

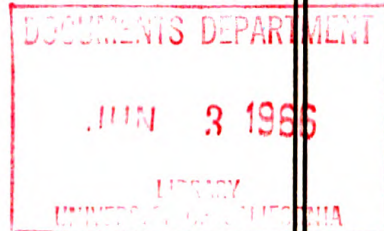
Thirtieth Biennial Report

of the

**FISH AND GAME
DEPARTMENT**

of the

(STATE) OF IDAHO



July 1, 1962 to June 30, 1964

State of Idaho
Fish and Game Department
Idaho Fish and Game Commission

Honorable Robert E. Smylie
Governor of Idaho
State House
Boise, Idaho

Sir:

Transmitted herewith for your consideration is the Thirtieth Biennial Report of the activities of the Idaho Fish and Game Department.

This report covers the period July 1, 1962 through June 30, 1964, with certain data for the last six months of 1964.

Respectfully submitted,

Frank Cullen, *Chairman*

Dr. William B. Durbon

Arlie Johnson

R. J. Holmes

Glenn Stanger

Attest:

John R. Woodworth, *Director*

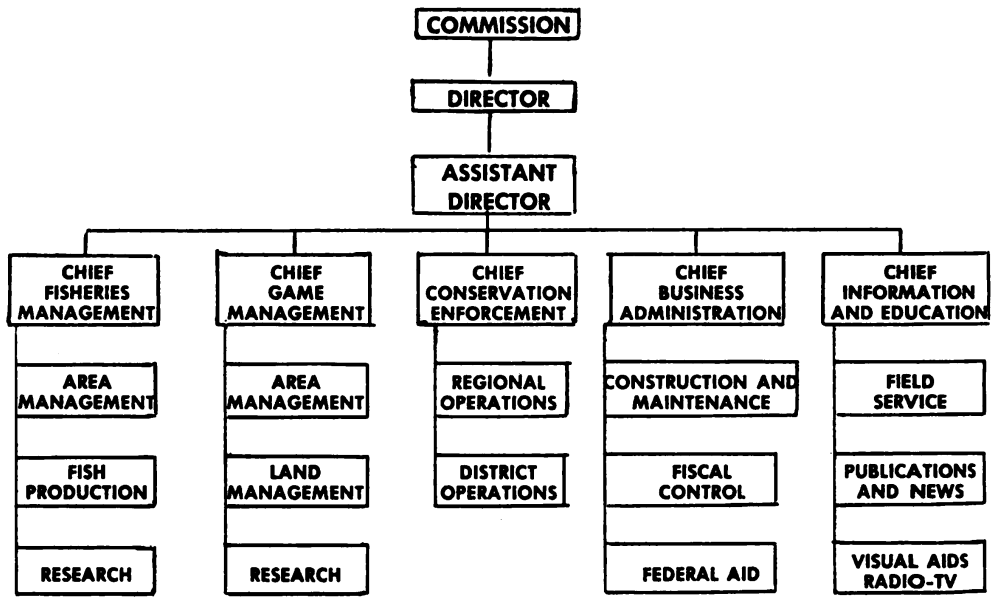


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Administration

Establishment of policy for the preservation, perpetuation, protection and management of all wildlife resources in the State of Idaho continued under the authority of the Idaho Fish and Game Commission. Operations of the Commission were conducted according to the initiative act of 1938.

Members of the Commission are appointed for staggered terms of six years from each of five districts in the state. The districts include the following counties:

- District No. 1: Boundary, Bonner, Kootenai, Benewah, Shoshone.
- District No. 2: Latah, Lewis, Clearwater, Nez Perce, Idaho.
- District No. 3: Adams, Valley, Washington, Payette, Gem, Boise, Canyon, Ada, Elmore, Owyhee.
- District No. 4: Lemhi, Custer, Camas, Gooding, Lincoln, Blaine, Jerome, Minidoka, Twin Falls, Cassia, Butte.
- District No. 5: Clark, Fremont, Jefferson, Madison, Power, Oneida, Bannock, Franklin, Bear Lake, Caribou, Bingham, Bonneville, Teton.

Members of the Commission

Members of the Commission during the biennium were:

- Frank Cullen, Coeur d'Alene, District One
- Tom Felton, Moscow, District Two
- Dr. William B. Durbon, Moscow, District Two
- Archie Johnson, Boise, District Three
- R. J. Holmes, Twin Falls, District Four
- Glenn Stanger, Idaho Falls, District Five

The Commission met in eight regular sessions and twenty special sessions during the biennial period.

Archie Johnson served as chairman of the Commission during 1962.

Thomas Felton served as chairman of the Commission from January, 1963 until October 3, 1963, when he resigned to accept office as Second District Judge.

Dr. William B. Durbon was appointed to replace Mr. Felton, taking office, October 4, 1963.

Frank Cullen was elected to serve as Chairman for the unfinished term of Mr. Felton and was re-elected as Chairman of the Commission in January, 1964 to serve during that year.

Director

John R. Woodworth, who was appointed Director of the Fish and Game Department in July, 1962, served during the biennium. Robert L. Salter was appointed Assistant Director at the same time, and also served in that office during the biennium.

Conservation Enforcement

Wildlife Law Enforcement

A successful wildlife program is dependent in various ways, to a degree or in some manner, upon effective enforcement of fish and game laws and regulations. The assignment of protecting Idaho's wildlife today is an increasingly heavy one in view of the continually growing population and the resultant increase in pressures and demands on the wildlife resource. Additional non-enforcement tasks have also been assigned to the Conservation Division adding to the already complex Conservation Officer duties.

An affirmative program of violation prevention has been maintained during the biennium. At the same time, emphasis has been applied toward apprehending violators when unlawful acts have already been committed. Conservation Officers are responsible for developing and maintaining, in each of their districts, public information campaigns for the sole purpose of forestalling inadvertent violations.

Regional and District Conservation Officers, as well as division headquarters, study and analyze arrest reports. Whenever a local or statewide pattern or trend begins to appear relative to a particular type of violation, support of public information media is obtained. Newspapers and radio broadcasting stations are asked to disseminate information designed to clarify situations and/or remind people of regulations, thus reducing unintentional violations. Toward the same end, information placards are placed in store windows, explanatory leaflets are distributed by license vendors, posters are displayed in the field, and talks are given to groups of all ages and kinds.

Application of sustained field patrol pressure in recognizable vehicles is stressed as a major means of violation prevention and maintenance of reasonable wildlife law enforcement control, particularly in localities where wildlife is vulnerable at the moment and/or violations are most likely to occur.

A special prevention effort has also been undertaken at several of the colleges and universities in the state by asking school authorities to help distribute information by means of the school paper, bulletin board, or advisors relative to the residency requirements for purchasing resident hunting and/or fishing licenses.

Samples of flesh of all types of Idaho wildlife were collected during the biennium and forwarded to the Twin Falls laboratory of the State Health Department to be used as controls in conducting meat identification tests by means of the paper chromatography method.

Greater law enforcement results were obtained from the Division's manpower through more fluid and flexible use and exchange of personnel between districts and between regions in coping with special problems and seasonal work loads.

A more uniform and efficient method was set up for handling out-of-state investigations for purchases of licenses of the wrong class.

Department personnel of other divisions were furnished with plastic utilicase kits containing all essential enforcement items and instructions necessary to expedite their handling violation situations when encountered.

To aid in the enforcement of the law prohibiting the use of communication between aircraft and hunters on the ground, several types of special radio monitoring equipment were gathered together from various points around the state and used by Department personnel periodically throughout the big game hunting season from strategic locations. The Idaho Department of Aeronautics and the U.S. Forest Service furnished substantial assistance and several items of necessary equipment in this joint effort.

Extra attention has been given to new methods and innovations relative to our overall enforcement program. Back country areas and waters have received extra emphasis in this respect. More effort and time has been directed toward such patrol measures as boat-float trips; hiking with backpacks; more diversified and productive use of horses; intensified jet boat coverage of the remote canyon areas of the Snake and Salmon rivers; increased back country surveillance through the use of trail machines; and more use of plane-radio patrols. On a number of occasions, two or three of these different types of patrol efforts have been combined into one overall operation. For instance, one major endeavor of this type might include the use of men afoot with backpacks, airplanes and a jet boat, in a coordinated, synchronized effort.

In line with modern trends among law enforcement agencies, false arrest insurance coverage was obtained for Department personnel.

Legislation

Enactments of the 1963 legislation which affect the Idaho Fish and Game Department's programs are as follows:

(1) Section 36-104 (b)4 was amended by deleting the requirement for special hunt drawings prior to establishing general seasons on game preserves.

(2) Section 36-2702 which provided for the suspension of general open seasons on game preserves was repealed.

(3) Section 36-2703 was amended by providing authority for the Idaho Fish and Game Commission to declare general open seasons on game preserves. Other amendments to Section 36-2703 prohibits the transfer of controlled hunt permits, provides for trapping of furbearing animals on game preserves and deleted the provision prohibiting establishment of hunting lodges within game preserves.

(4) Section 36-404 was amended to provide for increased fees

for deer and elk tags and to clarify the words "License" and "Tag" as used therein.

(5) Section 36-407 was amended by providing increased fees for resident combination licenses and for resident fishing licenses and by incorporating provisions for resident trapping licenses and fees under the same section.

(6) Section 36-409 relating to licenses and fees for nonresidents was repealed.

(7) Section 36-408 was amended to provide for a more orderly arrangement and description of the several kinds of nonresident licenses and the fees relating thereto. The amendments to Section 36-408 include incorporating the fees formerly provided for in Section 36-409.

(8) Chapter 4 of Title 36, Idaho Code, was amended by adding a new section thereto designated as Section 36-412. This section provides that it shall be unlawful for anyone to transfer to another person, and for such other person to use any fishing or hunting license, permit or tag so transferred.

(9) Section 36-1301 was amended by consolidating regulations governing the use of motor driven boats and vehicles and by providing additional controls and restrictions relative to the use of aircraft of all kinds, including helicopters, when the use of same is associated with hunting.

(10) Section 36-5408 relating to application for outfitters and guides licenses was amended to provide that residential requirements for procurement of a guide's license by a nonresident would be waived to the same extent as for nonresident applicants for outfitters' licenses.

(11) Section 36-5409 was amended to provide that the licensing year for outfitters and guides shall be July 1 of each year to June 30 of the following year and by providing that such licenses shall limit the area in which the licensees shall operate.

(12) Senate Bill No. 237 became a law providing for the execution by the State of Idaho of a compact known as the "Pacific Marine Fisheries Compact" with the States of California, Oregon and Washington relative to anadromous fisheries. This act provides for the form and contents of the compact and for representation from the State of Idaho on the membership of the Pacific Marine Fisheries Commission.

(13) Section 40-104 was amended to provide that public use of access roads to public lands or waters cannot be restricted without the person wishing to so do first petitioning the governing authority for the abandonment of said roads.

(14) Section 40-1614 was amended by providing that roads furnishing public access to public lands or waters cannot be abandoned without the governing body first conducting a public hearing thereon, after having given notice of said hearing by proper publication.

Operations

The number of personnel and the organizational structure of the Conservation Enforcement Division remained constant with a Division Chief, six Regional Conservation Officers and sixty-four District Conservation Officers. However, Regional Conservation Officer headquarters for the southwestern section of the State was relocated from Nampa to Boise and consolidated with the office facilities occupied by regional personnel of other Department divisions.

Each Regional Conservation Officer supervises from eight to thirteen of the statewide total force of District Conservation Officers. Work load factors, including those imposed by human as well as wildlife populations, determine the location and density of District Conservation Officer headquarters. At least one officer is stationed in each county but, in most instances, district boundaries are determined by geographical features rather than county lines.

During the 1963 calendar year, each officer averaged two arrests per month plus assisting with others. He averaged 4.3 days off per month. An average of seven days of annual leave and one day of sick leave was used during the year. He drove an average of 1,993 automobile miles per month at an average operational cost of 4.3 cents per mile. In addition to other public contacts, each officer checked an average of 131 hunting and/or fishing licenses per month. The average officer ate 84 meals from camp groceries and spent 36 nights in his sleeping bag during this 12-month period.

During the biennium the Conservation Enforcement Division co-sponsored an administrative school for supervisory personnel from various law enforcement agencies throughout the State. In addition, the Department's first Basic Training School was organized and conducted over a two week period during mid-summer of 1964. For the second time in the last three years, the representative of the Fish and Game Department was adjudged the outstanding student at the Idaho Law Enforcement Academy. Other training conferences and schools were attended by division personnel.

All recruiting of Division personnel is now being done on a Conservation Officer II level. Recruits, in other words, must have four years of previous experience with our Department, or a college degree in wildlife, or fisheries management, or closely related subjects in order to qualify for a position as an officer.

The biennium saw several innovations designed to improve the Division's records, reports and filing system on a district level. A new method of improved work planning and programming was also installed on a district basis.

District officers maintained their efforts relative to hunter safety instruction in the schools, county fair booth displays and general information and educational work at the local community level.

Participation by division personnel in various phases of fisheries, big game, bird and furbearer management programs continued to occupy much of the officers' time and attention. Servicing wildlife depredation complaints and supervising license vendors, plus maintenance and improvement work on Department equipment and installations, resulted in further demands on the district officer's time.

The sport of falconry became officially recognized by the department and a program was set up providing certain guidelines and controls.

Search and Rescue

Search and rescue was continued at a high level of participation with other cooperating agencies. The following table reflects the efforts of Department personnel in this area of endeavor. Many of the missions undertaken were on behalf of people other than hunters and fishermen.

TABLE I
SEARCH AND RESCUE
1962 and 1963

Year	No. Missions	Man Hours	Automotive Mileage	Mileage Cost	Boat-Horse, Plane/Hours	Subsistence	
1962	21 (1.4 man months)	226.5	\$679.50	1218 Miles	\$109.62	Boat & Horse \$281.00	\$10.24
1963	36 (2.8 man months)	453	\$1,359.00	2336 Miles	\$210.24	Boat & Horse \$112.00	\$19.10
Totals	57 (4.2 man months)	679.5	\$2,038.50	3554 Miles	\$319.86	\$393.00	\$29.34

Communications

The Department operates a shortwave, two-way radio communications system consisting of 108 mobile radios installed in automotive type vehicles, plus fourteen portable radios, five base sets and eleven mountain top repeaters. Radio kits already installed in other types of equipment such as snow tractors and boats permit the rapid transfer of a basic radio set into these units from regularly equipped vehicles. The portable radios are equipped with noise cancelling headsets and readily lend themselves to effective use in aircraft.

In recent months, substantial gains have been made in area coverage by our radio communications system in the Eastern and Western portions of the State by, respectively, relocating the East Butte radio repeater to Big Southern Butte and the Brundage repeater to Snowbank Mountain.

Buildings - Equipment

Four small house trailers have been purchased by the Enforcement Division during the past two years. They are used as back country patrol headquarters, similar to patrol cabins but on a more flexible and year around basis inasmuch as they can be relocated as seasonal demands and requirements change. Law enforcement in remote areas can be much more varied, flexible and effective, particularly during bad weather, when overnight facilities are available.

A medium sized residence type house trailer was recently purchased for use as a conservation officer residence-headquarters at Yellowpine.

A re-examination of the workload factors associated with the Latah County section of the State resulted in a decision to relocate patrol headquarters from Deary to Moscow. Consequently, the Deary Conservation Officer residence has been declared surplus and is in the process of being sold. Also the relocation of U.S. Highway 12, and other factors, resulted in a decision to dispose of the combination checking station-conservation officer residence at Kooskia. All other conservation officer stations and patrol cabins were maintained and improved as deemed necessary.

Arrests, Convictions and Fines

A new arrest record system was developed during the biennium which furnishes current, month by month, and accumulative total figures, by counties and regions, as to the number and kind of cases processed and the types and amounts of magistrate judgments rendered.

Table II gives the state of origin of nonresidents arrested, by number and percentage, during the calendar years of 1962 and 1963. Thirteen and two tenths per cent (155) of the 1962 total persons arrested (1,175) were nonresidents. Seventeen and seven tenths per cent (283) of the 1963 total persons arrested (1,601) were nonresidents.

Table III shows a breakdown of violations by type for each month during the biennium.

Table IV gives a record of arrests by county and region during the period of 1954 to 1963, inclusive.

Table V shows the number of arrests and average fines for each of the counties and regions during 1962 and 1963.

Table VI gives a breakdown of those 1962 and 1963 arrests which did not result in fines. It is noteworthy that of the total of 2,892 arrests made in the biennium only 0.4% resulted in acquittals, and 1% resulted in dismissals. The combined conviction and forfeiture rate exceeded 98%.

Table II
State of Origin of Nonresidents Arrested
1962 and 1963

State of Residence	Number of Arrests	Per Cent of Grand Total of 1962 Arrests (1175)	Per cent of 1962 Arrests of Non-residents (155)
California	25	2.1	16.13
Washington	48	4.1	30.97
Utah	31	2.6	20.00
Oregon	9	0.8	5.81
Montana	16	1.4	10.32
Miscellaneous	26	2.2	16.77
Total	155	13.2	100.00

Making up the miscellaneous group of 1962 arrests of nonresidents were one to four people from each of fourteen additional states.

State of Residence	Number of Arrests	Per Cent of Grand Total of 1963 Arrests (1,601)	Per Cent of 1963 Arrests of Non-residents (283)
Arizona	5	.3	1.8
California	54	3.4	19.1
Montana	38	2.4	13.4
Nevada	9	.5	3.2
Oregon	14	.9	4.9
Utah	60	3.7	21.2
Washington	73	4.6	25.8
Miscellaneous	30	1.9	10.6
Total	283	17.7	100.0

Making up the miscellaneous group of 1963 arrests of nonresidents were one to four people from each of eighteen additional states.

Table III
Summary of Violations

Fiscal Years 1962-63 & 1963-64	Fish-ing	Big Game	Upland Birds	Migra-tory Birds	Licenses	Misc.	Trap-ping	Check Station
July	79	2	0	1	32	4	0	0
August	36	2	5	2	17	7	0	0
September	40	14	11	0	16	2	0	1
October	28	104	43	14	21	20	0	5
November	26	85	37	12	27	14	2	2
December	23	54	15	18	6	7	3	2
January	6	8	1	46	14	1	1	0
February	27	7	0	0	17	11	0	0
March	34	4	0	0	9	0	0	0
April	82	3	2	0	27	2	0	0
May	45	7	3	0	12	9	2	1
June	85	9	1	0	14	12	0	0
Annual Total	511	299	118	93	212	89	8	11

Table III (continued)

Fiscal Years 1962-63 & 1963-64	Fishing	Big Game	Upland Birds	Migra- tory Birds	Licenses	Misc.	Trap- ping	Check Station
July	95	7	1	0	21	11	0	0
August	72	7	3	0	20	5	0	0
September	53	22	10	9	18	17	0	1
October	32	167	32	53	23	20	3	10
November	11	80	24	29	18	20	2	6
December	15	61	12	69	20	15	3	2
January	8	24	1	25	13	12	0	0
February	12	11	3	10	12	13	0	0
March	17	4	4	0	13	2	1	0
April	35	3	1	0	6	4	2	0
May	66	3	0	1	10	11	1	0
June	97	1	0	2	16	8	0	0
Annual Total	513	390	91	198	190	138	12	19
Biennial Total	1024	689	209	291	402	227	20	30

Table IV
Total Arrests by County and Region 1954-1963

Region and County	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963
Panhandle										
Benewah	19	19	15	17	39	35	43	24	13	20
Bonner	27	42	24	52	42	21	33	45	17	39
Boundary	19	10	9	13	18	9	17	9	6	16
Kootenai	79	49	52	128	92	42	41	31	28	52
Shoshone	20	12	28	72	22	25	22	35	26	38
Totals	164	132	128	282	213	132	156	144	90	165
Clearwater										
Clearwater	24	14	10	14	16	29	12	41	31	71
Idaho	30	20	22	16	28	42	54	84	92	137
Latah	9	9	6	3	14	10	8	10	15	18
Lewis	4	2	3	7	2	8	5	12	8	1
Nez Perce	13	3	20	18	18	27	60	51	77	73
Totals	80	48	61	58	78	116	139	198	223	300
Western										
Ada	55	44	88	135	82	96	42	42	29	38
Adams	12	13	20	10	9	18	12	14	28	20
Boise	18	15	20	34	28	25	35	17	33	42
Canyon	72	54	62	65	64	53	66	46	44	94
Elmore	48	20	38	31	66	25	26	26	55	47
Gem	18	9	9	5	19	9	7	23	14	14
Owyhee	31	27	31	50	73	82	61	26	34	70
Payette	21	15	10	6	7	9	8	5	5	19
Valley	55	46	63	37	26	62	44	41	35	57
Washington	22	11	25	10	13	8	5	14	26	42
Totals	352	254	366	383	387	387	306	254	303	443
Magic Valley										
Blaine	9	57	10	20	28	43	28	21	20	28
Camas	8	10	7	3	15	4	18	7	18	41
Cassia	25	26	16	34	60	49	47	39	21	34

Table IV (continued)

Region and County	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963
Gooding	26	12	13	6	27	29	24	43	59	45
Jerome	9	8	7	6	12	15	22	21	11	23
Lincoln	1	8	2	7	9	5	5	5	3	8
Minidoka	7	3	9	10	14	12	14	15	12	17
Twin Falls	44	29	31	47	27	39	61	48	26	28
Totals	129	153	95	133	192	196	219	199	170	224
Eastern										
Bannock	73	47	27	33	51	12	27	24	31	35
Bear Lake	19	25	15	14	8	21	18	7	17	31
Bingham	30	25	32	26	55	42	27	36	19	16
Bonneville	59	33	85	39	71	35	30	42	43	32
Caribou	48	43	54	46	61	28	22	43	49	54
Franklin	18	17	16	20	29	31	16	27	21	41
Fremont	44	62	50	50	58	49	39	44	28	30
Madison	11	8	7	2	6	8	5	6	2	4
Oneida	25	7	13	8	7	10	11	58	22	20
Power	35	32	55	38	50	61	35	39	18	45
Teton	5	7	5	3	4	5	6	6	1	2
Totals	367	306	359	279	400	302	236	332	251	310
Salmon										
Butte	16	7	11	14	15	20	12	0	6	7
Clark	13	10	21	21	34	24	8	19	15	16
Custer	28	32	34	51	47	81	66	55	32	54
Jefferson	32	38	68	76	42	58	62	51	54	32
Lemhi	32	22	22	22	46	44	31	49	31	50
Totals	121	109	156	184	184	227	179	174	138	159
Year Totals	1,213	1,002	1,165	1,319	1,454	1,360	1,235	1,301	1,175	1,601

Table V
Number of Arrests and Average Fine by County and Region
1962 - 1963

Region and County	January 1 - December 31, 1962				January 1 - December 31, 1963			
	Total Arrests	With Fines	Total Money	Average Fine	Total Arrests	With Fines	Total Money	Average Fine
Panhandle								
Benewah	13	11	\$ 355.00	\$32.27	20	19	\$ 555.00	\$29.21
Bonner	17	17	747.50	43.97	39	36	1,851.00	51.42
Boundary	6	6	350.00	58.33	16	14	590.00	42.14
Kootenai	28	25	1,355.00	54.20	52	42	1,875.00	44.64
Shoshone	26	23	1,025.00	44.57	38	32	990.00	30.94
Total and Average	90	82	\$ 3,832.50	\$46.74	165	143	\$ 5,861.00	\$40.99
Clearwater								
Clearwater	31	25	\$ 1,995.00	\$79.80	71	50	\$ 1,851.00	\$37.02
Idaho	92	76	2,741.00	36.07	137	117	3,645.00	31.15
Latah	15	15	265.00	17.67	18	17	385.00	22.65
Lewis	8	4	78.00	19.50	1	1	25.00	25.00
Nez Perce	77	42	1,222.00	29.10	73	40	1,277.00	31.93
Total and Average	223	162	\$ 6,301.00	\$38.90	300	225	\$ 7,183.00	\$31.92

Table V (Cont.)
Number of Arrests and Average Fine by County and Region
1962 - 1963

Region and County	January 1 - December 31, 1962				January 1 - December 31, 1963			
	Total Arrests	With Fines	Total Money	Average Fine	Total Arrests	With Fines	Total Money	Average Fine
Western								
Ada	29	21	\$ 476.00	\$22.67	38	35	\$ 960.00	\$27.43
Adams	28	28	721.00	25.75	20	19	585.00	30.79
Boise	33	32	900.00	28.13	42	37	994.00	26.86
Canyon	44	39	732.00	18.77	94	55	1,361.00	24.75
Elmore	55	49	\$ 1,292.00	26.37	47	43	1,085.00	25.23
Gem	14	13	660.00	50.77	14	12	260.00	21.67
Owyhee	34	28	822.50	29.38	70	63	1,262.00	20.03
Payette	5	5	150.00	30.00	19	11	250.00	22.73
Valley	35	32	1,000.00	31.25	57	50	1,356.00	27.12
Washington	26	25	582.00	23.28	42	39	1,410.00	36.15
Total and Average	303	272	\$ 7,335.50	\$26.97	443	364	\$ 9,523.00	\$26.16
Magic Valley								
Blaine	20	18	\$ 555.00	\$30.83	28	28	737.50	\$26.34
Camas	18	13	262.50	20.19	41	38	1,700.00	44.74
Cassia	21	18	726.50	40.36	34	28	1,012.50	36.16
Gooding	59	51	1,095.00	21.47	45	42	1,020.00	24.29
Jerome	11	7	160.00	22.86	23	16	335.00	20.94
Lincoln	3	3	100.00	33.33	8	8	275.00	34.37
Minidoka	12	8	200.00	25.00	17	15	441.00	29.40
Twin Falls	26	23	507.50	22.07	28	25	545.00	21.80
Total and Average	170	141	\$ 3,606.50	\$25.58	224	200	\$ 6,066.00	\$30.33
Eastern								
Bannock	31	24	\$ 750.00	\$31.25	35	21	\$ 410.00	\$19.52
Bear Lake	17	14	375.00	26.79	31	25	427.50	17.10
Bingham	19	17	495.00	29.12	16	11	260.00	23.64
Bonneville	43	38	1,617.00	42.55	32	29	680.00	23.45
Caribou	49	46	1,212.00	26.35	54	47	1,333.00	28.36
Franklin	21	18	253.00	14.06	41	38	882.00	23.21
Fremont	28	26	1,617.00	62.19	30	27	1,015.00	37.59
Madison	2	2	32.00	16.00	4	4	80.00	20.00
Oneida	22	13	333.00	25.62	20	15	242.00	16.13
Power	18	17	375.00	22.06	45	40	870.00	21.75
Teton	1	1	25.00	25.00	2	2	50.00	25.00
Total and Average	251	216	\$ 7,084.00	\$32.80	310	259	\$ 6,249.50	\$24.13
Salmon								
Butte	6	6	\$ 210.00	\$35.00	7	6	\$ 110.00	\$18.33
Clark	15	15	279.50	18.63	16	16	665.00	41.56
Custer	32	31	1,195.00	38.55	54	50	1,740.00	35.80
Jefferson	54	48	952.00	19.83	32	19	415.00	21.84
Lemhi	31	28	970.00	34.54	50	49	1,462.50	29.85
Total and Average	138	128	\$ 3,606.50	\$28.17	159	140	\$ 4,392.50	\$31.37
Statewide Total	1175	1001	\$31,766.00	\$31.73	1601	1331	\$39,275.00	\$29.51

Table VI
Breakdown of Total Cases Without Fines by Region
July 1, 1962 - June 30, 1963

Region	Entire Susp.	Dis- missed	Acquitted	For- feited	Juve- nile	Jail in Lieu of Fine	Totals
Panhandle	0	6	1	2	7	1	17
Clearwater	27	5	5	10	24	0	71
Western	7	4	1	1	14	2	29
Magic Valley	2	0	0	2	20	1	25
Eastern	12	1	0	0	35	0	48
Salmon	0	2	0	0	10	3	15
Total	48	18	7	15	110	7	205
Percent of Arrests with- out fines	24	9	3	7	54	3	100
Percent of Total Arrests (1341)	4	1	.05	1	8	.05	15

July 1, 1963 - June 30, 1964

Region	Entire Susp.	Dis- missed	Acquitted	For- feited	Juve- nile	Jail in Lieu of Fine	Totals
Panhandle	2	1	1	1	12	3	20
Clearwater	6	12	2	36	11	4	71
Western	16	2	2	4	82	3	109
Magic Valley	2	4	0	2	30	1	39
Eastern	15	6	1	1	24	1	48
Salmon	1	1	0	1	8	0	11
Total	42	26	6	45	167	12	298
Percent of Arrests with- out fines	14	9	2	15	56	4	100
Percent of Total Arrests (1551)	3	2	.03	3	10	.07	19
Grand Total For Biennium	90	44	13	60	277	19	503
Percent of Arrests with- out fines	18	8	3	12	55	4	100
Percent of Total Arrests (2892)	3	1	.04	2	10	.06	17

Game Management

In 1962 and 1963, various seasons were further liberalized to permit additional hunting on species which were lightly or moderately hunted in previous years. Natural conditions resulted in excellent years for most game birds and slightly lower harvests for deer and elk than in other recent years.

The biennium saw the largest overall participation in hunting in the history of the state. Important factors accompanying this trend included improved public understanding of the relationship between healthy habitat and the hunting potential, and an appreciation for the important part which land operators have in game management. Technical investigations continued to provide the factual basis for sound management.

Big Game

The game management staff added a big game supervisor to plan and supervise all big game work in the state, late in 1963.

For big game management purposes, Idaho is divided into eight areas with a game biologist in each region responsible for conducting and coordinating the annual surveys which provide the information on which annual hunting regulations and long term objectives are based.

Management

Data collected for big game management falls into three main categories: (1) information on big game populations, (2) information on the harvest by hunters, and (3) information on range condition and forage utilization.

Population data includes trend counts on winter concentration areas, herd classification counts, and results from trapping and marking projects.

Harvest data is provided by a post-hunting season questionnaire sent to a sample of licensed hunters, the report card attached to the big game tag which is mailed in by hunters, and check stations and field checks conducted during the hunting season.

Range information is based on measurements of key browse plants on important winter ranges to determine annual growth and percent of use by big game.

All available data is reviewed each year at a series of regional meetings with Department personnel, and recommendations for hunting seasons are submitted to the Idaho Fish and Game Commission which establishes regulations for the current hunting season.

Deer and Elk

The bulk of Idaho's big game hunting is provided by deer and elk and most of the Department's management efforts are directed toward these two species. Hunting seasons are concurrent wherever possible with elk hunting regulations usually more restrictive where different from the deer season.

A review of the biennium would point out the "open" fall and winter in 1962, the increase in big game tag fees in 1963, and a rather severe winter in 1963-64.

The mild weather and poor hunting conditions during the 1962 season resulted in a below average deer and elk kill. The increased cost of big game tags (deer from \$1.00 to \$2.00; elk from \$2.00 to \$3.00) in 1963 reduced the sale of deer tags by 9 percent, and elk tags by 7 percent. This had the effect of holding the total harvest below average again in 1963 despite better hunting success.

License and Tag Sales, Total Harvest and Hunter Success

DEER

Year	Hunting License Sales ¹	Regular Tags	Deer Tag Sales Other Tags ²	Total	Total Deer Kill ³	Hunter Success ³
1962	174,585	124,564	22,707	147,271	66,645	54 %
1963	173,766	117,554	15,886	133,440	63,546	55 %

ELK

Year	Hunting License Sales	Elk Tag Sales	Total Elk Kill ³	Hunting Success ³
1962	174,585	62,040	13,653	21 %
1963	173,766	57,529	14,542	24 %

¹ Resident Combination, Resident Hunting and Nonresident Combination in 1962; same plus Nonresident Restricted in 1963.

² Extra, Middle Fork, Hell's, Canyon and Antlerless tags in 1962; Extra, Middle Fork, and Nonresident Restricted tags in 1963.

³ Based on post-season hunter questionnaire.

Distribution of the calculated statewide deer and elk harvest among the individual big game management units is based on kills reported by successful hunters on their big game report cards.

Big Game Hunter Report Card Returns

	Deer		Elk	
	1962	1963	1962	1963
Total tags sold	147,271	133,440	62,040	57,529
Total cards returned	35,480	32,901	14,860	13,677
Total kills reported	22,611	21,443	5,659	5,810

Calculated Deer and Elk Harvest by Units

Unit	Sq. Mi In Unit	Total Harvested			
		Deer		Elk	
		1962	1963	1962	1963
1	2306	1426	1728	78	45
2	666	687	803	26	20
3	517	597	572	96	50
4	1440	677	925	392	558
5	582	393	646	36	63
6	884	643	833	642	838
7	539	176	104	335	345
8	1679	1423	1378	556	441
9	475	158	95	418	431
10	1863	461	551	1575	1537
10A	652	925	886	260	293
11	739	962	1002		Closed
11A	648	291	347	10	35
11B	273	62	80		Closed
12	1216	167	136	917	721
13	351	1277	1085	10	13
14	353	241	178	52	40
15	929	306	290	652	596
16	518	192	101	478	343
16A	228	71	50	265	328
17	1440	350	443	1128	1199
18	295	1234	865	57	33
19	916	718	735	431	393
20	1248	278	335	702	738
21	661	464	430	265	313
22	811	2722	2765	78	90
23	556	563	610	65	85
24	956	343	338	78	120
25	885	681	631	325	280
26	566	544	166	304	223
27	903	2001	1239	281	240
27A	823	294	290	94	90
28	1085	374	456	130	185
29	729	368	376		Closed
30	453	554	542	21	95
30A	243	247	243		Closed
31	597	653	791	10	18
32	1911	1315	1076	62	90
33	794	1652	1491	257	200
34	488	220	225	164	160
35	366	609	744	109	153
36	2479	1398	1523	234	270
37	906	486	199		Closed
37A	370	*	148	*	Closed
38	2142	59	56		Closed
39	2615	5803	5159	546	661
40	1402	2629	1920		Controlled Hunt
41	3029	1608	1538		Controlled Hunt
42	419	1432	978		Closed
43	804	755	788		Controlled Hunt
44	283		Controlled Hunt		Controlled Hunt
45	1348	390	240		Closed
46	3665	356	382		Closed
47	321		Controlled Hunt		Closed
48	878	1141	1052		Controlled Hunt
49	539	402	323		Controlled Hunt

50	1352	826	966		Closed	Closed
50A	191	269	*	Closed		*
51	994	257	367		Closed	
52	2428	99	110		Closed	
53	1567			Closed	Closed	
54	1357	Controlled Hunt		Closed	Controlled Hunt	
55	1004	1803	1514		Closed	
56	878	1058	797		Closed	
57	565	226	142		Closed	
58	692	139	190		Closed	
59	1201	1593	993	44	10 (Bulls only)	
60	1431	186	169	Controlled Hunt		
61	987	393	534	237		308
62	563	136	68	31		23
63	1031	19	21		Closed	
64	512	851	252	Closed	Controlled Hunt	
65	246	71	68	Closed	Controlled Hunt	
66	1082	1042	1224	Controlled Hunt		
67	278	501	1532	49		95
68	2033	12	12		Closed	
69	685	334	267	Controlled Hunt		
70	261	Controlled Hunt	738	Controlled Hunt		
71	337	430	513		Closed	
72	392	282	276		Closed	
73	600	1247	1689		Closed	
73A	650	1407	812		Closed	
74	1693	1080	1233		Closed	
75	650	1098	785		Closed	
76	495	1435	2922	Controlled Hunt		
76A	936	1664	*	Controlled Hunt		*
77	275	384	344	18		28
78	227	851	655	31		10
Unknown			1674			573

* Unit not in existence this year.

Where large numbers of hunters can be contacted or where special local information is needed, check stations are operated to obtain additional data.

Big Game Check Station Operations

Year	No. of Stations	Animals Checked		
		Deer	Elk	Bear
1962	37	12,758	2,696	95
1963	39	10,983	3,278	40

Black Bear

This species may be taken year-round except in the panhandle region of the state where a three-month fall hunting season was in effect during both years of the biennium.

The calculated statewide bear kill based on the hunter questionnaire was 3,951 in 1962, and 2,444 in 1963.

Antelope

Antelope are hunted under controlled hunts in a number of different areas of the sagebrush plains in southern Idaho. Permits issued, antelope harvested, and hunting success were similar to those of the previous biennium.

Summary of Antelope Hunts

Year	Hunting Units	No. of Permits	No. of Applicants	Kills			Participating Hunter Success
				Male	Female	Total	
1962	20	881	3,361	339	210	549 ¹	78%
1963	22	1,158	3,944	494	280	774 ²	78%

¹ Report cards returns.

² Report cards returns plus follow-up questionnaire.

Mountain Goat

Both controlled and general hunts were held for this species during both years of the biennium. Total harvests based on hunter report card returns have increased steadily during recent years, reaching a peak of 171 in 1963.

Summary of Mountain Goat Hunts

Year	Type of Hunt	Hunting Units	No. of Permits	Tags Sold	Kill			Participating Hunter Success
					Billies	Nannies	Total	
1962	Controlled	27	177	170	48	51	99	69%
	General	9	.....	176	19	26	45	41%
	Total	36	177	346	67	77	144	55%
1963	Controlled	29	195	195	51	49	100	62%
	General	9	.....	217	34	37	71	40%
	Total	38	195	412	85	86	171	51%

Bighorn Sheep

Except for a 5-permit controlled hunt in Fremont County in 1962, all bighorn sheep hunting was on a general season basis during the biennium. Only rams with horns of $\frac{3}{4}$ curl or larger were legal on all hunts. Total harvests based on hunter report card returns remained similar to those of the previous biennium.

Summary of Bighorn Sheep Hunts

Year	Type of Hunt	No. Hunt Units	No. of Permits	Tags Sold	Reported Kill	Participating Hunter Success
	General	7	..	522	58	17%
	Total	8	5	527	59	18%
1963	General	6	..	552	49	11%

Moose

This species is taken only on controlled hunts for antlered bulls and total harvests during the biennium were comparable to those of the previous two years.

Summary of Moose Hunts

Year	Hunting Units	No. of Permits	No. of Applicants	Kill			Participating Hunter
				Male	Female	Total	Success
1962	24	89	516	45	0	45	57%
1963	28	84	732	52	0	52	63%

Grizzly Bear, Caribou, Bison

In addition to animals providing annual big game hunting, Idaho also has three other species classified as big game animals. Grizzly bears, now protected by a closed season, are reported occasionally along the northern and eastern borders of the state, and a small remnant population may exist in the primitive areas.

A small herd of mountain caribou is found adjacent to the Canadian border, and a few bison move into eastern Idaho from Yellowstone Park in certain winters.

Tagging and Marking

Big game animals are captured, marked, and released to provide observations and tag returns which help understand population turnover and seasonal movements, particularly the relationship between winter ranges and the area occupied by the animals during other seasons of the year.

Under this program during the biennium, deer trapping was conducted in eight different areas and elk were trapped at five locations. Moose were captured from a helicopter on the Fremont County winter range using dart guns and immobilizing drugs.

Transplanting

In northern Idaho troublesome black bears were livetrapped in response to complaints; tagged, and released at remote sites.

Bighorn sheep were transplanted from British Columbia to the East Fork of the Owyhee River in the first phase of a program designed to restore this species to portions of its original range in Idaho.

In a similar continuing operation mountain goats were captured in the North Fork of the Clearwater drainage and moved to suitable areas near Pend Oreille Lake and the Seven Devils Mountains.

Summary of Big Game Tagging

Period	Bear*	Deer	Elk	Moose	Mtn. Goat*	Sheep*
1962-63	11	71	20	0	3	0
1963-64	11	347	108	28	9	19
Total	22	418	128	28	12	19

* Transplanted species

Research and Special Surveys

Studies to collect additional management information on important big game herds and their ranges were conducted on deer and elk in several units of southeastern Idaho; on antelope in parts of the Pahsimeroi - Little Lost - Big Lost area; and on elk in the Lochsa unit.

The special study financed by the U.S. Army Corps of Engineers on the impact of Dworshak Dam on elk herds in the North Fork of the Clearwater watershed was continued. This work included elk trapping and marking which is summarized under "tagging and marking."

Intensive research on methods to improve big game range, and development of more efficient range study techniques was continued in cooperation with the U.S. Forest Service, Boise Research Center.

Other projects were conducted to evaluate the effect of various herbicides on big game forage plants; to analyze stomach contents of big game animals to determine food preferences; and to study the potential effect of interstate highway construction across deer migration routes.

Furbearers and Predators

Furbearers

Low fur prices prevailed during the biennium and the volume of raw fur harvested was far below average. There were 630 trapper licenses sold in 1962-63 and 726 in 1963-64, compared to the long-term average of 1421.

Annual Fur Harvest

Species	1962-63		1963-64	
	Number Caught	Average Price	Number Caught	Average Price
Beaver	11,672	\$ 9.74	5,376	\$ 9.72
Muskrat	94,683	.85	97,960	.98
Mink	2,932	10.74	2,665	10.52
Marten	534	5.40	221	5.39
Otter	97	17.68	80	16.83
Raccoon	477	2.37	531	1.39
Fox	113	3.41	150	2.94
Bobcat	861	5.48	972	5.56
Weasel	230	.63	266	.41
Coyote	240	2.58	232	3.50
Skunk	135	.50	172	.58
Civet	34	.78	32	2.25
Badger	128	2.11	77	1.54
Nutria	0	.00	19	1.00
Lynx	12	12.50	28	9.96
Total	112,148	.....	108,781	.....

Beaver

Beaver continued to be Idaho's most valuable individual furbearer, and activities involving this species constitute the bulk of the Department's fur management program.

A reduction in the price of the beaver tag from \$1 to 50c and the mild, open 1962-63 winter contributed to the highest beaver harvest (11,738 pelts) since the first general open season (1957-58) when 24,410 pelts were reported taken.

The trend of beaver populations has been followed since 1959, by annual beaver colony trend counts on streams containing habitat suitable for beaver production.

Beaver Colony Trend Counts

District	No. of Routes	Stream Miles	Number of Colonies			% Change (colonies) 1959-63
			1959	1962	1963	
I	8	54	28	35	26	—7
II	5	27	8	16	13	+62
III	3	19	3	5	3	00
IV	9	46	40	44	36	—10
V	8	37	39	35	31	—21
Total	33	183	118	135	109	—8

Fisher

Through the cooperation of the British Columbia Fish and Game Branch, an effort to re-establish the fisher was concluded with the release of 17 animals near Red River and 11 near Powell. These supplement the fisher transplanted during the previous biennium, ending the project with a total of 39 animals released.

Cougar

The popularity of the cougar as a big game trophy continues to increase, with the estimated number of cougar killed during the biennium exceeding the harvest for similar periods when a state-wide bounty was in effect.

The bulk of the cougar are taken by hunters actively hunting this species but a few are killed incidental to deer and elk hunting.

Annual Cougar Kill

District	1959-60	1960-61	1961-62	1962-63	1963-64
I	15	9	14	23	18
II	36	34	79	39	87
III	26	25	39	19	14
IV	41	14	27	16	40
V	1	1	5	1	3
Total	119	83	164	98	162

Predators

Cooperative Predator Control Program

The Department's participation in predator control consists entirely of financial support of the cooperative program, to which various federal, state, and county agencies and livestock associations contribute. The Branch of Predator and Rodent Control, U.S. Fish and Wildlife Service, administers this fund and carries out actual control operations. Department expenditures for this activity during the biennium were \$23,000.00 in 1962-63 and \$25,004.88 in 1963-64 for a total of \$48,004.88.

Wildlife Depredations

A system for recording complaints of depredations by various species of wildlife was inaugurated during the biennium. In this period a total of 1,034 complaints were received and Department expenditures in servicing them amounted to \$26,152.57. Complaints received during 1963-64 totaled 13 percent less than for the 1962-63 fiscal year.

Depredation Complaints Received and Cost of Servicing, by Districts

District	1962-63				1963-64			
	Com-plaints	Service Trips	Animals Removed	Servicing Cost*	Com-plaints	Service Trips	Animals Removed	Servicing Cost
I	88	181	78	\$2,384.97	73	141	34	\$2,413.97
II	14	37	46	698.14	17	39	15	1,309.50
III	143	242	43	2,358.92	196	300	30	2,809.58
IV	109	310	72	3,188.12	77	170	22	1,977.24
V	200	382	172	3,352.27	117	236	43	3,481.93
Total	554	1152	411	14,160.25*	480	886	144	11,992.22

* Includes \$2,177.83 for beaver control not shown by districts.

Depredation Complaints by Species

	1962-63	1963-64	Total
Antelope	5	4	9
Bear	48	26	74
Deer	11	48	59
Elk	8	12	20
Other Big Game	0	0	0
Ducks	26	26	52
Geese	42	28	70
Other Waterfowl	1	5	6
Pheasants	90	108	198
Other Game Birds	2	1	3
Non-Game Birds	5	10	15
Beaver	298	190	488
Other Furbearers	6	8	14
Coyote	9	1	10
Bobcat	1	1	2
Other Predators	2	4	6
Other Mammals	0	7	7
Non-Game Fish	0	1	1
Total	554	480	1034

Game Birds

The year 1962 was a respectable bird year but it was eclipsed in almost all departments by the excellent production and outstanding game bird harvest of 1963. In that year, the very early spring and a long, lazy growing season resulted in ideal nesting, hatching and rearing conditions for virtually all game bird species.

The table below based on the hunter questionnaire sent annually to a 5 percent random sample of Idaho hunters lists harvest totals for the topnotch bird year of 1963.

Game Bird Harvest in Idaho
Based on Annual Hunter Questionnaire

	1962	1963	Average Annual Harvest 1954-1963
Pheasant	554,100	715,600	562,600
Ducks (all species)	321,500	421,500	471,900
Mourning Dove	159,700	203,300	140,300
Forest Grouse (3 species)	138,300	136,800	116,100
Chukar Partridge	99,300	148,400	62,600
Hungarian Partridge	47,500	89,900	53,500
Quail (4 species)	61,100	89,600	53,300
Sage Grouse	23,000	28,300	25,100
Canada Goose	15,800	20,800	19,000

The following pages give a brief analysis of the status of each of the upland game birds and the waterfowl, together with a sampling of the wide range of management data collected each year.

Pheasant

The first game bird field activity of each calendar year is the mid-winter pheasant sex ratio count. Virtually all field men in the Department participate in recording sex composition on pheasant flocks seen during January. The resulting sex ratios serve (1) to estimate percentage harvest of cock pheasants during the preceding hunt, (2) to give a rough check on the effect of hen removal during the preceding hunt and (3) to establish the base for estimating trend of breeding numbers the following spring. The table below shows that sex ratios during January of 1962 and 1963 were exactly on the long-term average of 2.1 hens per rooster.

In both years, data from summer pheasant brood counts indicated that the fall population of pheasants would be above average. The accompanying table compares opening weekend pheasant check station results with long-term averages for each general area of the state.

Idaho Pheasant Winter Sex Ratios Through the Years

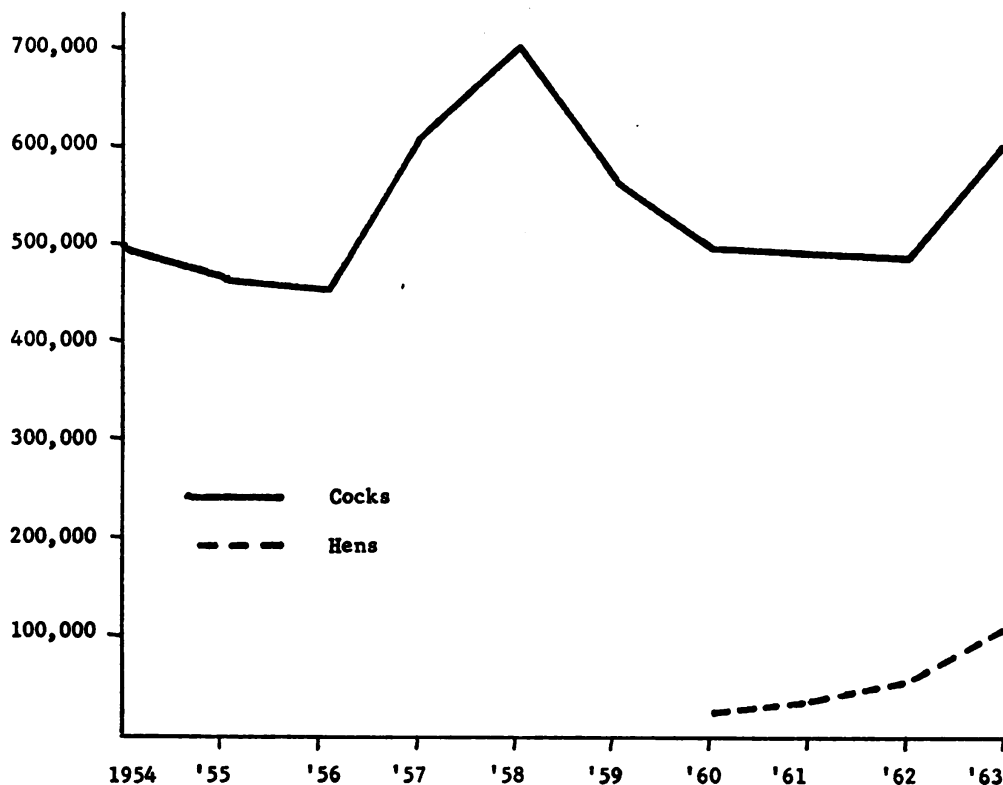
Year	Statewide Sample Size (Pheasants)	Statewide Sex Ratio	
		M:100F	Hens Per Cock
1950	15,834	53:100	1.9
1951	18,168	57:100	1.8
1952	47,444	50:100	2.0
1953	16,564	55:100	1.8
1954	18,283	45:100	2.2
1955	46,639	41:100	2.4
1956	25,828	41:100	2.4
1957	22,414	52:100	1.9
1958	18,479	51:100	2.0
1959	30,896	55:100	1.8
1960	31,010	43:100	2.3
1961	16,047	46:100	2.2
1962	29,183	41:100	2.4
1963	18,067	47:100	2.1
1964	35,064	47:100	2.1
Average	25,995	48:100	2.1
Range		57:100 to 41:100	1.8 to 2.4

Comparison of Pheasant Harvest Checks on Opening Weekend

Area	Year	No. Hunters	Total Birds	Hours Hunted	Birds Per Hunter	Hours Per Bird	
North Idaho	1962	547	492	1,637	0.90	3.3	
	1963	678	762	1,937	1.12	2.5	
Southwest Idaho	1962	2,412	2,832	9,025	1.17	3.2	
	1963	2,878	3,572	10,272	1.24	2.9	
South central Idaho	1962	1,935	2,283	6,328	1.18	2.8	
	1963	1,895	2,471	5,406	1.30	2.2	
Southeast Idaho	1962	2,993	3,730	12,664	1.25	3.4	
	1963	2,878	3,905	12,012	1.36	3.1	
Totals & Averages		1962	7,887	9,337	29,654	1.18	3.2
		1963	8,329	10,710	29,627	1.29	2.8
Long-Term Totals & Averages. (1950-1963)		114,076	119,795	414,664	1.05	3.5	

Only rooster pheasants were legal game during the opening weekend, hence the table listing pheasant check station results does not reflect the limited hen harvest which began the 10th day of the season in 1963. The relative levels of hen and rooster harvest in recent years are shown in the accompanying graph.

TREND OF PHEASANT HARVEST



Wild Turkey

Experimental releases of the Merriam's wild turkey were continued during the biennium. All releases have been made on the lower Salmon River drainage in the vicinity of Whitebird and Riggins (see table). Reproduction has occurred in all three release areas and the turkeys have spread to intervening creek drainages. There has been little or no extension of range outside the general release area to date. By the winter of 1963-64 there were an estimated 300 to 500 wild turkeys along the lower Salmon River. Additional releases of wild-trapped turkeys from Colorado and from the lower Salmon River flock will be made in areas outside the Salmon River drainage during the next biennium.

Wild Turkey Releases in Idaho

Date	Area	No. Hens	No. Gobblers	Total
January 14, 1961	Deer Creek near Whitebird	13	4	17
March 17, 1962	Shingle Creek near Riggins	8	3	11
March 22, 1963	Skookumchuck Creek near Whitebird	7	4	11
Totals		28	11	39

Game Farm Pheasant Release Record

County	1962				1963				Total
	Spring Release	Brood Stock	Summer Release	Fall Release	Spring Release	Brood Stock	Summer Release	Fall Release	
Ada	100	75		75		50		75	125
Bannock	100					150			150
Benewah	460			704	394			500	894
Bonneville				100		50		75	125
Boundary	258			800	300			900	1,200
Butte		705				300			300
Canyon				300	50			250	300
Caribou		390				300			300
Cassia							300		300
Clearwater	77								
Custer		300						100	100
Elmore	300		100		100	200	300		600
Franklin	310								
Fremont						50			50
Idaho	233		200	500	75			350	425
Jefferson		300		750		100		220	320
Jerome			300						
Kootenai	200				56			200	256
Latah	155			500	150			700	850
Lewis					75			350	425
Lincoln						100			100
Madison		300				100			100
Minidoka		75		75	50			75	125
Nez Perce	155		303	876	127		238	900	1,265
Oneida	200					400			400
Owyhee	100			200				110	110
Twin Falls	105		930		50	210	600	75	935
Totals	2,753	2,145	1,733	4,980	1,427	2,010	1,438	4,880	9,755

Sage Grouse

Idaho's research on sage grouse populations and habitats continued during the biennium. The scope of this research has now shifted toward obtaining information which may be useful in combating the continuing loss of sage grouse habitat resulting from large-scale sagebrush eradication programs.

1962 and 1963 were similar production years for sage grouse and yielded the best hunting success since 1958. Moderate liberalizations were made in the sage grouse hunting regulations to obtain a better harvest of annual surpluses and stimulate more hunter interest in the species. In 1963, participation in sage grouse hunting increased to its highest level since 1958.

Comparison of Sage Grouse Check Station Results

Area	Year	No. Hunters	No. Birds	Birds Per Hunter	Age Composition in the bag Percent Juvenile
Southwest Idaho	1962	660	734	1.11	57
	1963	726	1,097	1.51	70
South central Idaho	1962	1,644	1,391	0.85	57
	1963	1,928	1,614	0.84	61
Southeast Idaho	1962	2,694	2,949	1.09	68
	1963	3,278	2,887	0.88	61
Totals & Averages	1962	4,998	5,074	1.02	62
	1963	5,932	5,598	0.94	62

Forest Grouse

Forest grouse production continued at a relatively high level, particularly in north Idaho where most of the state's ruffed grouse habitat is located. Hunter questionnaire data (see Game Bird Harvest in Idaho) indicated that hunter harvests for both years were similar and well above average.

Sharp-Tailed Grouse

Although relic populations of the sharptail remain in a number of small habitat niches in southern Idaho, the only areas which support huntable populations are in Fremont and Oneida Counties. Here, sharptails are hunted in conjunction with sage grouse and a few hundred of this species are taken by hunters annually.

The Partridges and the Quail

Prior to 1962, Idaho's two species of partridge, the Hungarian and the chukar, and the four kinds of quail, the mountain, valley, Gambel's and bobwhite, received very little hunter interest. In that year, hunting regulations were adjusted to allow an earlier opening and longer season throughout the state's partridge and quail habitat. This change in regulations, coupled with a good production year in 1962 and an excellent one in 1963, brought

hunter harvest of these species up to their highest levels recorded to date (see table Game Bird Harvest in Idaho). In 1963, with 148,400 chukars reported bagged by hunters, the chukar partridge moved up to the No. 3 spot in the upland game bird harvest list. Participation in chukar hunting doubled from 1961 (11,300 hunters) to 1963 (22,700 hunters).

Waterfowl

Fall flights of waterfowl passing through Idaho, as estimated by weekly counts at ten counting stations in Idaho, were down in both 1962 and 1963 from similar counting periods during previous years. Fall flights in both years peaked in December instead of the normal November peak period. The main mallard movement occurred during the annual winter waterfowl inventory of January, 1964, resulting in the highest inventory totals recorded in the state since the mid-forties (see accompanying table). The "bonus" mallard hunting regulation was continued in the mallard wintering counties during both seasons without major effect on Idaho duck kill. Waterfowl hunter numbers were at their lowest level since 1943 (21,900 duck stamps sold in Idaho in 1963).

Idaho Winter Waterfowl Inventory

Species	January 1963	10-Year Average 1954-1963	January 1964
Mallard	894,437	454,138	383,253
Gadwall	1,005	1,200	3,220
Baldpate	22,566	18,843	20,477
G. W. Teal	5,191	2,361	1,876
B. W. Teal		3	50
Shoveler	3,274	1,040	467
Pintail	23,353	15,844	17,988
Wood Duck		22	10
Redhead	9,098	5,835	14,375
Canvasback	3,782	2,818	6,551
Scaup	8,277	4,118	2,868
Ring-neck	1,622	920	2,500
Goldeneye	22,243	16,211	14,523
Bufflehead	1,255	876	548
Ruddy Duck	959	273	277
Mergansers	14,986	6,893	5,575
Unid. Ducks	5,250	6,465	3,321
Total Ducks	1,017,298	537,860	477,879
Snow Goose	16	4	10
White Front	50		
Canada Goose	22,662	11,211	12,808
Lesser Canada		20	
Cackling Goose		2	
Total Geese	22,728	11,237	12,818
Whistling Swan	728	201	164
Trumpeter Swan	131	291	176
Coot	30,396	26,740	25,746
Total Waterfowl	1,071,281	576,329	516,783

Mourning Dove

Mourning dove production in Idaho and the western states continued to be good. Hunter interest in the dove continued to climb. The hunter questionnaire reported a record high take of 203,300 doves during the 1963 season when mild early September weather slowed the usually-fast fall movement of doves through the state.

Game Farm Operations

At the end of the biennium, operations at the Lapwai Game Farm were terminated. The Lapwai facility was then returned to the U.S. Department of Interior which had leased the area to the state since the Lapwai Game Farm began operations in 1926. Liquidation of the ancient Lapwai Game Farm facility was accomplished in order to reduce costs. No change in annual production goals is contemplated. The same release program which has been in effect for several years in north Idaho is being maintained by shipment of fully-grown birds from the Jerome Game Farm to release areas in north Idaho.

The tables below and on the following page list chukar and pheasant releases made during the biennium.

Game Farm Chukar Partridge Release Record

County	1962			1963		
	Spring Release	Brood Stock	Totals	Spring Release	Brood Stock	Totals
Butte		55	55			
Custer		55	55	107		107
Elmore				100		100
Gooding					30	30
Idaho	100		100			
Lemhi	300	112	412	100		100
Madison				50		50
Lewis	100		100			
Totals	500	222	722	357	30	380

Land Management

The land management section of the Game Management Division is responsible for wildlife habitat improvement programs and development, and operations, of the state's wildlife management areas and many hunting and fishing access areas.

Habitat Improvement

This program was continued through this biennium with the same objectives as previously reported, but less emphasis was placed on tree and shrub plantings on private farms with more effort expended toward other improvements or creation of wildlife habitat mostly on public lands.

Two game biologists were assigned to habitat improvement in three regions of the state during the biennium. All of the work was carried out under federal aid project 80-D.

For Game Birds

The tree and shrub planting program on private lands as wind-breaks or odd-corner plantings was continued during the biennium but on a reduced scale as compared to former years.

Summary of Tree and Shrub Plantings, 1963-64

Year	Number of Planting Sites				Trees and Shrubs Planted		Acres Open to "Hunting by Permission"
	SCD*	Pvt.	Dept. Lands	Other	In New Plantings	For Replants	
1963	121	1	6	1	170,562	17,891	200
1964	82	2	5	5	87,436	7,912	114
Total	203	3	11	6	257,998	25,803	314

* Plantings made in cooperating Soil Conservation Districts.

Before plantings are made on private lands the landowner agrees to allow a reasonable amount of public hunting on his lands. Since 1952 over 332,000 acres of private land have been opened to public hunting through these agreements.

The Department signed agreements with two more Soil Conservation Districts during the biennium. There are now cooperative working agreements with 43 of the 52 Soil Conservation Districts in the state.

Other work done by this program included installation of artificial goose nesting platforms at Carey Lake, Island Park Reservoir, Mormon Reservoir, on Snake River islands near Glens Ferry and in a marsh near Malad City. Cooperative work to improve range for wildlife was done in the Curlew Grasslands near Holbrook and in the Bartel Canyon area. Watering devices installed previously by this project were improved or repaired to provide water to wildlife in arid areas.

Wildlife Management Areas

No new wildlife management areas were purchased during the biennium. Land was purchased adjacent to Market Lake, Hagerman and Fort Boise Wildlife Management Areas to provide more space for the increasing number of hunters and fishermen visiting these areas. Where needed for wildlife or the hunting and fishing public, developments were made on some of the existing management areas. Because of limited funds most operations were maintenance only.

During the biennium the initial steps were taken to assign the Farragut area to the State Park Department for use as the Girl Scout Encampment site and eventually as a State Park. This transfer should in no way detract from the original purpose of the area, i.e., to provide access to Pend Oreille Lake for the fishing and boating public.

Cooperative Wildlife Research Unit

The staff of the Cooperative Wildlife Research Unit was increased by one instructor beginning in September, 1963. Dr. Robert H. Giles is teaching Big Game Management and Wildlife Techniques, and devoting one half time to research. There were 17 research projects carried on of which six were graduate student assignments resulting in master's theses. Fifty-two percent of all projects were related to big game or big game range, 17 percent on fish, 12 percent on game birds, and the remainder on fur bearers and predators.

White-tailed deer studies showed that there is wide dispersal in the spring, as green forbs become available, but move to north and east facing slopes by mid-summer where grasses and forbs have not yet begun to dry. By late August the white tails were again dispersed in relation to preferred browse species as they had been during the fall. Only when snow accumulated to depths greater than 18 inches, did deer seek cover of dense conifer stands. Cover-use changed more to a response of plant development and availability of food plants than to climate most of the year.

In a productivity study of mule deer on the Middle Fork of the Salmon, it was shown that the age composition revealed an under harvested deer herd. The percent of old deer (eight years old or older) was twice as high as in more heavily cropped herds.

Over wintering herd loss was calculated to be 18.5 percent. The poor condition of the winter range contributes to these losses by providing only a minimum subsistence and this of poor quality.

A companion study concerned with the ecology of the Middle Fork of the Salmon deer winter range showed the soil to be very unstable. The ground surface does not have adequate vegetational cover to protect the soil from disturbance and there is a distinct downward movement of the soil. The bitterbrush stands are over-mature and there is inadequate reproduction to maintain the browse. The trend of the range is toward an increase in grasses and a decrease in shrubs. The large concentrations of mule deer wintering in the vicinity of the Flying B ranch definitely contribute to the instability of the soil, the low ground-surface vegetational cover value, and the poor condition rating. Bitterbrush utilization even in a mild winter was about 55 percent.

A study on the productivity and movements of beaver in Bear Lake County showed that about 20 percent of the animals moved from two to 14 miles, but that half of the beavers which moved from their trapping sites were two-year old animals. In a stable or expanding population, the two-year olds move out to establish their own colonies. Movement because of food shortage were uncommon.

A heavy mortality of males appears to take place between the time the beavers are kits to adults. The decline was approximately 48 percent.

The use of the meadows in the vicinity of Elk City by elk was investigated in an effort to evaluate the relative use by livestock and elk.

The number of animal units of elk on the meadows exceeded those of livestock by 71 percent during the period May 12 to June 1. During the period June 2 to 22 livestock animal units exceeded those of elk by 330 percent; from June 23 to July 13 by 577 percent and July 14 to August 3 by 3,200 percent. The amount of forage removed by elk in comparison to that by livestock was insignificant.

The spring of 1964 was unusual in that elk failed to return in the large numbers observed in other years. Elk numbers in 1964 reached a peak about June 3 on six meadows, or nearly three weeks later than in 1963. Forage use by livestock and elk will vary from year to year. The initial study indicates that the dual use on the meadows occurs at a time when the forage plants are best able to withstand both elk and livestock use. The elk use on hay meadows was practically nil.

Cooperative Fisheries Research Unit

An agreement was signed late in 1963, establishing a Cooperative Fisheries Research Unit at the University of Idaho. Dr. Donald Chapman was appointed Unit Leader, with Robert Thompson, Assistant Leader, in the late spring, 1964.

No activity is reported for this Unit as organization was just being started at the close of the Thirtieth Biennium.

Information and Education

Regular services of the division were continued in the biennium, increasing in relation to need. The growing numbers of hunters and fishermen placed a much greater demand on the information staff of the state office, not only in answering questions on seasons, bag limits and regulations, but also in the more time consuming service of assisting recreationists in planning their hunting, fishing and travel expeditions. The demand for these services was also quite evident in the regional offices across the state.

During the first year of the biennium, a special project was developed to explain the financial needs in relation to the long-range goals of the Department, called the "Five-Point Program." Special information and education projects were devised to carry the details of the program to the people of the state. All publicity media were used extensively and Department personnel presented the program almost 200 times with the use of colored picture slides. The I & E phase of the program ended successfully with its acceptance by the 1963 Legislature.

Improvement in public service programs was one of the five-point goals approved for the Department. In line with this, information and education field services were extended to the Panhandle Region with the placement of a Conservation Educator at Coeur d'Alene. Other items qualifying as "Five-Point" projects included the acquisition of more adequate visual aid equipment, expansion of publications distribution, and the addition of a clerk-typist in the state information office.

Following is a listing of the information and education services made available during the biennium, followed by details of the division operations:

Information Services:

1. Maintenance of a central office news service:
 - a. Dated news releases on Department activities, usually Monday through Thursday.
 - b. A weekly condensation of the news for Thursday release.
 - c. Distribution of pictures and mats on Department activities for Thursday release.
 - d. Distribution of a feature article on Idaho wildlife for Sunday release.
 - e. Special news releases to the wire services.
2. Publication of the "Idaho Wildlife Review," a bi-monthly magazine.
3. Publication of various conservation information and education pamphlets and circulars.
4. Publication of regulations and legal notices.
5. Production of a statewide wildlife information radio program.
6. Presentation of a weekly live television program.
7. Maintenance of a film-loan library on various wildlife subjects.

8. Photographic services, including both still and moving picture production.

Education Activities

1. Public School assistance:
 - a. Special lectures on hunter safety and conservation.
 - b. Classroom conservation projects.
 - c. Liaison work with school administrators and teachers in conservation education.
2. Summer youth camp education with lectures and exhibits.
3. Wildlife exhibits for fairs and sportsmen's jamborees.
4. Assisting the Idaho Wildlife Federation in conservation education including the statewide essay contests.
5. Landholder-Sportsman Council program activities.
6. Talks, lectures and demonstrations on wildlife conservation to clubs and organizations.
7. Conducting the "Idaho Conservation Information Forum" series of lectures for adult groups.
8. Coordination of Departmental efforts in staging the general in-service training schools each year at the Gowen Field National Guard facilities in Boise.

Information

As populations increase and time is available, more interest is being directed toward the outdoors and hunting and fishing. This has been reflected in information requests to the Department during the biennium. These have totalled to around 20,000 written requests for varied information from where to fish . . . to simple pamphlets.

News releases have been continued to nearly 300 outlets each week, plus special features. Photo and special articles have been prepared many times.

Telephone requests and personal contacts at the Boise office have almost doubled during the past two years.

Publications

New subscribers have been added to the mailing list for the IDAHO WILDLIFE REVIEW at an average rate of 100 per month. Total copies printed increased from 16,000 at the start of this biennium, to 19,000 at the close of the two-year period.

Standard regulations are issued each year with an overall number close to one million. A new book with detailed information regarding public access and use areas at lowland lakes and streams has been prepared. The Annual Report has been revised to include more detail and has been useful for source information.

Special leaflets with information concerning Care of Game Meat; What To Do If Lost; Salmon Fishing Areas; Special Hunting Areas; reprints from the IDAHO WILDLIFE REVIEW, and pamphlets concerning Idaho wildlife, were prepared and distributed

during the two-year period. Total number of these issued has been estimated in excess of one million copies.

Photography and Films

The Department film library continues to be most popular with over 150 films on the list and in use most of the time. Ten new films have been added, and the photographic section has been obtaining stills and footage needed to prepare several new movies. Additional work has been done to utilize television media with short information films receiving wide use.

Radio and Television

The tape-recorded radio programs covering all Department activities were issued during the entire biennium on a weekly basis to an average of 25 radio stations. Some special extra programs were added on occasion or request. These taped programs are supplied in either 5 or 10-14 minute versions, as desired by individual stations. The programs are based primarily on field activities and usually feature interviews with Department personnel and occasionally outside authorities or people who are actually in the field for hunting, fishing or camping. Such field recordings are made with a portable "Midgetape" recorder.

Department personnel are also used on direct telephone interview radio programs by some stations. During the first part of 1964, a request occurred for special spot announcement tapes on road and weather conditions in back country fishing areas for salmon and steelhead. Such tapes were prepared and this resulted in a weekly fishing report radio tape in southwest Idaho on all local stations.

A regular weekly half-hour television program is presented on a free-time basis on one station and other programs are presented on request through other television stations.

Television program activities during the early summer months of 1964 expanded to coverage over the Twin Falls station, Channel 11, whenever possible. This is also a half-hour program.

Film clips are also supplied television stations in conjunction with Department news releases, when possible.

Short film strips with written narration are also supplied to stations for use at their discretion.

These television presentations cover current activities, operations, seasons, regulations and laws, and a series on game animals and fish; giving characteristics, life history and unusual facts about individual species occurring in Idaho. All shows include demonstrative materials such as animals, photos, films, charts and mounted specimens.

The television presentations are apparently well-received by the public and stations. It is a field which could be properly expanded.

Northern Idaho

The increasing demand for information and education field

services in northern Idaho was met with the assignment of a new field man to Coeur d'Alene in August 1963. The new Conservation Educator, made possible by the Five-Point Program, works throughout the five northernmost counties. The other field man remains at his Lewiston station serving the five-county Clearwater region.

Direct contact with the public is the main responsibility of a Conservation Educator with a field assignment. Along these lines, over 4,100 persons were contacted in 147 meetings of sportsmen's clubs, civic and professional organizations. Talks, slide lectures and film showings were given at over half of the meetings attended. Demonstrations, talks, movies and slide showings dealing with wildlife and conservation were presented to 3,000 young people in schools, summer camps and youth organizations. In addition, 1,068 youngsters were given three hours or more instruction in gun safety.

In all, 48 slide lectures and 81 motion picture showings were made by the field men. A total of 148 films were loaned from the motion picture film library maintained at the Lewiston office and the newly established one in Coeur d'Alene.

Four county fair exhibits were set up and several others were given assistance, equipment and materials. These consisted of mounted birds and animals, posters, photographs, continuous slide showings, and the most popular of all—live animal displays. Seven other displays on wildlife and resource conservation were made at conventions, etc. They included the annual Teachers' Institutes where the Department is able to make information and teaching aids available to individual teachers.

An even 50 news and feature articles were written and distributed to newspapers, radio and television stations for a total of 153 releases. Department activities, wildlife, etc., were photographed in black and white and color stills and movies. These photographic assignments aid in building headquarters photo file and film footage reserves. Also, many photographs were distributed to newspapers throughout the Panhandle and Clearwater regions.

Assistance was given to other personnel on projects in which the Department was engaged. Thirty-nine man days were spent on enforcement patrol and manning checking stations at the openings of fishing, bird and big game hunting seasons.

Southwestern Idaho

Volume of firearm safety training continued at about the same level as in the previous biennium with nearly 8,000 school students receiving instruction in junior high schools in southwest Idaho. Objective is to reach all seventh-grade students in the area each year. This was made possible through cooperation of Fish and Game Department personnel with sportsmen and other groups participating.

The school program presents the theory of safe gun handling, knowledge of kinds and parts of guns and the need of awareness of safety rules, with some firing at indoor targets. This training prepares the students for follow-up work by interested adult groups on the firing range for target work with live ammunition. About ten per cent of the students receiving the basic instruction were certified on target range.

The Department cooperated with the Idaho Wildlife Federation in promoting the annual Conservation Essay Contests on appropriate subjects in which school students in grades seven to twelve took part, statewide. Subjects were: "Water and Our Wildlife Heritage," and "My Stake in Wildlife Conservation."

Reference materials supplied teachers at conventions by the Department included 1,200 "conservation charts" telling the story of wise land and water use, in addition to the bird and mammal charts and a variety of Department publications and leaflets, and brochures secured from the U.S. Forest Service. All schools were mailed announcements of contest details. Prizes were awarded winners at both the community and state levels by sportsmen sponsoring the activity.

I. & E. Division personnel made approximately 100 appearances in school classes and summer camps during the biennium, reaching about 10,000 total students and youths in other organizations. Programs included "Career Day" experiences, film and slide showings and lectures on the conservation theme. Mounted specimens, game heads, hides and furs were used to illustrate these talks.

At the adult level, about 200 programs were presented by I. & E. Division personnel to an audience of 8,000 persons on a variety of subjects, with films, slides and discussion of Department activities, including the information released in selling the Department's "Five-Point Program" to sportsmen's clubs and other adult groups and organizations.

The two state fairs at Boise and Blackfoot continued to draw large crowds in 1962 and 1963. These wildlife displays featuring live birds, fish and mammals drew crowds daily for an estimated total of 75,000 to 100,000 each. The I. & E. Division also supplied display material for a number of smaller county fairs, and sportsmen's conventions during the biennium. A traveling display of big game heads was set up in January, 1963, at the San Francisco Sports and Boat Show by the Department in cooperation with the Idaho Department of Commerce and Development.

Southeastern Idaho

The Conservation Educator stationed at Pocatello has duties related to information and education programs of the Department for all southeastern Idaho extending into the Magic and Salmon regions. The demand for services remained at a high level throughout the years; both from the public and other personnel of the Department. A total of 637 information and education presentations were made during the biennium.

Forty-two Five-Point programs were presented in eastern Idaho. These programs helped to acquaint many people with the varied activities of the Fish and Game Department along with getting over the idea of needed increase in revenue. As a result many requests for color slide talks have been filled during the last part of the biennium.

The educator in this area, assisted by sportsmen and other Department personnel, gave firearm safety classes to 7,875 young people in the past two years. Short talks and movies of less than one hour on hunting safety have also been given to many sportsmen's meetings and to other adult groups.

Exhibits and displays have been an important part of the information and education program in southeastern Idaho. Fifty-one such programs were given. These included live animal and fish exhibits at the Eastern Idaho State Fair at Blackfoot; smaller displays at many of the county fairs; exhibits at sportsmen's jamborees and scoutoramas and teachers' institutes. In many of these displays, informative color-slide series were used.

Many young boys and girls received information on wildlife conservation at schools and camps. Fifty-seven programs were given to over 4,000 youngsters. Over 75 Boy Scout and Explorer posts were visited with a wide range of subjects connected with wildlife.

Over 100 sportsmen's meetings were attended, and at many of these, impromptu talks were given. The use of wildlife movies played a large part in the activities here with 188 movies shown and 103 loaned from the Pocatello film library. Many other requests were filled from the Boise film library by request from this office.

Other routine duties performed by the local educator included 16 full-time television shows, 8 radio appearances and numerous news releases to the local news media. Working with other Department personnel on law enforcement patrol, checking stations, big game and fish tagging and other activities was part of the daily routine. Visual aids work included taking film footage for TV and movies, photos for news release and color slides for slide talks.

Fisheries Management

Excellent water years during 1963-64 afforded the Fish and Game Department an opportunity to rebuild some of the fish populations in a number of irrigation reservoirs that were drawn down drastically during the drought years of 1959 through 1961. Reservoirs which were particularly noteworthy for exceptional fish production during the biennium were Magic, Mackay, and Blackfoot. Both Blackfoot and Magic were treated during the drought period to reduce undesirable fish populations. The 1964 harvest of fish from Magic Reservoir is probably the highest that it has been since the reservoir was constructed. It is estimated that 30,000 fish were harvested on the opening weekend of fishing season.

Blackfoot Reservoir opened to fishing in 1963 after having been treated in 1961, and was excellent fishing during the year, with fish averaging up to three pounds. In 1964, the catch of fish continued good throughout the season and fish up to six and seven pounds were taken. The carp population in Blackfoot Reservoir is increasing rapidly and will one day again be a limiting factor in the production of rainbow and cutthroat trout. Mackay Reservoir had a good carryover of water in the Falls of 1962 and 1963; consequently, fishing was excellent both years. Fishing in 1964 was of such quality that the Mackay Chamber of Commerce recommended the season be extended from the normal closing date of August 31 to October 31.

Palisades Reservoir was better fishing during 1964 than it has been for several years. The change in the management plan for the reservoir is responsible for the increased catch of cutthroat trout. The 1964 fishing season extended from May 1 through November 30. This permitted angling for cutthroat at the time of year they are most easily harvested. In addition, planting of yearling cutthroat increased the survival of these fish and fish planted in the spring of the year grew several inches during the summer and were contributing to the fishermen harvest.

Pend Oreille Lake produced exceptionally well for kokanee in 1964 and kamloops in 1963. The harvest of kokanee in 1963 was 1,049,339 and in 1964, 1,144,502. Indications are that 1965 should also be a good year for kokanee fishing.

Coeur d'Alene Lake continued good fishing for kokanee and Priest Lake produced above-average cutthroat fishing. A record mackinaw of 54 pounds, five ounces was taken from Priest Lake in April, 1964.

During the biennium, the Federal Power Commission granted Pacific Northwest Power Company a license to construct High Mountain Sheep Dam. When the project has been completed, that portion of Snake River, which is the last stronghold for the white sturgeon in the Snake River system, will be inundated. This will

**Kokanee Harvest from Lake Pend Oreille
by Year and by License Class**

Year	Total Harvest	Resident	N-Resident	Commercial
1952	514,900	183,652	268,108	63,140
1953	1,335,900	412,307	382,593	541,000
1954	1,232,900	326,568	362,828	543,504
1955	650,375	181,492	228,610	240,273
1956	1,092,651	423,092	240,294	429,265
1957	751,113	256,280	277,699	217,134
1958	1,197,426	365,082	359,132	473,212
1959	1,261,943	377,095	432,001	452,847
1960	1,038,200	319,041	278,571	440,588
1961	991,595	257,362	305,001	429,232
1962	651,000	168,867	190,059	292,074
1963	1,049,339	359,677	314,291	375,371
1964	1,144,502	323,690	450,800	370,012

bring about a change in habitat and the elimination of sturgeon from the impoundment. Bass and channel catfish fishing continued excellent throughout the biennium and each year an increase in the number of fishermen fishing the river is noted.

The escapement of spring chinook salmon into the Salmon River drainage during the biennium has been disappointing. The escapement of summer-run salmon was poor in 1963, and would have been considerably worse in 1964, had not the commercial fishery downstream from Bonneville Dam been reduced to an extremely short season. It is estimated that approximately 10,000 fish were harvested by the commercial fishery. In addition to the commercial fishery, the Indian fishery took approximately 5,000 summer chinook from the Bonneville pool.

Many waters throughout the State are open to winter fishing and afford an excellent fishery to the angler willing to brave the elements; however, only a limited number of fishermen participate actively in the sport throughout the winter.

The installation of fish screens for the protection of anadromous fish in the upper Salmon River drainage proceeded as scheduled during 1963, but came to a halt during 1964, because of the shortage of funds for this program. All fish screens installed to date have been constructed with federal funds supplied by the U.S. Fish and Wildlife Service under the Columbia River Fishery Development Program.

During the biennium, a Fishery Research Unit was created at the University of Idaho. The unit is staffed by two professors who receive their salaries and expenses from the U.S. Bureau of Sports Fisheries and Wildlife. The University provides clerical help, office space, and research facilities for the unit and the Fish and Game Department contributes to the program by supplying funds for scholarships and some materials and equipment. Establishment

of the unit will be a great asset to the Department and should provide many well-trained students for future employment. In addition, unit personnel and students will be working on significant research projects which will provide the Department with information that can be used to develop sound fishery management programs. The Fish and Game Department has also carried on several significant research programs with personnel of the Department doing the work.

Fish Screen Installation by Stream

Stream	Number screens
Salmon River	15
North Fork of Salmon River	16
Carmen Creek	13
East Fork Carmen Creek	3
Dahlonga Creek	3
Anderson Creek	1
Sheep Creek	2
Lemhi River	84
Hayden Creek	7
Lemhi Big Springs Creek	7
Pahsimeroi River	13
Powder Creek	1
Pahsimeroi Big Springs Creek	9
East Fork of Salmon River	13
Herd Creek	2
Total	189

Fish Screens Installed by Year

Year	Number screens
1958	10
1959	50
1960	22
1961	49
1962	32
1963	25
1964 (As of July 1)	1
Total	189

A highlight of the biennium was the agreement reached between the Fish and Game Department, the State Department of Reclamation, and the U.S. Bureau of Reclamation for a storage right of 50,000 acre feet of water in Lucky Peak Reservoir. This will permit a release of sufficient water down the Boise River during winter months to provide an excellent fall and winter fishery. In addition, it should provide for better duck hunting along the river between Caldwell and Boise.

Idaho State fish hatcheries had a record production of 1,891,993 pounds of fish during the biennium. A big step forward in the operation and management of the State fish hatcheries has been the change in the practice of specifying the amount and kind of ingredients in fish feed. Beginning January 1, 1963, the Department called for bids on an open formula which specified the feed ingredients and the vitamin concentrate in detail. Low bidders mix and deliver the feed to State fish hatcheries.

The cost of fish feed per pound of fish produced has diminished steadily since the advent of dry fish feed. In 1955, it required 5.6 pounds of wet feed at a cost of 38 cents per pound of fish produced. In 1964, the poundage of dry feed had been reduced to 2.2 pounds, and the cost to produce a pound of fish was reduced to 17 cents.

Fish Feed
(October 1, 1962 - September 30, 1964)

Item	Year	Pounds	Cost
Liver	1963	26,914	2,685.90
	1964	46,802	2,639.31
Slaughterhouse By-products	1963	48,674	2,372.53
	1964	49,268	2,617.64
Fish and Fish Viscera	1963	74,350	4,163.80
	1964	63,639	2,778.31
Meal and Meal Products	1963	2,052,018	177,511.54
	1964	1,921,316	150,528.40
Totals	1963	2,201,956	\$186,733.77
	1964	2,081,025	\$158,563.66
Biennium Totals		4,282,981	\$345,297.43

Experiments in fish nutrition are continuing at several of the State production hatcheries in an effort to develop the most desirable fish feed. In addition to the development of dry feed for use at the warmer water trout hatcheries, the Department is now purchasing a moist pellet, known as the Oregon Moist Pellet, for use in colder water stations in northern Idaho. Although it has not been used long enough to give concrete results, indications are that the fish feed will be superior to the former meat and salmon viscera diet which had been standard for many years.

The fish hatchery at Rapid River near Riggins was constructed by Idaho Power Company during 1964. This is an experimental station to determine if it will be possible to rear spring chinook salmon in a hatchery, and transfer the run of spring chinook from the Snake River drainage to the Rapid River drainage. Also, 850,000 spring chinook eggs were taken during the year. These are presently in incubators at the Rapid River station. The Oxbow artificial egg incubation channel, also constructed by Idaho Power,

was expanded to rear fall chinook salmon to fingerling size for release. Both the Rapid River hatchery and the Oxbow artificial egg incubation channel are operated by the Fish and Game Department under contract with Idaho Power Company.

Steelhead are being reared experimentally at Hagerman hatchery to determine the response of this species to 58° F. water temperature.

**Eggs Received by Purchase or Exchange
From Other Agencies
(October 1, 1962 - September 30, 1964)**

Species	Year	Number
Rainbow	1963	10,023,527
	1964	8,394,351
Brook	1963	433,134
	1964	470,093
Mackinaw	1963	100,062
	1964	102,080
Golden	1963	11,430
	1964	20,304
Kokanee	1963	193,760
	1964	642,150
Chinook Salmon	1963	400,000
	1964	2,000,000
Silver Salmon	1964	500,000
Totals	1963	11,161,913
	1964	12,128,978
Biennium Totals		23,290,891

**Rough Fish Removal — Seining Permits
(in pounds)
(October 1, 1962 - September 30, 1964)**

Species	Year	Pounds
Carp	1963	330,296
	1964	730,575
Chubs	1963	197,700
Suckers	1963	1,122,052
	1964	427,430
Unidentified	1963	50,580
Totals	1963	1,700,628
	1964	1,158,005
Biennium Totals		2,858,633

Lake Rehabilitation

Year	Name	County	Surface acres	Volume acre-feet	Undesirable species	Species restocked	Toxicant
1964	*C. Ben Ross Reservoir	Adams	30	150	Bullhead	Rainbow trout	Rotenone
1964	Caldwell Ponds	Canyon	9	60	Bluegill carp bullhead	Rainbow trout brown trout	Rotenone
1962	Glendale Reservoir	Franklin	3	24	Utah chub suckers	Rainbow trout	Rotenone
1962	Lamont Reservoir	Franklin	48	500	Utah chub	Rainbow trout	Rotenone
1964	**Lost Valley Reservoir	Adams	200	300	Perch bullhead	Rainbow trout	Rotenone
1963	Milton Branch Ponds	Washington	10	50	Bullhead catfish	Largemouth bass	Rotenone
1964	***Stone Reservoir	Oneida	5	2	Carp	Bass, crappie, rainbow trout	Rotenone
1963	Springfield Lake	Bingham	66	425	Utah chub suckers	Rainbow trout	Rotenone

* Includes three miles of tributaries treated above the reservoir.

** Includes 2½ miles of tributaries treated above the reservoir.

*** Stone Reservoir was treated September 29, 1964 and has not been restocked yet, but probably will be shortly.

Stream Rehabilitation

Year	Name	County	Volume c.f.s.	Miles treated	Undesirable species	Species restocked	Toxicant
1963	Cow Creek	Owyhee	5	7	Sucker Squawfish	Rainbow trout	Rotenone
1962	North Fork Payette River	Valley	25	12	Squawfish	Rainbow trout	Rotenone

Chinook Salmon and Steelhead Counted Over Lewiston Power Dam by Month, March, 1950 Through June, 1964

Year	July		Aug		Sept		Oct		Nov		Dec		Jan		Feb		March		April		May		June		Steelhead Fish-Year Total	Chinook Calendar-Year Total
	St	Ch	St	Ch	St	Ch	St	Ch	St	Ch	St	Ch	St	Ch	St	Ch	St	Ch	St	Ch	St	Ch	St	Ch		
1949-50																		39	1,219	0	1,757	0	152	1	3,167	
1950-51	28	6	2	2	5	0	390	0	43	58	1	6	279	1,981	0	1,289	0	279	1,981	0	1,289	0	121	15	4,202	1950— 9
1951-52	58	12	0	8	160	0	810	0	52	14	0	7	413	3,244	0	1,229	0	413	3,244	0	1,229	0	350	7	6,337	1951— 35
1952-53	15	7	5	0	9	0	318	1	26	7	94	165	4,377	3,774	0	1,757	5	4,377	3,774	0	1,757	5	99	23	10,646	1952— 15
1953-54	16	35	18	3	214	0	987	1	102	55	4	97	947	2,776	0	1,813	0	947	2,776	0	1,813	0	118	2	7,147	1953— 67
1954-55	12	15	5	1	800	0	1,954	0	360	23	1	47	577	6,191	0	3,823	0	577	6,191	0	3,823	0	382	4	14,175	1954— 18
1955-56	26	6	15	3	659	1	2,116	0	81	53	2	15	383	3,120	0	1,414	2	383	3,120	0	1,414	2	77	7	7,961	1955— 14
1956-57	0	4	3	1	128	0	301	0	14	17	0	0	933	2,425	0	141	11	933	2,425	0	141	11	31	42	3,953	1956— 14
1957-58	36	98	27	0	2,090	1	4,322	0	96	10	7	1,183	8,809	3,439	0	905	0	8,809	3,439	0	905	0	19	11	20,943	1957— 152
1958-59	2	11	2	1	4,803	2	13,286	1	1,018	284	62	418	6,008	6,460	0	808	0	6,008	6,460	0	808	0	85	5	33,216	1958— 26
1959-60	4	3	109	2	3,707	3	8,017	0	24	31	0	72	1,172	8,868	0	484	14	1,172	8,868	0	484	14	25	15	22,513	1959— 13
1960-61	0	14	16	0	3,817	0	6,533	0	516	2	96	521	9,990	3,489	2	174	24	9,990	3,489	2	174	24	9	82	25,162	1960— 43
1961-62	0	28	0	0	2,434	1	6,864	2	15	12	14	236	4,115	12,031	0	2,204	1	4,115	12,031	0	2,204	1	91	6	28,016	1961— 139
1962-63	9	5	136	1	9,423	3	15,194	1	1,665	533	59	462	8,013	6,963	0	708	0	8,013	6,963	0	708	0	31	5	43,196	1962— 17
1963-64	4	0	59	0	1,759	4	8,995	1	1,440	1	1	73	3,621	4,787	0	821	0	3,621	4,787	0	821	0	75	33	21,636	1963— 10

Eggs Taken By State (October 1, 1962 - September 30, 1964)

Station	Year	Species	Green Eggs	% Eye up	Numbers Eyed eggs
American Falls	1963	Rainbow	2,793,374	72.15	2,015,330
	1963	Rainbow	147,320	83.52	123,035
	1964	Rainbow	2,970,414	82.00	2,435,739
	1964	Rainbow	97,944	76.80	75,221
Coeur d'Alene Lake	1964	Cutthroat	30,528	50.00	15,264
	1963	Kokanee	21,200	87.00	18,444
	1964	Kokanee	100,340	94.50	948,213
	1963	Kamloops	999,794	86.00	859,823
Clark Fork	1964	Kamloops	777,127	79.90	620,924
	1963	Steelhead	1,253,357	87.60	1,097,941
Clearwater	1963	Steelhead	1,077,271	89.50	964,152
	1964	Rainbow	1,206,742	79.55	960,000
Eagle	1963	Rainbow	290,580	60.17	175,000
	1964	Brown	1,421,343	85.00	1,208,142
Hayspur	1964	Rainbow	44,880	50.00	22,440
	1963	Brown	780,528	89.72	700,322
Henry's Lake	1964	Rainbow	623,832	87.00	542,734
	1963	Rainbow	11,255,707	89.07	10,025,576
Moose Creek	1964	Cutthroat and Rainbow	1,891,740	87.45	1,654,240
	1963	Cutthroat	9,244,920	88.00	8,135,530
Oxbow ¹	1964	Cutthroat and Rainbow	359,022	83.00	297,988
	1963	Kokanee	1,417,581	80.97	1,147,770
Pend Oreille Lake	1964	Kokanee	4,093,060	88.00	3,601,893
	1963	Chinook	2,015,102	94.86	1,911,500
Priest Lake	1964	Chinook	774,450	72.06	558,100
	1963	Kokanee	203,390	88.41	179,816
Rapid River ¹	1964	Kokanee	111,940	94.50	105,783
	1963	Kokanee	18,850	99.00	18,662
Salmon River	1964	Kokanee	8,990	94.51	8,496
	1963	Chinook Salmon	705,986 ^a		
Williams Lake	1964	Steelhead	21,165	79.00	16,720
	1963	Chinook	1,160,885	85.00	986,753
Totals	1964	Chinook	1,354,971	89.38	1,211,026
	1963	Rainbow	1,037,098	98.52	1,021,734
Biennium Totals	1964	Rainbow	366,770	95.21	349,212
	1963		26,493,248	(Av.) 85.56	22,895,946
			24,184,953	(Av.) 82.75	21,117,577
Biennium Totals			50,678,201	(Av.) 83.75	44,013,523

¹ Idaho Power Company Station operated by Fish and Game Department.
^a Eye up not complete at end of report period.

Idaho Fish Plantings*
By Species, Size — All Agencies
(October 1, 1962 - September 30, 1964)

Species	Year	0 - 3"	3 - 6"	6" - Up	Total	Pounds
Rainbow	1963	6,871,835	1,271,449	2,698,777	10,842,061	914,990
	1964	4,663,177	1,791,833	3,140,266	9,595,276	1,002,791
Cutthroat	1963	7,142,496 ¹	29,347	335,545	7,507,388	24,303
	1964	5,319,409 ²	750,030	3,150	6,072,589	47,182
Brook	1963	75,329		5,220	80,549	1,004
	1964	220,572	7,300	19,490	247,362	1,814
Brown	1963	193,600		500	194,100	1,088
	1964		2,600		2,600	100
Kamloops	1963	442,088	253,411	89,999	785,498	59,652
	1964	308,808	337,910	61,218	707,936	36,696
Golden	1963	7,740			7,740	2
	1964	18,400			18,400	6
Kokanee	1963	266,790			266,790	74
	1964	810,000 ³			810,000	310
Chinook Salmon	1963	1,100,119 ⁴	42,275		1,142,394	180
	1964	495,540			495,540	1,940
Largemouth Bass	1963			10,000	10,000	200
	1964	600		720	1,320	19
Steelhead	1963	1,097,941 ⁵			1,097,941	
	1964	964,771 ⁶			964,771	
Rainbow and Cutthroat	1963	1,484,850			1,484,850	1,072
	1964	246,120			246,120	110
Silver Salmon	1963	500,000 ⁶			500,000	
	1964	1,100,000 ⁶			1,100,000	8,667
Mackinaw	1963	21,400	13,000	8,000	42,400	1,700
Totals	1963	19,204,188	1,609,482	3,148,041	23,961,711	1,004,265
Totals	1964	14,147,397	2,889,673	3,224,844	20,261,914	1,099,635
Biennium Totals		33,351,585	4,499,155	6,372,885	44,223,625	2,103,900

* Excludes all salvaged fish—these are reported in another table.

¹ Includes 852,614 eyed eggs.

² Includes 659,952 eyed eggs.

³ Includes 332,000 eyed eggs.

⁴ Includes 1,100,119 fingerling released from Oxbow, no weight estimate.

⁵ Eyed Eggs.

⁶ Includes 617,000 eyed eggs.

Fish Plantings In Idaho By Other Agencies (October 1, 1962 - September 30, 1964)

Station	Year	Rainbow		Cutthroat		Totals	
		Numbers	Pounds	Numbers	Pounds	Numbers	Pounds
U.S. Hagerman (Idaho)	1963	836,227	113,921			836,227	113,921
	1964	865,924	118,300			865,924	118,300
U.S. Jackson (Wyoming)	1963			220,045	15,618	220,045	15,618
	1964			230,028	18,163	230,028	18,163
U.S. Ennis (Montana)	1963	296,436	4,966			296,436	4,966
U.S. Greston (Montana)	1964	46,790	8,277			46,790	8,277
Wyoming State	1963			14,497	899	14,497	899
	1964			10,916	551	10,916	551
Idaho Power Company	1963	110,400	5,818			110,400	5,818
Totals	1963	1,243,063	124,705	234,542	16,517	1,477,605	141,222
	1964	912,714	126,577	240,944	18,714	1,153,658	145,291
Biennium Totals		2,155,777	251,282	475,486	35,231	2,631,263	286,513

**Fish Salvaged and Planted
(October 1, 1962 - September 30, 1964)**

Station area	Year	Trout	Large-mouth Bass	Bullhead Catfish	Crappie	Bluegill	Yellow Perch	Total	Pounds
Eagle	1963		27,314	300	18,816			46,430	3,680
	1964			3,027	25,500		3,000	31,527	1,077
Hagerman	1963		7,989			3,935		11,924	2,925
Hayspur	1963	198					138	336	100
Totals	1963	198	35,303	300	18,816	3,935	138	58,690	6,705
	1964			3,027	25,500		3,000	31,527	1,077
Biennium Totals		198	35,303	3,327	44,316	3,935	3,138	90,217	7,782

Hatchery Production (October 1, 1962 - September 30, 1964)

Hatchery	Year	Rainbow		Cutthroat		Brook		Brown		Kamloops	
		Nos.	Lbs.	Nos.	Lbs.	Nos.	Lbs.	Nos.	Lbs.	Nos.	Lbs.
American Falls	1963	575,552	119,203	49,364	302						
	1964	987,554	136,749	131,796	119						
Ashton	1963	796,131	42,148 ¹	297,622	253						
	1964	997,492	42,492	256,463	1,165	29,164	46				
Clark Fork	1963	117,075	22,080	1,694,102	784					594,331	25,678
	1964	344,043	27,279	2,235,387	555					657,636	34,846
Eagle	1963	1,593,878	38,144 ²	156,250	125			194,100	1,088		
	1964	1,229,808	40,856					2,600	100		
Grace	1963	1,779,590	102,563	1,212,500	4,326						
	1964	1,550,117	98,750	515,000	466						
Hagerman	1963	2,231,584	381,229							190,231	42,128 ⁸
	1964	1,925,970	392,102							286,750	14,022
Hayspur	1963	999,572	39,965	18,200	63						
	1964	737,734	40,911								
Henry's Lake	1963			735,550	573						
	1964			1,197,200	526						
Mackay	1963	924,922	89,392	121,290	283						
	1964	861,784	72,241	101,710	37						
McCall	1963	308,825	157	424,477	164						
	1964	410,102	127	352,150	137						
Mullan	1963	196,310	613	453,604	186	239,384	72 ⁴				
	1964	304,000	608	299,284	593	180,000	84 ⁴				
Sandpoint	1963	549,635	2,198	122,333	188	80,549	1,004				
	1964	372,821	1,995	129,004	239	38,198	1,684				
Twin Falls	1963	495,016	27,600								
	1964	439,870 ⁻	35,694								
Warm River	1963			1,135,120	628						
	1964		450 ⁶	244,192	587						
Totals	1963	10,568,090	865,292	6,420,412	7,875	319,933	1,076	194,100	1,088	784,562	67,806
	1964	10,161,295	890,254	5,462,186	4,424	247,362	1,814	2,600	100	944,386	48,868
Biennium Totals		20,729,385	1,755,546	11,882,598	12,299	567,295	2,890	196,700	1,188	1,728,948	116,674

Hatchery Production (Cont.)

Hatchery	Year		Mackinaw		Goldens		Kokanee		Chinook		Largemouth bass		Rainbow and Cuthroat		Totals	
	1963	1964	Nos.	Lbs.	Nos.	Lbs.	Nos.	Lbs.	Nos.	Lbs.	Nos.	Lbs.	Nos.	Lbs.	Nos.	Lbs.
American Falls	1963	1964													624,916	119,505
	1963	1964													1,119,350	136,888
Ashton	1963	1964					810,000	310							1,093,753	42,401
	1963	1964													2,093,119	44,013
Clark Fork	1963	1964													2,405,508	48,542
	1963	1964													3,237,066	62,680
Eagle	1963	1964							42,275	180					1,986,503	39,537
	1963	1964													1,232,408	40,956
Grace	1963	1964	42,400	1,700											3,952,690	109,346
	1963	1964													2,065,117	99,216
Hagerman	1963	1964													2,421,815	423,357
	1963	1964													2,212,720	406,124
Hayspur	1963	1964													1,017,772	40,028
	1963	1964													737,734	40,911
Henry's Lake	1963	1964													1,302,200	888
	1963	1964													566,650	315
Mackay	1963	1964			18,400	6									1,443,320	636
	1963	1964													1,046,212	89,675
McCall	1963	1964			7,740	2									981,894	72,294
	1963	1964													741,042	323
Mullan	1963	1964					22,590	16							762,252	264
	1963	1964													911,888	887
Sandpoint	1963	1964													783,284	1,285
	1963	1964													752,517	3,390
Twin Falls	1963	1964													540,023	3,918
	1963	1964													495,016	27,600
Warm River	1963	1964													439,870	35,694
	1963	1964													1,135,120	628
	1963	1964													244,192	1,037
Totals	1963	1964	42,400	1,700	7,740	2	22,590	16	42,275	180					1,484,850	1,072
	1963	1964			18,400	6	810,000	310							246,120	110
Biennium Totals			42,400	1,700	26,140	8	832,590	326	42,275	180					1,730,970	1,182
															37,779,301	1,891,993

¹ Includes 3,174 pounds weight increase on fish transferred from another station.
² Includes 5,600 pounds of rainbow transferred to Grace for rearing.
³ Includes 4,300 pounds of karioops transferred to Clark Fork for rearing.
⁴ Transferred to Sandpoint for rearing.
⁵ Includes weight increase of rainbow transferred to station.
⁶ Weight increase on fish transferred from American Falls, Eagle, and Hagerman.

Business Administration

Accelerated Public Works

Through the Public Works Acceleration Act of 1962, Federal funds were made available to the Idaho Fish and Game Department through the Department of Interior, to promote fish and wildlife restoration projects. Federal monies were made available to the State on a 50 percent Federal, 50 percent State basis, or on a 66 percent Federal, 34 percent State basis, depending on the area where funds were used.

It is to be remembered that the principal purpose of the Accelerated Public Works Program is to provide employment in economically depressed areas at the earliest possible time, while simultaneously accomplishing useful public works of lasting benefit.

During the period January 17, 1963 to June 30, 1964, the Idaho Fish and Game Department received allocations of Federal funds totaling \$151,338. An itemization of projects approved by the Idaho Fish and Game Commission and the Bureau of Sport Fisheries and Wildlife follows:

Accelerated Public Works Projects Approved During Biennium July 1, 1962 to June 30, 1964

Project No.	Name of Project	Estimated Costs		
		Federal	State	Total
FW-1-D-1	Fishing and Hunting Access Trail Development Bonner County	\$ 8,678.00	\$ 8,678.00	\$ 17,356.00
FW-1-D-2	Fishing and Hunting Access Trail Development-Kootenai County	9,850.00	9,850.00	19,700.00
FW-1-D-3	Fishing and Hunting Access Trail Development-Boundary County	11,250.00	11,250.00	22,500.00
FW-1-D-4	Fishing and Hunting Access Trail Development-Shoshone County	9,800.00	9,800.00	19,600.00
FW-1-D-5	Fishing and Hunting Access Trail Development-Shoshone County	12,540.00	6,460.00	19,000.00*
FW-1-D-6	Fishing and Hunting Access Trail Development-Boundary County, Mountain Lakes Segment	11,250.00	11,250.00	22,500.00
FW-2-D-1	Public Access Development-Kootenai County, Office Building Segment	26,500.00	26,500.00	53,000.00
FW-2-D-2	Public Access Development-Kootenai County, Rose Lake Segment	4,200.00	4,200.00	8,400.00
FW-2-D-3	Public Access Development-Kootenai County, Hayden Lake Segment	1,500.00	1,500.00	3,000.00
FW-2-D-4	Public Access Development-Kootenai County, Corbin Park Segment	1,650.00	1,650.00	3,300.00
FW-3-D-1	Public Access Development-Teton County, Teton River Segment	9,140.00	9,140.00	18,280.00
FW-3-D-2	Public Access Development-Teton County, Packsaddle Lake Segment	2,750.00	2,750.00	5,500.00
F-1-D-1	Public Access Development-Bene- wah County, St. Maries River	3,400.00	3,400.00	6,800.00
F-2-D-1	Fishing Access Development-Bonner County, Garfield Bay	16,500.00	16,500.00	33,000.00
F-3-D-1	Priest Lake Spawning Channels- Bonner County	6,270.00	3,230.00	9,500.00*
F-3-D-2	Priest Lake Spawning Channels- Bonner County Hatchery Ponds Segment	10,560.00	5,440.00	16,000.00*
F-4-D-1	Pub. Access Development-Boundary Co. Bonner Lake and Moyie River	5,500.00	5,500.00	11,000.00
Totals		\$151,338.00	\$137,098.00	\$288,436.00

* 66 percent Federal funds, 34 percent State funds; balance of projects financed with 50 percent Federal and 50 percent State funds.

Construction and Maintenance

The following projects summarize activities of the Construction Section during the biennium, July 1, 1962 through June 30, 1964.

Capital Improvements—Hatcheries

Oil furnace installed replacing coal—Twin Falls Hatchery
Henry's Lake Hatchery—dripolator installation
Grace Hatchery—domestic water line
Grace Hatchery—new residence
Grace Hatchery—asphalt access road surfacing
American Falls Hatchery—domestic water well
American Falls Hatchery—expanded trailer house dwelling
Hayspur Hatchery—combination storage and office building
Hayspur Hatchery—Loving Creek diversion channel
Ashton Hatchery—asphalt access road surfacing
Hagerman Hatchery—additional feed storage facilities
Hagerman Hatchery—pipeline to raceway system
Hagerman Hatchery—additional raceway headworks
Hagerman Hatchery—preliminary new access road construction
Clark Fork Hatchery—moved garage Lapwai Farm to Clark
Fork
All Hatchery built 4 new fish loaders

Capital Improvements—Fish Management

Lemhi upper weir operations building
Lemhi lower weir operations building (DJ Project)
Lemhi River lower fish counting weir (DJ Project)
Yellow Belly Lake migration block (DJ Project)
Priest Lake, Hunt Creek and Kalispell Creek spawning channels
(APW Project)

Capital Improvements—Columbia River Program

Fish screens on Pahsimeroi and East Fork Salmon River
East Fork Salmon screen access vehicle bridge
Selway River hatching channel

Capital Improvements—Wildlife Management Areas

Sand Creek area domestic well (PR Project)
Market Lake area—dike riprapping (PR Project)
Fort Boise area—furnace installation (PR Project)
Fort Boise area—quonset storage (PR Project)
Fort Boise area—Boise River vehicle bridge (PR Project)
Fort Boise area—Gold Island irrigation channel (PR Project)
Fort Boise area—Keefer Segment irrigation channel (PR
Project)

Capital Improvements—Public Access

Lemhi River public access development (DJ Project)
Silver Creek public access additional developments (DJ Project)
Antelope Creek public access development (DJ Project)

Snake River—Pingree public access development (DJ Project)
 Snake River—Walters Ferry, five public access developments
 (DJ Project)
 Snake River—Massacre Rocks public access development (DJ
 Project)
 Snake River—Fort Boise area public access improvement (PR
 Project)
 C. J. Strike impoundment public access boat ramp improvement
 (PR Project)
 Teton River—west side segment public access development
 (APW Project)
 Teton River—east side segment public access development
 (APW Project)
 Snake River—Twanas Gulch access road
 Niagra Springs bridge replacement (cooperative all agency pro-
 ject)
 Anderson Ranch—Deer Creek (cooperative waterways project)
 Horseshoe Bend public grounds cleanup
 Twin Lakes, Bingham City, Ferry Butte (cooperative waterways
 project)
 Rose Lake public access development (APW project)
 Corbin Park public access development (APW project)
 Waha Lake public access development (DJ Project)
 Cocolalla Lake public access additional development (APW
 project)
 Spring Valley public access additional development (DJ—cooper-
 ative waterways project)
 Garfield Bay public access jetty, ramp, dock development (APW
 project)
 St. Maries River public access development (APW project)

Capital Improvements—General

Coeur d'Alene Panhandle office construction (APW project)
 Twenty-four flag poles installed all headquarters
 Salmon headquarters—gasoline pump and tank
 Hagerman headquarters—gasoline pump and tank
 Lapwai farm quonset storage building moved to Kamiah
 Kooskia station quonset storage building moved to Lewiston
 headquarters
 Lapwai Farm dwelling moved to Lewiston headquarters to be
 incorporated in new office building
 Lapwai Farm brooder house moved to Lewiston headquarters
 for storage
 Plans completed for Boise headquarters office building
 Demolished Boise Braves baseball stadium at Boise office site
 Drilled water production well for new Boise office building heat-
 ing plant
 Survey and plans for Lake Creek impoundment
 Survey and plans for McArthur Dam reconstruction
 Feasibility surveys made for Wildhorse Dam and impoundment

Surveys and plans for Brush Lake Dam reconstruction
Feasibility surveys for Tolo Lake rehabilitation
Surveys made for Musselshell impoundment
Surveys and plans made for Hayspur Hatchery expansion

Maintenance Projects—General

Steel fish trap cage at Lewiston Dam fish ladder (CRP project)
Maintained and operated 189 fish screens Salmon River (CRP project)
Demolished and removed Bruces Eddy fish trap facility
Cabinet replacement basement room addition Mackay Hatchery dwelling
Increased heighth diversion head wall Hagerman Hatchery
Riley Creek bridge replacement Hagerman Hatchery
Public grounds sidewalk and curb—Hagerman Hatchery
Furnace replacement—Hagerman Hatchery superintendent's dwelling
Two furnace replacements—Hagerman Hatchery duplex dwelling
Cabinet, cabinet top, sink replacements—Hagerman Hatchery dwellings
Storm windows installed on one dwelling—Hagerman Hatchery
Re-insulated domestic water supply tank building—Hagerman Hatchery
Improved Riley Creek demosser—Hagerman Hatchery
Concrete rearing pond dividing wall—Eagle Hatchery
Cold storage grinding room converted to crew room—Eagle Hatchery
Cabinet work rebuilt in older dwelling—Eagle Hatchery
New roof installed Fort Boise superintendent's dwelling (PR project)
Dwelling rewired at Boundary County WMA headquarters dwelling
Maintenance work on C. J. Strike access road and boat ramp and dock
Installed storm windows—Salmon shop (CRP project)
Placed ceiling in storage garage—Ashton Hatchery
Rebuilt cabinet work in two dwellings—Ashton Hatchery
Rebuilt main hatchery water supply line, enclosed springs—Ashton Hatchery
Repaired inside Warm River Hatchery dwelling
Improved hatchery water supply line—Grace Hatchery
Repairs to cabinet work in dwellings—American Falls Hatchery
Culvert replacement main access road—American Falls Hatchery
Loving Creek water diversion structure replaced—Hayspur Hatchery
Cabinet work modernized in one dwelling—Clark Fork Hatchery
New metal roofing installed—Sandpoint Hatchery superintendent's dwelling

Improved outside Market Lake WMA superintendent's dwelling
New covering on cabinet work North Lake WMA headquarters
dwelling
Oil furnace installed—Garden Valley conservation officer's
quarters replacing coal furnace

Painting—Statewide

Henry's Lake Hatchery—painted exterior, all buildings
Ashton Hatchery—painted exterior, all buildings
Warm River Hatchery—painted exterior, all buildings and the
interior of the superintendent's dwelling
Grace Hatchery—painted exterior, all buildings
Mackay Hatchery—painted exterior, all buildings
Clark Fork Hatchery—painted exterior, all buildings and the
interior of the hatchery building
Sandpoint Hatchery—painted exterior, all buildings
McCall Hatchery—painted exterior, all buildings
Mores Creek Check Station—painted exterior, all buildings
Rock Creek Check Station—painted exterior and interior of the
building
C. J. Strike Headquarters—painted exterior equipment storage
building
Boundary County Management Area—painted exterior, all
buildings
Schaffer Butte Radio—painted exterior of the building
Bear Valley Patrol Cabin—painted exterior, all buildings
Fisher Creek Patrol Cabin—painted exterior and the interior of
the building
Jerome District Office—painted exterior of the office building
and the warehouse storage building
Boise warehouse—painted inside
Boise Office—painted inside
Fort Boise dwelling—painted outside all buildings
Twin Falls Hatchery—painted outside all buildings

Land Acquisition

Pursuant to the needs for providing administrative, fish and wildlife habitat, and public access sites, the following is a report of lands added to the land management rolls of the Idaho Fish and Game Department by purchase of fee title, easement, U.S. Patent, lease, etc., during the period July 1, 1962 to June 30, 1964:

	Sites	Acres	Consideration or Lease Fee
Administrative Sites:			
Purchase of fee title, easement, patent	2	11.41	\$ 83,100
Leased	1	1.0	50
Fish & Wildlife Management Sites:			
Purchase of fee title, easement, patent	10	1,212.07	189,713
Leased	1	5.53	82
Licensed	6	116.99	---
Fishing & Hunting Access Sites:			
Purchase of fee title, easement, patent	20	1,147.58	49,535
Leased	14	1,735.312	587
Totals	54	4,229.892	\$323,067
Fish screen easements	18		

Operation and Maintenance Funds

June 30, 1964

Federal appropriation fiscal year 1959	\$ 10,000.00
Federal appropriation fiscal year 1960	16,624.58
Federal appropriation fiscal year 1961	25,000.00
Federal appropriation fiscal year 1962	40,000.00
Federal appropriation fiscal year 1963	40,000.00
Federal appropriation fiscal year 1964	35,000.00
Total federal funds available for program	\$ 76,249.38
Disposition of funds:	
CRP- 7 Operation and maintenance of screens	1,591.95*
CRP- 9 Operation and maintenance of screens	3,446.06*
CRP-12 Operation and maintenance of screens	16,249.58*
CRP-13 Operation and maintenance of screens	24,759.52*
CRP-16 Operation and maintenance of screens	32,216.74*
CRP-20 Operation and maintenance of screens	41,475.80*
CRP-25 Operation and maintenance of screens	35,000.00
Total funds expended or contracted	154,739.65
* Project closed	

Columbia River Operational Study Projects

June 30, 1964

CRP-OS- 1	Introduction of fall-spawning Chinook salmon into the Clearwater River drainage	\$	4,992.74*
CRP-OS- 2	Development of techniques and equipment to facilitate planting of salmon and steelhead eggs		2,435.62*
CRP-OS- 3	Reintroduction of spring and summer-run Chinook salmon into the Selway River, Clearwater River drainage		52,286.13*
CRP-OS- 4	Transfer of adult steelhead for spawning purposes, South Fork of Clearwater		4,253.68*
CRP-OS- 5	Planting of eyed fall-spawning Chinook salmon eggs in Clearwater River drain.		6,740.98*
CRP-OS- 6	Reintroduction of spring and summer-run Chinook salmon into the Selway River, Clearwater River drainage		24,371.08*
CRP-OS- 7	Reintroduction of steelhead trout into the South Fork of the Clearwater River and the Lemhi River		24,518.53*
CRP-OS- 8	Reintroduction of spring and summer-run Chinook salmon into Selway River		45,948.41*
CRP-OS- 9	Planting of eyed fall-spawning Chinook salmon eggs in the Clearwater River drainage		13,396.32*
CRP-OS-10	Reintroduction of steelhead trout into the South Fork of the Clearwater River and the Lemhi River, 1963		23,000.00
CRP-OS-11	Reintroduction of spring and summer-run Chinook salmon into the Selway River drainage		40,000.00
CRP-OS-12	Planting of eyed fall spawning Chinook salmon eggs in the Clearwater River drainage		2,000.00
Total funds expended or contracted			\$ 243,943.49

* Project completed

Columbia River Fisheries Development Program Statement of Operations

Construction Funds as of June 30, 1964

Federal appropriation fiscal year 1957	\$ 200,000.00
Federal appropriation fiscal year 1958	125,000.00
Federal appropriation fiscal year 1959	300,000.00
Federal appropriation fiscal year 1960	24,375.00
Federal appropriation fiscal year 1961	295,000.00
Federal appropriation fiscal year 1962	261,627.29
Federal appropriation fiscal year 1963	741,549.54**
Federal appropriation fiscal year 1964	119,450.46
Federal appropriation fiscal year 1965	75,000.00
Total federal funds available for program	\$2,142,002.29

Disposition of Funds:

CRP- 1 Investigation and planning	315,949.36*
CRP- 2 Access and fill at Salmon whse.	1,344.82*
CRP- 3 Salmon whse. plans and specifications ...	1,975.97*
CRP- 4 Well at Salmon warehouse	539.00*
CRP- 5 Dagger Falls plans and specifications	9,207.26*
CRP- 6 Fish screens plans and specifications ...	8,298.55*
CRP- 8 Fish screen construction	433,097.80*
CRP-10 Dagger Falls fishway construction ...	122,612.43*
Dagger Falls access	50,627.29*
CRP-11 Salmon warehouse construction	50,692.22*
CRP-14 Selway Falls fishway, pre-engineering ...	22,723.93*
CRP-15 Stream clearance and minor falls cons. ...	10,000.00*
CRP-17 Screening irrigation diversions	133,483.20*
CRP-18 Fish counting and fishway study	
Lewiston dam	10,741.86*
CRP-19 Selway Falls, plans and specifications ...	15,000.00*
CRP-21 Stream clearance and minor falls cons. ...	28,000.00
CRP-22 Screen irrigation diversions	159,988.94*
CRP-23 Revision fishways, Lewiston dam	130,000.00
CRP-24 Selway Falls fishway	443,000.00
CRP-26 Screening irrigation diversions	75,000.00

Total funds expended or contracted **2,022,282.63**

Balance federal appropriation June 30, 1964 **\$119,719.66*****

* Closed

** \$275,549.54 advanced from 1964 appropriation

*** Reserved for CRP-24

IDAHO FISH AND GAME DEPARTMENT Nonexpendable Assets June 30, 1964

Highways and waterways	\$ 863,440.00
Office machines and equipment	108,245.00
Field equipment	49,270.00
Engineering and precision equipment	154,125.00
Hatchery, farm, construction equipment	15,463.00
Land	1,769,292.00
Buildings	967,927.00
Total	\$4,154,601.00*

* Listed at department's cost.

Federal Aid In Fish and Wildlife

Wildlife Restoration

The Federal Aid in Wildlife Restoration Act of 1937 provides that the Federal Government will finance 75 percent of approved wildlife projects, from funds collected from an 11 percent excise tax on sporting arms and ammunition. Approvable projects encompass coordination, land acquisition, land development, and investigations and surveys.

During the biennium July 1, 1962 to June 30, 1964, Idaho received allocations of Federal funds totaling \$573,978.76.

Projects approved by the Idaho Fish and Game Commission and the Bureau of Sport Fisheries and Wildlife during the biennium are itemized as follows. Funds to finance these projects were obligated as available.

Federal Aid in Wildlife Restoration Projects Approved During Biennium July 1, 1962 to June 30, 1964

Project No.	Name of Project	Estimated Costs		
		Federal	State	Total
FW-40-C-23	Fish & Wildlife Mgmt. Coordination	\$ 19,813.50	\$ 6,604.50	\$ 26,418.00
FW-40-C-24	Fish & Wildlife Mgmt. Coordination	17,670.00	5,890.00	23,560.00
	Total Coordination	37,483.50	12,494.50	49,978.00
Development Projects:				
FW-2-D-11	C. J. Strike Wildlife Mgmt. Area	11,250.00	3,750.00	15,000.00
FW-2-D-12	C. J. Strike Wildlife Mgmt. Area	12,600.00	4,200.00	16,800.00
W-36-D-14	Hagerman Wildlife Mgmt. Area	8,250.00	2,750.00	11,000.00
W-36-D-15	Hagerman Wildlife Mgmt. Area	7,650.00	2,550.00	10,200.00
W-55-D-16	North Lake Wildlife Mgmt. Area	15,750.00	5,250.00	21,000.00
W-55-D-17	North Lake Wildlife Mgmt. Area	16,125.00	5,375.00	21,500.00
W-60-D-12	Boundary County Wildlife Mgmt. Area	2,100.00	700.00	2,800.00
W-60-D-13	Boundary County Wildlife Mgmt. Area	2,400.00	800.00	3,200.00
W-64-D-11	Boise Riv. Wildlife Mgmt. Area. Amend. ...	1,125.00	375.00	1,500.00
W-64-D-12	Boise River Wildlife Mgmt. Area	4,875.00	1,625.00	6,500.00
W-64-D-13	Boise River Wildlife Mgmt. Area	7,500.00	2,500.00	10,000.00
W-75-D-10	Trapping and Transplanting	13,837.50	4,612.50	18,450.00
W-75-D-11	Trapping and Transplanting	4,125.00	1,375.00	5,500.00
W-80-D-16	Game Habitat Improvement	41,400.00	13,800.00	55,200.00
W-80-D-17	Game Habitat Improvement	39,750.00	13,250.00	53,000.00
W-89-D-13	Sand Creek Wildlife Mgmt. Area	18,375.00	6,125.00	24,500.00
W-89-D-14	Sand Creek Wildlife Mgmt. Area	22,500.00	7,500.00	30,000.00
W-103-D-8	Farragut Wildlife Mgmt. Area	1,275.00	425.00	1,700.00
W-103-D-9	Farragut Wildlife Mgmt. Area	1,275.00	425.00	1,700.00
W-116-D-7	Market Lake Wildlife Mgmt. Area	18,750.00	6,250.00	25,000.00
W-116-D-8	Market Lake Wildlife Mgmt. Area	23,250.00	7,750.00	31,000.00
W-123-D-4	Snow Removal	2,475.00	825.00	3,300.00
W-123-D-5	Snow Removal	2,475.00	825.00	3,300.00
W-124-D-4	Fort Boise Wildlife Mgmt. Area	4,950.00	1,650.00	6,600.00
W-124-D-5	Fort Boise Wildlife Mgmt. Area	19,125.00	6,375.00	25,500.00
W-124-D-6	Fort Boise Wildlife Mgmt. Area	23,625.00	7,875.00	31,500.00
W-126-D-4	Albeni Falls Wildlife Mgmt. Area	9,375.00	3,125.00	12,500.00
W-126-D-5	Albeni Falls Wildlife Mgmt. Area	2,100.00	700.00	2,800.00
W-128-D-3	Carey Lake Wildlife Mgmt. Area	1,500.00	500.00	2,000.00
W-128-D-4	Carey Lake Wildlife Mgmt. Area	2,400.00	800.00	3,200.00
W-130-D-4	Statewide Public Hunting Access Sites, St. Joe National Forest Segment	618.75	206.25	825.00
W-130-D-5	Statewide Public Hunting Access Sites, Snake River - Walters Ferry Segment ..	5,625.00	1,875.00	7,500.00
	Total Development Projects ..	348,431.25	116,143.75	464,575.00

Research Projects:

W-85-R-14	Idaho Big Game Harvest, Census and Range Study, Amendment	1,875.00	625.00	2,500.00
W-85-R-15	Idaho Big Game Harvest, Census and Range Study	95,475.00	31,825.00	127,300.00
W-85-R-16	Big Game Surveys and Investigations	88,125.00	29,375.00	117,500.00
W-96-R-11	Statewide Game Bird Survey	4,500.00	1,500.00	6,000.00
W-96-R-12	Statewide Game Bird Survey	4,500.00	1,500.00	6,000.00
W-111-R-11	Artificial Revegetation Studies on Ranges	8,250.00	2,750.00	11,000.00
W-111-R-12	Artificial Revegetation Studies on Ranges	9,150.00	3,050.00	12,200.00
W-125-R-4	Sage Grouse Investigations	9,000.00	3,000.00	12,000.00
W-125-R-5	Sage Grouse Investigations	11,025.00	3,675.00	14,700.00
	Total Research Projects	231,900.00	77,300.00	309,200.00

Land Acquisition Projects:

FW-1-L-3	C. J. Strike Wildlife Mgmt. Area	3,825.00	1,275.00	5,100.00
W-24-L-10	North Lake Wildlife Mgmt. Area	600.00	200.00	800.00
W-117-L-5	Statewide Land Leases, Boise River Elk and Deer Winter Range	825.00	275.00	1,100.00
W-118-L-2	Reclamation Projects, Wildlife Mgmt. Areas	375.00	125.00	500.00
W-129-L-7	Statewide Public Hunting Access Sites, Recreation Act Applications Segment	225.00	75.00	300.00
W-129-L-8	Statewide Public Hunting Access Sites, Payette River - Kennedy Segment	28,650.00	9,550.00	38,200.00
W-129-L-9	Statewide Public Hunting Access Sites, Teton Riv.-Fox Creek Marsh Segment	12,900.00	4,300.00	17,200.00
W-129-L-10	Statewide Public Hunting Access Sites, Teton Riv.-Fox Creek Segment	240.00	80.00	320.00
	Total Land Acquisition Projects	47,640.00	15,880.00	63,520.00

Summary of Approved Projects

Classification	Federal	State	Total	Percent of Total
Coordination	\$ 37,483.50	\$ 12,494.50	\$ 49,978.00	\$ 5.63
Development Projects	348,431.25	116,143.75	464,575.00	52.36
Research Projects	231,900.00	77,300.00	309,200.00	34.85
Land Acquisition Projects	47,640.00	15,880.00	63,520.00	7.16
Totals	\$665,454.75	\$221,818.25	\$887,273.00	\$100.00

Fish Restoration

The Federal Aid in Fish Restoration Act of 1950 provides that the Federal Government will finance 75 percent of approved fish restoration and management projects from funds collected from a 10 percent excise tax on fishing rods, creels, reels, artificial lures, baits, and flies. Approvable projects encompass coordination, land acquisition, land development, and investigations and surveys.

During the biennium July 1, 1962 to June 30, 1964, Idaho received allocations of Federal funds totaling \$190,784,42.

Projects approved by the Idaho Fish and Game Commission and the Bureau of Sport Fisheries and Wildlife during the biennium are itemized as follows. Funds to finance these projects were obligated as available.

Federal Aid in Fish Restoration Projects Approved During Biennium July 1, 1962 to June 30, 1964

Project No.	Name of Project	Estimated Costs		
		Federal	State	Total
FW-40-C-23	Fish & Wildlife Mgmt. Coordination	\$ 6,962.25	\$ 2,320.75	\$ 9,283.00
FW-40-C-24	Fish & Wildlife Mgmt. Coordination	5,580.00	1,860.00	7,440.00
	Total Coordination	12,542.25	4,180.75	16,723.00
Development Projects:				
F-28-D-2	Mountain Lakes	9,900.00	3,300.00	13,200.00
F-45-D-6	Statewide Public Fishing Access Sites, Cedar Draw-Bordewick Segment-Am- endment	900.00	300.00	1,200.00
F-45-D-11	Statewide Public Fishing Access Sites, Antelope and Silver Creeks Segment ..	3,525.00	1,175.00	4,700.00
F-45-D-12	Statewide Public Fishing Access Sites, Spring Valley Dam Reservoir Site	5,512.50	1,837.50	7,350.00
F-45-D-13	Statewide Public Fishing Access Sites, Snake River-Pingree Segment	3,075.00	1,025.00	4,100.00
F-45-D-14	Statewide Public Fishing Sites, Snake River-Massacre Rocks Segment ..	2,437.50	812.50	3,250.00
F-46-D-2	Fish Barrier Dam, Yellow Belly Lake	8,775.00	2,925.00	11,700.00
F-48-D-2	Channel Clearance in Priest Lake Trib- utary Streams	1,275.00	425.00	1,700.00
F-50-D-1	South Fork Salmon & Steelhead Weirs ..	19,800.00	6,600.00	26,400.00
F-52-D-1	Lemhi River Fish Trapping Facilities	13,575.00	4,525.00	18,100.00
	Total Development Projects	68,775.00	22,925.00	91,700.00
Research Projects:				
F-18-R-9	Statewide Fishing Harvest Survey	3,375.00	1,125.00	4,500.00
F-18-R-10	Statewide Fishing Harvest Survey	3,600.00	1,200.00	4,800.00
F-32-R-6	Tests for Increasing Returns of Hatchery Trout	9,525.00	3,175.00	12,700.00
F-32-R-7	Tests for Increasing Returns of Hatchery Trout	12,750.00	4,250.00	17,000.00
F-34-R-6	Water Quality Investigations	8,550.00	2,850.00	11,400.00
F-34-R-7	Water Quality Investigations	9,750.00	3,250.00	13,000.00
F-49-R-2	Salmon and Steelhead Investigations	18,075.00	6,025.00	24,100.00
F-49-R-3	Salmon and Steelhead Investigations	22,500.00	7,500.00	30,000.00
F-51-R-1	Anderson Ranch Reservoir-South Fork Boise River Fishery Research Project...	11,625.00	3,875.00	15,500.00
F-51-R-2	Anderson Ranch Reservoir-South Fork Boise River Fishery Research Project ..	9,375.00	3,125.00	12,500.00
	Total Research Projects	109,125.00	36,375.00	145,500.00
Land Acquisition Projects:				
F--36-L-8	Statewide Public Fishing Access Sites, Snake River-Pingree Segment	412.50	137.50	550.00
F-36-L-9	Statewide Public Fishing Access Sites, Recreation Act Applications Segment...	1,481.25	493.75	1,975.00
F-36-L-10	Statewide Public Fishing Access Sites, Teton River-Christensen Segment	1,200.00	400.00	1,600.00
F-36-L-11	Statewide Public Fishing Access Sites, Billingsley Creek Segment	22,725.00	7,575.00	30,300.00
	Total Land Acquisition Projects	25,818.75	8,606.25	34,425.00

Summary of Approved Projects

Classification	Federal	State	Total	Percent of Total
Coordination	\$ 12,542.25	\$ 4,180.75	\$ 16,723.00	\$ 5.80
Development Projects	68,775.00	22,925.00	91,700.00	31.80
Research Projects	109,125.00	36,375.00	145,500.00	50.46
Land Acquisition Projects	25,818.75	8,606.25	34,425.00	11.94
Totals	\$216,261.00	\$ 72,087.00	\$288,348.00	\$100.00

**TABULATION OF LICENSE SALES
 By Series**

	General Season*																
	Resident Fish and Game	Resident Game	Resident Fish	Non-res. Big Game	Non-res. Bird	Non-res. Fish	Tourist Fish	Tourist 1-day Fish	Additional 1-day Fish	Shipping Permits	Regular Deer Tags	Elk Tags	Goat Tags	Sheep Tags	Archery Antelope Tags	Regular Deer Tags	Elk Tags
1954	125,316	46,465	45,393	3,638	1,162	14,823	49,107			1,315	103,702	48,201			1,434	1,240	
1955	118,189	46,315	47,095	3,729	1,133	13,042	41,379			1,062	106,840	50,757			1,658	1,500	
1956	104,944	56,962	54,305	4,046	1,334	12,874	41,686			1,191	114,019	52,627	63	75	89	1,967	1,794
1957	104,035	57,086	57,504	4,882	1,818	13,837	45,063			M.F. Deer 327							
1958	106,423	63,958	62,613	5,112	2,175	14,601	44,419			1,253	110,836	50,732	76	193	92	2,226	2,065
1959	108,325	62,281	59,825	6,369	3,261	14,270	30,492	7,717		Ext. Deer 7,166		54,920	96	255	58	2,491	2,278
1960	100,924	65,609	65,561	6,725	2,521	13,839	30,466	10,138		Ext. Deer 9,123		56,381	108	379	69	2,514	2,244
1961	97,804	66,215	66,248	7,778	2,811	14,036	30,716	10,731		M.F. Deer 2,687		56,324	188	417	82	2,682	2,393
1962	100,374	65,442	68,832	8,769	3,288	13,665	32,306	11,561		1,005	123,335	58,727	186	555	81	2,780	2,485
1963	104,024	60,768	64,099	7,795	3,177	12,517	26,774	24,320		Ext. Deer 8,400		62,040	176	522	69	2,795	2,518
										M.F. Deer 3,373							
										937	123,460						
										Ext. Deer 5,900							
										M.F. Deer 3,841							
										H. C. Deer 2,796							
										896	123,646						
										Ext. Deer 7,152							
										M. F. Deer 3,148							
										H.C. Deer 5,695							
										912	124,564						
										Ext. Deer 11,524							
										M.F. Deer 3,442							
										H.C. Deer 6,388							
										Ant. Deer 1,353							
										877	117,554						
										M.F. Deer 1,837							
										Ext. Deer 13,093							
										Res. Deer 956							

* This does not include controlled hunt permits.
 M.F. Deer—Middle Fork deer tags
 Ext. Deer—Extra deer tags
 H.C. Deer—Hells Canyon deer tags
 Res. Deer—Nonresident restricted deer tags
 Ant. Deer—Antlerless deer tags

STATEMENT OF TOTAL FUND OPERATIONS Fish and Game Fund No. 6 July 1, 1962 - June 30, 1964

	F & G Sect. 1	Predator Animal Sect. 2	Wildlife Restoration Sect. 3	Fish Restoration Sect. 4	Columbia River Sect. 5	Special Study Sect. 6	Accelerated Pub. Wrks Sect. 7	Total	Percent
Beginning Balance								\$950,599.15	
Revenue									
Licenses	4,924,585.40							4,924,585.40	
Matching Funds			697,908.83	125,431.72	924,249.71	243,990.16	57,122.30	2,048,702.72	
Others	141,544.19		33,847.32	1,131.12	474.01		32.20	177,028.84	
Total Revenue	5,066,129.59		731,756.15	126,562.84	924,723.72	243,990.16	57,154.50	7,150,316.96	
Department Transfers									
Total Funds Available								8,100,916.11	
Disbursements									
Salaries & Wages	2,124,873.81	14,542.40	363,965.80	79,582.66	274,646.22	77,551.37	6,828.98	2,941,991.24	45.7%
Travel	125,328.58		13,456.86	5,450.81	23,149.11	6,042.23	990.13	174,417.72	2.7%
Other Expense	1,189,550.95	33,462.58	293,772.27	70,747.75	205,266.76	85,978.67	84,654.36	1,963,433.34	30.5%
Capital Outlay	646,597.63		150,771.74	41,395.42	398,937.52	69,760.82	43,318.68	1,350,781.81	21.0%
Refunds	1,006.60			25.00				981.60	.1%
Total Expense	4,087,357.57	48,004.98	821,966.67	197,151.64	901,999.61	239,333.09	135,792.15	6,431,605.71	100.0%
State Transfers									
Social Security	84,406.19							84,406.19	
Adm. Audit	5,500.00							5,500.00	
Adm. Charges	33,372.21							33,372.21	
Prior Bien. Canc. War.	191.98							191.98	
Total Disbursements								6,554,692.13	
Fund Balance								1,546,223.98	
Outstanding Orders	173,263.84		9,249.11	440.33	207.00	194.50	3,245.86	350,000.00	536,600.64
Unencumbered Fund Balance								\$1,009,623.34	

**Details of Cash Receipts
Fish and Game Fund Section One**

	Biennium Number	Biennium
01 Resident Hunting and Fishing	205,571	1,073,546.55
02 Resident Hunting	127,538	363,483.30
03 Resident Fishing	131,281	442,420.70
10 Non-resident Hunting and Fishing	16,297	1,335,106.25
11 Non-resident Bird	6,480	137,916.25
12 Non-resident Season Fish	25,197	318,099.90
13 Non-resident 5-day Fish	58,378	247,379.05
14 Tourist First-day Fish	82,062	155,917.80
15 Tourist Additional 1-day Fish	37,963	36,064.85
16 Non-resident Gun	418	1,976.95
17 Non-resident Deer-Bear	1,180	28,025.00
20 Shipping Permits	1,827	730.80
21 Deer Tags	242,118	341,688.40
22 Elk Tags	119,569	281,833.65
23 Extra Deer Tags	24,617	35,824.50
24 Middle Fork Deer Tags	5,279	6,760.20
25 Hells Canyon Deer	6,388	6,068.60
26 Antlerless Deer	1,353	1,285.35
27 Non-resident Restricted Deer	956	1,816.40
28 Beaver Tags	17,875	8,490.84
29 Commission Saved		7,044.06
30 Resident Trapper	1,358	6,790.00
31 Commercial Fish	446	4,460.00
32 Resident Outfitter		
33 Guide License		
34 Resident Fur Buyer	64	320.00
35 Taxidermist	46	460.00
36 Private Pond Permit	67	670.00
37 Game Bird Farm Permit	33	330.00
38 Non-resident Outfitter		
40 Non-resident Trapper	4	300.00
41 Non-resident Fur Buyer	11	220.00
42 Duplicate Licenses	3,259	3,259.00
50 Deer Permits	6,238	18,712.00
51 Elk Permits	4,605	23,009.00
52 Moose Permits	173	4,325.00
53 Moose Tags	174	1,740.00
54 Sheep Permits	5	125.00
55 Sheep Tags	1,079	10,790.00
56 Goat Permits	365	1,825.00
57 Goat Tags	758	7,580.00
58 Antelope Permits	1,977	5,929.00
59 Antelope Tags	2,111	2,111.00
98 Erroneous License Sales		210.00
99 R.A.M. (Insuff. Checks.)		59.00
Total Licenses and Permits		\$4,924,585.40
Rentals		28,324.23
Fines and Confiscations		33,532.75
Miscellaneous Sales		12,548.03
Sale of Capital Assets		32,548.84
Insurance Adjustments		163.15
Refunds OE		9,261.73
Refunds CO		25,165.46
Total Receipts Fund No. 6		\$5,066,129.59

Fish and Game Fund No. 6
July 1, 1962 — June 30, 1964

	Total	Salaries and Wages	Travel	Operating Expense	Capital Outlay	Refunds
Administration, construction, fiscal and warehouse .. \$	721,828.12	332,263.89	30,685.23	139,220.92	218,676.48	981.60
Conservation enforcement	1,297,163.81	878,307.40	50,811.79	241,274.23	126,770.39	
Fisheries management	2,880,209.31	996,912.17	62,001.28	1,053,238.63	768,057.23	
Game management	1,319,288.70	617,391.35	26,505.13	455,780.80	219,611.42	
Information and education	213,115.77	117,116.43	4,414.29	73,918.76	17,666.29	
Total Fish and Game Fund No. 6	\$6,431,605.71	2,941,991.24	174,417.72	1,963,433.34	1,350,781.81	981.60

Employees of Idaho Fish and Game Department

As of June 30, 1964

John R. Woodworth, Director

Robert L. Salter, Assistant Director

Business Administration Division

Amos K. Belnap, Chief

T. D. Biladeau, Assistant Federal Aid Coordinator	Carlos B. Livingston, Transitman
Alice L. Cannaday, Data Processor I	D. W. McRae, Construction Foreman
Claude W. Clapsaddle, Data Processing Supervisor	Keto Murphey, Senior Clerk
Vernon Clark, Construction Foreman	Richard J. Nourse, Senior Clerk
Gloria M. Elliott, Senior Secretary	George O. Palmer, Equipment Operator II
Anne Epeldi, Principal Clerk II	Vernon B. Rich, Federal Aid Coordinator
Josephine Freeman, Senior Clerk	Robert W. Robertson, Junior Accountant
Merriam Fuller, Secretary	*Judy L. Shiefer, Key Punch Operator I
*Darlene K. Harms, Clerk Typist	Ivol E. Sies, Improvement Supervisor
Betty L. Heidel, Secretary	Louise B. Snodgrass, Principal Secretary
R. E. Hoffman, Chief Clerk	Worth A. Stevens, Duplicating Machine Operator II
Kenneth L. Johnson, Construction Foreman	Esther M. Toler, Senior Clerk
Ralph E. Johnson, Property, Supply and Warehouseman	Fran B. Wheelock, Accounting Clerk
John Langenheder, Construction Foreman	Fay Whitson, Principal Clerk II
†Frank Lanham, Maintenance Man	

* Resigned.
† Retired—part time.

Conservation Enforcement Division

Hawley Hill, Chief

Irene Powell, Secretary

Clearwater Region

Robert B. Irving, Regional Conservation Officer	Frank R. Keough, DCO II
Joseph A. Bross, Jr., DCO II	†Ray J. Kernan, DCO II
G. Hale Ebling, DCO II	Tom M. Kilmer, DCO II
Chas. W. Gallaher, DCO II	Donald D. McPherson, DCO II
Keith Hawn, DCO II	Glen Richardson, DCO II

Eastern Region

Wendell Twitchell, Regional Conservation Officer	Walton L. Hester, DCO II
Dale A. Barney, DCO II	A. LaVarr Jacklin, DCO II
Richard H. Bross, DCO II	Norman Jockumsen, DCO II
†O. R. Christensen, DCO II	Buddy Jack King, DCO II
William J. Davidson, DCO II	Ray B. Lyon, DCO II
Frank D. DeShon, DCO II	John P. Smith, DCO II
Lloyd Edwards, DCO II	Charles L. White, DCO II
Maurice T. Harding, DCO II	Derrel G. Wright, DCO II

Magic Valley Region

Edward B. Scholes, Regional Conservation Officer	†Grover C. Davis, DCO II
Robert G. Atnip, DCO II	L. Dean Davis, DCO II
Dale S. Baird, DCO II	Leland T. Hunt, DCO II
Marc C. Bingham, DCO II	Stanley L. Larson, DCO II
†Alonzo F. Brown, DCO II	Joel C. Reynolds, DCO II
Walter R. Browne, DCO II	Marion A. Rhodes, DCO II
Gary L. Davidson, DCO II	Frank A. Smith, DCO II

† Retired—part time.

Panhandle Region

Philip Swanstrum, Regional Conservation Officer	Howard R. McKeever, DCO II
Walter T. Arms, DCO II	Peter A. Printz, Jr., DCO II
Walter T. Berry, Jr., DCO II	Tom D. Reinecker, DCO II
Murvle E. Crook, DCO II	Cecil R. Sanford, DCO II
Lester C. Gissel, DCO II	†George F. Staudt, DCO II
	William B. Strack, DCO II

Salmon Region

P. J. McDermott, Jr., Regional Conservation Officer	Boyd D. Thietten, DCO II
Joe Blackburn, DCO II	Dean G. Tresch, DCO II
Bill R. Clifton, DCO II	Jim A. Uranga, DCO II
Gary R. McNeill, DCO II	Francis G. Watkins, DCO II
	J. M. Wilkins, DCO II

Western Region

W. R. Horning, Regional Conservation Officer	Kenneth A. Mackenzie, DCO II
†William Lee Black, DCO II	Claude I. Matthews, DCO II
William H. Dorris, DCO II	Martel Morache, DCO II
Fred S. Edwards, DCO II	Glen S. Page, DCO II
Vern G. Gardner, DCO II	John W. Plummer, DCO II
Heyward W. Jack, DCO II	Keith S. Rudd, DCO II
Albert F. Lyle, DCO II	John W. Smith, DCO II
	Dale Turnipseed, DCO II

† Retired—part time.

Fisheries Management Division

James Simpson, Chief

- B. D. Ainsworth, Fish Hatchery Superintendent II
B. D. Ainsworth, Jr., Fish Culturist II
Harvey Albrethsen, Fish Hatchery Superintendent I
John Austin, Fish Culturist I
E. O. Bailey, Fish Hatchery Superintendent I
Leland Batchelder, Fish Hatchery Superintendent I
Robert J. Bell, Fisheries Biologist II
Walter Bethke, Fish Hatchery Superintendent I
Ted C. Bjornn, Fisheries Research Supervisor
Burt Bowlden, Fish Hatchery Superintendent I
Osborne Casey, Fisheries Biologist II
Bradley Christensen, Equipment Operator II
Alan J. Clark, Fish Hatchery Superintendent I
†J. E. Clark, Fish Hatchery Superintendent I
Donald Corley, Fisheries Biologist I
Calvin Coziah, Fish Hatchery Superintendent II
Garrett E. Craig, Fish Culturist I
Paul Cuplin, Fish Hatchery Supervisor
James E. Dayley, Fish Culturist I
Franklin Farnsworth, Fish Culturist I
Wilfred Fiscus, Equipment Operator II
Jack Fisher, Engineer
Norman C. Floyd, Fish Hatchery Superintendent II
Frank Gaver, Fish Hatchery Superintendent I
L. W. Gaver, Fish Hatchery Superintendent I
Stacy V. Gebhards, Fisheries Biologist II
James Graban, Fisheries Biologist I
Terry Holubetz, Fisheries Culturist I
Richard Horn, Fish Culturist I
Paul Jeppson, Fisheries Biologist II
James Keating, Fisheries Biologist II
Fred J. Keppner, Fish Hatchery Superintendent I
Billy F. Knorpp, Fish Culturist II
Delbert C. Ledington, Fish Culturist II
James W. McLin, Fish Culturist II
Jerry Mallet, Fisheries Biologist II
Richard Martin, Fish Culturist I
Hark Misseldine, Fish Hatchery Superintendent I
Leon Murphy, Coordinator, Basin Investigations
Charles Neider, Fish Hatchery Superintendent I
David W. Ortmann, Fisheries Biologist I
Donald E. Packard, Fish Culturist II
Evan Max Parrish, Fish Culturist II
William S. Platts, Fisheries Biologist II
Melvin Prince, Equipment Operator II
Charles R. Quidor, Fish Hatchery Superintendent I
Walter Rast, Fish Culturist II
Melvin Reingold, Fisheries Biologist I
Monte R. Richards, Jr., Fishery Development Supervisor
Wallace C. Roberts, Fish Culturist II
Charles Sherwood, Fish Hatchery Superintendent I
Rex Spackman, Fish Culturist II
Lorrie Spiker, Secretary
*Judith A. Toole, Stenographer
Rex Starks, Fish Culturist I
Robert Vaughn, Fish Culturist I
William E. Webb, Fisheries Biologist II
Thomas Welsh, Fisheries Biologist II

† Retired—part time.

* Resigned

Game Management Division

Levi L. Mohler, Chief

- | | |
|--|---|
| Elwood G. Bizeau, Game Bird Supervisor | Howard Kaster, Refuge Manager |
| Charles Blake, Game Biologist II | Howard D. Livengood, Game Farm Superintendent |
| Orrin F. Blattner, Refuge Manager | Martin H. Luther, Refuge Manager |
| Alexander W. Bruner, Refuge Manager | David S. Neider, Game Biologist I |
| H. E. Cherry, Refuge Manager | A. Errol Neilson, Game Biologist II |
| Arnold Coleman, Game Biologist II | Elmer Norberg, Game Biologist II |
| Gene deReus, Land Management Supervisor | Richard Norell, Game Biologist II |
| Wallace P. Ekren, Assistant Game Farm Superintendent | †David P. Osterhout, Assistant Refuge Manager |
| Mary Fanckboner, Secretary | Ralph V. Pehrson, Game Biologist II |
| William Gnemi, Game Farm Superintendent | Duane Pyrah, Game Biologist II |
| Deral J. Haycock, Refuge Manager | Ray M. Rogers, Game Biologist II |
| Charles D. Haynes, Jr., Game Biologist III | Clyde A. Scott, Game Biologist II |
| ‡Keith Heezen, Game Biologist I | Wesley Shaw, Biologist III |
| Lester Hendrickson, Refuge Manager | Robert K. Sherwood, Game Biologist II |
| Floyd D. Horne, Game Biologist II | †Homer Stever, Game Farm Assistant |
| Eernice Howell, Secretary | Dale Tanner, Game Biologist II |
| Dale Jensen, Game Biologist II | Lester E. Trout, Game Biologist II |
| Steven L. Judd, Game Biologist I | Roger M. Williams, Big Game Supervisor |
| ‡ Educational leave of absence. | Richard Wilson, Refuge Manager |
| † Retired—part time. | |

Information and Education Division

E. Kliess Brown, Chief

- | | |
|---|---|
| William Cunningham, Conservation Educator I | James Humbird, Conservation Educator II |
| Sandra DeGroot, Stenographer | Michael Throckmorton, Conservation Educator III |
| Marshall Edson, Conservation Educator III | Harvey J. McNeel, Conservation Educator I |
| Marilynn Folwell, Senior Stenographer | Ramona West, Receptionist Clerk |
| Delvan D. Hibbert, Conservation Educator II | Milton T. Williams, Conservation Educator II |