contracts to fish rough fish only in specified waters at specified times. The contract operations are concentrated on large waters where large stocks of rough fish occur. Eight are located on Lake Winnebago and tributary waters.

The whole rough fish control function is faced with some very basic problems.

The prices paid for carp and drum have continued to be low and there is a declining market for them. This has occurred while costs have gone up. These trends have forced one of the commercial fishermen out of business and reduced the state's income from rough fish. Nineteen contract fishermen remain.

In 1959 state crews and contractors caught 9,070,376 pounds of rough fish. The state accounted for 5,028,618 pounds, contractors for 3,992,269 pounds and cooperators for 49,489 pounds. Of the contractors' catch, 2,819,215 pounds came from Lake Winnebago in the form of freshwater drum (sheepshead). Most of the state's catch was carp (4,116,214 pounds).

Principal producing waters are the



Trawling is a useful method of catching low-quality fish in some situations.

This is a catch of drum or "sheepshead" from Lake Winnebago.

large shallow lakes such as Winnebago, Koshkonong, Waubesa and Kegonsa. Lake Winnebago appears to be in the position of supporting a continuous commercial fishery for drum. Catches in Beaver Dam and Horicon were sharply reduced by heavy winterkills.

Efforts were made to arrest the northward expansion of carp in northwestern Wisconsin. Through operation of an electric barrier and seining, 40,000 pounds of carp were taken out of the Trade River system, Polk County.

Rough fish sales by the state brought in \$159,281.46 for the 4,623,177 pounds sold. Sales to animal food concerns (mink ranchers, etc.) accounted for \$44,010.79 income and sales to fish dealers for human consumption brought in \$115,-270.67.

A new development in management was authorized by the 1957 Legislature which permitted the Conservation Commission to declare any species of fish detrimental or in a class with the rough

fish when evidence indicated they were a nuisance. The Commission determined that bullheads were a detrimental species in the following waters: Castle Rock Flowage, Adams and Juneau Counties; Enterprise Lake, Langlade County; Lake DuBay, Marathon County; Little Lake Butte des Morts, Outagamie County; Little Rice Lake, Forest County; Pelican Lake, Oneida County; Petenwell Flowage, Wood County; Landing and Mill Lakes, Vilas County; Long Lake, Fay Lake, and Pine Flowage, Florence County. Perch were declared detrimental in Landing Lake, Mill Lake, North Twin Lake, South Twin Lake, High Lake and Fishtrap Lake in Vilas County. Catfish were called detrimental in Big Green Lake.

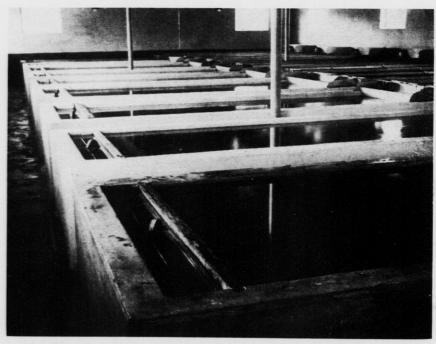
In 1959 a contract fisherman was engaged to fish the bullhead waters. He succeeded in catching 40,782 pounds of bullheads in northeastern Wisconsin waters, and thus contributed to restoring population balance.

PROPAGATION AND DISTRIBUTION

A keener realization of the value and shortcomings of propagated fish has been resulting in a better use of them and more efficient propagation. The division now has eleven trout hatcheries and rearing stations plus two warm-water hatcheries supported by an extensive system of ponds. One of the former trout rearing stations, Westfield, now operates as a disease and nutrition research station.

Cold water: Trends in trout propagation are illustrated in the accompanying graph. The division has been able to consistently raise about the same poundage of fish with no change in the budget although costs have increased. The demand for brown trout for stream stocking purposes has increased and proportionately more of them are raised now. Most of the rainbow trout production goes into lakes. The rearing of trout is predominantly dedicated to rearing yearling fish, although stocking in the fall has been found to be economic in some instances. There is a growing realization that trout stocking is not necessary on streams with good natural reproduction.

In the most recent cost report (1958) it cost \$0.75 per pound to raise rainbow trout, \$1.04 per pound for brook trout, \$0.71 per pound for brown trout. and \$3.15 per pound for lake trout. By all standards this is economical fish rearing for 2,000,000 trout largely made possible by the formulation of balanced dry diets fed to the trout in the form of pellets. Feeding of dry diets in the form of small pellets has also been found to be practical for fingerling trout. Hatcheries are



Several trout hatcheries now have improved facilities, such as these tanks.

making greater use of large conditioning dirt ponds which result in better growth and a better quality fish for stocking.

Capital improvements to the physical plant have been construction of a new rearing house at St. Croix. This improvement follows reconstruction of the water collection system during the last biennium. At the Nevin hatchery a piece of adjoining property was purchased to better protect spring sources and provide opportunities for physical plant improvement. Several of the hatcheries have converted their shallow metal rearing troughs to deeper, permanent cement tanks.

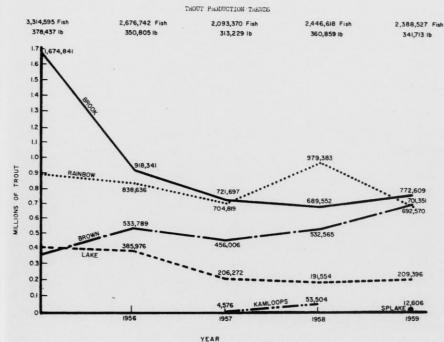
Trout propagation is augmented by the operation of 25 cooperative rearing ponds by sportsmen's clubs who raised 221,874 trout to larger sizes.

Lake trout spawn-taking from Lake Superior is declining sharply because of reduced populations of adult fish. This, of course, contributes to the high cost of propagating these fish plus the fact that they are slower growing.

Warm water: The warm-water fish propagation operation has this sequence: egg taking from wild fish, hatching of eggs in batteries, and stocking the fry and rearing of fingerlings in shallow ponds. Hatcheries are located at Spooner and Woodruff, each hatchery being associated with a complex of ponds. These hatcheries supplied 207,578,783 fry mostly for stocking of rearing ponds or providing muskellunge forage.

Rearing ponds are either of the natural type or controlled water level. In addition to the hatchery ponds 30 natural ponds were utilized for rearing of walleye, northern pike and muskellunge fingerlings, and four ponds with controlled water levels. The basic objective in pond culture remains the same, namely, to raise as many fingerlings of large size as possible because the larger

The Date of the Street



fingerlings have a better chance of survival.

The fingerling rearing program on muskellunge and walleye remains essentially the same also, although an effort is being made to hold brood stock muskellunge to remove our dependence on wild fish for eggs. Mechanics of operating controlled water level ponds have been much improved also so that production is more dependable. Walleye rearing ponds of natural origin were not as productive as usual because of low water levels in Polk and St. Croix Counties where most of these ponds are located. More rearing pond space is being devoted to raising northern pike during this biennium than in the past.

Under present practices the general tendency is to stock more on the basis of need rather than on simply an annual maintenance basis. There is a growing realization that there are weak and strong natural year classes, and that stocking to be effective can best take place in those years with weak year classes with reduced competition and predation.

Distribution: A fleet of 33 trucks handles distribution. In 1958, 1,311 lakes and streams were stocked with fish of one kind or another. A list of the species and amounts distributed appears in the accompanying table. The newest trucks have recirculating water systems which permit hauling more fish per load thereby reducing costs.

The plans for stocking are formulated by the district fish manager generally with the advice of annual county management meetings. Fish consigned to individual waters are receipted for at planting sites by cooperators.

FISH DISTRIBUTION IN 1958 AND 1959

Species	198	58	195	1959	
Бресиев	Number	Pounds	Number	Pounds	
Brook trout	$\frac{248,907^2}{516,637^1}$	9,943.5 87,856.3	199,539 ² 622,099 ¹	3,658.00 99,946.80	
Brown trout	$\frac{106,266^2}{517,370^1}$	2,757.5 $106,003.0$	249,895 ² ,4 533,668 ¹ ,4	4,125.50 108,319.60	
Rainbow trout	$\frac{314,687^2}{703,381^1}$	$10,482 \\ 155,990.5$	163,326 ² 584,546 ¹	9,988.00 137,367.00	
Kamloops trout	53,5641	5,880.0			
Lake trout	$\substack{15,937^2\\207,362^1}$	1,848 9,711	10,844 ² 209,396 ¹	636.00 10,063.00	
Splake	3,960	158.5	12,612	772	
Largemouth bass	$15,000^3,^4\\234,323^2,^4\\3,496^1$	$^{15}_{452.42}_{1,158.2}$	659,347 ² ,4 5,542 ¹ ,4	976.97 2,280.00	
Muskellunge	$^{104,842^3}_{92,853^2}$	3,430.34	$\begin{array}{c} 917,964^{3} \\ 119,736^{2} \end{array}$	4.31 4,184.34	
Northern pike	6,8001	7,705.0	$\substack{4,679,710^3\\34,751^2\\5,819^1}$	37.36 $1,298.36$ $11,087.00$	
Valleye	26,109,741 ³ 1,610,806 ² 839 ¹	10,697.84 841	$\begin{array}{c} 40,789,221^3 \\ 2,472,743^2 \\ 3,248^1 \end{array}$	111.66 12,450.04 996.00	

Legal-size, yearling and adult plantings.
 Fingerling plantings.
 Fry plantings (placed in lakes from which eggs are taken).
 Includes fish from federal hatcheries.

COMMERCIAL FISHERIES

Commercial fisheries are closely followed by keeping statistics on catches and quality of fishing. Statutes and Commission orders require all commercial fishermen to make regular reports. These statistics are the basis for prescribing more detailed research and investigations and regulating the fishery.

Lake Michigan: Lake trout catches are still nonexistent and unlikely to be otherwise unless heavy stocking is initiated. Whitefish are also scarce but there appears to be a strong year class present which will reach the fishery during the next biennium. Herring also seem to be at a low while chub production is constant. Perch catches and smelt catches have remained high and increased in some areas.

Lake Michigan is troubled with a trash fish problem-an overabundant supply of small fish of little value on the market. To make use of these fish requires efficient fishing methods which will permit fishermen to catch them in quantity. For this reason the division has given encouragement to development of a trawl fishery under a permit issued by the Director. In 1960 ten permits had been issued. Trawling catches the small fish, bloaters, smelt, and alewives, in much greater abundance per unit of time than gill nets, thus reducing the labor requirement. Catches commonly run 5,000 pounds per day and sometimes reach 10,000 pounds.

Lamprey control operates under U. S. Fish and Wildlife Service direction with state assistance. State personnel have assisted with attending some of the traps. Further declines were noted in the catches of lamprey traps, but, particu-

HARVEST BY COMMERCIAL FISHERIES IN WISCONSIN, 1959

Species		Por	inds	
	Lake Michigan	Lake Superior	Mississippi River	Inland Waters
AlewivesBowfinBuffalo	738,291		6,642 882,957	1,425 198,697
BullheadsBurbot		140 6,476	34,919	44,221 29,165 5,069,296
CarpCatfishChubs	1,923,155 253 5,295,400	782,971	2,769,055 583,954	5,069,296
EelGar		2.861.944	46 29,141	5,917
Lake herring (cisco)Lake troutMooneye and goldeye		186,014	10,660	1,072
Northern pikeQuillbackSheepshead (drum)	5,997		16,764 274,977	51,241 3,580,582
Smelt Sturgeon	2,106,955	383,584	2,114	
Suckers Turtle	353,992	29,240	29,328 799	87,911 748
Whitefish	1,228,623	52,764 709		50
Yellow walleyeOther	7,238		719	51
Total pounds	12,426,601	4,379,112	4,642,075	9,070,376
Total value	\$1,281,261	\$ 522,000	\$ 361,149	\$ 299,782

TRENDS IN LAKE TROUT HARVEST

Year	Lake Michigan (pounds)	Lake Superior (pounds)
1940	2,508,550	500,164
1941	2,742,868	629,233
1942	2,692,696	657,803
1943	2,824,277	617,208
1944	2.851.642	707,187
1945	2.515.075	571.757
1946	1,648,408	533,433
1947		517,685
1948	F40 404	552,957
1949		514,206
1950		590,627
1951	2,710	503.988
1952		520,507
1953	140	449,606
1954	56	435,009
1955	0	552,690
1956	0	479,259
1957	0	286,765
1958		258,052
1959		181,966

larly in 1960, there was considerable escapement because of high water. Seven traps were operated on Lake Michigan in 1960. Unproductive traps have been shut down.

As a reflection of the poor quality of the Lake Michigan fishery, we have noted a further decline in the number of commercial fishermen.

Lake Superior: Greater reliance is being placed on chemical control of lampreys with traps as check points. In 1959 and 1960 the chemical treatment of the Brule, Fish Creek, Bad and White Rivers completed treatment of all Wisconsin streams flowing into Lake Superior. The treatment was considered very successful although it was severely hindered by bad weather conditions.

Lamprey traps being operated now number 12. In the future those operated will be largely check points to observe the effectiveness of the larvicide. The catch of the traps declined somewhat although the incidence of lamprey scars on adult trout continues high (75 per cent).

Further declines in the lake trout and whitefish harvest were noted. Indicative of the decline, the division was unable to obtain sufficient lake trout eggs to adequately supply its hatchery. With possible control of the lamprey in sight, plans for rebuilding lake trout stocks are in the formative stages. Census data collected to date indicate stocked fish have high survival rates and make important contributions to the catch. In 1959 thirty-one per cent of the commercial catch was from this source. Fishermen are paying more attention to chubs than they have in the past. The herring catch always concentrated in the fall spawning period was off because of bad weather conditions.

Mississippi River: This fishery is concentrated on catfish and rough fish. Catfish, carp and buffalo account for 90 per cent of the total value. There are more pounds of fish currently being harvested from the Mississippi River than from Lake Superior. Recent trends noted were an increase in the catch of buffalo and catfish, both of which receive good prices on the market. Adequate commercial harvest of rough fish species is considered to be essential for good management of a sport fishery and duck hunting on the river.

RESEARCH

The research section is relied upon to furnish detailed investigations and analyses of management problems. The section consists of a chief biologist, group leaders for warm-water fisheries, coldwater fisheries research and disease and nutrition, and project leaders for the seven projects currently in operation. Some research problems, mostly those of a basic research nature, are referred to the University for investigation. A summary of activities and results reported by each project follows:

Lawrence Creek: The basic objective

of this project is to determine the best management for a good population of brook trout. When first established as a research area, prevailing size and bag limits were removed, and during the most recent period (1958 to present) a nine-inch minimum size and bag limit of five are being tried. Data are collected by a system of permits issued from a checking station plus sampling with electro-fishing gear.

Although theoretical data indicated a greater biomass of trout could be attained with a nine-inch minimum size, angling records have indicated otherwise. Few trout reached the creels and the population of large trout failed to build up to expected levels. Although the presence of more brood stock resulted in production of a large year class, survival to the creel has not been good. Angler harvest dropped to 22.0 and 11 per cent of the preseason stock of age II fish in 1958 and 1959. This compares with harvest of 72 to 96 per cent in

prior years. This minimum size was considered to be too high and will be reduced to an eight-inch size and five bag limit during the next fishing period.

The research data has demonstrated there can be substantial variation in year class strength perhaps aided by population fluctuations imposed by angling. Operation of a refuge on a portion of the stream indicated the density to which a population of brook trout will climb. It reached 233.5 pounds per acre and thereafter declined to levels that approximated populations in other portions of the stream.

The studies to date have indicated that a trout population in even a small stream with stable water levels is very dynamic and not readily predictable.

Five Lakes: This period of research at the Five Lakes project was largely dedicated to an evaluation of walleye fingerling stocking, but other interesting developments have occurred as well. Data collection is accomplished through issu-



Man-made Cox Hollow lake yielded a bonanza of northern pike when it was opened to fishing. Catches were recorded at a checking station.

ance and collection of permits at a checking station.

The principal lake in the group, Escanaba, basically has been a perch-walleye lake in recent years. After having observed the natural population for seven years, a planting of walleye fingerling was attempted in a year with a poor year class of natural fish. Harvest from this planting of 48,300 fingerlings in 1954 has been 5,599 fish weighing 2,450 pounds. This is 11.5 per cent of the number stocked. In 1958 and 1959 additional plantings were made in the face of stronger natural competition. Survival of these fingerlings was, however, not so good because of early mortalities.

Observations of the fish population through netting and creel census amply illustrate the dynamic and unpredictable character of this resource. Northern pike, never a common fish in Escanaba Lake, had two good spawning years in a row in 1956 and 1957. Now the catch of northern pike is equal to that of the walleye. Similarly, the pumpkinseed sunfish surpassed the perch in the anglers' creels to assume a dominant position among the panfish species. Meanwhile perch and walleye catches are off.

Delafield Bass and Walleye Studies: Aspects of the life history and management of smallmouth bass in Lake Geneva were studied because of complaints of overharvest and subsequent scarcity. Findings indicated nest abandonment and subsequent poor hatches follow periods of cold weather during the nesting season and that removal of male fish guarding the nest will expose the nest to destruction. Protection through the spawning period was recommended as a management measure to improve the relatively small population of smallmouth, Good growth and variable year class strength were characteristics of this population.

Additional tests of walleye fingerling stocking took place in two southern Wisconsin lakes, Lake LaBelle and Pike Lake. Pike Lake has a natural population of walleyes with significant natural reproduction. Lake LaBelle has been found to be dependent on stocked fish. Voluntary anglers' return of tags indicate a minimum rate of harvest of 12.7 per cent was experienced at Lake LaBelle in 1959 and 20.6 per cent at Pike Lake. A higher rate of harvest for the faster growing and larger females was noted.

Winnebago Studies: This project has been concerned with two species, the freshwater drum and lake sturgeon. The drum is regarded as a competing species with game fish which is held in low regard by anglers. Thus, in management there has been an effort to increase predation on the drum. Commercial catches of the species jumped from the long-term average of one-half million to 4,000,000 pounds per year in 1954. The effect of this predation on the drum themselves and relative abundance of game fish was observed.

Increased harvest resulted in a 15 per cent improvement in drum condition (weight relative to length). At the same time steady increases in the perch and white bass abundance were noted and a sharp increase in walleye and sauger noted toward the end of the period. In 1959 this increase was 53 per cent for walleyes, 221 per cent for saugers, 158 per cent for white bass and 100 per cent for perch. Phenomenal fishing was reported in the summer of 1960.

A detailed picture of the life history of the drum has been worked out.

Over the years all sturgeon caught in trap nets have been marked with tags. Subsequent recoveries through operation of a reward system give data sufficient for population estimates and spearing mortality. The estimated population of adults in Lake Winnebago lies between 10,700 and 12,700 fish in the size range speared (over 40 inches). Return of tags was 1.8 per cent of the total. Smaller size sturgeon taken from the upper lakes (Big Butte des Morts, Poygan and Win-

neconne) suggests a much higher rate of exploitation.

With the study of life history and management of the drum and sturgeon nearing completion, attention is shifting to the other game fish species.

Spooner Muskellunge Studies: Principal effort in this project has been to determine levels of recruitment of wild fish and survival of stocked fingerling. To gather data of this kind all fingerlings stocked in the lakes of northwestern Wisconsin have been marked by excising a fin. Subsequently, incidence of marked fish among unmarked fish gave population data on wild fish and relative survival of stocked fish. Accomplishment of this objective required a great deal of attention to methodology. The project leader has concluded that successful population estimates of fingerling mus-

kellunge, as well as northern pike and grass pickerel, can be accomplished by night-time operation of the boom shocker. Estimates of fingerling survival on these lakes were attempted. Survival of stocked fingerlings was seventy per cent at Evergreen Lake one month after stocking, twenty per cent at Des Moines Lake and five per cent at Partridge Lake.

During the last three years 763 adult muskellunge from eight lakes have been tagged. Returns of 72 by anglers and 60 recaptures by trap nets furnish growth data. Known growth measurements have been compared with scales and fin bone sections to validate this method of growth measurement. Growths of four to six inches over a four-month period were noted. A tag attached to the hyomandibular bone proved durable and interfered least with the fish's activities.



A small wetlands area such as this becomes a valuable public asset under the wetlands acquisition program.

Murphy Flowage: Murphy Flowage is a 180-acre body of water with a northern pike, bass and panfish population on which there have been no season, size or bag limits since 1955. The basic objective of the project has been an evaluation of the impact of the liberal regulations on this fishery.

Statistics show a high catch has been maintained in the face of growing fishing pressure. In 1959, 5,300 anglers fished the flowage for 20,600 hours and caught 45,000 fish. Anglers averaged 2.2 fish per hour and 67 per cent of the anglers were successful. Application of 114 hours of fishing effort per acre of water yielded 250 fish (50 pounds) per acre.

Analyses of permits filled out by anglers reveal a great deal about anglers' habits. Repeat fishermen were more successful than first-time anglers and had less unsuccessful trips. There were 762 anglers who had made only one trip, 235 in the two to five trip class and 41 who had made over five trips.

To have had normal seasons would have reduced the largemouth bass catch by twenty-four per cent and northern pike harvest by eight per cent. The populations of the principal species were estimated to be 726 northern pike, 1,448 largemouth bass and 157,957 bluegills.

During the next period of investigation, the project personnel intend to intensify the harvest of panfish to note its effect on the population.

Disease and Nutrition: This project has assumed supervision of the former Westfield trout rearing station. During the biennium the value of various feeds was tested. It was found that a ration prescribed by the Department produced good growth and conversion and compared favorably with manufactured feeds. The feeding of grainlets to fingerling trout was tried and limitations noted. The survival of planted fish in the wild which had been fed various diets was noted. The fish fed on the Department

formulation did as well as those on other diets.

A high level of disease control was maintained through the period. Operation of a laboratory at Nevin permits chemical analyses of food and water supplies.

Trout Lakes Study: This project aims to provide facts for better management of trout lakes such as time of stocking, conditions necessary for good survival and growth and angler's take. The project has not been in operation long enough for accumulation of much data. Preliminary data suggest trout growth tends to be poor in those situations which have a plankton crop dominated by small plankters. Growth between time of stocking (late winter or early spring) and last sampling date (June) was one inch at Moose Lake and two inches at Rock Lake.

Habitat Development Evaluation: The effect of improvements on four trout streams was followed during the biennium. These were Big Roche a Cri in Waushara and Adams Counties, McKenzie Creek in Polk County, Black Earth Creek in Dane County and Mt. Vernon Creek in Dane County.

Findings generally stress the dynamic character of fish populations and their environment. At Roche a Cri improving the stream channel resulted in some improvement of the trout population. The improvement is not clear-cut due to drastic changes in the fishing pressure (reduction), water level (increase due to rain), and movement of the fish. At McKenzie Creek, successive population increases followed improvement. Channelization or deepening has attracted larger trout and brush covers have protected young-of-the-year. In contrast, of the two Dane County streams, Black Earth had the lowest population on record in 1959 despite considerable improvement work and unimproved Mt. Vernon had an excellent population. However, a large fingerling crop is in

evidence at Black Earth Creek in 1960. For some reason there was low fishing pressure in 1959 on trout streams which permitted better survival than usual. This is expected to become evident in the crops of fingerling.

University Cooperative Studies: Studies dealing with the ecology and physiology of lake fishes wholly or partly supported by Department funds are carried out by the University of Wisconsin's Zoology Department. Fifty thousand dollars was allotted to these studies in 1959–60. Specific subjects under investigation are as follows:

- The biology of trout and bass in artificially alkalized bog lakes.
- Life history and ecology of the white bass.
- Movements of perch in Lake Mendota.
- Reactions of fish to conventional and experimental fishing gear.
- Population dynamics of yellow walleye fingerlings in lakes.

Refinements in methods and further evaluation of the results of liming took place. Light transmission was greatly improved on two bog lakes (twofold increase at four meters) but unaffected on a third.

Past work on this project furnished evidence of the feasibility of managing both trout and bass in the same lake, and evolved a method of preventing winterkill by air turbulence.

White bass studies were principally concerned with schooling behavior, surface distribution and concentrations of the species in Lake Mendota. There are two groups of white bass in the lake which have slightly different characteristics and habits. One group spawns off Maple Bluff and the other off Governor's Island. Homing tendency was 88 per cent true. The majority of surface feeding white bass feed upon zooplankton. The adults swim with mouth open when

feeding on the *Daphnia* concentrated at the surface in morning and evening.

Use of sonor permitted recording of perch movements under the ice. Activity is most pronounced at daybreak and gradually diminishes through the day. During daylight perch are evenly distributed from a 20-foot depth down to the bottom while at night they are on the bottom.

Work on reactions of fish to fishing gear was concentrated on these questions:

- Role of temperature in net avoidance.
- Effect of the group on net avoidance.
- 3. Effect of net color.
- Effect of partial occlusion by air bubbles.

In warm water surface escape routes were generally used and in cold water bottom escape routes were sought. Carp try to avoid the air curtain until crowded. Net color made no difference in behavior.

Studies of the yellow walleye were intended to determine in what manner and to what extent augmentation of native year classes by artificial stocking affects year classes of native walleye. Much attention was given to the ecology of young walleve. One lake, Little John, had good natural year classes of walleye two years in a row; a second (Erickson) had a failure two years in a row while a third (Sparkling) had a good year class followed by a poor one. Stocking small fingerlings 2.6 to 3.2 inches gave negligible survival. Stocking larger fingerlings gave better survival over the winter.

TECHNICAL PUBLICATIONS BY FISH MANAGEMENT DIVI-SION PERSONNEL

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Marecek, Frank

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McFadden, James T.º

1959. Relationship of Size and Age to Time of Annulus Formation in Brook Trout. Trans. Am. Fish. Soc., Vol. 88, No. 3, pp. 176– 177.

Miller, Nicholas J., Clifford L. Brynildson, and C. W. Threinen

1959. Rough Fish Control. Pub. 229, Wis. Conservation Dept., 15 pp.

Mraz, Donald

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- Niemuth, Wallace, Warren Churchill, Thomas Wirth
 - 1959. The Walleye: Its Life History, Ecology, and Management. Pub. 227, Wis. Conservation Dept., 14 pp.

O'Donnell, D. J., and C. W. Threinen

1960. Fish Habitat Development. Pub. 231, Wisconsin Conservation Dept., 15 pp.

Snow, Howard, Arthur Ensign, and John Klingbiel

1960. The Bluegill: Its Life History, Ecology, and Management. Pub. 230, Wis. Conservation Dept., 14 pp.

Stoeckler, Joseph H. and Glenn J. Voskuil

1959. Water Temperature Reduction in Shortened Spring Channels of Southwestern Wisconsin Trout Streams. Trans. Am. Fish. Soc., Vol. 88, No. 4, pp. 286–288.

Not employed by the Wisconsin Conservation Department at time of publication but paper is based on material obtained during period of employment by WCD.

Game Management

The game management division is responsible for the maintenance, development, and safeguarding of the wildlife resources of the state. Since its reorganization into five management areas in 1949–50, the administration and organizational structure has been developed to

handle efficiently the increasing and complex activities. The game management division has a permanent staff of 84 supervisory and 77 nonsupervisory personnel, augmented during periods of peak activity with additional seasonal personnel.

GAME REGULATIONS

The Conservation Commission establishes regulations for the harvest of game and fur. It is the responsibility of the game management division to recommend seasons which not only will yield the most recreational opportunity to sportsmen, but will result in the sound management of each game species.

To insure that such recommendations are sound, population and range surveys

are undertaken to measure accurately the annual status of each species. The results are prepared for use by the public at the Conservation Congress county and state hearings.

The ever-increasing number of hunters results in more and more hunting pressure on most wildlife, and creates the need for larger game harvests and better hunting opportunities.

LAND ACQUISITION

The land acquisition program began in 1927 when the Legislature appropriated \$250,000.00 for the acquisition of Horicon Marsh. The program has continued, and today a total of 196,536 acres of land has been purchased. During the biennium, approximately 44,031 acres of land were purchased at a cost of \$1,011,885.00.

Deansville Marsh in Dane County was the first leased public hunting grounds; it was established in 1938. Today there are 304,483 acres of leased public hunting and fishing grounds, and 256 state-owned and leased public hunting and fishing grounds located in 68 of the 71 Wisconsin counties.

In addition to the above, there are 4,540,650 acres of lands open to public hunting and fishing on national, state, and county forests, private forest crop lands, and State Land Commission lands.

LAND ACQUISITION

	1958-59	1959-60
Total units leased and purchased	253 314,838 183,065	256 304,483 196,536

COSTS OF ACQUIRING AND OPERATING STATE PUBLIC HUNTING AND FISHING GROUNDS

Cost	1958-59	1959-60
Cost of land purchases Development, patrol and maintenance Damage claims Payments in lieu of school taxes	\$425,517.00 682,141.00 1,312.00 44,909.00	\$586,368.00 663,000.00 1,346.00 Pending

GAME AREA MANAGEMENT, MAINTENANCE, AND DEVELOPMENT

The task of improving game habitat on public and private lands was again emphasized during the 1958–60 biennium. A brief description including statistical summaries of habitat improvement is discussed as follows:

Game Food and Cover

Wildlife habitat is created by planting game food and cover species on public hunting and fishing grounds, selected watersheds and on private lands. During the springs of 1959 and 1960, the game and fish management divisions supervised the planting of 3,117,358 trees and shrubs. Assistance was given to schools, clubs, 4-H clubs, U. S. Soil Conservation Service, and other interested groups and individuals. None of the trees or shrubs were used for ornamental and landscape purposes.

Fence Construction

Game managers supervised and constructed 6,250 rods of new fencing on public and privately owned lands to protect tree and shrub plantings and to provide food patches for wildlife and other existing good game cover.



Rose hedges offer excellent cover for small game. They are adapted to the southern one-third of Wisconsin, where much of the land shows such lack of cover as to limit game populations.

Food Patches

To provide food for prairie grouse, waterfowl, geese and upland game, 2,707 acres of food patches were planted on public and privately owned lands. Crops used included corn, buckwheat, millet, rye, sorghum, etc.

Trail Seeding

Trail seeding was again intensified this biennium with the seeding of 650 miles of woods roads on Wisconsin's public forest lands. Seed mixtures include legumes and grasses. Trail seeding will keep woods roads open for hunters and provide forest game with good feeding, nesting sites and "edge".

Prescribed Burning

Poor weather conditions hampered this activity which had its modest beginning in the early 1940's but which has reached a point where it is one of the best and cheapest game management tools. During the biennium 16,827 acres were prescribed burned to maintain plant successions for prairie grouse, waterfowl and upland game.

Firebreak Construction

In cooperation with forest protection division personnel, game managers constructed 62 miles of new firebreaks. When prescribing burning areas, it is necessary that complete fire control exists around the area to be burned.



To create good waterfowl habitat, it is often necessary to "make wetland wetter" with the use of dikes. This is one such impoundment.

Flowage Construction

Several flowages were constructed ranging from a few acres to several hundred acres in size to benefit wildlife, provide public hunting and fishing and to afford recreational use. With reduced budgets during the biennium, 24 flowages were constructed totaling 3,360 acres.

Clearing

Where it is impossible to use prescribed burning as a management tool to revert plant successions to an early stage, various clearing methods are employed to accomplish this function. Usually this method includes the use of hand tools, bulldozers, herbicides and other mechanical cutters. During the biennium 3,633

acres were cleared on public forest and state-owned lands.

Access Road Construction

Access to many areas for hunting and management work continues to be a major problem. To provide this access, 155 miles of road were built and maintained by game managers throughout the state.

Parking Lots

The parking of automobiles on public hunting grounds and public forest lands is an increasingly serious problem. To accommodate the increasing number of hunters, game managers constructed 160 new parking lots throughout the state.



Building access roads is a necessary part of forest development work. The openings improve game habitat and enable hunters to get "back in." Also, access is needed for management operations and fire protection.

Beaver and Deer Complaints

The statutory responsibilities of controlling beaver and deer are evidenced by the fact that 985 beaver and deer complaints were answered during the biennium.

Level Ditching and Diking

This tool is used by game managers to improve habitat conditions for wild-life on marshes throughout the state. During this biennium 55,257 feet of level ditching and diking was accomplished.

This figure includes the repair of some existing dikes which required extensive repair work as the result of high spring water.

Income from Sale of Products

By-product income from game management lands totaled \$51,267.00 during the biennium. Of this amount \$38,451.00 came from the sale of timber and pulpwood. Sale of moss, surplus buildings, marsh hay and miscellaneous items accounted for \$12.816.00.

GAME AREA MANAGEMENT, MAINTENANCE, DEVELOPMENT

Activity	Total 1958-60
ame Habitat food and cover (stems) nnee construction (rods) ood patches (acres) ail seedling (miles) escribed burning (acres) rebreak construction (miles) owage construction (acres) earing (acres) cess road construction (miles) rking lots (number) evel ditching and diking (feet) eaver and deer complaints (number)	2,707 650 16,827 3,360 3,633 155

GAME AREA BY-PRODUCT INCOME

	Total 1958-60
Timber and pulpwood. Buildings. Moss Marsh hay Grazing. Easements.	\$38,451.00 5,146.00 6,808.00 56.00 245.00 561.00
Total	\$51,267.00

COOPERATION—OTHER AGENCIES

During the biennium, game division personnel cooperated with various state and federal agencies and civic organizations. Contacts continued with the Highway Commission relative to the planting of trees and shrubs along road right-of-ways, with Soil Bank cooperators regarding wildlife practices on their farms, and with the U. S. Forest Service to promote

full multiple-use on large acreages of public lands. Cooperation was also extended to the ASC, ACP, Bureau of Sport Fisheries and Wildlife, and the Trees for Tomorrow program. Cooperation of this type is essential to promote wildlife management recommendations and disseminate information on various conservation programs.

FISCAL YEAR EXPENDITURES

		1958-59		1959-60				
Function	Game (P-R)	$Fish \ (D-J)$	Total	Game (P-R)	Fish (D-J)	Total	$_{TOTAL}^{GRAND}$	
Coordination	\$ 37,410.00 145,416.00 249,486.00 298,437.00		145,416.00 480,866.00	155,909.00	\$ 13,067.00 	\$ 52,268.00 155,909.00 37,090.00 554,488.00	\$ 102,148.0 301,325.0 517,956.0	
Total	\$730,749.00	\$335,591.00	\$1,066,340.00	\$621,591.00	\$178,164.00		\$1,866,095.0	

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FEDERAL AID IN FISH AND WILDLIFE RESTORATION ACTIVITIES

The Federal-aid in Fish and Wildlife Restoration Act better known as the Pittman-Robertson and Dingell-Johnson programs was designed to help check the depletion of the nation's wildlife, stimulate its restoration and also solve the nation's sport fishery problem. Money spent under these two programs provides benefits to hunters and fishermen who seek recreation and food from the country's resources and also affords substantial rewards to agriculture and forestry and to millions of other Americans who enjoy out of door living on areas acquired or developed with cash contributions from hunters and fishermen.

Wisconsin's Pittman-Robertson program began in 1939 while the Dingell-Johnson program followed in 1952. Both programs are administered by the Bureau of Sport Fisheries and Wildlife. The Pittman-Robertson program operates on

a 11 cent tax from the sportsman's gun and ammunition dollar and the Dingell-Johnson program functions on a 10 cent tax from the fisherman's fishing gear and equipment dollar. By a formula based on paid hunting and fishing licenses and area of State, the State receives its share of the annual tax receipts to help maintain and to increase fish and game species through land purchase, habitat improvement, research and coordination. The States select, plan and direct their programs after approval by the Bureau of Sport Fisheries and Wildlife. The States own all of the lands purchased and improvements made. Project costs are paid on the basis of 14 by the State and ¾ by Pittman-Robertson or Dingell-Johnson funds. Wisconsin's approved federal-aid functions with their respective costs for the 1958-60 biennium are summarized as follows:

RESEARCH

Two classes of research effort are undertaken by the Wildlife Research Section. The first consists of routine surveys and investigations made jointly each year by research biologists and game managers to answer current questions on the status of game numbers, food, and cover. The second effort concerns evaluations of effects of land-use changes on wildlife; development of methods of improving wildlife habitat; and the investigation of factors affecting populations, including the evaluation of hunting regulations.

To integrate departmental wildlife research with other programs concerning wildlife and wildlife habitat, cooperation is extended to and received from the U. S. Bureau of Sport Fisheries and Wildlife, U. S. Department of Agriculture branches, U. S. Soil Conservation Service, U. S. Forest Service, University

of Wisconsin and several of the state colleges, other Wisconsin state agencies, and the fish and game departments of other states.

Five wildlife research projects are conducted with Pittman-Robertson funds under terms of the Federal Aid in Fish and Wildlife Restoration Act. The functions of these projects are as follows: The Wildlife Pathology Project investigates natural wildlife losses and diseases, determines causative agents, evaluates their significance, and uses this information to contain and control diseases whenever possible. The Game and Range Survey Project is concerned with the maintenance of an up-to-date picture of the status of game species in Wisconsin and the conduct of an inventory of game habitat in the state. Research by the Wetlands Game and Range Research Project is aimed at evaluating and developing methods of managing wetland areas for wildlife and of obtaining information about wetland game population levels. The Farm Game and Range Research Project evaluates the effects of various habitat factors on farm game populations, particularly pheasants. The Forest Game and Range Research Project Game and Range Research Project of the project of the

ect develops, evaluates, and recommends methods of managing forested areas for wildlife production, and of evaluating factors affecting population levels.

Completed research findings are made public through all available news media, the departmental technical bulletin series, scientific journals, and the Wisconsin Conservation Bulletin.

COSTS FOR RESEARCH PROJECTS

Project Name and Number	Total Costs		
	1958-59	1959-60	
Wildlife Pathology Research, W-24-R. Game and Range Survey, W-25-R. Wetlands Game and Range Research, W-77-R. Farm Game and Range Research, W-78-R. Forest Game and Range Research, W-79-R.	\$ 9,826.36 19,359.00 34,853.64 31,694.00 49,683.00	\$ 10,717.56 20,533.29 29,664.15 39,679.47 55,314.53	
Total	\$145,416.00	\$155,909.00	

LICENSED FARMS AND SHOOTING PRESERVES

Many private citizens are engaged annually in the production of wildlife. The most acreage, totaling 50,007, was devoted to muskrat farming. Deer farming was second with 20,275 acres. There were approximately 10,330 acres of bea-

ver farms. In addition to the licenses shown in the following table, during the biennium, 81 scientific certificates to collect wildlife, and 77 bird-banding permits, were issued by the game division.

SUMMARY OF FARM AND SHOOTING PRESERVE LICENSES

	New in	Total for	Total for
	Biennium	1958	1959
Deer Farms Muskrat Farms Mink on Muskrat Farms Beaver Farms Raccoon, Otter, and Skunk Farms Game Bird and Animal Farm Licenses Wildlife Exhibit Licenses Zoo Permits Shooting Preserve Licenses	37	110	122
	19	367	351
	20	66	68
	1	30	28
	112	250	234
	281	766	791
	33	5	30
	4	25	25
	14	89	88

GAME HARVEST

Records of the annual game harvest showing the species and quantity of animals, upland birds, and waterfowl taken during open seasons, are prepared for

the use of departmental personnel, cooperating agencies, and individuals concerned with management work. Such statistical reports are of value in show-

ing yield trends during the years and as guides in future planning.

During the biennium, an estimate of more than eight million game animals and birds were taken by hunters and trappers. The total pelt value of trapped animals during the 1959–60 season, exclusive of bountied predators, was estimated to be \$796,061.50, compared to a pelt value of \$822,208.42 during the previous season.

COMPARATIVE GAME HARVEST REPORT

	1958-5	9	195	9-60
Cottontail Rabbit Snowshoe Rabbit	939,900 64,900 10,700		432,400 44,700 6,400	
	1,0	15,500		483,500
Grey Squirrel	881,400 494,800		554,700 312,400	
	1,3	376,200		867,100
Pheasant	472,400 431,500 5,900 35,900 47,400		277,800 322,800 8,900 33,100 37,500	
		93,100		680,100
Woodcoek Ducks Coot	27,000 566,200 149,700		30,000 Decrease Decrease 29,600	
	7	42,900		59,600
Deer (Gun and Bow and Arrow)Bear (Gun and Bow and Arrow)	97,119 577		106,916 579	
		97,696		107,495
Muskrat Mink Skunk Weasel Otter Opossum Beaver Raccoon	495,400 32,660 2,201 5,042 1,097 2,377 11,515 49,700		257, 662 24,026 5,424 5,217 737 1,867 10,597 50,900	
		599,992		356,430
	4,8	825,388		2,654,225
Biennium Total				7,479,613

STATE GAME FARM

The State Game Farm at Poynette attracts thousands of visitors annually to its animal and bird exhibits, game food and cover tree and shrub plantings, and picnic facilities.

Aside from the major function of game bird production and distribution, personnel concerned give considerable assistance to conservation clubs and individuals on pheasant management methods under the cooperative rearing and stocking program. The major activities of the farm are as follows:

GAME FARM PRODUCTION AND DISTRIBUTION

	1958-59	1959-60	Totals
Eggs Produced	433,129	429,176	862,30
Eggs Set	395,477	408,408	803,888
Egg Distribution	26,687	31,559	58,246
Chicks Hatched	295,963	291,970	587,933
Chick Distribution: Chicks to Cooperators Chicks in Farm Brooders	208,375 87,285	204,975 81,661	413,350 168,946
Total	295,660	286,636	582,296
Stocking		1	
Pheasants Liberated from: Egg Program Day-old Chick Program Farm—16-20 weeks old Mature Pheasants	9,432 191,497 42,637 24,493	11.417 185,941 43.474 16,777+	20,849 377,438 86,111 41,270
Total	268,059	257,609	525,669

WILDLIFE REFUGES AND CLOSED AREAS

A total of 105 wildlife refuges covering 28,498 acres in 39 counties was posted in 1959. Refuges have been established for some time for the protection and reproduction of the game spe-

cies concerned. During the biennium, additional closed areas were created in many regions of the state wherein the hunting and trapping of various species of wild animals and birds was prohibited.

WINTER GAME BIRD FEEDING

The winter bird feeding program is an emergency game bird feeding activity, confined mainly to pheasants, Hungarian partridge, and quail, although sharp-tailed grouse, prairie chicken, and turkey are fed also in central Wisconsin.

Department personnel responsible for the program work closely with conservation clubs and other interested parties in the servicing of feeding stations. The following table shows a summary of winter bird feeding by management areas.

WINTER BIRD FEEDING

Area	1958-59		1959-60	
	Lbs, Fed	Food Patches Number	Lbs. Fed	Food Patches Number
NWA NEA WCA ECA 8A	5,240 25,930 65,232 240,705 146,250	14 66 35	14,290 11,520 19,145 128,500 50,115	4 9 79 63
Totals	483,357 (241.7 Ton)	115	223,570 (111.8 Ton)	155
No. of Counties	53		44	

DEER AND BEAR DAMAGE

The 1949 Legislature appropriated a \$40,000.00 annual payment for deer and bear damage claims. Since 1955, the statutes limited the payment of damage to growing agricultural crops, orchard trees, nursery stock, apiaries, farm animals, and poultry. During the biennium, most deer damage was paid for commercial garden

vegetables, hay, clover, alfalfa, and small grain losses.

Bear damage was paid primarily for livestock (mostly sheep), apiaries, and corn; also for orchards and other grain. The following table shows the cost of deer and bear damage claims:

DEER AND BEAR DAMAGE

Fiscal Year	Deer		Bear		Total
	Cost	No. of Claims	Cost	No. of Claims	1000
1958-59	\$28,611.99	299	\$11,106.71	208	\$39,718.70
1959-60	27,384.80	170	4,879.78	74	32,264.58
	\$55,996.79	469	\$15,986.49	282	\$71,983.28

Information and Education

The success of any state conservation program is determined by the acceptance given it by the citizens of the state. Acceptance is based on information and the public's understanding of the objectives of the conservation program.

Information and Education serves to inform by using all types of available communication media to explain the various programs of the department to the people of the state. Many of the activities described here are determined by public demand.

The division's activities are divided into the sections of information, education, publications, and recreational publicity.

INFORMATION

With the realignment of the Information and Education Division which was effected during the biennium, the information section was organized to include news services, radio, television, and photographic activities.

News Services

Appointment of a new member to the news services supervisor position highlighted the activity of this function during the biennium. This appointment, made to fill the vacancy created by retirement of the previous news services supervisor who had held the position for 25 years, was effective October 1, 1959.

News services activities since that time have been expanded to include a number of functions which were not previously conducted. These new functions include preparation and distribution of feature articles accompanied by photographs to illustrate the article, and preparation and distribution of radio spot announcements about specialized news items appropriate for radio usage. Examples of these are spot announcements on the subjects of gun safety and nursery stock sales. The radio spot announcements are distributed to 73 broadcast stations in Wisconsin.

The personal contact work of a liaison

nature by the news services supervisor with newspaper editors and staff members also was stepped up following the new appointment.

In addition, the regular work of preparing and distributing news releases including the weekly fishing reports during the summer months has been maintained at a higher rate of production than in the previous biennium.

These new and increased functions have resulted in wider and more thorough coverage of department programs and activities in the press and on radio.

Radio

The department's weekly radio program, "Wisconsin Outdoors," was continued on the same basis as during the previous biennium. The number of stations carrying the weekly 14-minute taperecorded series was maintained at an average of 35 during the biennium.

Television

Major television efforts during the biennium continued to be in the form of film clips produced and distributed to stations throughout the state. Twenty stations in Wisconsin, Minnesota, and Illinois are being serviced regularly with these film clips which run from 3 to 5 minutes each. A change in the method of production of the film clips was instituted during the biennium. Previously, the editing of the film clips was all handled by department personnel with the prints being made from the edited original by a commercial laboratory. Under the new method the work has been turned over to a different laboratory and all editing and printing is handled by this laboratory. This arrangement results in faster service and better production, with optical effects such as fades and dissolves which were not obtainable under the previous method, at no increase in cost.

In addition to filmed materials prepared for distribution to television stations, personnel of the information section provided direct assistance to program conductors on a number of local television stations in the state. Special aid was given to station WISN-TV, channel 12, Milwaukee, and WISC-TV, channel 3, Madison, in helping them inaugurate new outdoor shows.

Photography

One feature motion picture was completed during the biennium and a second was completed except for processing of final prints by the close of the biennium. The completed film titled "Story in the Smoke" is a 28-minute color-sound production depicting the story of forest protection in Wisconsin. The second film titled "Better Fishing" is a 28-minute color-sound production which tells the story of the fish management program being conducted by the Conservation Department.

A third film completed during the biennium was one titled "College of the Outdoors" which portrays the activity of the summer conservation outdoor training school conducted by Wisconsin State College at Stevens Point in cooperation with the Conservation Department. This 12 minute color-sound production was scripted and narrated by Conservation

Department personnel and musical background for the sound track was recorded through the cooperation of the State Bureau of Audio Visual Instruction. This method of production permitted completion of the film at a fraction of the cost that would have been required if the film had been edited, scripted and the sound track recorded by a special laboratory.

In addition to motion picture production, black and white and colored stills are continuously being produced by our own personnel and field personnel. All film is sent to this office for processing and screening in order to add to our general public file which contains over 17,000 black and white, 4,500 color 2" x 2" and several hundred larger color transparencies.

Newspapers, magazines and other publications used 3,363 black and white and color photographs during this biennium. Processing of black and white and color photographs totaled 16,153 compared to 9,817 in the previous biennium. Prints and enlargements made during this period totaled 31,457 compared to 26,029 for the previous biennium.

I and E Clinics

The information section, together with the publications supervisor, conducted a series of Information and Education clinics during January and February, 1960, in which field personnel of the department were instructed in utilization of the various publicity media available to the Conservation Department. The clinics were arranged on an area basis so that one clinic was held in each of the five conservation areas in the state. Field personnel from each area attended the clinic in their particular area. Instruction was offered on utilization of radio and television, on photographic techniques, on writing material for distribution to newspapers and on preparation of articles for the Conservation Bulletin.

These clinics resulted in the field personnel being better equipped to handle publicity in their local areas and to prepare materials for state-wide distribution when they are called on to do so. The clinics also provided for a closer liaison between field personnel and the Information and Education Division, resulting in a more unified and coordinated department-wide publicity effort.

PUBLICATIONS

Wisconsin Conservation Bulletin

As of January, 1960, the Conservation Bulletin had been published continuously on a monthly basis for 24 years. It is a small publication designed to supply Wisconsin schools and the interested public with significant conservation information.

The Bulletin presents short, meaty articles and draws on many authors. More than 100 of the department's personnel contributed articles in 1959, some of them more than one. In addition, a limited amount of material originating outside the department was used.

Circulation rose from 77,600 at the start of the biennium to 86,000 at the mid-point and 88,500 at the end. The slowdown in circulation growth can be attributed to a rigorous control procedure adopted in 1959. This consists of continuous mailing list revision, with cards mailed to one-twenty fourth of the subscribers each month, so that all subscribers are contacted once each two years. All subscribers who fail to fill out, stamp, and return the cards, on a single notice only, are dropped from the list.

Because budget cuts were essential, plans were made to convert the Bulletin from monthly to bimonthly publication at the end of the biennium.

The Conservationist

The Activities Progress Report has been replaced during the biennium by the "Conservationist" which is mailed monthly to about 3,700 persons including Conservation Department personnel, various public officials, and individuals who carry responsibilities for advancing specific conservation programs in Wisconsin. Although not available for general distribution, the publication is supplied to libraries and to information media such as newspapers, radio stations and television stations.

The news, features and special columns which highlight this publication attempt to bring to all employes and close co-workers the progress of activities, new plans and new stands, background thinking on policies and programs—in general, information which is designed to help augment the basic foundation of facts underlying ideas and attitudes.

Technical Reports

Technical reports are written as the final step in a research project and are published in a Technical Bulletin series, which has now been expanded to include fish, forestry and game research papers. These reports are written by the research technicians and edited and prepared for publication by the research editor.

Three technical bulletins were published during the biennium: No. 18: Relationship of Ruffed Grouse to Forest Cover Types in Wisconsin; No. 19: The Hemlock Borer and The European Pine Shoot Moth and Its Relation to Pines in Wisconsin; and No. 20: Relation of Weather, Parasitic Disease and Hunting in Wisconsin Ruffed Grouse Populations.

These reports are distributed to technical people inside and outside of Wisconsin who will benefit the most from the techniques and results presented, and also to selected groups interested in a special subject.

Annual summaries of the results of all fish, forestry and game research projects were processed and distributed in an effort to keep technicians, management personnel, administrators and interested public abreast of research in Wisconsin. The series, entitled Research in Wisconsin, does not constitute formal publication but does offer an up-to-date preliminary report of findings.

Several leaflets were prepared in popular style, enabling the department to bring to the public readable information about research and management activities in a style which is readily comprehensible. These included: Field Techniques for Sexing and Aging Game Animals, Fish Habitat Development, Rough Fish Control, and a series on the Ecology, Life History and Management of Brook Trout, Walleye, Yellow Perch and Bluegill. These leaflets and booklets are designed to provide the technicians with a quick survey of existing knowledge on a species or activity, and the interested sportsman with the answers to many of his questions on various aspects of fish and game.

Other Publications

Digests of regulations, issued annually, were published in the following numbers in 1959: small game hunting, 600,000; big game hunting, 500,000; waterfowl, 250,000; trapping, 40,000; fishing, 1,600,000; boating, 500,000.

Other new publications included Smallmouth Bass Streams in Wisconsin, Prune Pine Plantations, and the Twenty-Sixth Biennial Report of the Wisconsin Conservation Department.

Thoroughly revised before reprinting was Forest Trees of Wisconsin—How to Know Them, which has been a popular reference for decades. A relatively new forestry publication, Tree Planting in Wisconsin, went through two additional printings.

Other publications reprinted with minor revisions as supplies were exhausted included Wisconsin Trout Streams, Wisconsin's Way of the Outdoors, Notes on Wisconsin Conservation, Wisconsin Wild Flowers, and Christmas Tree Dealers License Law.

Reprinted as separates were 57 articles from the Wisconsin Conservation Bulletin.

EDUCATION

The school services section of the Information and Education Division has been continuing to fulfill the 1935 legislative mandate pertaining to the teaching of conservation in Wisconsin through the following media:

Joint conservation education project with the Department of Public Instruction and the College of Agriculture involving the promotion of conservation in Wisconsin has been completed. Outdoor education work shops or clinics stressing school camping and the use of the out of doors were conducted this biennium.

Wisconsin was host to the Midwest Conservation Conference which was held in the Wisconsin Center in October 1959 and involved the states of Illinois, Iowa, Minnesota, and Wisconsin.

The furnishing of resource people from this division as well as coordinating persons from other divisions at teacher training institutions throughout the state has been conducted. Approximately twenty of the some thirty teacher training institutions now regularly scheduled specialized in the development to help in their conservation education classes.

A summer college program involving fifteen senior students majoring in conservation has been conducted in cooperation with the Department. Actual residence for about six weeks in various State parks gives these future teachers an excellent opportunity to incorporate conservation resources management in with their classes as well as intimate knowledge of practical conservation projects. A new film entitled "Conservation of the Out of Doors" produced by this Department in cooperation with State colleges now available to schools aptly demonstrates this unique program.

A summer high school conservation program involving high school boys through the organized school systems has been conducted the past several years. Two additional schools started similar programs this past summer involving practical aspects of soil, water, wildlife and forestry management were included.

A "Section for Teachers" has been included in the Conservation Bulletin

which stresses the techniques, aids, materials, and opportunities for conservation training available to Wisconsin educators.

The Conservation Day program has been conducted in portions of the state the past year. A typical Conservation Day program works like this: a team of technicians and specialists, consisting of a forester, fishery biologist, game manager, forest ranger, and a law enforcement officer, visits a high school with the entire school day given over to the theme of conservation. Each member of the team presents a talk, usually illustrated, on his particular phase of conservation activity. These high school visits are not intended to supplant a conservation curriculum in the school, but are intended to supplement work the school is conducting by bringing to



The "College of the Outdoors" gives future conservation teachers an onthe-job perspective on conservation work. Here the subject of study is the lamprey eel.

the students' attention various conserva- tation on the Educational Advisory Countion problems and their solutions.

The Gun Safety Program in Wisconsin received emphasis this past year with the hiring of a conservation educator to head up a safety program. During 1959 the Hunter Safety Program in Wisconsin was taken over on a cooperative basis from the N. R. A. for further development. In September of 1959, the record shows 420 instructors and 2,477 students trained. By September 1960, there were 578 instructors and 5,384 trained students.

A record of hunting accidents indicates a total of 175 in 1956, 181 in 1957. 216 in 1958 and 159 in 1959. With less accidents in 1959 than any of the previous three years, this could mean that the new program had some effect on total accidents.

More than fifty schools are presently engaged in some sort of firearms' safety work ranging from compulsory short courses for students who wish to go deer hunting to weekly marksmanship programs as a part of physical education. Several vocational schools have conducted training courses for instructors inspired by department personnel.

During the biennium there were 7,010 film shipments sent; in these 9,496 films were enclosed. The films were shown to 636,188 people. Slide shipments were 435 and display shipments 290.

The handling of general conservation information requested, school conservation material, scouting, school camping, outdoor nature areas, school forests and club activities were also handled by this section. Representation at the State and National level in the conservation education organization included the State Conservation Curriculum Committee, The Wisconsin Education Association, the Midwest Conservation Education Conference, the Conservation Education Association, and the Educational Subcommittee of the Natural Resources Committee of State Agencies, Represencil of Trees for Tomorrow is also a part of the program.

Exhibits

The conservation exhibit program for 1959 and 1960 included the State Fair, Farm Progress Days, district and county fairs as well as various sport shows and community celebrations.

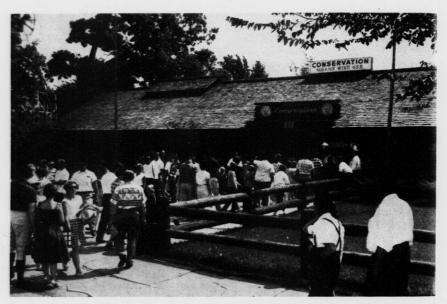
The display of wild animals and game birds at the fairs has always been a major attraction. During this biennium an effort was made to tell a story about the animal or bird and how they fit into the conservation picture. Paul Bunyon and Smokey the Bear appeared at the State Fair and on television to relate their respective stories of logging days long past and the waste of careless fires in our forests today. Another feature of the State Fair was a display of various camping equipment by campers who were willing to discuss their camping experience with fair visitors. As many as 2500 visitors an hour passed through the conservation display area at State Fair park with a total of over 300,000 for the ten days.

The 1960 Farm Progress Days at Marshfield boasted a 300 foot conservation display in the largest round barn in the world. In addition to live animal displays, the various field divisions each highlighted a particular phase of their work with mounted specimens, pictures, specialized equipment with special mention of a miniature nursery of seedling trees.

The educational panel exhibits which include dioramas, color translites and animated displays were shown in 24 locations in 1959 and in only 16 locations in 1960 due to a realignment of the program.

Clubs

Present figures indicate there are over 400 sportsmen's clubs in the state and



The Conservation Department exhibit is one of the more popular attractions at the Wisconsin State Fair. It has drawn as many as 2,500 visitors in an hour, and more than 300,000 in 10 days.

this does not include watershed groups, bird study clubs, shooting clubs and many more whose activities center around our natural resources. Many of these clubs have generated such worthwhile projects as wetland acquisition, safety training programs, habitat improvement and many others.

The department has always been ready and willing to assist with professional services, plans, equipment and supplies to adult and junior conservation clubs who really want to use their manpower for a local project.

A recent leadership conference held in cooperation with Trees for Tomorrow, Inc., by the Education and Public Relations Committee of the Congress, proved to be an excellent medium for the exchange of ideas by various clubs with new project recommendations by the department.

Conservation clubs with an outstanding annual accomplishment in the field of projects which contribute to preservation of soil and water resources and tend to add to the harvestable crops of fish and game are honored with an award as a Congress activity.

Conservation Congress

The Wisconsin Conservation Congress was established in 1934 as an advisory committee to the Conservation Commission. Prior to this time, objections to changes of hunting and fishing regulations could be heard at public hearings by right of petition. In its present form, the Congress enlists the aid of 355 elected members from the 71 counties with three regular and two alternate members from each county. Terms of office for regular members are for three years.

The Executive Council of the Congress consists of twenty-two men from eleven equal districts elected at the annual state Congress meeting each year. The principle officers of the Council are

presently the Chairman, Glen Garlock of Forest County, Vice-Chairman, Edward F. Keip of Manitowoc and the Secretary— Treasurer, John Cross of Wood County.

Eight study committees of five men each with one man from each conservation area and selected by the Congress Chairman completes the duty assignments. These committees, namely the Big Game, Education and Public Relations, Fish Warm Water, Fish Cold Water, Fur, Upland Game, Waterfowl and Waters and Forestry are each assigned a department advisor by the Di-

rector of the Department, Lester P. Voigt. It is the duty of these committees to study problems of the Commission and recommend a procedure for solving the problem to the Council and finally to the Commission. As the entire body serves only in an advisory capacity to the Commission, the final action still rests with the Commission.

A member of the Information and Education staff serves to coordinate the activities of the Congress with the department.

RECREATIONAL PUBLICITY

Several highlights occurred during the 1958–1960 biennium in the recreational publicity and advertising field within the department. Initially a new supervisor assumed duties in August of 1958 succeeding J. H. H. Alexander who had been supervisor of the section for more than 22 years.

Another outstanding event of the biennium was the tremendous growth of the number of inquiries received in both the Madison and the newly established Chicago office. During the year of 1959, 191,030 inquiries were received in the two offices. This represents a new high in the number of inquiries received by more than 20,000. During the same period, namely 1959, the Chicago office received 61,300 inquiries, by far the largest ever received in that establishment.

During the spring of 1959, the section was confronted with a recommended cut in its budget of more than \$100,000. The Committee on Joint Finance of the Legislature recommended that the sum generally obtained from the general fund be deleted from the budget and the section operate on the remaining \$150,000 which is appropriated by the Highway Department. After a succession of meetings and assistance from the various state groups which are interested in the vaca-

tion and travel business, \$103,000 was restored to the budget and a cut of only \$100 was required.

During the biennium, the section took part in the 1960 Rose Bowl by sharing the cost of a float representing the state of Wisconsin and participating in the Rose Bowl program. During June of 1960, the section participated in a joint venture in the publication of a New York Times Supplement devoted entirely to the state of Wisconsin.

A man was hired in the spring of 1960 to take over the preparation of news releases and publicity matters for the section and to assist in the manning of the annual sports and vacation show exhibits.

In June of 1960, more than 30 travel editors and their wives took part in a travel editor tour of the eastern portion of the state. These individuals were taken through the Milwaukee, Sheboygan, Green Bay, Door County, Menominee Indian Reservation, Waupaca, Wisconsin Dells, Taliesin and Waukesha areas. The results have been extremely gratifying in the amount of publicity which has been given to the state by those who took part in this tour.

During 1959, the section received one gold medal award and in 1960 received two silver awards in competition with other businesses and establishments for excellence in advertising and promotional programs. These awards were given by the Affiliated Advertising Agencies Network of which the section's advertising agency, namely Arthur Towell Inc., is a member.

An attempt was made to lengthen the operating seasons for the resorts and the motels by establishing a program of convention and sales conference development for the state. Although lacking in adequate funds with which to carry on an extensive program, the meager efforts have paid off and approximately 12 meetings have been brought to the state through the efforts of the Chicago and Madison offices. Directories of information pertaining to the location and facilities of the various establishments in the state are maintained in the two offices and potential conventioneers and sales conferees are given sufficient information in order to determine what usage they might desire to make of the state facili-

During the biennium, two other "firsts" were established in the section. A monthly Calendar of Events was initiated and the special Fall Colorama publicity and advertising were initiated. Both publications received wide acceptance and plans are afoot for the further development of both programs in an effort to improve the amount of publicity we receive outside the state and to attract individuals to the state over a longer period.

During the period, the temporary Recreational Industry Advisory Committee was given permanent status and devoted considerable time and effort to a furtherance of the recreation program and development of new plans for promotion in the future.

For the first time in history, the state took part in a Winter Sports Show in Chicago. The skiing facilities were advertised and the individuals attending the show gave Wisconsin great acceptance.

As far as the general exhibits were concerned, the section took part in sports and vacation shows in Chicago, Des Moines, Kansas City, and Minneapolis. Assistance was also rendered to some similar shows within the state boundaries. A new type of exhibit was devised which is completely transportable and which requires a minimum of effort to set up and take down. These colorful displays have been complimented by individuals in the sports show business and it is anticipated that continued use will be made of this type of display. Additionally, these displays and others have been designed for use in store windows or in offices in lobbies wherever we are able to obtain the space without cost.

Among minor developments for the period were the brochure entitled "The Mighty Mississippi." A new mass distribution brochure for the section, and the establishment of several new files within the office which will aid in the development of better public relations programs.

Clerical

Clerical services are provided to all divisions of the Department by personnel located in five offices in Madison and in 23 cities throughout the State.

The workload is determined by the program needs of the various divisions and includes the services usually associated with office operations. These include typing, secretarial service, duplication, mailing, reception and filing. Correspondence continues to require much of the time of clerical employes.

In November of 1959, when the Department offices were moved from the State Office Building to offices on Atwood and Pennsylvania Avenues, vital functions of the division had to be sepa-

rated, which materially affected the efficiency of the division. Personnel in charge of the typing and the mail and supply sections had to be stationed in the Atwood Avenue office while the mail and supply functions and the mimeograph unit, because of lack of space, had to be headquartered at the Pennsylvania Avenue office. With the aid of four motor vehicles, the satisfactory interchange of mail and supplies between all Madison offices has been accomplished.

Turnover among clerical employes is high—approximately twenty-five percent. To offset this administrative handicap, much time must be spent in training new employes. Clerical supervisors in the



Addressing and mailing some 88,000 copies of the Wisconsin Conservation Bulletin every two months is one of the many duties of the Clerical Division. This is done by the mail and supply section. Other sections are stenographic, typing, and filing.

field share in this responsibility and also participated in a two-day training session in the Madison office. Their training included a review of policies, procedures and general operations including equipment needs.

In July of 1959 a perpetual revision of the Conservation Bulletin mailing list was begun. Approximately 1/24 of the total subscribers are contacted each month to determine if they wish to continue receiving the Bulletin. This type of revision has proven very satisfactory to date as it spreads the workload evenly throughout the year. Results indicated that about 15% to 18% of the subscribers fail to notify the Department of continued interest in receiving the Bulletin and their names are dropped from the list. Total revision of the list is completed every two years.

As in the past, the division has, within the budget limitations, purchased up-todate labor saving equipment. In the past two years, obsolete equipment as follows was replaced: Ditto, Mimeograph, copy machine, Varityper and thirty-three manually-operated typewriters. An additional Dictaphone and two transcribers were purchased to take care of the increased workload of the Information and Education Division without increasing the number of personnel. Four electric typewriters were purchased and assigned to the typing section and secretaries to administrative personnel.

Plans of the clerical division called for expansion of personnel to provide services for additional field offices where there was a concentration of supervisory personnel. However, in the face of reduced revenues in the coming biennium, these plans had to be revised with the thought that reductions would have to be considered.

Finance

The Finance Division is responsible for the over-all financial business of the Department. The division is composed of the comptroller's office and five sections: accounting, license sales, field business management, cashiering and purchasing.

The comptroller and his assistant are responsible for the preparation of the Department's biennial budget and the over-all financial and accounting work in the Department.

The accounting section is responsible for the over-all accounting work of the Department including both general and cost accounting. The accounting work performed is as follows:

The maintenance of general accounting records covering funds, appropriations, allotments, receipts, disbursements and encumbrances.

Necessary preauditing and coding of vouchers.

Preparation of financial statements.

Reconciliation of accounts with the records of the Department of Administration, Bureau of Finance.

Budgetary control is maintained by carrying a three-line budget by appropriation and budget activity. Encumbrances are a part of the system and are included in the appropriation and budget activity allotment controls.

Cost records are determined covering the major divisions of the Department. Cost accounting takes into consideration expenditures from the standpoint of the cost of producing specific items, if measurable items are produced, or the cost of services rendered by gathering together all items of cost relating thereto. Costs on the operation of motorized equipment is determined and an annual report made.

Personnel engaged in cost accounting work must maintain close contact with all field stations to help and advise regarding field accounting problems. They also reconcile field accounting records with the Madison office, handle the suballotment of budgets and assist the individual divisions in the preparation of their budgets. The cost accountants also perform the internal audit work within the Department.

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The license sales section handles the purchase, distribution and sale of all Departmental licenses and tags; including hunting, fishing and trapping, all regulation pamphlets relating to fishing, hunting and trapping seasons. The section maintains its own license sales accounting records and is responsible for the collection of accounts receivable connected with the license business.

The section also handles the processing and issuance of permits and special licenses, the recording of lease agreements and the performance thereon. They also handle for the law enforcement division the arrest and seizure records, the collection of warden fees and the sale of confiscations.

The license section assumed the new important function of boat registration during this biennium. The initial registration of boats was handled in a very efficient and satisfactory manner at a minimum of cost. The function will remain a permanent responsibility of the license section.

The field business management section provides for the handling of business affairs for the finance and other divisions at the area level including all costs and other activities connected with the operation of the area headquarters building. Field business management has been activated in only three of the five conservation areas due to the financial condition of the Department. It is, however, planned to establish field business management in the two remaining areas as soon as the necessary funds are available.

The cashiering section consists of the Department cashier who is responsible for maintaining a comprehensive control over all receipts, including the proper classification of receipts and the preparation of deposits.

The purchasing and property section of the division is as follows:

The property portion of the section

is responsible for maintenance of the over-all Department inventory records and the handling of insurance matters for the entire Department. The purchasing portion of the section handles the centralized purchasing of all Departmental materials and supplies. It includes the maintenance and development of specification and vendor files of active purchased materials, supplies and equipment needed by the Department. Also are included the efforts to control inventory stocks through salvage and material listings, the preparation of and placing of Departmental requisitions with the Bureau of Purchases, and the followthrough on orders placed for the purpose of expediting delivery of materials and equipment to meet requirements.

LICENSE SALES

Type of License	1958	1959
	694.415	676.60
*Resident fishing licenses Nonresident fishing licenses (annual)	234,742	248.11
Nonresident fishing (combination-15 day)	50,461	53,42
Nonresident fish shipping coupons	221	22
Cisco fishing licenses	331	26
Cisco nsning licenses	991	2.68
Sturgeon spearing licenses	384,819	340.06
Resident small game hunting licenses	333,236	346,55
Resident deer hunting licenses	56,428	61.86
Voluntary sportsmen's licenses	4.314	3,66
Resident trapping licenses	279.442	218.65
Trap tags	58.438	61.01
Deer party permits	2,630	2,88
Nonresident big game hunting licenses		2.08
Nonresident small game hunting licenses		
Nonresident deer archer licenses	4,225	4,51
Nonresident shooting preserve licenses	596	66
Settlers small game hunting licenses	438	
Settlers deer hunting licenses	471	55
Set-line licenses	2,788	2,35
Set-line tags	6,620	5,47
Set or bank pole licenses	600	60
Slat net licenses	42	3
Slat net tags	1,533	1,27
Guide licenses	776	76
Christmas tree dealer's licenses	1,550	1,61
Wholesale fish dealer's licenses	191	18
Bait dealers—Class A licenses	56	10
Bait dealers—Class B licenses	1.224	1.36
Great lakes commercial fishing licenses	409	34
Mississippi river commercial fishing licenses	184	16
Taxidermist licenses	102	10
Fur dealers licenses—itinerant	1	
Fur dealers licenses—Class A		6
Fur dealers licenses—Class B	52	5
Fur auctioneer	1	
Bait net licenses	20	
	12	1
Trammel net licenses	110	12
Deer farm licenses	368	35
Muskrat farm licenses	29	2
Beaver farm licenses	250	23
Fur animal farm licenses	766	79
Game farm licenses	2.22	69
Private fish hatchery licenses		8
Shooting preserve licenses		6
Mink farm licenses	67	3
Scientific permits	39	
Bird banding permits	26	5
Cooperative rearing pond permits.	38	3
Children's fish pond permits	28	3
Exhibition license	5	3
Miscellaneous permits	758	58

^{*}Includes number of voluntary sportsmens licenses issued.

FINANCIAL REPORT, 1958–1959

BEGINNING AND ENDING BALANCES AND TRANSACTIONS OF THE OVER-ALL CONSERVATION DEPARTMENT FOR THE FISCAL YEAR 1958–1959

Appropriation	Balance Forwarded From 1957-1958	Plus Revenue 1958–1959	Minus Disburse- ments 1958-1959	Plus Transfers 1958–1959	Minus Transfers 1958-1959	Cash Balance Forwarded To 1959-1960	Minus Un- liquidated Encum- brances	Unencum- bered Balanc Available fo 1959-1960
Fish, Game and Parks	\$1,116,186,39	\$ 6,673,777.42		(a)\$ 453,707.48	(m) \$0,001,440,44			1333-1360
Imprest Fund Advance. Fish and Game Operations. Conserving Wildlife. Water Pollution Costs Water Regulatory Board. Retirement, Etc.—Fish and Game. Recreational Advertising—Current. Bear and Deer Damage State Parks. School Tax on State Hunting Grounds. Gifts and Donations Forestry.	5,000.00 270,908.86 — 0— — 0— — 0— — 4,683.23 — 7,716.94 — 892.66 — 0—		\$ 5,704,815.10 9,500.00 14,697.71 6,000.00 394,087.52 245,556.37 4,683.23 40,000.00	(g) 6,091,448,14 (h) 9,500,00 (i) 14,697,716,94 (e) 892,66 (f) 340,40 (g) 6,091,448,14 (h) 9,500,00 (i) 14,697,71 (j) 6,000,00 (m) 4,683,23 (n) 40,000,00 (m) 4,683,23 (n) 40,000,00 (o) 513,761,13 (p) 127,38	(e) 892.66 (s) 4,070,670.35 (t) 14,697.71 (u) 274,317.87 (w) 137,158.94	5,000.00 (aa) 386,633.04 -0- -0- -0- -0-	\$	\$1,200,808.2 5,000.0 43,208.5 -001,083.5 -0000013,906.9 -13,616.2
Forestry Operations Water Pollution Costs Southern Wisconsin Forests Kettle Moraine Land County Forest Aid Letirement, Etc.—Forestry Forestry Reserve Vablic Hunting and Fishing Grounds—Sportsmen's Federal Aid—Clarke-McNary Federal Aid—Soil Bank Federal Aid—Pittman-Robertson and Dingell-Johns ancelled Drafts ansurance Loss TOTAL CONSERVATION FUND	-0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -	130,975,50 429,923,94 144,602,83 527,747,11 1,519,59 3,833,43	14,697.71 254,843.46 202,403.14 218,311.52 318,531.93 327,438.11 140,487.89 360.97 3,097.09	(t) 14,697,71 (u) 274,317.87 (v) 160,774.00 (w) 137,158.94 (x) 218,311.52 (y) 318,531.93 (a) 74,039.63	(x) 218,311,52 (y) 318,531,93 (r) 358,515,62 (v) 160,774.00 (q) 429,923,94 (a) 527,747,11 (f) 340.40	19 011 19	13,841.07 1,684.66 3,000.00 	1,393,617.5 58,658.0 90,841.3 166,929.0 -0- 300,000.0 58,401.4 -0- 36,559.0 -0- 2,492.1 12,011.1

CONSERVATION FUND

Footnotes

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(a) $ 453,707.48 and $74,039.63 transferred to Fish, Game and Parks and Public Hunting and Fishing Grounds, Sportsmen's Licenses respectively from Federal Aid—Pittman-Robertson
         $ 270,908.86 is prior year Fish and Game Operations balance which reverts to Fish, Game and Parks Appropriation.
                      683.23 is prior year Recreational Advertising balance which reverts to Fish, Game and Parks Appropriation.
                  7,716.94 is prior year Bear and Deer Damage balance which reverts to Fish, Game and Parks Appropriation.
(d)
                      892.66 is prior year State Parks balance which reverts to Fish, Game and Parks Appropriation.
 (e)
        342.00 is prior year State Parks balance winch reverts to Fish, Game and Parks Appropriation.

$40,00 consists of cancelled drafts over six years old which revert to Fish, Game and Parks Appropriation.

$40,001,448.14 transferred from Fish, Game and Parks to Fish and Game Operations as 1958-59 Appropriation.

$40,007.71 transferred from Fish, Game and Parks to Conserving Wildlife as 1958-59 Appropriation.

$40,007.71 transferred from Fish, Game and Parks to Water Pollution Costs as 1958-59 Appropriation.

$40,000.00 transferred from Fish, Game and Parks to Water Regulatory Board as 1958-59 Appropriation.
               394 087, 52 transferred from Fish, Game and Parks to Retirement Contributions Fish and Game as 1958-59 sum sufficient Appropriation.
               253, 100, 00 transferred from Fish, Game and Parks to Recreational Advertising as 1958-59 Appropriation.
 (1)
                  4,683,23 transferred from Fish, Game and Parks to Recreational Advertising—Reimbursement to Highway and General Fund—Current Year.
 (m)
                40,000.00 transferred from Fish, Game and Parks to Bear and Deer Damage as 1958-59 Appropriation.
 (n)
               513.761.13 transferred from Fish, Game and Parks to State Parks as 1958-59 Appropriation.
 (o)
                       127.38 transferred from Fish, Game and Parks to School Tax on State Hunting Grounds as 1958-59 sum sufficient Appropriation.
 (p)
              429,923,94 transferred to Forestry from Federal Aid—Clarke-McNary.
358,515.62 is prior year Forestry Operations balance which reverts to Forestry Appropriation.
 (q)
        $ 358,515.62 is prior year Forestry Operations balance which reverts to Forestry Appropriation.
$4,070,670.35 transferred from Forestry to Forestry Operations as 1958-59 Appropriation.
$14,697.71 transferred from Forestry to Water Pollution Costs as 1958-59 Appropriation.
$274,317.87 transferred from Forestry to So. Wis. Forests as 1958-59 Appropriation.
$100,774.00 transferred from So. Wis. Forests to Kettle Moraine Land—Emergency Board Approval—3-20-59.
$137,158.94 transferred from Forestry to Kettle Moraine Land as 1958-59 Appropriation.
$218,311.52 transferred from Forestry to County Forest Aid as 1958-59 sum sufficient Appropriation.
$318,531.93 transferred from Forestry to Retirement Contributions—Forestry as 1958-59 sum sufficient Appropriation.
Balances rever to Fish, Game and Parks Appropriation.
 (v)
 (x)
          Balance reverts to Forestry Appropriation.
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BEGINNING AND ENDING BALANCES AND TRANSACTIONS OF THE OVER-ALL CONSERVATION DEPARTMENT FOR THE FISCAL YEAR 1958–1959 (Cont'd)

GENERAL FUND

A ppropriation	Balance Forwarded From 1957–1958	Plus Revenue 1958–1959	Minus Disburse- ments 1958–1959	Plus Transfers 1958-1959	Minus Transfers 1958-1959	Cash Balance Forwarded To 1959-1960	Minus Un- liquidated Encum- brances	Unencum- bered Balanc Available fo 1959-1960
GENERAL FUND—LAPSING Forest Crop Administration. Forest Crop Aid Forest Crop Severance Tax. Forest Crop Withdrawals.	-0- -0-	\$ 4,760.89 250,273.19 51,650.56 2,234.07	\$ 4,760.89 250,273.19 10,780.64 1,340.36			-0 -0- \$ 40,869.921 893.711		-0- -0- \$ 40,869.92 893.71
TOTAL GENERAL FUND—LAPSING	-0	\$ 308,918.71	\$ 267,155.08			\$ 41,763,631		\$ 41,763.63
GENERAL FUND—NON-LAPSING Capital Improvements—State Parks Federal Aid—P. H. S.—Devil's Lake		\$ 10,720.15	\$ 81,998.30 10,720.15			\$ 85,609.32 —0—		\$ 85,609.32
TOTAL GENERAL FUND-NON-LAPSING	\$ 167,607.62	\$ 10,720.15	\$ 92,718.45			\$ 85,609,32		-0-
BEFORES		REFORES	STATION F	UND		00,000.02		\$ 85,609.32
REFORESTATION FUNDReforestation Fund—Cancelled Drafts	\$ 264,664.58 .85	\$ 140,064.72				236,606.01	\$ 61,685.82	
TOTAL REFORESTATION FUND	264,665.43		\$ 168,123.29			.85	\$ 61 695 90	.85
VARDEN REMOVED.		WARDEN				200,000.00	4 01,000.02	174,921.04
WARDEN PENSION FUND	454,947.49	\$ 104,799,35	63,216.63		\$	496,530.21		496,530.21
TOTAL WARDEN PENSION FUND\$	454,947.49	\$ 104,799.35	63,216.63					
RAND TOTAL CONSERVATION DEPARTMENT	5,017,133.79	\$12,657,595.60	\$13,027,519.54	\$ 14,122,596.19	14.122.596.19	4 647 200 852	461 010 54 0	496,530.21

 $^{^1\,\}mathrm{Non\text{-}appropriated}$ Revenue—reverts to General Fund, $^2\,\mathrm{Less}$ \$41,763.63—See Item No. 1 above.

CONSERVATION DEPARTMENT REVENUE

-	Net Revenue 1958-59
00000 FOREST CROP 76200 Forest Crop Taxes 76210 1/5 Severance Tax Co. 76212 100 Percent Severance Tax PP. 76220 Withdrawal Private 76230	\$ 33,010.87 18,639.69 2,234.07
	\$ 53,884.63 *
10100 FEDERAL AID—P. H. S. 95500 Federal Aid—P. H. S. 95500 Devils Lake 95500	\$ 10,720.15 \$ 10,720.15 *
10000 FISH AND GAME FUND 90900 1	\$ 150,000.00 103,100.00 1 150,000.00 \$ 403,100.00 *
Fees. 91000 Warden and Witness Fees. 9103	0 5,357.78
Fishing Licenses—Sportsmens 92100 Fish Shipping Coupons 9211 Fish Shipping Coupons 9211 Nonresident 15-day Fishing Licenses 9212 Nonresident 15-day Fishing Licenses 9212 Nonresident Fishing Licenses 9213 Nonresident Fishing Licenses 9213 Resident Fishing Licenses 9214 Resident Fishing Licenses 9214 Resident Fishing Licenses 9214	1 285,651.60 2 3,916.00 1 1,122,161.80 2 13,202.00
Fishing Licenses—Commercial 92200 Great Lakes Commercial Fishing—Resident 9222 Great Lakes Commercial Fishing—Nonresident 9223 Bait Dealer Licenses—A 9224 Bait Dealer Licenses—B 9225 Mississippi River Commercial Fishing Licenses 9225 Private Fish Hatchery 9226 Slat Net Licenses 9227 Slat Net Tags 9227 Wholesale Fish Dealer 9228 Trammel Net Licenses 9229	0 \$ 8,193.50 0 857.00 1 2,680.00 2 6,990.00 1 4,080.00 1 2 1,090.25 0 3,575.00 1 663.50 2 540.00 0 4,700.00 0 460.00
Miscellaneous Fishing Licenses and Tags 92300 Bank Pole Fishing Licenses 9231 Cisco Licenses 9232 Set Line Licenses 9233 Set Line Tags 9233 Sturgeon Tags 9234 Bait Net 9235	
Game Licenses—Hunting 92400 Resident Hunting—Small Game 9241 Resident Hunting—Small Game 9242 Resident Hunting—Big Game 9242 Resident Hunting—Big Game 9243 Camp Deer 9244 Nonresident Hunting—Small Game 9243 Nonresident Hunting—Small Game 9244 Nonresident Hunting—Big Game 9244 Nonresident Hunting—Big Game 9244 Nonresident Hunting—Big Game 9244	\$ 925,013,38 8,505,00 1,040,744,25 22 26,668,00 292,235,00 31 29,645,25 31,000,00 41 6,222,75 42 70,850,00

		Net Revenue 1958-59
Nonresident Hunting—Archers 9245	1	12,672.00
Nonresident Hunting—Archers 9245 Nonresident Hunting—Archers 9245 Nonresident Shooting Preserve Hunting Licenses 9246 Nonresident Shooting Preserve Hunting Licenses 9246 Shooting Preserve Licenses 9246	2	29,450.00
Nonresident Shooting Preserve Hunting Licenses 9246	1	1.082.90
Shooting Preserve Hunting Licenses 9246	2	1,975.00
Shooting Preserve Licenses 9246 Shooting Preserve Licenses 9247	1	515.00
Sattler Hunting I S. 11.0	2	430.90
Settlers Hunting Licenses—Small Game 9248	0	1.314.00
Shooting Preserve Tags 9247 Shoting Preserve Tags 9247 Settlers Hunting Licenses—Small Game 9248 Settlers Hunting Licenses—Big Game 9249	0	1,884.00
	8	\$2,533,607.43
Game Licenses—Trapping 92500 Trapping Licenses 9251 Trapping Licenses 9251 Trap Tags 9251	1 8	7,799.25
Trapping Licenses 9251	5 6	184.00
Trap Tags 9252	il	24,506.38
Trap Tags 9252	2	710.40
Beaver Trapping Licenses 9253		710.40 $2,342.50$
Trap Tags 9251 Trap Tags 9252 Trap Tags 9252 Beaver Trapping Licenses 9253 Beaver Pelt Tags 9253	2	11,578.00
	8	47,120.53
Farm and Fur Dealer Licenses 92600 Deer Farm Licenses 92611 Dead Deer Tags 92612 Live Deer Tags 92612		0.000
Dead Deer Tags 92611	8	3,075.00
Live Deer Tags 92612		328.70
Resident Fur Dealer—Class A		395.00 1,650.00
Resident Fur Dealer—Class B. 92622		520.00
Tunerant Fur Buyer		200.00
Resident Fur Dealer—Class B 92621 Itinerant Fur Buyer 92622 Fur Auctioneer 92625 Game Farm Licenses 92631 Game Farm Tags 92631 Muskrat Farm Licenses 92632 Muskrat Farm Licenses 92641 Beaver Farm Licenses 92642 Beaver Farm Licenses 92651		250.00
Game Farm Licenses		2,123.00
Game Farm Tags. 92632		994.14
Muskrat Farm Licenses 92641		1,760.00
Regyer Form Liesses 92642		87.95
Beaver Farm Tags92651		137.81
Seaver Farm Licenses 92642		.91
Otter, Raccoon and Skunk Farms Tags 92661		1,090.13
Mink Farm Licenses 92002		8.32-
Mink Form Togo		258.75
Exhibition Licenses 92672		$\frac{1.33}{240.00}$
Voluntary Sportsmens Licenses	8	13,104.40
Voluntary Sportsmen's Licenses .92800 Voluntary Sportsmen's Licenses .92811 Voluntary Sportsmen's Licenses .92812	\$	324,855.00 $98,715.00$
	8	423,570.00
discellaneous Licenses and Tags and Permits 92900	1	
Christmas Tree Dealer Licenses and Permits 92900 Christmas Tree Dealer Tags 92911	8	7,750.00
Duplicate Licenses 92912		31.52
Duplicate Licenses 92912 Guide Licenses 92920		2.814.75
92930		3,740.00
Taxidermist Licenses92940		70.00
Managed Goose Hunting Permit		525.00
Managed Deer Hunting Permit 92970		$13,489.00 \\ 1,973.00$
Scientific Certificates 92940 Taxidermist Licenses 92950 Managed Goose Hunting Permit 92960 Managed Deer Hunting Permit 92970 Managed Pheasant Hunting Permit 92980		1,291.00
	8	31,684.27 *
Building and Building Site 93100		
Concession 93110	8	617.86
Suilding and Building Site	1	617.86 921.76
Other93150		80.00
93190	_	679.40
-1 P	\$	2,299.02 *
nployee Rents and Service		
93210	\$	12,204.00
	\$	12,204.00 *
tivity Services 93300		
	8	1 080 80
tivity Services 93300 Exhibits -93340 Other -93390	\$	1,080.80 2,513.89

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	_	Net Revenue 1958-59
Supervision and Inspection Service 93400 Permit Supervising Outlying Waters 93420 Inspections 93440 Mileage 93450	\$	252.00 586.40 138.90
00700	\$	977.30
Convenience Services 93500 Prepayment of Postage 93520	\$.35
04100	8	.35
Sale of Resources .94100 Timber, Other .94110 Rough Fish Sales .94131 Rough Fish Commissions .94132 Fish, Game and Fur .94160 Game Sold to Farms .94170 Fur from Horicon Marsh .94180 Other .94190	\$	4,913.40 187,112.23 5,514.62 15,937.24 173.00 928.32 1,965.95
	\$	216,544.76
Sale of Confiscations and Seizure 94200 Baby Trout and Whitefish 94210 Deer 94220 Other Fish and Game 94230 Fur 94240 Equipment 94250	8	193.65 11,274.08 545.45 2,389.20 594.24
	\$	14,996.62
Sale of Products 94300 Spawn 94350 Game Birds, Animals and Fur 94350 Publications 94371 Photos 94372 Lists 94380 Other 94390	\$	1,621.48 504.00 270.48 165.05 503.98 49.25
	\$	3,114.24
Sale of Equipment 94400 Propagation 94420 Law Enforcement 94430 Flexible Rules 94440 Game Farm Pliers 94450 Other 94490	8	307.73 1,505.58 47.50 10.00 1,546.53
	\$	3,417.34
Sale of Other Items. 94500 Fish Boxes. 94510 Ice. 94520 Buildings and Structures. 94530 Sale of Salvage and Scrap. 94540 Other. 94590		1,558.00 172.40 3,111.00 286.45 160.98
	\$	5,288.83
Sale of Signs .94700 Fur Farm .94710 Private Fish Hatchery .94720 Shooting Preserve .94730	\$	$34.00 \\ 53.00 \\ 418.95$
	\$	505.95
Federal Aid—Pittman-Robertson	8	322,973.31
	\$	322,973.31
Federal Aid—Dingell-Johnson 95300 Transfers from Federal Aid—Dingell-Johnson 95391	s	130,734.17
	8	130,734.17

		Net Revenue 1958-59	e
Other Revenue 970	00		
Civil Action Damages 970 Prepayment of Taxes 970 Refund of Prior Year Expenses 970 Other 970	10 0	2,691.00 3,053.64 1,728.55 4,456.93	
	8	11,930.12	1000
Bond Interest .97100 Bond Interest .971	-	25.00	-
Other Investment Income	\$	25.00-	
Other Investment Income	00	126,271.59	
Sale of Resources	8	126,271.59	
35 Timber, Other	\$0 \$	13,094.81 5,090.00	
Sale of Other Items	8	18,184.81	
Sale of Other Items 94500 35 Buildings and Structures .945	- 1-	100.00	
Fees	8	100.00	
76 Campsite Fees	0 8	67,708.70 26,266.30	
Oak Parks J Parks I	8	93,975.00	
Other Rents and Rentals 93100 76 Building and Building Sites 9311 76 Concession 9315 76 Sewer and Water 9316 76 Land Use 9316 76 Other 9316		$\substack{11,048.35\\15,294.28\\1,349.00\\641.00\\497.68}$	
Fundame Danta and Santan	8	28,830.31	
Employee Rents and Services	-	3,395.00	
Convenience Services .93500 76 Electrical Charges, Campers .9353 76 State Roads .9354	0 \$	3,395.00 4,731.60	
76 Other	0 _	8,164.96 196.57	
Sale of Resources	8	13,093.13	***
76 Other 9419	-	53.80	
Supervision and Inspection Services 94400 76 Other 9449	\$	53.80	1
76 Other	-	55.75	
Sale of Other Items94500	8	55.75	*
76 Buildings and Structures 9453 76 Sale of Salvage and Scrap 9454 76 Other 9459	8	66.00 305.90 937.00	
Other Revenue	8	1,308.90	-
97000 97006 97007 9700	0	$90.11 \\ 47.00 \\ 35.00$	
	\$	172.11	77
	\$7	,127.484.90	

		Net Revenue 1958-59	
200 WARDEN PENSION FUND			
Pension Contributions 90800 Employee Contributions 90810 Municipal Contributions 90820	\$	18,031.52 67,000.00	
	\$	85,031.52	*
Bond Interest 97100 Bond Interest 97100	\$	18,660.40	
Bond Discount Earned	\$	18,660.40	*
Bond Discount Earned 98100 Bond Discount Earned 98100	8	1,570.86	*
Premium on Investment Purchases 99000	\$	1,570.86	*
Premium on Investment Purchases 99000	8	102.50-	_,
Loss on Sale of Bonds 99100			
Loss on Sale of Bonds 99100	8	360.93-	
	8	104,799.35	
900 GIFTS AND DONATIONS	-		
Gifts and Donations 96000 Pittman-Robertson 96001 Pittman-Robertson Reimbursements 96013 Eau Galle 96070 Lake Mason Improvement Association 96071 Special Deer Research 96076 High Cliff Forest Park 96080 Kettle Moraine Forest 96081 Recreational Advertising, Rose Bowl 96094 Recreational Public Awards 96096 Miscellaneous Gifts 96096	\$	6,755.00 2,514.29 165.00 400.00 3,000.00 3,300.00 14,206.58 10,936.95 125.00 21.00	
	\$	41,423.82	*
	\$	41,423.82	
000 FORESTRY FUND Special Revenue			
Fire Suppression Tax Levy 90830	\$	5,070.49	*
Fees. 91000 Campsite Fees 91010	8	34,028.17	
Campate rees	8	34,028.17	*
Other Rents and Rentals 93100 Building and Building Sites 93110 Concession 93120 Land Use 93150 Contact Rental 93160 Easements 93170	8	790.35 4,669.44 2,785.00 485.54 1.00	
	\$	8,731.33	*
Employee Rents and Services 93200 Dwelling and Bunk House Rents 93210 Mess Hall 93240		17,663.07 2,035.30	
	\$	19,698.37	*
Activity Services 93300 Fire Suppression, County 93310 Fire Suppression, Other 93320 Slash Disposal 93330 Pest Control 93350 Other 93390	\$	5,368.54 11,684.57 67.65 412.01 1,875.36	
Other	\$	19,408,13	*

SPORTSMEN'S LICENSES 92800 92800 92811 97,500.50 92812 97,500.50 92812 97,500.50 92812 97,500.50 92812 92812 97,500.50 92812 97,500.50 97,50		Net Revenue 1958-59
Sale of Resources	Convenience Services 02500	
Sale of Resources	Raising and Moving Wires 93510 Electrical Charges, Campers 93530 State Roads 93540	\$ 26.84 1,032.20 11,404.03
Sale of Products		
Sale of Products 94300 Nursery Stock 94301 Maps 94300 Other 94307 Other 94400 Frie Fighting 94400 Other 94400 Other 94400 Other 94400 Transfers from Federal Aid—Clarke-McNary and Norris-Doxey 94500 Transfers from Federal Aid—Clarke-McNary and Norris-Doxey 95101 Transfers from Federal Aid—Clarke-McNary and Norris-Doxey 95201 Transfers from Federal Aid—Pittman-Robertson 95200	Sale of Resources 94100 Timber, Other 94110 Other 94190	\$ 11,957.38 1,248.10
Other		10,200.10
Other	Sale of Products 94300	
Sale of Equipment Fire Fighting 94410 Other 94490 Other 94490 Other 94490 Other 94490 Other 94490 Other 94490 Sale of Other Items 94590 Sale of Salvage and Scrap 94590 Other 94590 Transfers from Federal Aid—Clarke—McNary and Norris—Doxey 95191 Severance 4/5 96200 Severance 4/5 96200 Withdrawal 96220 Withdrawal 96220 2/10 Mill Tax 96600 2/10 Mill Tax 96600 2/10 Mill Tax 96600 2/10 Mill Tax 96600 Soverance 4/5 96710 Soverance 4/5 96	Fuorications	141 05
Sale of Other Items		\$ 463,763.92
Sale of Other Items	Sale of Equipment 94400	
Sale of Other Items Sale of Salvage and Scrap Other. Sale of Salvage and Scrap Sale of Salvage and Scrap Other. Sale of Salvage and Scrap Sale of Salvage Sale of Salvage and Scrap Sale of Salvage Sale of Salvage and Scrap and Salvage and Sal	Other	409.45
Sale of Salvage and Scrap. 94540 0ther. 94590 94590 893.66	Sale of Other Items	\$ 1,302.45
Severance 4/5	Sale of Salvage and Scrap	
Seederal Aid Clarke-McNary and Norris-Doxey 95100 Transfers from Federal Aid Clarke-McNary and Norris-Doxey 95191 \$ 429,923.94		
\$\frac{\text{Forest Crop Taxes}}{\text{Severance 4/5}} &	Federal Aid—Clarke-McNary and Norris-Doxey 05100	9 833.00
Severance 4/5	Transfers from Federal Aid—Clarke-McNary and Norris-Doxey95191	\$ 429,923.94
\$\frac{1}{2}\text{Tax-Prior Year} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Forest Cron Taxes	\$ 429,923.94
Some stry Tax	Severance 4/5 96210 Withdrawal 96220	
\$ 74,037.81 * \$ 74,0		\$ 133,180.23 *
Section Sect	7 Prior Year 96600 2/10 Mill Tax 96610	\$ 74,037.81
\$3,352,608.65 \$3,352,608.65 \$3,352,608.65 Prepayment of Taxes		\$ 74,037.81 *
\$3,352,608.65 \$3,352,608.65 \$3,352,608.65 Prepayment of Taxes	orestry Tax—Current Year	
Prepayment of Taxes	96710	
Telephone Line Damage	ther Revenue	
\$4,569,212.97 \$4,569,212.97 \$4,569,212.97 \$4,569,212.97 \$4,569,212.97 \$4,569,212.97 \$2,500	1	\$ 317.61 304.07
PUBLIC HUNTING AND FISHING GROUNDS SPORTSMEN'S LICENSES 92800 \$ 97,500.50 \$ 130,975.50		\$ 897.27 *
SPORTSMEN'S LICENSES 92800 92800 92811 97,500.50 92812 97,500.50 92812 97,500.50 92812 97,500.50 92812 92812 97,500.50 92812 97,500.50 97,50		\$4,569,212.97
Voluntary Sportsmen's Licenses. 92811 \$ 97,500.50 Voluntary Sportsmen's Licenses. 92812 \$ 33,475.00 \$ 130,975.50 * \$ 130,975.50 * Ederal Aid—Pittman-Robertson. 95200 \$ 73,845.00	PUBLIC HUNTING AND FISHING GROUNDS— SPORTSMEN'S LICENSES	
ransfers from Federal Aid—Pittman-Robertson 95200 Transfers from Federal Aid—Pittman-Robertson 95292 \$ 73,845.00	Voluntary Sportsmen's Licenses	\$ 97,500.50 33,475.00
Transfers from Federal Aid—Pittman-Robertson95292 \$ 73,845.00		\$ 130,975.50 *
<u>- 110000</u>	Transfers from Federal Aid—Pittman-Robertson 95200	

		Net Revenue 1958-59
Federal Aid—Dingell-Johnson	8	194.63
	8	194.63 *
	8	205,015.13
2000 FEDERAL AID—CLARKE-McNARY 95100 Federal Aid—Clarke-McNary and Norris-Doxey 95110 Cooperative Fire Fighting 95120 Cooperative Planting Stock 95120 Cooperative Farm Forestry 95130 Watershed 95150 Transfers to Forestry Fund 95191		327,545.13 17,000.00 85,315.01 63.80 429,923.94
Pederal Aid—Soil Bank 95400 Soil Bank—Conservation Reserve 95410 Technical Assistance 95420 Nursery Operation 95440	\$	3,995.83 6,000.00 134,607.00
	8	144,602.83 *
	8	144,602.83
Federal Aid—Pittman-Robertson 95200 Coordination 95211 Farm Game and Range Research 95212 Forest Game and Range Research 95213 Game and Range Survey Research 95214 Pathology Research 95215 Wetland Game and Range Research 95216 Regional Development—N. W. Area 95220 Regional Development—N. E. Area 95221 Regional Development—W. C. Area 95222 Regional Development—E. C. Area 95224 Forest Habitat Development—N. W. Area 95224 Forest Habitat Development—N. E. Area 95225 Forest Habitat Development—W. C. Area 95227 Land Acquisition 95236 Land Acquisition Vol. 95237 Crex Meadows Development 95241 C.W. C.A.—M. V. Development 95244 French Creek Development 95245 Fowell Marsh Development 95246 Mazomanie Development 95248 Prairie Chicken Development 95248 Prairie Chicken Development 95249 Yellowstone Develop	\$	23,622,81 19,648,33 31,392,40 10,228,02 6,570,68 25,389,71 1,160,93 2,848,01 4,490,15 314,66 8,083,26 14,302,57 5,738,83 6,733,95 88,335,71 73,845,00 14,429,43 4,297,09 14,818,58 733,50 14,818,58 733,50 14,429,43 4,297,09 14,818,58 733,50 14,818,58 733,50 14,818,58 733,50 14,818,58 733,50 14,818,58 733,50 14,818,58 733,50 14,818,58 733,50 14,818,58 733,50 14,818,58 733,50 14,818,58 733,50 14,818,58
Federal Aid—Dingell-Johnson 95300 Coordination 95310 Habitat Management—N.W. Area 95331 Habitat Management—N.E. Area 95332 Habitat Management—W.C. Area 95333 Habitat Management—E.C. Area 95334 Habitat Valuation 95340 Land Acquisition 95340 Land Acquisition 95350 Land Acquisition Vol. 95351 N.W. Area Biology Research 95360 So. Area Biology Research 95370 Transfers to Fish and Game 95391 Transfers to Public Hunting and Fishing Grounds—Sportsmen's 95391	s	7,874.26 19,700.17 21,289.06 13,587.56 34,503.82 14,723.06 5,278.73 251.75 194.63 9,873.83 3,651.93 130,734.17—194.63—

		Net Revenue 1958-59
98000 REFORESTATION FUND Other Rents and Rentals		
Equipment 93146 Land Use 93150	8	$\frac{4,300.52}{3,427.00}$
	8	7,727.52
Sale of Resources 94100 American Legion Timber 94111	8	18,868.61
Brule River Timber	1	2,067.87
Flambeau River Timber		3,096.12 1.017.00
Northern Highland Timber 94116		72.991.18
Black River Timber 94117		21,862.94
Moss		3,582.70
Land94140	-	162.03
	8	123,648.45
Sale of Equipment .94400 Other .94490		900.00
	\$	900.00 *
Other Revenue		336.98
	8	336.98 *
Other Investment Income 97900 Other Investment Income -97900	8	7.451.77
	8	7,451.77 *
	8	140,064.72
9500 CANCELLED DRAFTS		
Other Revenue 97000 Cancelled Drafts 97030	\$	1,519.59
	8	1,519.59 *
	\$	1,519.59
9900 INSURANCE LOSS		
Other Revenue 97000 Fire Loss 97010	8	3,833.43
	\$	3,833.43 *
	8	3,833.43

CONSERVATION DEPARTMENT DISBURSEMENTS

Conservation Fund

	Personal Services	Travel Expense		Materials, Services and Supplies		Capital Outlay	Special Purpose	Total 1958–1959 Disbursements
H AND GAME OPERATIONS								
ish Management	122,836.38	\$ 8.509.48	s	17,816.26	s	3,996.40	9	153.158.52
NWA\$		146.48	9	10.747.78	0	31.30		27.701.56
Bayfield	$16,776.00 \\ 11,343.62$	51.15		7,887.52				20,537.18
Brule Hayward	11,343.02	55.75		4.980.27				16,382.75
Hayward	$11,333.00 \\ 26,271.62$	273.99		16,647.89				43.543.96
Osceola	24,544.80	109.40		12,354.43	1			88,926.15
St. Croix Falls	23,716.99	1.836.10		1,329.38				28,977.18
NWA Biology ResearchNWA Habitat Management	37,222.16	3,439.41		5,883.93				47,412.47
NWA Habitat Management	129,760.08	12,177.26	1	30,688.55				188,561.24
NEA	12,718.68	352.32	1	6,792.55		419.84		20,283.39
Crystal Springs	11,267.03	318.66	1	5,971.11				19,063.20
Lakewood	11,014.02	208.46	1	6,355.25				18,725.43
Langlade	10,603.01	352.02		10,759.64				23, 235, 47
Thunder River	16,731.42	734.18	1	1,258.86	1			19,725.88
NEA Biology Research NEA Habitat Management	10,731.42	3,248.51		10,747.27				45,738.33
NEA Habitat Management	30,633.22	9,618.28		13.894.70				128,650.80
WCA	83,708.46 8,673.00	725.92		849.60	1			10.344.53
Mississippi River Survey	8,673.00	699.09		1.030.13				12,266.63
WCA Biology Research	10,478.16	3,238.89		5,334.83				41,132.23
WCA Habitat Management	27,244.42	9,063.83		24,602.77				134,305.25
ECA	83,709.15	9,063.83	1.	10,676.24				56,518.22
Calumet Harbor	42,411.34	1,581.03	1	1 001 47		13.85		15,818.94
Great Lakes Commercial Fishing	12,583.74	2,159.88		1,061.47 $9,785.51$	9			54.072.44
Horicon	39,574.96	2,795.66		9,785.51 876.54				9,310.7
Westfield	8,198.00	227.22				356.34		59,428.2
Wild Rose	34,400.98	314.25		24,356.72 $1,927.00$				16,688.8
ECA Biology Research ECA Habitat Management	12,984.39	1,099.49		1,927.00				10,000.0
ECA Habitat Management	33,186.42	4,752.58		6,391.13		38.835.72		44,854.7 167,728.7
SA	101,342.82	8,084.03		19,466.19				64,843.7
McFarland	41,929.69	2,271.26		12,978.97 $11,095.78$		7,663.79 3,288.51		36.383.2
Nevin	21,810.22	188.78		7.391.28		526.15		46,909.6
Newville	36,947.63	2,044.57		2,011.08		591.92		17.545.7
SA Biology Research	14,178.00	764.71				295.32		58,465.2
SA Habitat Management	40,533.40	4,990.27		12,646.23 $53,987.39$		295.32		53,987.3
University of Wisconsin Research			-	53,987.39		2,162.23		23,683.6
SA Habitat Management University of Wisconsin Research Pathology and Nutrition Habitat Evaluation	12,945.00	2,762.22		5,814.18		828.80		21,110.5
Habitat Evaluation	11,896.04	2,654.32		5,731.36 908.29		828.80		17,900.3
D-J Coordination	15,544.00	1,448.06		908.29		73,046.57		73.046.5
D-J Land Acquisition						5,592.76		5,686.6
Land Acquisition		0 041 10	-	$93.92 \\ 15.546.05$		1,103.19		82,784.9
Administration	59,294.60	6,841.13	-		-			
*	\$1,250,346.45	*\$100,138.64	* \$	398,678.05	* \$	266,277.58 *		\$ 2,015,440.7
Distribution of Retirement, etc.				18,978.48			\$ 94,966.33	113.944.8
	\$1,250,346.45	\$100,138.64	e	417,656.53	8	266,277.58	\$ 94,966.33	\$ 2,129,385.5

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CONSERVATION DEPARTMENT DISBURSEMENTS—(Continued)

	Personal Services	Travel Expense	Materials, Services and Supplies	Capital Outlay	Special Purpose	Total 1958–1959 Disbursemen
Game Management						
NWA P-R Crex Meadows Development	\$ 67,257.56	\$ 10,965.41	\$ 6,350.97	\$ 14,552.58		
P-R Crex Meadows Development	11,329.59 1,477.67	897.04	8,134.58	1,062.50		\$ 99,126.5 21,423.7
P-R Regional Development—NWA P-R Forest Habitat Development—NWA	1,477.67	669.45	3.25			2,150.3
		4,793.63 12,161.13	17,048.12			56,420,5
P-R Powell Marsh Development P-R Regional Development—NEA P-R Forest Habitat Development—NEA	13.333.99	2,614.73	19,691.05 6,361.58 3,768.04	10,257.37		112,930.5
P-R Regional Development—NEA	13,333.99 2,305.05 31,389.51	657.45	3.768.04	12,565.37 1,208.35		34,875.6
WCA	31,389.51	5,969.09	21,696.64 17,937.19 3,837.13	2.439.03		7,938.8
P-R CWCA Meadow Valley Davelerment	105,421.63	14,717.58	17,937.19	2,439.03 16,983.01		61,494.2 155,059.4
P-R Prairie Chicken Development	5,042.81 2,715.10	289.30	3,837.13			9,169.2
P-R CWCA Meadow Valley Development P-R Prairie Chicken Development P-R Forest Habitat Development—WCA	8,678.41	508.82 559.23	1,297.80 6,779.52	399.68		4,921.4
		17,497.06	19,206.11	3,922.61		16,017.1
P-R Horicon Marsh Development P-R Regional Development—ECA	11,325.59	647.76	4,697.36	2,692.25		138,089.6
	6,219.58	1,352.00	69.16	2,002.20		19,362.9 7,640.7
P-R French Creek Development P-R Mazomanie Development P-R Vallowstone Development	94,732.51	19,151.94	15,024.54 1,158.00	6,967.68		135,876.6
P-R Mazomanie Development			1,158.00	780.00		1,938.0
P-R Mazomanie Development. P-R Yellowstone Development. P-R Regional Development—SA P-R Farm Game and Range Research. P-R Forest Game and Range Research. P-R Game and Range Survey. P-R Pathology Research. P-R Wetland Game and Range Research. P-R Coordination.	2,917.15	206.04	749.71 938.02			749.7
P-R Regional Development—SA	11,738.29	1.071.69	962.31			4,061.2
P-R Farm Game and Range Research	21,049.23 34,651.35 15,678.89	3.898.97	6.696.09	50.00		13,772.2 31,694.2
P-R Game and Range Research	34,651.35	7,198.11	6,035.82 1,504.97	1,766.17		49,651.4
P-R Pathology Research	$15,678.89 \ 7,589.00$	2,165.14	1,504.97	10.00		19,359.0
P-R Wetland Game and Range Research	27,080.00	1,318.17 3,903.16	798.23	120.96		9,826.36 34,853.6
P-R Coordination.	19,894.59	3,069.07	3,210.32 7,214.27	660.16 2,454.83		34,853.6
		0,000.07	1,214.21	8 007 05		32,632.70 8,907.93 302,893.0
Game and Fur Farm P-R Land Acquisition	175,301.98	2,791.48	118,956.65	5.842.90		8,907.9
Administration				216,643.85		216,643.8
	50,319.80	6,739.03	12,566.39	462.45		70,087.67
D	\$ 930,312.89 *	\$125,812.48	\$ 312,693.82 *	\$ 310,749.70 *	***	1,679,568.89
Distribution of Retirement, etc.			10,049.23		\$ 70,659.13	80,708.36
	\$ 930,312.89	\$125,812.48	\$ 322,743.05	\$ 310,749.70	\$ 70,659.13	1,760,277.25
aw Enforcement					\$ 10,000.10 B	1,700,277.20
NWA	\$ 172.343.28	\$ 65,513.26	\$ 9.086.59			
		67,594.52	6,045.47	\$ 7,403.74 8,042.15		254,346.87 241,877.61
WCA ECA SA	152,049.12	59,149.37	5.851.91	7.003.42		241,877.61 224,053.82
		65,973.21	8,224,70			252 865 13
Radio Dispatching.	142,405.10	51,481.13	6,692.00	7,034.03		252,865.13 207,612.26
Radio Dispatching	29,045.21 48,378.00	13,312.43	12,759.22 10,646.80	86.58 5,571.07		41.891.01
						77,908.30
Distribution of Retirement, etc.	9 0/4,084.U3 *	\$323,023.92 *	\$ 59,306.69 *	\$ 43,540.34 *	*	1,300,555.00
			\$ 86,303.40		\$ 44,900.53	131,203.93
	\$ 874,684.05	\$323,023.92	\$ 145,610.09			1,431,758,93

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	Personal Services	Travel Expense	Materials, Services and Supplies	Capital Outlay	Special Purpose	Total 1958-1959 Disbursements
General Administration Commission Services. Personnel. Administration	\$ 6,044.37 35,769.00 90,127.00	\$ 1,903.34 1,454.18 7,818.75	\$ 190.88 811.34 22,876.65	\$ 41.45 3,419.89		8,138.59 38,075.97 124,242.29
	\$ 131,940.37	\$ 11,176.27 *	\$ 23,878.87	* \$ 3,461.34*	*8	170,456.85
Distribution of Retirement, etc.			\$ 173.92		\$ 10,021.13	10,195.05
	\$ 131,940.37	\$ 11,176.27	\$ 24,052.79	\$ 3,461.34	\$ 10,021.13	180,651.90
Finance WCA Business Management ECA Business Management SA Business Management Accounting Cashier License Sales Purchasing and Property Office Rent Administration	\$ 6,375.00 13,512.00 19,536.00 74,065.15 5,124.00 42,868.95 11,628.00	\$ 54.19 92.65 68.70 1,541.58 1,725.63 622.01 1,035.53	\$ 3,807.73 3,008.95 2,491.51 21,865.30 245.92 88,069.31 377.90 45,231.53 565.39	\$ 57.72 4.998.02 53.70 395.38		\$ 10,294.64 21,611.62 22,149.91 97,866.41 5,369.92 132,663.89 12,627.91 45,231.53 20,206.78
Distribution of Retirement, etc.	\$ 191,457.10	* \$ 5,140.29 *	\$ 165,663.54 252.38	*\$ 5,761.68	** \$ 14,541.54	\$ 368,022.61 \$ 14,793.92
Distribution of Residential, essential	\$ 191,457.10	\$ 5,140.29	\$ 165,915.92	\$ 5,761.68	\$ 14,541.54	\$ 382,816.53
Engineering Engineering Rivers Survey	\$ 93,047.43	\$ 7,685.01 2,358.36	\$ 57,652.55— 105.30	\$ 389.72 626.53		\$ 43,469.61 3,090.19
	\$ 93,047.43	* \$ 10,043.37	\$ 57,547.25—	* \$ 1,016.25	**	
Distribution of Retirement, etc.			\$ 122.65		\$ 7,067.14	\$ 7,189.79
	\$ 93,047.43	\$ 10,043.37	\$ 57,424.60-	\$ 1,016.25	\$ 7,067.14	\$ 53,749.59
General Administration Transfers Gen. Adm. Transfers Bet. Approp.—F. & G	\$ 53,464.00—	\$ 8,696.00—	\$ 9,353.00-	\$ 1,090.00—		\$ 72,603.00
	e 52 464 00	* \$ 8.696.00-	s 9,353.00-	-* \$ 1,090.00-	*	\$ 72,603.0

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	Personal Services	Travel Expense	Materials, Services and Supplies	Capital Outlay	Special Purpose	Total 1958–1959 Disbursements
Finance Transfers Finance Transfers Bet. Approp.—F. & G	\$ 59,317.00—	\$ 2,017.00—	\$ 38,628.00— \$	576.00—		\$ 100,538.00-
Clerical Transfers	\$ 59,317.00—	* \$ 2,017.00—*	\$ 38,628.00—*	576.00—*	*	
Clerical Transfers Bet. Approp.—F. & G	\$ 139,193.00	\$ 512.00	\$ 30,787.00 \$	3,564.00		174,056.00
Information and Education Transfers I. and E. Transfers Bet. Approp.—F. & G.	\$ 139,193.00		\$ 30,787.00 *	3,564.00 *	*	174,056.00
Transfers Bet. Approp.—F. & G.	\$ 43,623.00		\$ 62,636.00 \$	2,986.00	8	120,372.00
State Employee Retirement Fund State Employment Retirement Fund—F. and G	\$ 43,623.00	* \$ 11,127.00 *	\$ 62,636.00 *	2,986.00 *	*	120,372.00
and G			3 2,512.66			2,512.66
Distributed to Operating Divisions		* *	2,512.66 *	*	* \$	2,512.66
Podge County 25% Sale of Fur Dodge County 25% Sale of Fur			3 2,512.66— —0—		· · · · · · · · · · · · · · · · · · ·	2,512.66— —0—
5 - 1 and 20 % case of Pul-					\$ 148.73	148.73
nvestment Expense Investment Expense—F. and G.		*	*	*	\$ 148.73 *\$	148.73
		k			\$ 262.84 \$	262.84
	\$3,541,823.29	\$576,260.97	1,063,995.78	635,690,89	202.01	262.84
CONSERVING WILDLIFE					9,500.00	6,060,338.30 9,500.00
WATER POLLUTION COSTS		**	*	*		9,500.00
				8	\$ 14,697.71	14,697.71
WATER REGULATORY BOARD		*	*	* 8	\$ 14,697.71 *\$	14,697.71
				*8	\$ 6,000.00	6,000.00

CONSERVATION DEPARTMENT DISBURSEMENTS—(Continued)

	Personal Services	Travel Expense	Materials, Services and Supplies	Capital Outlay	Special Purpose	Total 1958–1959 Disbursements
RETIREMENT, ETC., FISH AND GAME Social Security			\$ 45,317.21		\$ 77,343.59	\$ 77,343.59 45,317.21 193,368.50
Wisconsin Retirement (1948 Act) Workmen's Compensation Awards Conservation Wardens' Pension Group Life Insurance Board			2,452.04 67,000.00 5,074.52 3,531.66		193,368.50	2,452.04 67,000.00 5,074.52 3,531.66
Judgment Relief Awards			\$ 123,375.43		\$270,712.09 *	\$ 394,087.52
Distributed to Operating Divisions			\$ 123,375.43— —0—		\$270,712.09—	\$ 394,087.52 —0—
RECREATIONAL ADVERTISING Recreational Advertising Chicago Office	\$ 21,831.00 18,767.00	\$ 2,865.94 941.92	\$ 177,573.87 18,514.40	\$ 1,563.40 498.84	\$ 3,000.00	\$ 206,834.21 38,722.16
Chicago Olite	\$ 40,598.00	\$ 3,807.86	* \$ 196,088.27	* \$ 2,062.24	\$ 3,000.00	\$ 245,556.37
RECREATIONAL ADVERTISING— REIMBURSEMENT Reimbursement Highway Department Reimbursement General Fund					\$ 2,775.52 1,907.71	\$ 2,775.52 1,907.71
Reimbursement General Fund		*	*	*	* \$ 4,683.23	* \$ 4,683.28
BEAR AND DEER DAMAGE Bear Damage			\$ 11,111.37 28,888.63			\$ 11,111.33 28,888.63
Deer Damage		*	*\$ 40,000.00	*	*	* \$ 40,000.0

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CONSERVATION DEPARTMENT DISBURSEMENTS—(Continued)

	Personal Services		Travel Expense		Materials, Services and Supplies		Capital Outlay	Special Purpose	Total 1958–1959 Disbursements
TATE PARKS State Parks Operations Aztalan Brunet Island Castle Mound Copper Falls Cushing Memorial Devil's Lake Interstate Lost Dauphin Lucius Woods Ojibwa Pattison Peningula	\$ 1,332.71 12,341.34 1,108.00 12,316.59 1,098.74 158,430.66 23,728.00 602.11 5,910.53 1,638.58 18,305.22	8	271.79 271.79 273.76 2,204.00 389.44 21.07 4.70 142.78	\$	540.78 2,239.02 61.24 2,459.42 239.92 22,404.50 3.091.39 7.2.79 1,452.10 369.48 3.181.42	\$	180.00 319.47 18.47 810.27 7,037.58 877.55	\$	2,156.56 15,060.25 1,187.71 15,858.07 1,412.42 190.076.74 28,086.38 674.90 7,569.42 2,037.01
Peninsula Potawatomi Rib Mountain Terry Andrae Cooperation—State Historical Society Cooperation—Aztalan Exploration Administration	$\begin{array}{c} 61,207.51 \\ 14,659.38 \\ 20,994.13 \\ 14,220.06 \\ 4,000.00 \\ 1,479.28 \\ 24,443.76 \end{array}$		475.10 25.55 395.70 34.71 500.00 47.15 3,111.70		15,203.09 1,978.06 7,812.79 1,859.40 517.44 2,588.24		1,388.18 9,143.89 18.86 4,600.03 1,302.36 2,463.38 523.37		23,017.60 86,029.59 16,681.85 33,802.65 17,416.53 4,500.00 4,507.25 30,667.07
Distribution of Retirement, etc.	\$ 377,816.60 \$ 377,816.60	* \$		\$	66,071.08 10,008.03	* 8	28,893.38	\$ 28,556.29 \$	480,742.00 38,564.32
General Administration Transfers— State Parks	\$ 377,816.60 \$ 2,768.00	8	7,960.94 674.00	8	76,079.11 724.00	8	28,893.38	\$ 28,556.29	519,306.32
Finance Transfers—State Parks	2,768.00 5,609.00	* \$		\$		8	85.00 * 55.00	*	4,251.00
lerical Transfers—State Parks		* \$	192.00 * 41.00	\$		8	55.00 * 335.00	* * * * * * * * * * * * * * * * * * * *	9,531.00
TOTAL STATE PARKS	3 12,185.00 3 398,378.60	* \$	41.00 * 8,867.94	\$	2,496.00 * 82,974.11	8	335.00 * 29,368.38	\$ 28,556.29 \$	15,057.00 15,057.00

${\bf CONSERVATION\ DEPARTMENT\ DISBURSEMENTS} - ({\bf Continued})$

		Personal Services		1	Travel Expense			Materials, Services and Supplies		Capital Outlay		Special Purpose	_	Total 1958–1959 Disbursements
CHOOL TAX ON STATE HUNTING GROUNDS											8	127.38	8	127.38
CHOOL TAX ON STATE HONTING GROUNDS		*				*			*	*	8	127.38 *	8	127.38
IFTS AND DONATIONS	8	840.00	8	11	1,336.95		;	313.38	8	15,824.35	-		8	28,314.68
FIS AND DONATIONS	\$		8	11	1,336.95	* 5	3	313.38	* 8	15,824.35	* -		8	28,314.68
RESTRY OPERATIONS														
Forest Protection NWA Headquarters NEA Headquarters WCA Headquarters ECA Headquarters SA Headquarters District No. 1. District No. 2. District No. 3. District No. 4. District No. 5. District No. 6. District No. 7. District No. 7. District No. 9. District No. 9. District No. 10. District No. 11. District No. 12. Tomahawk Warehouse		$\begin{array}{c} 7, 104.00 \\ 7, 104.00 \\ 7, 104.00 \\ 17, 532.00 \\ 9, 793.91 \\ 4, 944.00 \\ 105.604.12 \\ 98, 180.34 \\ 96, 388.51 \\ 101.329.24 \\ 100, 771.81 \\ 105.669 \\ 109.88.51 \\ 101.329.24 \\ 100, 771.81 \\ 109.88.51 \\ 101.329.24 \\ 100, 771.81 \\ 100, 735.80 \\ 100, 7$	8		1,800.75 1,885.89 1,951.06 496.34 1,134.17 1,631.93 2,254.99 2,491.50 2,054.08 2,255.05 2,138.57 2,499.40 1,611.40 1,607.98 1,650.33 1,241.14		8	456.19 518.16 2,317.11 1,987.49 320.69 8,734.37 12,804.86 10,062.41 10,781.24 9,463.84 11,740.41 11,452.15 10,842.91 12,634.27 10,772.33 14,479.50 10,846.40 4,541.24	8	55. 89 340. 35 354. 29 99. 19 107. 14 2, 260. 35 2, 325. 84 3, 153. 28 3, 960. 23 3, 848. 11 2, 282. 73 2, 687. 37 1, 753. 75 1, 589. 21 1, 938. 55			8	9, 416, 8 9, 848, 44 22, 154, 44 12, 376, 9 6, 506, 0 118, 230, 7 115, 566, 0 112, 095, 7 116, 338, 8 111, 571, 8 133, 796, 2 121, 081, 8 15, 301, 6 106, 359, 8 54, 855, 2 40, 799, 3 4, 541, 2 334, 244, 6
Tomahawk HeadquartersAdministration		$119,772.13 \\ 19,572.00$			7,556.79 2,556.82			78,714.06 3,292.75			-		-	25,421.5
Distribution of Retirement, etc.		,261,522.40			40,477.59	*	\$ \$\$	217,679.90 46,831.69 264,511.59		\$ 159,869.60 \$ 159,869.60	*	\$ 98,140.78 \$ 98,140.78		\$ 1,679,549.4 \$ 144,972.4 \$ 1,824,521.9
Fire Suppression Reportable Fires (County) Nonreportable Fires (Other)	. 8	17,519.48 11,261.45		8	854.64 668,38		\$	8,767.78 720.16						\$ 27,141.9 12,649.9
	\$	28,780.93	*	\$	1,523.02	*	8	9,487.94 78.15	*		-*		*	\$ 39,791.5 78.
Distribution of Retirement, etc	8	28,780.93		8	1,523.02		8	9,566.09						\$ 39,870.

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CONSERVATION DEPARTMENT DISBURSEMENTS—(Continued)

		Personal Services		$Travel \\ Expense$		Materials, Services and Supplies		Capital Outlay	Special Purpose		Total 1958–1959 Disbursements
Forest Management County Forestry. Pest Control Private Forestry. State Forest Inventory U, of W, Research. Forest Management Trans to Soil Bank Tax Law.	-	202,918.98 38,862,20 246,821.73 82,135.24 3,773.49 11,000.00—	8	41,937.55 8,947.17 55,446.46 17,178.86 422.30	8	7,374.25 11,353.78 18,008.04 4,577.61 124,118.47	\$	2,336.84 70,565.81 3,477.38 218.20 72.00		-	254,567.62 129,728.96 323,753.61 104,109.91 128,386.26
Tax Law	-	27,255.88 22,133.00		4,009.80 3,896.57		$\substack{165.30\\14,752.71}$		636.40 4,148.14		-	11,000.00- 32,067.38 44,930.42
Distribution of Retirement, etc.	8	612,900.52	* \$1	131,838.71	* 8	100,000.10	* 8	81,454.77		* 8	1,006,544.16
	-					915.28			\$ 48,051.30	8	48,966.58
Vurseries	\$	612,900.52	\$1	131,838.71	\$	181,265.44	8	81,454.77	\$ 48,051.30	8	1,055,510.74
Boscobel. Gordon. Griffith. Hayward. Hugo Sauer. Trout Lake. Blister Rust. Nursery Transfers to Reforestation.		$\begin{array}{c} 107,567.64 \\ 23,936.14 \\ 124,059.80 \\ 82,150.41 \\ 43,821.93 \\ 21,382.32 \\ 11,547.48 \end{array}$	8	$\begin{array}{c} 727.28 \\ 154.91 \\ 410.19 \\ 351.82 \\ 114.98 \\ 20.15 \\ 2,991.56 \end{array}$	8	16,856.55 18,619.29 18,100.62 15,723.89 11,819.37 2,669.03	\$	6,299.51 8,903.48 8,286.76 23,649.28 11,473.70 362.17			131,450.98 51,613.82 150,857.37 121,875.40 67,229.98 24,433.67
Nursery Transfers to Soil Bank. Administration.		89,000.00— 12,648.00		1,086.51		24,979.52— 19,976.19		23,280.85— 6,500.00— 39.70			14,539.04 23,280.85— 120,479.52— 33,750.40
Distribution of Retirement, etc.	\$	338,113.72 *	* \$	5,857.40	* \$		8	29,233.75 *	*	\$	451,990.29
	-		-		- 0	31,543.50			\$ 34,083.28	\$	65,626.78
tate Forests	\$	338,113.72	8	5,857.40	8	110,328.92	\$	29,233.75	\$ 34,083.28	8	517,617.07
American Legion Black River Black River Council Grounds Flambeau River Northern Highland Trout Lake Administration Administration	8	18,440.43 30,709.53 12,225.21 3,818.29 37,194.81 113,846.08 12,648.00	8	$\substack{\substack{597.18\\1,229.77\\523.20\\7.35\\932.90\\1,737.01\\1,886.64}$	8	11,635.61 4,187.95 5,384.23 692.72 20,409.39 18,598.63 557.87	\$	8,558.65 9,366.19 130.83 68.92 3,869.36 7,942.49 91.89		\$	39,231.87 $45,493.44$ $18,263.47$ $4,587.28$ $62,406.46$ $142,124.21$
	\$	14,851.30 243,733.65 *	-	3,427.88	* 8	68,408.61 *	s	3,397.04		_	15,184.40 28,618.43
Distribution of Retirement, etc.					8	6,547.27	-	and the second second		\$	355,909.56
						0,047.27			\$ 18,961.39	2	25,508.66

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	Personal Services	Travel Expense	Materials, Services and Supplies	Capital Outlay	Special Purpose	Total 1958–1959 Disbursements
Clerical Clerical	\$ 297,673.71	\$ 536.40	72,651.24	\$ 7,051.36		\$ 377,912.71
	\$ 297,673.71	\$ 536.40 *	72,651.24	* \$ 7,051.36	**	\$ 377,912.71
Distribution of Retirement, etc.			\$ 450.23		\$ 23,157.69	\$ 23,607.92
	\$ 297,673.71	\$ 536.40	\$ 73,101.47	\$ 7,051.36	\$ 23,157.69	\$ 401,520.63
Information and Education Publications Newspaper Service Clubs	\$ 13,308.00 7,584.00 6,744.00	45.75 853.10	\$ 74,655.83 3,301.11 4.70 1.833.13	\$ 377.50		\$ 88,728.78 10,930.86 7,601.80 7,231.10
Conservation Congress	21,644.08 14,207.00 6,744.00 20,856.00	5,397.97 7,091.93 1,873.45 593.16 2,982.24	1,833.13 9,029.72 3,239.82 5,760.66 11,988.77	3,449.29 2,867.64 1,016.00		41,215.02 $19,320.27$ $15,965.46$ $36,843.01$
Visual AidsAdministration	7,869.00	* \$ 19,962.04 *	756.89	* \$ 7,710.43	**	9,362.88 \$ 237,199.18
Distribution of Retirement, etc.			\$ 259.08		\$ 7,698.34	\$ 7,957.42
	\$ 98,956.08	0 10,002101	\$ 110,829.71	\$ 7,710.43	\$ 7,698.34	\$ 245,156.60 \$ 68,352.00
General Administration Transfers-Forestry	\$ 50,696.00	- 0,022.00	\$ 8,629.00	\$ 1,005.00 *\$ 1,005.00	* *	\$ 68,352.00
To the French	\$ 50,696.00 \$ 53,708.00	* \$ 8,022.00 * \$ 1,825.00	\$ 8,629.00 \$ 34,953.00	\$ 521.00		\$ 91,007.00
Finance Transfers—Forestry	\$ 53,708.00	*\$ 1,825.00 *	\$ 34,953.00	* \$ 521.00	**	\$ 91,007.00
Clerical Transfers—Forestry	\$ 151,378.00—	\$ 553.00—	\$ 33,283.00-	\$ 3,899.00—		\$ 189,113.00-
Ciericai Transicio Locomy	\$ 151,378.00-	* \$ 553.00—*	\$ 33,283.00-	* \$ 3,899.00-	-**	\$ 189,113.00-
Information and Education Transfers—	\$ 43,623.00-	\$ 11,127.00—	\$ 62,636.00-	\$ 2,986.00-		\$ 120,372.00-
	\$ 43,623.00-	* \$ 11,127.00—*	\$ 62,636.00-	* \$ 2,986.00-	-*	\$ 120,372.00-
TOTAL FORESTRY OPERATIONS	\$2,791,084.01	\$208,704.09	\$ 772,222.10	\$ 313,386.28	\$230,092.78	\$ 4,315,489.26

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an State of some production with the

CONSERVATION DEPARTMENT DISBURSEMENTS—(Continued)

			ob e Robinte 1113	— (Continued	,	
	Persona! Services	Travel Expense	Materials, Services and Supplies	Capital Outlay	Special Purpose	Total 1958–1959 Disbursements
WATER POLLUTION COMMITTEE					\$ 14,697.71	14,697,71
SOUTHERN WISCONSIN FORESTS Big Foot Beach		.*	**		* \$ 14,697.71 * \$	
High Cliff Northern Purchase Unit Point Beach Southern Purchase Unit Administration	\$ 12,702.66 9,337.98 75,169.31 21,958.18 41,071.34 11,064.00	\$ 40.28 5,10 264.46 19.88 378.62 1,080.55	\$ 4,359.37 1,186.45 13,172.17 3,901.76 6,371.36 4,357.46	\$ 1,700.75 1,085.92 16,541.87 2,581.64 12,828.09 588.66	13,075,60	18,803,06 11,615,45 105,147,81 28,461,46 60,649,41 30,166,27
Distribution of Retirement, etc.	\$ 171,303.47	* \$ 1,788.89	\$ 33,348.57 * \$ 1,813.95	35,326.93	* \$ 13,075.60 * \$	
ETTLE MORAINE LAND	\$ 171,303.47 ========	\$ 1,788.89	\$ 35,162.52 =========	35,326.93	\$ 13,075.60	256,657.41
LITTLE MORAINE LAND				202,403.14		202,403.14
DUNTY FOREST AID	'	**	*\$	202,403.14 *	** \$	202,403.14
		**			\$218,311.52 \$ \$218,311.52 *\$	218,311.52 218,311.52
TIREMENT, ETC., FORESTRY			=======	======	=======================================	218,311.32
Jnemployment Compensation Vorkmen's Compensation Act) Vorkmen's Compensation Available			\$ 82,282.23		\$ 63,214.65 166,878.13	63,214.65 82,282.23
Group Life Insurance Board			2,257.52 3,899.40		100,878.13	166,878.13 $2,257.52$ $3,899.40$
Distributed to Operating Divisions	·*	·*	\$ 88,439.15—*		\$230,092.78 * \$	318,531.93
			\$ 88,439.15— —3—		\$230,092.78—	318,531.93
		'	-3-		-0-	-0-

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CONSERVATION DEPARTMENT DISBURSEMENTS—(Continued)

	Personal Services	Travel Expense	Materials, Services and Supplies	Capital Outlay	Special Purpose	Total 1958-1959 Disbursements
PUBLIC HUNTING AND FISHING GROUNDS—SPORTSMEN'S LICENSES NWA			\$ 3,262.89 3,897.23 15,040.86 12,411.60 24,471.85	15.50 967.38 13.75 20,651.58 246,705.47		\$ 3,262.89 3,912.73 16,008.24 12,411.60 24,485.60 20,651.58 246,705.47
	*		\$ 59,084.43	* \$ 268,353.68	**	\$ 327,438.11
FEDERAL AID—SOIL BANK Nursery Transfers from Forestry Soil Bank Forest Mgt., Transfers from Forestry	\$ 89,000.00		\$ 25,000.00	\$ 7,000.00 8,487.89		\$ 121,000.00 8,487.89 11,000.00
Forest Mgt. Transfers from Forestry	\$ 100,000.00		\$ 25,000.00	* \$ 15,487.89	*	\$ 140,487.89
CANCELLED DRAFTS			\$ 360.97			\$ 360.97
	*		\$ 360.97	*	**	\$ 360.97
INSURANCE LOSS			\$ 2,643.17	\$ 453.92		\$ 3,097.09
			\$ 2,643.17	* \$ 453.92	**	\$ 3,097.09
TOTAL CONSERVATION FUND	\$7,044,027.37	\$810,766.70	\$2,277,844.73	\$1,518,357.70	\$785,309.59	\$12,436,306.09

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CONSERVATION DEPARTMENT DISBURSEMENTS General Fund

	Personal Services	Travel Expense	Materials, Services and Supplies	Capital Outlay	Special Purpose	Total 1958–1959 Disbursements
GENERAL FUND Forest Crop Severance Tax					\$ 10,780.64	\$ 10,780.64
Forest Crop Withdrawal	*	**	**		* \$ 10,780.64 * \$ 1,340.36	\$ 10,780.64 \$ 1,340.36
Forest Crop Administration	* 4,760.89	*	**.			\$ 1,340.36 \$ 4,760.89
Forest Crop Aid	\$ 4,760.89 *	*	**		* \$250,273,19	\$ 4,760.89
Capital Improvements—State Parks	***************************************	*	**			\$ 250,273.19 \$ 250,273.19
Big Foot Beach Brunet Island Copper Falls Devil's Lake					\$ 35.40 201.33 278.64	\$ 35.40 201.33 278.64
Lucius Woods Merrick					28,714.62 14,708.52 1,103.97 28.36	28,714.62 14,708.52 1,103.97 28.36
Pattison Peninsula Potawatomi Rib Mountain					655.28 1,481.69 6,427.71 3,574.89	655.28 1,481.69 6,427.71 3,574.89
Terry Andrae_ Wild Cat Mountain Wyalusing					17,380.80 1,450.93 5,956.16	17,380.80 1,450.93 5,956.16
Federal Aid-P. H. S.	*	*	*		* \$ 81,998.30 *	\$ 81,998.30
Devil's Lake	*	*	**		\$ 10,720.15 * 10,720.15 *	\$ 10,720.15 \$ 10,720.15
TOTAL GENERAL FUND	\$ 4,760.89				\$355,112.64	\$ 359,873.53

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	Personal Services	Travel Expense	Materials, Services and Supplies	Capital Outlay	Special Purpose	Total 1958–1959 Disbursements
ORESTRY ACTIVITIES—REFORESTATION Land Acquisition State Aid				\$ 72,678.42	\$ 30,871.61	72,678.42 30,871.61
Investment Expense Nursery Transfers from Forestry Tourney Nursery			\$ 23,699.62	24,194.23 31,61	76.81	76.81 $24,194.23$ $23,731.23$
Black River Forest. Flambeau Forest.			191.05	8,483.81 7,896.13		8,483.81 8,087.18
			\$ 23,890.67 *	\$ 113,284.20	* \$ 30,948.42 *	\$ 168,123.29

CONSERVATION DEPARTMENT DISBURSEMENTS

Warden Pension Fund

	Personal Services	Travel Expense	Materials, Services and Supplies	Capital Outlay	Special Purpose	Total 1958-1959 Disbursements
VARDENS' PENSION FUND Retirement Activities					\$ 62,769.51	\$ 62,769.51
Investment Expense					447.12	447.12
		*	*	***************************************	\$ 63,216.63	\$ 63,216.63
		*	*	***************************************	\$ 63,216.	63 *

FINANCIAL REPORT, 1959-1960

BEGINNING AND ENDING BALANCES AND TRANSACTIONS OF THE OVER-ALL CONSERVATION DEPARTMENT FOR THE FISCAL YEAR 1959–1960

CONSERVATION FUND

Appropriation	Balance Forwarded From 1958-1959	Plus Revenue 1959–1960	Minus Disburse- ments 1959-1960	Plus Transfers 1959-1960	Minus Transfers 1959–1960	Cash Balance Forwarded To 1960-1961	Minus Un- liquidated Encum- brances	Unencum- bered Balance Available for 1960-1961
Fish, Game and Parks Imprest Fund Advance Fish and Game Operations	5,000.00 386.633.04	\$ 6,747,404.34	\$ 5,834,720.63	(b) 386,633.04 (c) 7,543.63 (d) 4,180.13 (e) 417.04	(f)\$ 6,370,980.62 (j) 9,500.00 (k) 38,730.35 (l) 6,000.00 (m) 5,000.00 (n) 418,859.15 (o) 259,613.53 (p) 1,083.54 (q) 40,000.00 (r) 653,322.78 (s) 44,908.99 (t) 133,471.00 (u) 9,328.49 (g) 35,000.00 (h) 60,000.00 (i) 125,000.00	\$ 395,125.34 5,000.00		\$ 395,125.34 5,000.00
Lake Classincation Warm Water Fish Hatcheries—Woodruff. Public Access to Waters. Conserving Wildlife. Water Pollution Costs Water Regulatory Board Topographic Maps Retirement, Etc.—Fish and Game. Recreational Advertising Rec. Adv.—Reimb. to Highway and General Fund Bear and Deer Damage State Parks. School Tax on State Hunting Grounds Bounties. Gifts and Donstions	0- -0- -0- -0- -0- -0- -0- 7,543.63 -0- 4,180.13 -0- -0- -0- -0-	52,685,96	27,839.75 29,528.24 9,500.00 38,730.35 6,000.00 5,000.00 418,859.15 236,670.01 1,083.54 32,492.32 585,122.79 44,908.99	(g) 35,000.00 (h) 60,000.00 (i) 125,000.00 (j) 9,500.00 (k) 38,730.35 (l) 6,000.00 (m) 5,000.00 (n) 418,859.15 (o) 259,613.53 (p) 1,083.54 (q) 40,000.00	(e) 7,543.63	(cc) 536,259,99 (cc) 7,160,25 (cc) 30,471.76 (cc) 125,000.00 (cc) -0 (cc) -0 (cc) 22,943.52 (cc) 68,199.99 (cc) 35,400.30	\$ 209,550,69 197,00 29,538,14 2,825,00 20,464,00 40,384,28	326,709,30 6,963,25 933,62 122,175,00 -0- -0- -0- -0- 2,479,52 -0- 7,507,68 27,815,71 -0- -0- 2,815,71
Forestry Operations Southern Wisconsin Forests Kettle Moraine Land County Forest All Retirement, Etc. — Forestry. Forestry Reserve. Forestry Reserve.	71,899.07 92,525.97	4,258,275.97	4,272,148.67 269,855.97 95,822.84	(x) 4,566,212.22 (y) 287,043.23 (z) 143,521.62 (aa) 218,642.33	(x) 4,566,212,22 (y) 287,043,23 (z) 143,521,62 (aa) 218,642,33 (bb) 352,418,87 (w) 71,899,07	35,400.30 (dd) 294,063.55 109,713.23 217,627.82 -0- -0- 309,000.00	9,510.00 88,166.63 4,147.61 26,500.00	25,890.30 602,773.20 205,896.92 105,565.62 191,127.82

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Appropriation	Balance Forwarded From 1958–1959	Plus Revenue 1959–1960	Minus Disburse- ments 1959–1960	Plus Transfers 1959–1960	Minus Transfers 1959–1960	Cash Balance Forwarded To 1960–1961	Minus Un- liquidated Encum- brances	Unencum- bered Balance Available for 1960-1961
Federal Aid—Clarke-McNary Federal Aid—Soil Bank	-0- 37,550.02	446,818.87			(v) 446,818.87	-0- 37,550.02	951.00	-0- 36,599.02
Federal Aid—Pittman-Robertson and Dingell-Johnson Boat Registration and Enforcement.	-0- -0-	471,687.13 431,989.15	93,842.80		(a) 471,687.13	338,146.35		338,146.35
Claims—1959 Session Cancelled Drafts Insurance Loss	-0- 2,492.13 12,011.18	35,098.00 4,258.65	9,328.49 34,392.25 7,576.47	(u) 9,328.49	(e) 417.04	(ee) 2,780.84 8,693.36	76.82	2,780.84 8,616.54
	\$3,786,699.83	\$12,591,257.22	\$13,190,738.79	\$ 15,167,815.63	\$ 15,167,815.63	\$ 3,187,218.26	\$ 454,479.15	\$2,732,739.11

CONSERVATION FUND

Footnotes

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(a) $ 258,937.34 and $212,749.79 transferred to Fish, Game and Parks and Public Hunting and Fishing Grounds. Sportsmen's Licenses respectively from Federal Aid—Pittman-Robertson
and Dingell-Johnson.

(b) $ 386, 633. 04 is prior year Fish and Game Operations balance which reverts to Fish, Game and Parks Appropriation.

(c) $ 7,543. 63 is prior year Recreational Advertising balance which reverts to Fish, Game and Parks Appropriation.

(d) $ 4, 180. 13 is prior year State Parks balance which reverts to Fish, Game and Parks Appropriation.

(e) $ 417.04 consists of cancelled drafts over six years old which revert to Fish, Game and Parks Appropriation.

(f) $ 6, 370, 980. 62 transferred from Fish, Game and Parks to Fish and Game Operations as 1959-60 Appropriation.

(g) $ 35,000.00 transferred from Fish, Game and Parks to Lake Classification.

(h) $ 60,000.00 transferred from Fish, Game and Parks to Warm Water Fish Hatcheries Appropriation.

(i) $ 125,000.00 transferred from Fish, Game and Parks to Warm Water Fish Hatcheries Appropriation.

(i) $ 9,500.00 transferred from Fish, Game and Parks to Oxoserving Wildlife as 1959-60 Appropriation.

(k) $ 38,730.35 transferred from Fish, Game and Parks to Conserving Wildlife as 1959-60 Appropriation.

(k) $ 38,730.35 transferred from Fish, Game and Parks to Water Pollution Costs as 1959-60 Appropriation.

(g) $ 6,000.00 transferred from Fish, Game and Parks to Water Regulatory Board as 1959-60 Appropriation.

(g) $ 40,000.00 transferred from Fish, Game and Parks to Recreational Advertising as 1959-60 Appropriation.

(g) $ 40,000.00 transferred from Fish, Game and Parks to Recreational Advertising as 1959-60 Appropriation.

(p) $ 1,083.54 transferred from Fish, Game and Parks to Recreational Advertising as 1959-60 Appropriation.

(p) $ 653,322.78 transferred from Fish, Game and Parks to Bear and Deer Damage as 1959-60 Appropriation.

(p) $ 653,322.78 transferred from Fish, Game and Parks to Bear and Deer Damage as 1959-60 Appropriation.

(p) $ 448,681.88 7 transferred from Fish, Game and Parks to Boolof Tax on State Hunting Grounds as 1959-60 sum sufficient Appropriation.

(g) $ 287,043.23 transferred from Fish, Game and Parks to Damage Claims Approp
   and Dingell-Johnson.
                       $ 386,633.04 is prior year Fish and Game Operations balance which reverts to Fish, Game and Parks Appropriation.
       (dd) Balance reverts to Forestry Appropriation.

(ee) Items over six years old totalling $620.61 will revert to Fish, Game and Parks Appropriation.
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BEGINNING AND ENDING BALANCES AND TRANSACTIONS OF THE OVER-ALL CONSERVATION DEPARTMENT FOR THE FISCAL YEAR 1959–1960 (Cont'd)

GENERAL FUND

Appropriation	Balance Forwarded From 1958–1959	Plus Revenue 1959–1960	Minus Disburse- ments 1959–1960	Plus Transfers 1959–1960	Minus Transfers 1959-1960	Cash Balance Forwarded To 1960-1961	Minus Un- liquidated Encum- brances	Unencum- bered Balance Available for 1960-1961
GENERAL FUND—LAPSING Forest Crop Administration. Forest Crop Aid. Forest Crop Severance Tax Forest Crop Withdrawals.	-0- -0- -0-	\$ 4,736.68 251,283.38 63,376.12 1,655.44	\$ 4,736.68 251,283.38 7,981.09 1,410.56			-0- -0- \$ 55,395.031 244.881		-0- -0- \$ 55,395.03 244.88
TOTAL GENERAL FUND—LAPSING	-0-	\$ 321,051.62	\$ 265,411.71			\$ 55,639.911		\$ 55,639.91
GENERAL FUND—NON-LAPSING Capital Improvements—State Parks Blue Mound State Park	85,609.32 —0—	\$ 30,000.00	\$ 15,286.83 30,000.00			\$ 70,322.49 -0-	\$ 3,507.58	
TOTAL GENERAL FUND—NON-LAPSING\$	85,609.32	\$ 30,000.00	\$ 45,286.83			\$ 70,322.49	\$ 3,507.58	\$ 66,814.91
		REFORE	STATION F	UND				,
REFORESTATION FUND	236,606.01	\$ 147,006.03	\$ 313,522.69	\$.85	\$.85	\$ 70,090.20 -0-	\$ 60,970.86	\$ 9,119.34 —0—
TOTAL REFORESTATION FUND\$	236,606.86	\$ 147,006.03	\$ 313,522.69	\$.85	\$.85	\$ 70,090.20	\$ 60,970.86	\$ 9,119.34
		WARDEN	PENSION	FUND				,
	496,530.21					\$ 536,362.85		\$ 536.362.85
	496,530.21	\$ 103,590.98	\$ 63,758.34			\$ 536,362.85		\$ 536,362.85
GRAND TOTAL CONSERVATION DEPARTMENT \$,605,446.22	\$13,192,905.85	\$13,878,718.36	\$ 15,167,816.48	\$ 15,167,816.48	\$ 3,919,633,712		\$3,400,676.122

 $^{^1\,\}rm Non-appropriated$ Revenue—reverts to General Fund. $^2\,\rm Less~\$55,639.91$ —See Item No. 1 above.

CONSERVATION DEPARTMENT REVENUE

	Net Revenue 1959-60
00000 FOREST CROP	
Forest Crop Taxes 76200 1/5 Severance Tax, County 76210 100 Percent Severance Tax, PP 76220 Wikh Jamel Painett 76230	\$ 41,975.84
1/5 Severance Tax, County 1/0 December 1 Severance Tay PP 76296	21,400.28
Withdrawal, Private76230	1,655.44
William III	
	\$ 65,031.56 *
	\$ 65,031.56
70000 FISH AND GAME FUND	
Transfers from General Fund	
Transfers from General Fund—Parks 90911	\$ 200,000.00
Transfers from General Fund—Parks 90911 Transfers from General Fund—Recreational Advertising 90912	103,000.00
Transfers from Highway Fund—Recreational Advertising 90921	150,000.00
	\$ 453,000.00 *
Fees	
Warden and Witness Fees 91000	\$ 5,809.39
Waluch and Williams I Co.	0,000.00
	\$ 5,809.39 *
20 - 21 H 2 H 2 H 2 H 2 H 2 H 2 H 2 H 2 H 2	
Fishing Licenses, Sportsmen's 92100 Fish Shipping Coupons 92111	100.00
Fish Shipping Coupons	\$ 163.90
Nonresident 15-day Fishing Licenses 9212	303,705.55
Nonresident 15-day Fishing Licenses 92122	1 100 000 05
Nonresident 15-day Fishing Licenses 9212 Nonresident 15-day Fishing Licenses 92122 Nonresident Fishing Licenses 92133 Nonresident Fishing Licenses 92131	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Resident Fishing Licenses 92141	1 119 212 07
Resident Fishing Licenses 92142	1,119,212.07 9,475.00
Tester I ming Metaso	
	\$2,633,696.37 *
Fishing Licenses—Commercial 92200 Great Lakes Commercial Fishing—Resident 92220 Great Lakes Commercial Fishing—Nonresident 92230 Bait Dealer Licenses—A 92241 Bait Dealer Licenses—B 92242 Mississippi River Commerical Fishing Licenses 9225 Mississippi River Commerical Fishing Tags 9225 Private Fish Hatchery 9226 Slat Net Licenses 9227	7 260 00
Great Lakes Commercial Fishing—Resident 9223	7,360.00
Reit Dader Lienres—A 9294	2,275.00
Bait Dealer Licenses—B 9224:	6,255.00
Mississippi River Commercial Fishing Licenses 9225	2,946.00
Mississippi River Commercial Fishing Tags 92255	965.75
Private Fish Hatchery 92260	3,685.00
Slat Net Licenses 9227 Slat Net Tags 9227	1,209.00
Slat Net Tags 9227:	1,056.00
Wholesale Fish Dealer 92280	1,925.00
Trammel Net Licenses 92290	380.00
	\$ 31,416.75 *
M: 11 Fi-Li I i T 00000	
Miscellaneous Fishing Licenses and Tag 3	\$ 1,339.45
Ciona Licanasa 99391	264.00
Clico Licenses 9233 Set Line Licenses 9233 Set Line Tags 9234 Sturgeon Tags 9234	1,915.90
Set Line Tags 9233:	1,384.35
Sturgeon Tags 92340	6,748.50
Bait Net92350	6.00
	\$ 11,658.20 *
Game Licenses—Hunting 92400	\$ 784,718.25
Residential Hunting—Small Game	9 977 00
Residential Hunting—Small Game Decidential Hunting—Bing Come 0242	1 074 546 55
Residential Hunting—Small Game 92412	\$ 784,718.25 8,877.00 1,074,546.55 22,076.00
Comp Door 9242	260,527.15
Camp Deti	36,500.00
Camp Deer 92426	
Camp Deer	25,962.90
Camp Deer. 9242t Nonresident Hunting—Small Game 92431 Nonresident Hunting—Small Game 9243	25,962.90 26,150.00
Camp Deer. 9242t Nonresident Hunting—Small Game 9243t Nonresident Hunting—Small Game 9243t Nonresident Hunting—Big Game 9244t	25,962.90 26,150.00 66,988.25
Camp Deer. 9242t Nonresident Hunting—Small Game 9243; Nonresident Hunting—Small Game 9243; Nonresident Hunting—Big Game 9244; Nonresident Hunting—Big Game 9244;	25,962.90 2 26,150.00 66,988.25 77,000.00
Camp Deer 9242t Nonresident Hunting—Small Game 9243t Nonresident Hunting—Small Game 924st Nonresident Hunting—Big Game 9244t Nonresident Hunting—Big Game 924t Nonresident Hunting—Archers 9245	25,962.90 2 26,150.00 66,988.25 77,000.00
Nonresident Hunting—Small Game 9243 Nonresident Hunting—Small Game 9243 Nonresident Hunting—Big Game 9244 Nonresident Hunting—Big Game 9244 Nonresident Hunting—Archers 9245 Nonresident Hunting—Archers 9245	25,962.90 26,150.00 1 66,988.25 27,000.00 1 13,622.40 2 31,730.00
Camp Deer. 9242t Nonresident Hunting—Small Game 92431 Nonresident Hunting—Small Game 92431 Nonresident Hunting—Big Game 92441 Nonresident Hunting—Big Game 92441 Nonresident Hunting—Archers 92451 Nonresident Hunting—Archers 92451 Nonresident Shooting Preserve Hunting Licenses 92461 Nonresident Shooting Preserve Hunting Licenses 92461	25,962.90 26,150.00 1 66,988.25 27,000.00 1 13,622.40 2 31,730.00

Shoeting Preserve Licenses 92471 8hooting Preserve Tags 92472 333 40 84472 333 40 84472 333 40 84472 333 40 84472 333 40 84472 333 40 84472 333 40 84472 333 40 84472 333 40 84472 333 40 84472 333 40 84472 333 40 84472 333 40 84472 333 40 84472 333 40 84472 334 40 84472 343 40 84472 343 40 84472 343 40 84472 343 40 84472 343 40 84472 343 40 84472 343 40 84472 34472 344 50 84472 34472			Net Revenue 1959-60
Shooting Preserve Tags	Shoeting Preserve Licenses		000.00
Section	Shooting Preserve Tags. 9247	5	
Section	Settlers Hunting Licenses—Small Game 9248	5	1 152 00
Came Licenses	Settlers Hunting Licenses—Big Game	5	
Tapping Licenses 92511 \$ 6,508.30 182.00		8	2,436,262.40 *
1. 1. 1. 1. 1. 1. 1. 1.	Game Licenses—Trapping 92500		4553
Trap Tags	Trapping Licenses 9251	1 8	
Trap Tags	Tran Tags 0050		10 592 14
Pearwer Pett Tags	Trap Tags 02529		
Parm and Fur Dealer Licenses	Beaver Pelt Tags 92533		
Deer Farm Licenses		8	26,724.64 *
Decad Deer Tags	Farm and Fur Dealer Licenses 92600	-	
Resident Fur Dealers—Class A 92611 320.00	Deer Farm Licenses 92611	8	
Resident Fur Dealers—Class A 92821 1,700.00 Resident Fur Dealer—Class B 92822 500.00 Resident Fur Dealer—Class B 92825 600.00 Fur Auctioneer 92826 600.00 Game Farm Licenses 92825 600.00 Game Farm Licenses 92826 250.00 Game Farm Licenses 92831 1,985.00 Muskrat Farm Licenses 92832 153.40 Muskrat Farm Licenses 92833 15.40 Muskrat Farm Licenses 92831 110.00 Beaver Farm Licenses 92851 110.00 Beaver Farm Tags 92851 110.00 Beaver Farm Tags 92851 110.00 Beaver Farm Tags 92861 10.00 Reaver Farm Tags 92861 10.00 R	Live Deer 1998		
Company	Resident Fur Dealers—Class A 92013		
Comparison	Resident Fur Dealer—Class B		500.00
Came Farm Licenses	Tunerant Fur Duyer		600.00
Game Farm Tags	Game Farm Licenses		
15.40 15.40 16.3	Crame Farm Tags 09096		
Muskrat Farm Tages 92641 1,630.00 10.0	Came Marking Bands 09699	83	
Beaver Farm Licenses 92651 40.06	MUSKIAL PARM Licenses 02041		1,630.00
Description 1	Reguer Form Licenses 92642		
Mink Farm Licenses 92662 1.07	Beaver Farm Tags		
Voluntary Sportsmen's Licenses 92800 \$ 13,366.21 * Voluntary Sportsmen's Licenses 92812 381,195.00 \$ 3,902.50 \$ 465,097.50 * 466,000 * 4	Otter, Raccoon and Skunk Farm Licenses 9266		861.38
Voluntary Sportsmen's Licenses 92800 \$ 13,366.21 * Voluntary Sportsmen's Licenses 92811 381,195.00 \$ 3,902.50 \$ 465,097.50 * 466,000 * 4	Mink Farm Licenses 92662		
Voluntary Sportsmen's Licenses 92800 Voluntary Sportsmen's Licenses 92811 Voluntary Sportsmen's Licenses 92812 Wiscellaneous Licenses and Tags and Permits 92900 Christmas Tree Dealer Licenses 92911 Christmas Tree Dealer Tags 92912 Guide Licenses 92920 Guide Licenses 92930 Scientific Certificates 92930 Scientific Certificates 92950 Managed Goose Hunting Permits 92960 Managed Pheasant Hunting Permits 92980 Other Rents and Rentals 93100 Building and Building Sites 93110 Concession 93120 Land Use 93170 Dother 93170 Exasements 93170 Other 93190 Stagements 93100 Exhibits 93200 Dwelling and Bunk House Rent 93300 Exhibits 93340 Other 93390 \$ 1,66.50 * Activity Services 93340 <tr< td=""><td>Exhibition Licenses 92681</td><td></td><td>400.00</td></tr<>	Exhibition Licenses 92681		400.00
Scientific Certificates 92940 60.00	Miscellaneous Licenses and Tags and Permits 92900 Christmas Tree Dealer Licenses 92911 Christmas Tree Dealer Tags 92912 Duplicate Licenses 92920 Guide Licenses 92920	\$	465,097.50 * 8,060.00 29.76 2,776.15
Solution	Taxidermist Licenses 92940 Managed Goose Hunting Permits		60.00 545.00 18,639.00
Building and Building Sites. 93110 \$ 1,824.96 Concession. 93120 \$ 1,353.11 678.60 Easements. 93170 Other 93190 \$ 151.00 384.00 \$ 4,391.67 * Employee Rents and Services. 93200 \$ 11,166.50 *		\$	
Land Use	Other Rents and Rentals 93100		
Easements	Concession 93110	8	
Supervision and Inspection Services Permit Supervising Outlying Water 93400 Supervision Services 93	Land Use93120		
Supervision and Inspection Services Permit Supervising Outlying Water 93400 Supervision Services 93	Easements 93170	1	
Employee Rents and Services	Other93190	_	
Supervision and Inspection Services 93400 11,166.50 11,166	F P 10 .	8	4,391.67 *
* \$ 11,166.50 * Exhibits	Dwelling and Bunk House Rent 93210	8	11.166.50
Activity Services 93300 Exhibits 93340 Other 93390 \$ 1,609.25 2,917.24 \$ 4,526.49 * Supervision and Inspection Services 93400 Permit Supervising Outlying Water 93420 Inspections 93440 Mileage 93450 78.30		-	
Supervision and Inspection Services 93400	Activity Services	0	11,100.50
Supervision and Inspection Services 93400	Exhibits93300	8	1.609 25
Supervision and Inspection Services 93400 Permit Supervising Outlying Water 93420 Inspections 93440 Mileage 93450 78.30	Other93390	10	2,917.24
Permit Supervising Outlying Water		\$	4,526.49 *
185 Pectons 93440 583.95 Mileage 93450 78.30	Supervision and Inspection Services 93400	1	
93450 78.30	Permit Supervising Outlying Water 02400	8	324.00
	Mileage		583.95 78.30
		8	986.25 *

		Net Revenue 1959-60	
Convenience Services .93500 Sale of Resources .94100 Timber, Other .94110 Rough Fish Sales .94131 Rough Fish Commissions .94132 Fish, Game and Fur .94160 Game Sold to Farms .94170 Other .94190 94190 .94190	8	10,450.43 129,670.38 2,620.69 14,699.98 142.50 2,982.30	
*	\$	160,566.28	
Sale of Confiscations and Seizures 94200 Baby Trout and Whitefish 94210 Deer 94220 Other Fish and Game 94230 Equipment 94250 Other 94290	\$	643.93 19,690.08 1,202.05 103.17 58.00	
	8	21,697.23	
Sale of Products. 94300 Agricultural Produce. 94320 Game Birds, Animals and Fur. 94350 Publications. 94371 Photos. 94372 Lists. 94380 Other. 94390	\$	197.86 762.15 369.30 224.53 2,545.29 54.00	
	8	4,153.13	NAME OF THE PERSON
Sale of Equipment 94400 Propagation 94420 Law Enforcement 94430 Flexible Rules 94440 Game Farm Pliers 94450 Other 94490	\$	352.50 500.00 76.25 90.00 545.34	
	\$	1,564.09	
Sale of Other Items 94500 Fish Boxes 94510 Ice 94520 Buildings and Structures 94530 Sale of Salvage and Scrap 94540 Other 94590	\$	$\begin{array}{c} 767.00 \\ 30.00 \\ 5,520.21 \\ 341.45 \\ 57.30 \end{array}$	
	\$	6,715.96	
Sale of Signs 94700 Fur Farm 94710 Private Fish Hatchery 94720 Shooting Preserve 94730	\$	39.00 51.00 481.70	
	\$	571.70	
Transfers from Federal Aid—Pittman–Robertson95291	_	235,383.93	
	8	235,383.93	
Transfers from Federal Aid—Dingell-Johnson95391	\$	23,553.41	
	\$	23,553.41	
Other Revenue 97000 Prepayment of Taxes 97050 Refund of Prior Year Expenses 97070 Other 97090	\$	5,579.63 791.22 555.53	
	8	6,926.38	
Bond Interest 97100			
Other Investment Income	8	118,499.82	
	100		1

		Net Revenu 1959-60	ie
Sale of Resources			
35 Timber, Other 9. 35 Moss 9.	\$110 \$120	11,399.50 1,718.00	0
Sale of Other Items	8	13,117.50	0
Fees. 91000 76 Campsite Fees. 9 76 Golf Fees. 9	1010 8	109,649.85 28,060.70	5
	8	137,710.55	5
Other Rents and Rentals 93100 76 Building and Building Sites 98 96 Concession 95 76 Sewer and Water 98 76 Land Use 98 76 Other 98	3120 3130 3150	9,868.80 27,954.87 1,424.65 800.00 312.35	7 5 0
	8	40,360.67	7
Employee Rents and Service 93200 76 Dwelling and Bunk House Rent 93	210 \$	3,598.34	4
	8	3,598.34	
Activity Services 93300			
76 Exhibits 93300 76 Other 93	340 390 \$	394.64 7.15	
	8	401.79	, :
Convenience Services 93500 76 Electrical Charges, Campers 93 76 State Roads 93 76 Other 93	530 540 590	3,751.55 7,729.02 235.30	2
	8	11,715.87	
Sale of Resources 94100 76 Timber, Other 94 76 Other 94	110 190	528.00 50.00	
	8	578.00	, :
Sale of Products 94300 76 Other 94	390 \$	38.00	
	8	38.00	- 1
Supervision and Inspection Services 94400		00.00	
76 Other	190 \$	38.00	
	8	38.00	*
Sale of Other Items 94500 76 Sale of Salvage and Scrap 941 76 Other 941	540 \$	81.90 12.93	
	8	94.83	-
Other Revenue 97000 76 Prepayment of Taxes 97 76 Refund of Prior Year Expanses 97			
76 Refund of Prior Year Expenses 97 76 Other 97	070	$ \begin{array}{r} 38.52 \\ 15.00 \\ 85,106.40 \end{array} $	
	\$	85,159.92	*
	87	,006,341.68	
00 WARDEN PENSION FUND Pension Contributions 90800			
Pension Contributions 90800 Employee Contributions 908 Municipal Contributions 908			

		Net Revenue 1959-60
Bond Interest 97100 Bond Interest 97100	8	18,625.30
	8	18,625.30
Bonds—Discount Earned98100		
Investment Income 99000 Premium on Investment Purchases 99000	\$	528.50-
	8	528.50-
Loss on Sale of Bonds	8	662.12-
2000 011 0412 01 201001	8	662.12-
	8	103,590.98
00 GIFTS AND DONATIONS	-	
Gifts and Donations 96000 Pittman-Robertson 96001 Pittman-Robertson Reimbursements 96013 Mead Wildlife Area 96014 Horicon Marsh Development 96050 Eau Galle 96070 Caldron Falls Flowage 96073 Special Deer Research 96076 Chippewa County Wildlife Development 96076 High Cliff Forest Park 96081 Kettle Moraine Forest 96081 Eagle Scout Forestry Camp 96082 Miscellaneous Gifts 96099	8	$\begin{array}{c} 32,439.82 \\ 2,706.14 \\ 3,000.00 \\ 450.00 \\ 170.00 \\ 10,000.00 \\ 25.00 \\ 450.00 \\ 631.00 \\ 737.00 \\ 2,000.00 \\ 77.00 \\ \end{array}$
	\$	52,685.96
	\$	52,685.96
500 FORESTRY FUND 90800 Special Revenue 90800 Fire Suppression Tax Levy 90830	\$	1,959.77
Fees 91000 Campsite Fees 91010	8	56,841.19
Campaige Pees	8	56,841.19
Other Rents and Rentals 93100 Building and Building Site 93110 Concession 93120 Land Use 93150 Contact Rental 93160 Easements 93170	8	1,113.75 2,971.29 2,390.00 414.48 2.00
	\$	6,891.52
Employee Rents and Services 93200 Dwelling and Bunk House Rent 93210 Mess Hall 93240	\$	17,870.11 2,248.55
	\$	20,118.66
Activity Services. 93300 Fire Suppression, County. 93310 Fire Suppression, Other. 93320 Pest Control. 93350 Other. 93390	\$	4,296.58 9,690.15 404.84 710.80
	\$	15,102.37
Convenience Services 93500 Raising and Moving Wires 93510 Electrical Charges, Campers 93530 State Roads 93540 Other 93590	\$	$\substack{6.58\\1,159.01\\11,481.36\\3.00}$
Ctner99990	8	12,649.95

	Net Revenue 1959–60
Sale of Resources 94100 Timber, Other 9411 Moss 9412 Other 9419	60.00
	\$ 9,886.79
Sale of Products 94300 Nursery Stock 9431 Agricultural Produce 9432 Maps 9436 Publications 9437 Other 9439	67.00 680.50 1 64.95
	\$ 438,445.73
Sale of Equipment 94400 Fire Fighting 9441 Other 9449	0 \$ 280.25 700.00
	\$ 980.25 *
Sale of Other Items. 94500 Buildings and Structures. 94530 Sale of Salvage and Scrap 9454 Other. 9459	\$ 2,623.85 1,664.24 80.40
	\$ 4,368.49 *
Transfers from Federal Aid—Clarke-McNary and Norris-Doxey9519	\$ 446,818.87
	\$ 446,818.87 *
Forest Crop Taxes 96200 Severance 4/5 96210 Withdrawal 96220	\$ 167,903.59 1,708.49
	\$ 169,612.08 *
Forestry Tax—Prior Year	\$ 76,296.92
	\$ 76,296.92 *
Forestry Tax—Current Year	\$3,504,429.13
	\$3,504,429.13 *
Other Revenue 97000 Telephone Line Damage 97060 Refund of Prior Year Expenses 97070 Microwave Communications 97080 Other 97090	25,000.00
	\$ 59,306.88—
	\$4,705,094.84
000 PUBLIC HUNTING AND FISHING GROUNDS—SPORTSMEN'S LICENSES Voluntary Sportsmen's Licenses 92800 Voluntary Sportsmen's Licenses 92811 Voluntary Sportsmen's Licenses 92812	
Transfers from Federal Aid—Pittman-Robertson	\$ 208,550.01
	\$ 208,550.01 *
Transfers from Federal Aid—Dingell-Johnson95392	\$ 4,199.78
	\$ 4,199.78 *

		Net Revenue 1959-60
Refund of Prior Year Expenses 97000 Refund of Prior Year Expenses 97070	8	18.90
Retund of Fron Tear Expenses	8	18.90
	-	
	\$	355,788.94
00 FEDERAL AID—CLARKE-McNARY Federal Aid—Clarke-McNary and Norris-Doxey		
Cooperative Fire Fighting 95110 Cooperative Farm Forestry 95130	\$	320,646.95 78,017.00
Watershed 95150		45,679.92
Watershed—Public Law 566		2,475.00
Transfers to Forestry Fund 95191		446,818.87-
00 FEDERAL AID—PITTMAN-ROBERTSON AND DINGELL-JOHNSON Federal Aid—Pittman-Robertson		
Federal Aid—Pittman-Robertson 95211	s	29,120.76
Farm Game and Range Research 95212	1	22,351.51
Forest Game and Range Research 95213	1	44,540.81
Game and Range Survey Research 95214 Pathology Research 95215 Wetland Game and Range Research 95216 Regional Development—N.W. Area 95220 Regional Development—N.E. Area 95221 Regional Development—E.C. Area 95223 Regional Development—S. Area 95224 Forest Habitat Development—N.W. Area 95225 Forest Habitat Development—N.E. Area 95226 Forest Habitat Development—W.C. Area 95226 Land Acquisition 95236		14,197.69 7,819.95
Wetland Game and Range Research 95216		24.923.33
Regional Development—N.W. Area		1,260.58
Regional Development—N.E. Area 95221 Regional Development—E.C. Area 95223		2,928.71 $3,298.62$
Regional Development—S. Area		3,142.14
Forest Habitat Development—N.W. Area95225		16,534.27
Forest Habitat Development—N.E. Area 95226		20,999.63 3,342.77
Land Acquisition 95236	1	12,172.85 208,550.01
Land Acquisition. 95236 Land Acquisition, Vol. 95237 Crex Meadows Development 95241 Option		208,550.01
Crex Meadows Development 95242		4,140.57 7,385.10
Germania Marsh Development	1	2,556.13
Horicon Marsh Development 95244		6,429.37
French Creek Development 95245 Powell Marsh Development 95246	1	720.00 4,403.69
Mazomanie Development 95248		445.17
Prairie Chicken Development 95249		1,541.78
Yellowstone Development 95254 Transfers to Fish and Game 95291		1,128.50 235,383.93-
Transfers to Fish and Game95291 Transfers to Public Hunting and Fishing Grounds—Sportsmen's95292		208,550.01-
Federal Aid—Dingell-Johnson 95300		
Federal Aid — Dingell Johnson 95300 Coordination 95310 Habitat Management — N.W. Area 95331 Habitat Management — N.E. Area 95332 Habitat Management — W.C. Area 95333 Habitat Management — E.C. Area 95334 Habitat Management — S. Area 95335 Land Acquisition 95350	\$	9,706.91
Habitat Management—N.W. Area		2,766.47 2,766.47 2,766.47
Habitat Management—W.C. Area	1	2,766.47
Habitat Management—E.C. Area95334		2,766.47
Habitat Management—S. Area		2,766.49 14.13
Land Acquisition, Vol. 95351	1	4,199.78
Transfers to Fish and Game		23,553.41- 4,199.78-
		4,199.78
Transfers to Public Hunting and Fishing Grounds—Sportsmen's 95392		
Transfers to Public Hunting and Fishing Grounds—Sportsmen's		
Transfers to Public Hunting and Fishing Grounds—Sportsmen's	8	386 658 00
Transfers to Public Hunting and Fishing Grounds—Sportsmen's	\$	386,658.00 23,210.00
Transfers to Public Hunting and Fishing Grounds—Sportsmen's 99392	\$	23,210.00 18,947.00
Transfers to Public Hunting and Fishing Grounds—Sportsmen's 99392	\$	23,210.00 18,947.00 2,103.00
Transfers to Public Hunting and Fishing Grounds—Sportsmen's 99392	\$	23,210.00 18,947.00
Transfers to Public Hunting and Fishing Grounds—Sportsmen's 99392	s	23,210.00 18,947.00 2,103.00 880.00 190.00
Transfers to Public Hunting and Fishing Grounds—Sportsmen's 95392 200 BOAT REGISTRATION 92700 Boat Registration 92710 Fleet Registration 92713 Fleet Registration 92714 Dealer Registration 92715 Transfer Registration 92718 Duplicate Registration 92719	_	23,210.00 18,947.00 2,103.00 880.00
Transfers to Public Hunting and Fishing Grounds—Sportsmen's 99392	_	23,210.00 18,947.00 2,103.00 880.00 190.00
Transfers to Public Hunting and Fishing Grounds—Sportsmen's 95392 200 BOAT REGISTRATION 92700 Boat Registration 92710 Fleet Registration 92713 Fleet Registration 92714 Dealer Registration 92715 Transfer Registration 92718 Duplicate Registration 92719	8	23,210.00 18,947.00 2,103.00 880.00 190.00

	_	Net Revenue 1959-60
98000 REFORESTATION FUND Other Rents and Rentals		4,229,86 2,731.00 70.00
Activity Services 93300 Other 93390	8 8	15.00
Sale of Resources 94100 American Legion Timber 94111 Brule River Timber 94112 Flambeau River Timber 94114 Kettle Morsine Timber 94115 Northern Highland Timber 94116 Black River Timber 94117 Moss 94120 Land 94140	\$	
Sale of Equipment 94400 Other 94490	8	1,435.00 1,435.00 *
Other Revenue 97000 Prepayment of Taxes 97050 Other 97090	8	1,380.03 21.90
Other Investment Income 97900 Other Investment Income 97900	\$ \$ \$	1,401.93 * 7,181.97 7,181.97 * 147,006.03
9500 CANCELLED DRAFTS Other Revenue	s	35,098.00
	\$	35,098.00 * 35,098.00
9900 INSURANCE LOSS Other Revenue	\$	4,258.65
	\$	4,258.65 *

CONSERVATION DEPARTMENT DISBURSEMENTS

Conservation Fund

	Personal Services	Travel Expense	Materials, Services and Supplies	Capital Outlay	Special Purpose	Total 1959–1960 Disbursements
Bayfield Brule B	49,456.57	\$ 11,249.95 104.87 54.25 8.95 110.95 138.25 11,620.38 128.76 206.00 162.68 171.30 10,993.38 227.20 14,148.58 1,122.47 2,294.21 1,839.86 254.90 12,666.67 1,731.54 208.78 1,391.15 1,183.68 3,877.76 5,972.01 1,299.89	9,603,92 6,725,00 5,017,24 14,376,71 14,763,44 34,211,14 6,889,82 6,610,12 6,721,94 9,204,65 21,777,45 612,83 28,273,85 9,918,30 958,14 8,869,31 23,972,00 23,760,85 8,240,95 8,240,95 8,570,12 6,901,45 50,710,60 5,349,71 7,157,78 7,173,12 3,45	\$ 16,936.10 627.08 590.69 109.99 335.92 94,963.84 22,330.28 317.03 256.87 1.71 941.54 26,487.08 324.29 30,234.53 773.43 398.14 2,348.07 3,319.97 10,705.58 8,400.53 535.68 3,319.83		\$ 215,084.74 29,726.70 18,658.94 16,288.18 42,069.62 134,566.21 219,097.09 20,617.76 18,224.99 17,871.33 20,880.78 172,627.46 10,452,32 205,598.58 55,245.17 16,013.81 51,298.54 67,955.40 198,484.64 60,300.32 32,599.58 49,115.62 50,710.60 27,643.47 44,660.96 98,163.39 17,409.84 109,128.46 64,455.65 77,587.88
Distribution of Retirement, etc			\$ 16,057.07		\$103,873.75	\$ 119,930.82

	Personal Services	Travel Expense	Materials, Services and Supplies	Capital Outlay	Special Purpose	Total 1959–1960 Disbursements
Game Management NWA. NEA. WCA. ECA. P-R Germania Marsh Development	\$ 105,508.15 117,115.55 129,361.45 115,985.15	\$ 15,968.88 20,724.11 13,579.66 18,479.97	\$ 39,006.49 41,656.67 33,447.80 36,114.49 3,016.95	\$ 11,973.15 31,896.27 11,369.43 10,781.22 30,866.70		\$ 172,456.67 211,392.60 187,758.34 181,360.83 33,883.65
SA P-R Farm Game and Range Research P-R Forest Game and Range Research P-R Game and Range Survey P-R Pathology Research P-R Wetland Game and Range Research P-R Coordination Game and Fur Farm	$16,448.14 \\ 8,739.00 \\ 23,251.64 \\ 30,665.01 \\ 165.685.26$	$19,147.51\\4,446.76\\8,494.36\\2,290.28\\1,124.62\\3,504.94\\2,735.26\\2,606.31$	39,859.13 5,582.25 5,278.84 1,262.73 704.01 2,114.84 5,504.26 108,833.33	11,140.09 1,393.66 324.27 532.14 149.93 793.37 339.08 1,207.99		182,241.50 $39,679.47$ $55,314.53$ $20,533.29$ $10,717.56$ $29,664.79$ $39,243.61$ $278,332.89$
P-R Land Acquisition		6,772.77 *\$119,875.43 *	8.00 25,034.76 \$ 347,424.55	80,687.43 8,410.99 6,216.68 \$ 208,082.40		80,695,43 8,410,99 95,474.16 \$ 1,627,160.31
Distribution of Retirement, etc	\$ 951,777.93	* \$119,875.43 *	\$ 13,962.27 \$ 361,386.82	\$ 208,082.40		\$ 89,254.77 \$ 1,716,415.08
aw Enforcement	\$ 181,488,26 164,577.79 167,035.58 176,448.70 156,280.53	\$ 65,046.61 62,631.18 58,491.14 63,913.58 50,443.94 13,352.75	\$ 5,764.64 4,861.52 4,038.80 7,784.37 4,430.79 12,997.32 19,558.94	\$ 2,738.76 2,896.35 1,713.94 2,599.52 1,967.31 36.04 21,763.00	10,292.00	\$ 255,038.27 234,966.84 231,279.46 250,746.17 213,122.57 48,719.34 104,700.34
Distribution of Retirement, etc	\$ 931,542.49	\$313,879.20 *	\$ 59,436.38 80,336.01	\$ 33,714.92	\$ 52,679.13	\$ 1,338,572.99 \$ 133,015.14
General Administration	\$ 931,542.49	*\$313,879.20 *	\$ 139,772.39 °	\$ 33,714.92		\$ 1,471,588.13

		Personal Services			Travel Expense		Materials, Services and Supplies		Capital Outlay	Special Purpose		Total 1959–1960 Disbursements
inance NWA Business Management NEA Business Management WCA Business Management ECA Business Management SA Business Management Accounting Cashier License Sales Office Rent Procurement and Property Administration	\$	3,375.34 3,304.55 9,349.00 14,904.00 21,156.00 75,440.57 5,499.00 37,344.57	\$	1	44.74 143.67 85.01 ,009.13 2.05 ,454.10 623.59 626.76	s	1,936,39 4,342,93 3,873,21 3,249,61 2,631,64 23,497,62 142,53 77,829,47 48,966,96 372,87 812,97	8	28.90 315.10 30.52 96.00 516.16		\$	5,311.73 7,676.38 13,582.05 18,327.80 23.968.65 100,463.48 5,643.58 116,628.14 48,966.96 13,321.64 17,443.83
Distribution of Retirement, etc		198,361.43	-		,989.05	* \$	772.96	* \$		\$ 15,691.87 \$ 15,691.87	\$ \$	371,334.24 16,464.83 387,799.07
Engineering Engineering Rivers Survey Hydrology Research		198,361.43		8 9	3,989.05 9,342.41 2,192.96	8	62,905.68— 132.85 12,000.00	ľ		13,091.07	\$	54,567.57 2,997.88 12,000.00
Distribution of Retirement, etc.	\$	107,010.09	* \$	8 11	1,535.37	* \$	50,772.83— 391.47	* \$	1,792.82	\$ 8,465.16	\$	69,565.4 8,856.6
	8	107,010.09	* 5	8 11	1,535.37	* \$	50,381.36—	* \$	1,792.82	\$ 8,465.16	* 8	78,422.0
Information and Education Clubs Conservation Congress Newspaper Service Publications Exhibits Schools T-V-Radio Visual Aids Administration.	8	7,239.00 6,342.00 13,164.00 16,567.30 20,439.00 7,299.00 22,116.00 382.50		400	1,739.96 3,572.51 895.37 293.72 4,113.79 3,436.53 900.42 2,903.55 649.61	8	315.20 1,626.66 2,194.68 67,350.87 4,437.81 1,005.91 7,467.36 10,323.16		888.00— 9.10 288.14 3,150.27		8	9,294.10 5,199.1' 9,432.0 80,808.5 24,230.9 24,890.5 15,954.9 38,492.9 1,556.1

	Personal Services	Travel Expense		Materials, Services and Supplies	Capital Outlay	Special Purpose	Total 1959–1960 Disbursements
Distribution of Retirement, etc			\$	630.35		\$ 7,400.29	\$ 8,030.64
	\$ 93,548.80	* \$ 18,505.46 *	8	95,876.01	*\$ 2,559.51	* \$ 7,400.29 *	\$ 217,890.07 *
Clerical Transfers from Forestry Clerical Transfers	\$ 128,582.00		8	75,950.00	\$ 17,105.00		\$ 221,637.00
Figure 7	\$ 128,582.00	*	8	75,950.00	* \$ 17,105.00	**	
Finance Transfers to Forestry Finance Transfers		\$ 7,000.00—	\$	836,605.99			\$ 170,394.00—
State Employee Retirement Fund	~	_*\$ 7,000.00—*	8	163,394.00-	*	**	\$ 170,394.00—*
State Employee Retirement Fund			8	447.18			\$ 447.18
Distributed to Operating Divisions		-**	\$	447.18 447.18—	*	*	\$ 447.18 * \$ 447.18—
TOTAL FISH AND GAME OPERATIONS	\$3,708,054.30	\$548,661.19	\$1	,011,650.28	\$ 678,057.81	\$263,402.70	\$ 6,209,826.28
AKE CLASSIFICATION	\$ 15,836.19	\$ 965.65	8	1,060.94	\$ 9,976.97		\$ 27,839.75
	\$ 15,836.19	*\$ 965.65 *	\$	1,060.94	*\$ 9,976.97	**	\$ 27,839.75 *
VARM WATER FISH HATCHERY			\$	3,039.50	\$ 26,488.74		\$ 29,528.24
		_**	\$	3,039.50	*\$ 26,488.74 *	*	\$ 29,528.24 *
ONSERVING WILDLIFE.						\$ 9,500.00	\$ 9,500.00
		_**			*	\$ 9,500.00 *	\$ 9,500.00 *
ATER POLLUTION COMMITTEE						\$ 38,730.35	\$ 38,730.35
		**			**	\$ 38,730.35 *	\$ 38,730.35 *

	Personal Services	Travel Expense	Materials, Services and Supplies	Capital Outlay	Special Purpose	Total 1959-1960 Disbursements
WATER REGULATORY BOARD					\$ 6,000.00	6,000.00
,	k		*	*	\$ 6,000.00 *\$	6,000.00
TOPOGRAPHIC MAP					\$ 5,000.00 \$	5,000.00
	*		*	*	\$ 5,000.00 * \$	5,000.00
RETIREMENT, ETC., FISH AND GAME Social Security Unemployment Compensation Wisconsin Retirement Workmen's Compensation Awards Conservation Wardens' Pension Group Health Insurance			\$ 35,454,30 5,237,64 67,000,00 14,103,36		\$ 98,574.93 198,488.92	98,574.93 35,454.30 198,488.92 5,237.64 67,000.00 14,103.36
Distributed to Operating Divisions		*	* \$ 121,795.30 * \$ -121,795.30	*	\$297,063.85 * \$ \$-297,063.85 \$	
RECREATIONAL ADVERTISING Recreational Advertising Chicago Office	\$ 25,128.42 20,097.00	\$ 3,005.26 1,986.89	\$ 156,049.30 19,798.63	\$ 4,622.45 2,143.66	\$ 2,051.67 1,786.63	190,857.20 45,812.81
	\$ 45,225.42	* \$ 4,992.25	*\$ 175,847.93 *	\$ 6,766.11 *	\$ 3,838.30 *	236,670.01
RECREATIONAL ADVERTISING— REIMBURSEMENT Reimbursement—Highway Dept. Reimbursement—General Fund					\$ 642.21 441.33	642.21 441.33
		*	* * *	*	* \$ 1,083.54 * \$	1,083.54
BEAR AND DEER DAMAGE Bear Damage Deer Damage			\$ 4,899.78 27,592.54			4,899.78 27,592.54
		*	*\$ 32,492.32 *	*	* *	32,492.32

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	Personal Services	Travel Expense	Materials, Services and Supplies	Capital Outlay	Special Purpose	Total 1959–1960 Disbursements
STATE PARKS Aztalan Brunet Island Copper Falls Cushing Memorial Devils Lake Interstate Lost Dauphin Lucius Woods Ojibwa Pattison Peninsula Potawatomi Rib Mountain Terry Andrae Cooperation—State Historical Society Cooperation—Aztalan Exploration Administration	\$ 2,005.03 13,576.34 20,000.65 1,721.35 188,883.21 30,042.23 460.88 3,067.27 18,283.79 61,768.52 16,189.03 22,904.45 13,911.86 4,000.00 27,114.56	\$ 54.64 189.08 151.10 50.16 2,719.73 495.33 2.10 18.10 98.91 540.64 27.80 475.18 28.30 500.00 3,972.18	\$ 570.85 2.614.97 3.539.43 250.92 29.370.46 4.635.38 1.32.01 1.646.65 4.90.14 16.813.64 2.870.83 7.810.17 3.147.85 2.148.96 4.697.10	\$ 1,665.09 2,894.85 23,254.05 3,428.53 848.25 62.98 1,761.91 19,028.43 3,252.57 5,054.56 718.47 2,484.43 409.49	* **	\$ 2,630.82 18,045.48 26,586.03 2,022.43 38,601.47 592.89 5,564.71 2,147.74 24,834.75 98,151.23 22,340.23 36,244.36 17,806.48 4,500.00 4,633.39 36,193.33
Distribution of Retirement, etc.	***************************************		\$ 10,092.35	01,003.01	\$ 33,661.15	585,122.79 43,753.50
	\$ 425,506.18	\$ 9,323.25 *	\$ 95,522.10 *	\$ 64,863.61	* \$ 33,661.15 *	628,876.29
SCHOOL TAX ON STATE HUNTING GROUNDS					\$ 44,908.99	44,908.99
	*	*			\$ 44,908.99 *	44,908.99
BOUNTIES			\$ 133,471.00		8	133,471.00
	*	*	\$ 133,471.00 *		*	133,471.00
GIFTS AND DONATIONS	\$ 350.00		\$ 14,087.65	\$ 16,968.21		31,405.86
	\$ 350.00 *	*	\$ 14.087.65 *	\$ 16,968.21 *	* 9	31,405.86

	Personal Services	Travel Expense		Materials, Services and Supplies		Capital Outlay	Special Purpose	Total 1959–1960 Disbursements
DRESTRY OPERATIONS								
Forest Protection				440.00	-	10.75		0 000 00
NWA Headquarters	\$ 7,599.00	\$ 1,816.86	\$	149.25	\$	43.75		\$ 9,608.86
NEA Headquarters	7,599.00	1,684.94		370.48		96.05		9,750.47
WCA Headquarters	19,077.00	1,856.64		2,599.43		52.95		23,586.02
ECA Headquarters	13,588.00	622.56		1,767.46		50.45		16,028.47
SA Headquarters	5,619.00	1,792.79		597.69		422.82		8,432.30
District 1	107,489.24	1,506.10		8.417.43		2,297.64		119.710.41
District 2	101,760.81	1,779.93		10,806.58		1,297.92		115,645,24
	94.519.97	2,205,22		10,667.80		460.45		107,853,44
District 3				11.879.74		2.851.98		122,316.49
District 4	105,169.18	2,415.59				701.88		116,526.42
District 5	102,310.28	2,119.37		11,394.89				
District 6	100,338.25	1,720.03	- 1	13,161.67		919.62		116,139.57
District 7	119,406.34	2,121.57	- 1	10,049.12		1,905.72		133,482.75
District 8	100,915,54	1.524.95		12,222.47		1,818.68		116,481.64
District 9	100,055.71	1,871.53		13,002.18		1,822.99		116,752.41
District 10	94,700.61	1,370.29	- 1-	12,264.96		2,419.66		110,755.52
		1,414.00		11,650.79		1,698.00		54,865.18
District 11	29.059.70	1,414.00		9.098.67	100	1.088.27		40.390.42
District 12	29,059.70	1,143.78				1,000.21		17,910.20
Tomahawk Warehouse				17,910.20				297.602.75
Tomahawk Headquarters	133,268.84	7,326.64		78,882.70		78,124.57		
Administration	21,057.00	2,505.93		745.98		5.50		24,314.41
	\$1,303,635.86	* \$ 38,798.72	* 8	237,639.49	* \$	98,078.90	**	\$ 1,678,152.97
Distribution of Retirement, etc.			8	53,804.74			\$106,578.85	\$ 160,383.59
	\$1,303,635.86	* \$ 38,798.72	* 8	291,444.23	* \$	98,078.90	\$106,578.85 *	\$ 1,838,536.56
Fire Suppression								\$ 6.888.03
Reportable Fires	\$ 2,563.27	\$ 78.59	8	4,246.17				
Nonreportable Fires	4,768.15	660.10		167.31				5,595.56
	\$ 7,331.42	*\$ 738.69	* 8	4,413.48	*		**	8 12,483.59
Distribution of Retirement, etc.			\$	139.62				\$ 139.62
	\$ 7,331.42	*\$ 738.69	* 8	4,553.10	*		**	\$ 12,623,21
Forest Management								
County Forestry	\$ 239,454.09	\$ 39.901.14	8	7.867.15	8	1.963.42		\$ 289,185.80
Pest Control	53,113.64	8.204.07	0	6.779.08	1	1.500.82		69.597.61

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		Personal Services		$Travel\ Expense$		Materials, Services and Supplies		Capital Outlay	Special Purpose		Total 1959–1960 Disbursements
State Forest Inventory U. of W. Research Tax Law Administration		83,182,82 4,939,48 28,847,52 25,737,00		$13, 196, 29 \\ 820, 15 \\ 3, 974, 32 \\ 3, 590, 96$		2.691.39 $158.881.71$ $1.267.89$ $5.288.79$		49.62 2,976.00			99,120,12 167,617,34 34,089,73 34,616,75
Distribution of Retirement, etc.	8 7	39,212.24	* \$	125,099,16	* 8	199,635,10 2,858.88	* 8	8,240.61 *	\$ 60,821.60		1,072,187.11 63,680.48
	8 7	39,212.24	* 8	125,099.16	* \$	202,493.98	* 8	8.240.61 *	\$ 60,821.60 *	8	1 135 867 59
Nurseries Boscobel Gordon Griffiith Hayward Hugo Sauer Trout Lake Blister Rust Administration	1	12,720,74 24,564,00 26,398,37 72,156,92 35,337,04 18,585,18 11,412,46 13,338,00	8	621.87 145.28 258.49 334.49 202.32 13.20 1,940.10 1,397.29	8	15,392.18 17,785.38 15,165.99 14,514.04 10,815.09 3,075.03 59.20 15,217.38	8	6,296,12 4,230,21 4,664,51 5,870,03 3,456,90 2,259,66		s	135,030.91 46,724.87 146,487.36 92,875.48 49,811.35 23,933.07 13,411.76 29,952.67
	\$ 4	14,512.71	* \$	4,913.04	* 8	92,024.29	* 8	26,777.43 *	*	8	538,227.47
Distribution of Retirement, etc.					8	25,336.80			\$ 33,888.52	8	59,225.32
	8 4	14,512.71	* \$	4,913.04	* 8	117,361.09	* \$	26,777.43 *	\$ 33.888.52 *	8	597.452.79
State Forests American Legion Black River Brule River Council Grounds Flambeau River Northern Highland Trout Lake Administration Administration	1	25,088.59 40,094.96 15,070.05 1,935.51 41,434.33 28,921.92 13,278.00 14,026.00	8	$\begin{array}{c} 624.74 \\ 1.264.98 \\ 1.007.80 \\ 102.50 \\ 1.132.20 \\ 1.497.70 \\ 1.760.82 \\ 1.958.85 \end{array}$	8	9,103.74 6,533.32 7,337.04 548.21 19,534.09 22,059.10 949.23 2,644.36	8	3,810.93 $9,621.81$ $9,151.25$ 517.15 $6,064.59$ $11,528.48$ 295.63		\$	38,628.00 57,515.07 32,566.14 3,103.37 68,165.21 164,007.20 15,988.05 18,924.84
	\$ 2	79,849.36	* 8	9,349.59	* 8	68,709.09	* \$	40,989.84 *	*	8	398,897.88
Distribution of Retirement, etc					8	4,960.46			\$ 22,879.10	8	27,839.56
	\$ 2	79.849.36	*8	9.349.59	* 8	73.669.55	*8	40.989.84 *	\$ 22,879.10 *	8	426.737.44

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	Personal Services	Travel Expense	Materials, Services and Supplies	Capital Outlay	Special Purpose	Total 1959–1960 Disbursements
General Administration Commission Services Personnel Administration	\$ 3,939.00 37,067.00 97,913.44	\$ 954.61 1,145.85 8,054.67	\$ 104.11 1,223.43 38,860.93	148.53 3,248.95		\$ 4,997.72 39,584.81 148,077.99
Distribution of Retirement, etc	\$ 138,919.44	* \$ 10,155.13 *	\$ 40,188.47 * \$ 491.18	* \$ 3,397.48 *	* * * * * * * * * * * * * * * * * * *	\$ 192,660.52 \$ 11,848.55
	\$ 138,919.44	* \$ 10,155.13 *	\$ 40,679.65 *	* \$ 3,397.48 *	\$ 11,357.37 *	\$ 204,509.07
Clerical Clerical	\$ 341,218.08	\$ 797.61	\$ 79,769.83	\$ 7,854.96		\$ 429,640.48
Distribution of Retirement, etc	\$ 341,218.08	*\$ 797.61 *	\$ 79,769.83 * \$ 1,405.44	* \$ 7,854.96 *	\$ 27,896.31	\$ 429,640.48 \$ 29,301.75
Distribution of Residence, ecc.	\$ 341,218.08	* \$ 797.61 *		* \$ 7,854.96 *	\$ 27,896.31 *	
Clerical Transfers to Fish and Game Clerical Transfers	\$ 128,582.00—		\$ 75,950.00—	\$ 17,105.00—		\$ 221,637.00—
	\$ 128,582.00—	**	\$ 75,950.00—	* \$ 17,105.00—*	**	\$ 221,637.00—
Finance Transfers from Fish and Game Finance Transfers		\$ 7,000.00	\$ 163,394.00			\$ 170,394.00
		* \$ 7,000.00 *	\$ 163,394.00	*	**	\$ 170,394.00
Information and Education Newspaper Service Exhibits			\$ 191.65 950.00			\$ 191.65 950.00
		**	\$ 1,141.65	**	**	\$ 1,141.65
TOTAL FORESTRY OPERATIONS	\$3,096,097.11	\$196,851.94	\$ 899,962.52	\$ 168,234.22	\$263,421.75	\$ 4,624,567.54

		Personal Services		$Travel\ Expense$		Materials, Services and Supplies		Capital Outlay	Special Purpose	$Total \ 1959-1960 \ Disbursements$
OUTHERN WISCONSIN FORESTS Big Foot Beach High Cliff Northern Purchase Unit Point Beach Southern Purchase Unit Administration	1 8 2 4	4,162,86 0,463,10 5,764,77 3,314,91 5,231,20 8,679,00	s	130.08 70.51 145.95 119.16 328.01 2,118.57	8	$\begin{array}{c} 4,654.82 \\ 107.33 \\ 10,942.40 \\ 4,139.27 \\ 5,843.69 \\ 6,698.21 \end{array}$	\$	$\substack{2,141,25\\2,915,40\\18,374,27\\1,387,00\\6,179,79\\1,021,51}$	\$ 14,922.91 \$	21,089.01 13,556.34 115,227.39 28,960.34 57,582.69 33,440.20
	\$ 18	7,615.84	* \$	2,912.28	* 8	32,385.72 *	8	32,019.22	* \$ 14,922.91 * \$	269,855.97
SETTLE MORAINE LAND							8	95,822.84	8	95,822.84
			*		*	*	8	95,822.84	** \$	95,822.84
OUNTY FOREST AID									\$218,642.33 \$	218,642.33
			*		*	*			* \$218,642.33 * \$	218,642.33
ETIREMENT, ETC., FORESTRY Social Security Unemployment Compensation						74,487.73			\$ 80,799.16	
Wisconsin Retirement Workmen's Compensation Awards Group Health Insurance					- 0	3,117.07 11,392.32			182,622.59	74,487.73 $182,622.59$ $3,117.07$ $11,392.32$
			*		* 8	88,997.12 *			* \$263,421.75 * \$	352,418.87
Distributed to Operating Divisions					. 8	88,997.12—			\$263,421.75—	352,418.87
UBLIC HUNTING AND FISHING GROUNDS— SPORTSMEN'S LICENSE—FISH D-J Land Acquisition					- 0	3.051.87	8	65,656.74		65,656.74
Doubling					- 9	3,051.87				3,051.87

	Personal Services	Travel Expense	Materials, Services and Supplies	Capital Outlay	Special Purpose	Total 1959-1960 Disbursements
PUBLIC HUNTING AND FISHING GROUNDS—SPORTSMEN'S, LICENSE—GAME NWA. NEA. WCA. ECA. SA. P-R Land Acquisition			\$ 2.888.54 5.355.40 10,706.13 12.548.85 23.347.35	\$ 277,822.59		\$ 2,888.54 5,355.40 10,706.13 12,548.85 23,347.35 277,822.59
		*	\$ 54,846.27 *	\$ 277,822.59 *	*	\$ 332,668.86
BOAT REGISTRATION AND ENFORCEMENT NWA—Enforcement. NEA—Enforcement WCA—Enforcement. ECA—Enforcement. SA—Enforcement. Administration	\$ 1,642.35 4,268.78 2,748.08 8,135.29 4,031.56 24,870.38	\$ 559.42 1,303.93 1,076.88 3,019.92 1,566.60 62.67	\$ 318.21 466.92 176.62 1,004.99 167.72 17,958.77	\$ 5,230.06 1,510.02 4,167.01 2,554.93 3,880.21 2,799.59	321.89	\$ 7,750.04 7,549.65 8,168.59 14,715.13 9,646.09 46,013.30
	\$ 45,696.44 *	\$ 7,589.42 *	\$ 20,093.23 *	\$ 20,141.82	\$ 321.89 *	\$ 93,842.80
CANCELLED DRAFTS			\$ 34,392.25			\$ 34,392.25
	·*	***************************************	\$ 34,392.25 *		*	\$ 34,392.25
CLAIMS—1959 SESSION.			\$ 9,328.49			\$ 9,328.49
		**	\$ 9,328.49 *		*	\$ 9,328.49
INSURANCE LOSS			\$ 2,767.41	\$ 4,809.06		\$ 7,576.47
		*	\$ 2,767.41 *	\$ 4,809.06		\$ 7,576.47
TOTAL CONSERVATION FUND	\$7.524.381.48	\$771.295.98	\$2,523,999.48	\$1,467,627.94	\$903.433.91	\$13,190,738.79

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CONSERVATION DEPARTMENT DISBURSEMENTS

General Fund

	Personal Services	Travel Expense	Materials, Services and Supplies	Capital Outlay	Special Purpose	Total 1959–1960 Disbursements
ENERAL FUND Forest Crop Severance Tax	•				\$ 7,981.09 \$	7,981.09
Forest Crop Withdrawal	*	*	*		\$ 7,981.09 *\$ \$ 1,410.56 \$	7,981.09 1,410.56
Forest Crop Administration	\$ 4.736.68	**	*	*	\$ 1,410.56 *	1,410.56 4,736.68
	\$ 4,736.68 *	*	*	*	*\$	4,736.68
Forest Crop Aid		*	*	*	\$251,283.38	251,283.38 251,283.38
Capital Improvements—State Parks Copper Falls Devils Lake Peninsula Potawatomi Rib Mountain Terry Andrae Governor Dodge Merrick Wyalusing					\$ 3,947.27 2,377.69 25.51 1,246.85 95.54 25.74 2,250.21 4,998.76 319.26	$\begin{array}{c} 3,947.27 \\ 2,377.69 \\ 25.51 \\ 1,246.85 \\ 95.54 \\ 25.74 \\ 2,250.21 \\ 4,998.76 \\ 319.26 \end{array}$
Blue Mound State Park	*	*	*	* 30,000.00	\$ 15,286.83 * \$	15,286.83 30,000.00
TOTAL GENERAL FUND	\$ 4,736.68	*	*	00,000.00	\$275,961.86 \$	30,000.00 310,698.54

CONSERVATION DEPARTMENT DISBURSEMENTS

Warden Pension Fund

WARDENS' PENSION FUND Retirement Activities					\$ 63.327.94	s	63.327.94
Investment Expense					430.40	-	430.40
TOTAL WARDENS' PENSION FUND	*	*	*	*******	\$ 63,758.34	* 8	63,758.34
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