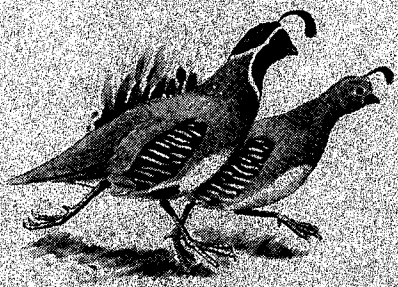
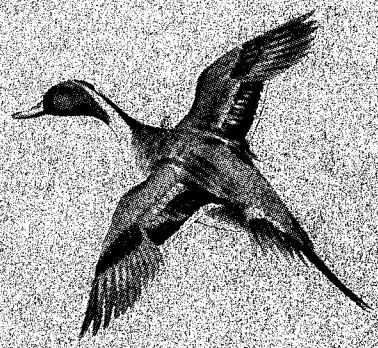
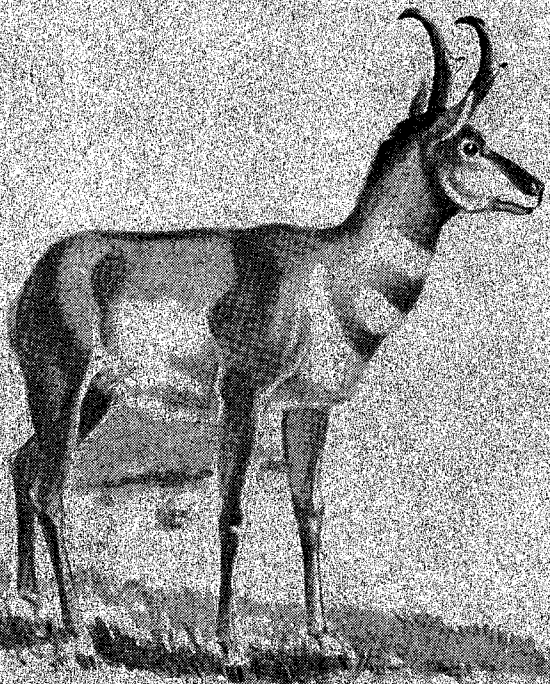
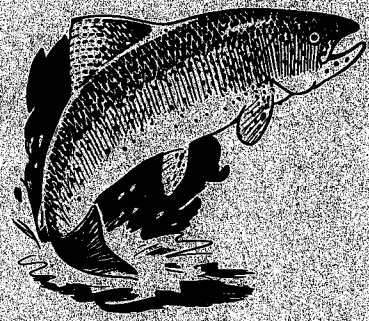
SUMMARY of OPERATIONS 1958









Idaho Department of Fish and Game

Ross Leonard, Director

THE IDAHO DEPARTMENT OF FISH AND GAME
518 Front Street
Boise, Idaho

December 1, 1958

The Honorable Robert E. Smylie
Governor of Idaho
Capitol Building
Boise, Idaho

Dear Governor Smylie:

Because of the excellent progress made in meeting the pressures and demands placed upon the fish and wildlife resources of Idaho, we are pleased to comply with Section 36-116 and submit this annual report to you.

In order to manage properly the fish and wildlife resources of the State, continued emphasis has been placed upon research and study during the past year. Since many wildlife management programs have become stabilized, it became possible to direct more attention toward the development of new areas and the study of new methods of management. These projects and programs are designed to meet pressures which the increasing human population has placed upon our wildlife resource. We recognize the problems associated with this use, and our efforts will continue to be designed to provide for such increased recreational use.

Other agencies and other business organizations are fully cognizant of the spiraling costs of their operations. The Fish and Game Department is confronted with the same problem. However, we will continue to do the best possible job to provide good fishing and hunting commensurate with revenue made available by those people who participate in hunting and fishing activities.

The Idaho Fish and Game Commission and the members of the Idaho Department of Fish and Game wish to thank you, as well as the individuals, agencies, and conservation organizations who have contributed to the sound management, wise use, and perpetuation of Idaho's fish and wildlife resources.

Respectfully,

Ross Leonard
Director

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GAME MANAGEMENT

The year 1958 brought much progress in game management programs and was a successful year for the hunter. A few of the highlights are included in the next five paragraphs.

Upland game bird hunters had the best pheasant hunting experienced in the seven years for which detailed information is available. Extensive weekend checks obtained information from over 10,000 pheasant hunters and over 8,000 sage grouse hunters. This large coverage reflects accurately the conditions encountered by hunters afield.

Production checks indicated notable improvement in Canada goose production in eastern Idaho for 1958 compared to 1957.

In big game work hunters cooperated in all areas by returning big game report cards. The information from these cards has proven a great help in advance planning of big game regulations and management procedures. When this was written cards were arriving in about the same volume as in 1957 when nearly 65,000 cards were returned.

Special accomplishments in field jobs included improved inventory work of bighorn sheep through use of the helicopter, the ear tagging of 140 antelope as a part of antelope production studies in the Little Lost and Pahsimeroi valleys, and further studies of the Cassia deer herd, particularly a critical examination of inventory possibilities.

Hunters were encouraged to measure big game heads for record purposes in the past two seasons when it became evident that heads of outstanding trophy quality were being taken in Idaho without proper recognition. North American records published in 1958 showed that Idaho hunters in 1957 took the record Shiras moose reported for the year, the record elk, first, second and third places for non-typical mule deer, and seventh place for typical mule deer. A notable feature of the mule deer competition was the fact that a number of the best Idaho heads came from herds which have been hunted regularly for many years.

Big Game

Annual work in big game is directed at determining animal population trends and levels, checking the status of the forage plants which support the animals, and gathering information concerning the harvest by hunting. In 1958 all of these jobs were carried out as thoroughly as possible, and further improvements were made in techniques used. In addition, field investigations were extended to some areas not previously covered.

Of special interest in 1958 big game operations were these jobs:

1. Browse plot studies in northern Idaho. In Boundary, Bonner, Kootenai, Shoshone and Latah counties, a total of 190 browse study

plots were established and examined in the spring of 1958 in nine important deer and elk wintering areas. More than half of these ranges showed heavy or excessive winter use from previous years and generally moderate use in recent mild winters. This suggests the importance of proper annual harvests of deer and elk if ranges are to be maintained in satisfactory condition.

2. Population surveys. Extensive aerial surveys of deer and elk were continued during 1958, mostly in areas which have been covered several consecutive years. Helicopters were used in limited periods in game survey work in the winter of 1958 following their satisfactory performance earlier in the Clearwater drainage. Permanent use of helicopters on a limited basis is desirable since these machines enable game technicians to get information which could not be obtained otherwise. Bighorn sheep surveys, for example, were made via helicopter for the first time in 1958 and the information derived immediately bore fruit to the hunter in terms of revised bighorn hunting regulations.

3. Cassia deer studies. It has been evident for some time that continuous investigations should be made of selected deer and elk herds so that basic information may be accumulated. This will be valuable in interpreting other more general investigations. The deer herd of the Cassia division of the Sawtooth National Forest was selected for these deer study purposes and a biologist was assigned to that area in the fall of 1957 primarily to:

1. work toward improving herd census or inventory methods,
2. obtain information on the movements of the Cassia deer herd,
3. obtain information on herd composition, or the ratio of bucks, does, and fawns in the herd, and
4. determine range conditions and degree of browse utilization on key wintering areas in the Cassia management unit.

After one year of concentrated work with the Cassia deer herd, the following findings seem particularly pertinent:

1. Ground counts as used on the Cassia in past years are likely to be misleading if used alone as deer population trend indicators. Helicopter counts indicated that many deer were outside the counting limits of the selected ground count areas in 1957 and 1958. This undoubtedly contributed to the lower ground counts in 1958.
2. Winter ratios of buck:doe:fawns were similar to those found on many other western deer ranges.
3. A review of past records shows that range conditions have shown little change in recent years. However, the range deteriorated for a long period up to as recently as 1954 and restoring the range to good condition will require careful management of the deer herd.

4. Antelope and deer. Other special studies in 1958 included antelope survival investigations in the Little Lost and Pahsimeroi valleys

and deer range and deer herd studies in southeastern Idaho directed toward planning proper harvests of deer in areas of high deer population and poor wintering conditions. A full-time game biologist worked throughout 1958 in southeastern Idaho on this latter study.

5. Big game report cards. Big game report cards, supplied to hunters in 1957 with their big game tags, provided a successful method of getting current hunting information for the entire state. These cards were tabulated daily, giving much needed data on the date of kill, location of kill, and sex of animal taken. Hunters returned about 65,000 of these cards in the trial year and the data derived were used directly in making needed revisions in 1958 hunting seasons and regulations. The cards supply extensive information from all parts of the state. Report cards were arriving in quantity in each mail late in 1958 when this was written. Early compilations indicated similar hunting success for most areas in both 1957 and 1958, with most major areas holding about the same rank in statewide deer and elk harvest in both years.

Cards covering the following kills on the less common species had been received by November 10, 1958:

800 antelope - 67 moose - 35 bighorns - 50 mountain goats

Additional reports will change these totals. The largest volume of deer and elk cards will arrive in December after the close of hunting in most areas. No preliminary deer and elk kill figures are included in this report. However, official checking stations handled more elk in 1958 than in 1957, and deer checked by mid-November in 1958 numbered slightly less than for the entire season of 1957.

Big Game Kill for 1957

The statewide calculated kill of deer, elk, and bear, based upon the game kill questionnaire, was as follows:

	Deer	Elk	Bear
By residents	59,969	11,456	--
By non-residents	2,185	2,112	--
TOTAL KILL	62,154	13,568	3,045

GAME BIRDS

One of the primary objectives of the game bird management program is to gather and assemble inventory material each year which will show the population trend of the various species. Many Department personnel cooperate in this work which is coordinated by biologists assigned to various areas of the state. Standardized techniques allow direct comparisons to be made with the results.

Pheasant

Pheasant sex-ratio counts are made each year. These counts are normally taken during January when counting conditions are optimum. The results are useful in assessing the portion of available cocks that have been harvested during the preceding season. They are also used in conjunction with crowing counts taken during the spring to determine the trend in pheasant breeding populations.

The results for the January, 1958 count and a comparison with the preceding two years are shown in the following table. The counts this year follow the same general pattern of previous years in that the ratio varies from 1½ to 2½ hens per cock. Since a safe ratio for breeding purposes can be as high as 6 or 7 hens per cock, it is evident that we still are not harvesting as many cock pheasants as could safely be taken.

Comparison of Pheasant Sex Ratio Counts, 1956 - 1958

	1956		Sex Ratio	1957		Sex Ratio	1958		Sex Ratio
Dist.	Cocks	Hens	M/100 F	Cocks	Hens	M/100 F	Cocks	Hens	M/100 F
1	111	255	44:100	217	355	61:100	105	183	57:100
2	491	969	51:100	374	824	45:100	255	397	64:100
3	2623	8290	32:100	1906	3931	48:100	2826	6277	45:100
4	2115	4006	53:100	2718	4035	67:100	2353	3695	64:100
5	2122	4846	44:100	2488	5566	45:100	712	1676	42:100
Totals	7462	18366	41:100	7703	14711	52:100	6251	12228	51:100

Pheasant checking stations are operated on the opening week end of the season. The results for the past five years are shown in the accompanying table. The statewide hunter success this year was the highest in the seven years that this information has been gathered.

Comparison of Pheasant Checks on Opening Week End, 1954-58

District		No. of Hunters	No. of Birds	Av. Birds/Hunter
One	1954	712	459	.64
	1955	504	347	.69
	1956	308	142	.46
	1957	432	242	.56
	1958	387	239	.62
Two	1954	868	606	.70
	1955	645	387	.60
	1956	646	445	.69
	1957	908	818	.90
	1958	1,138	905	.80
Three	1954	3,548	3,714	1.00
	1955	2,765	2,653	.96
	1956	3,010	3,236	1.10
	1957	3,210	4,134	1.30
	1958	3,381	4,531	1.34
Four	1954	2,329	2,253	.97
	1955	1,936	1,667	.86
	1956	1,710	1,558	.91
	1957	1,852	2,028	1.10
	1958	1,831	2,866	1.57
Five	1954	3,616	3,633	1.00
	1955	3,654	3,196	.87
	1956	1,727*	1,481	.86
	1957	3,900	4,035	1.03
	1958	3,559	4,804	1.35
Totals	1954	11,073	10,665	.96
	1955	9,504	8,251	.87
	1956	7,421	6,828	.92
	1957	10,302	11,257	1.09
	1958	10,296	13,345	1.30

* Checks taken on opening Sunday only.

Sage Grouse

The results of breeding ground counts and brood counts indicated that a short hunting season was warranted for sage grouse in 1958. A one and one-half day season with a two-bird season limit was held in the major sage grouse areas of the state. Because of a high population, the season was lengthened to four and one-half days in most of Owyhee County.

Since the population had remained fairly static for some time and the closure had always resulted in some illegal kill, the area open to sage grouse in Fremont County was also opened for sharp-tailed grouse. This was the first open season on this species for many years. Reports from the field indicate that there are plenty of sharptails left. The results of this year's checking stations on sage grouse and a comparison with previous years are given in the accompanying table.

Comparison of Sage Grouse Checking Station Results
(1953, 1956-58)

District		No. of Hunters	No. of Birds	Av. Birds/Hunter
Three	1953	1,360	1,418	1.00
	1956	1,167	1,043	.89
	1957	806	770	.96
	1958	1,207	1,410	1.17
Four	1953	4,067	4,169	1.00
	1956	4,051	4,219	1.00
	1957	513*	694	1.40
	1958	2,670	2,952	1.11
Five	1953	5,013	4,822	.96
	1956	5,156	4,813	.93
	1957	4,791	3,756	.78
	1958	4,640	4,314**	.93
Totals	1953	10,440	10,409	.99
	1956	10,374	10,075	.97
	1957	6,110	5,220	.85
	1958	8,517	8,676**	1.02

* Only part of District open in 1957.
** Includes 238 sharp-tailed grouse from Fremont County.

Other Upland Bird Species

Opening week end checks on forest grouse showed that 1,216 hunters had taken 1,174 grouse for an average of .97 birds per hunter. This was up .10 bird per man over the checks of 1957. Big game hunters reported excellent grouse populations in many areas where the seasons coincided.

There were 28 counties open to chukar hunting in 1958. Most areas reported high populations and there was some evidence of increased hunter interest in this bird.

Fairly mild weather during the first 15 days of September insured a successful mourning dove season. Hungarian partridge and quail populations continued the upward surge noted last year. Huns did particularly well and numbers in some areas were comparable to the "good old days."

Waterfowl

A continued high population of waterfowl in the Pacific Flyway resulted in the allowance of a 95-day season for the second year in a row. The shooting was good in all areas for several days and then a prolonged spell of "blue bird" weather caused a decline in the hunting. It is hoped that the weather will be conducive to good hunting during the remainder of the season.

The annual mid-winter inventory of waterfowl is taken following the hunting season when the birds are undisturbed and on their wintering areas. The results of the counts in Idaho for the past five years are shown in the accompanying table.

Idaho Waterfowl Mid-Winter Inventory

January 1954 - January 1958

	1954	1955	1956	1957	1958
Mallard	394,034	344,054	379,436	302,569	341,435
Baldpate	20,780	27,658	19,539	16,740	17,686
Pintail	24,237	17,891	5,231	9,045	19,256
Green-winged Teal	2,274	1,707	1,318	818	2,489
Blue-winged Teal	9	--	--	--	2
Shoveller	83	554	157	2,568	1,783
Gadwall	263	1,246	1,131	651	1,382
Wood Duck	102	--	2	3	--
Redhead	1,147	2,559	5,724	2,102	3,072
Canvasback	2,887	3,477	1,629	1,744	1,717
Scaup	2,191	2,602	1,927	4,062	3,249
Ringneck	800	2,313	1,002	6	423
Goldeneye	8,414	10,713	11,188	17,612	11,115
Bufflehead	992	834	1,007	564	519
Ruddy Duck	152	76	127	53	236
Unidentified ducks	7,246	3,657	8,058	5,330	5,729
Canada Goose	12,375	6,709	11,281	8,859	6,826
Snow Goose	2	1	6	3	--
Cackling Goose	--	2	--	--	--
Whistling Swan	102	134	1	226	110
Trumpeter Swan	419	290	323	326	234
Mergansers	5,574	1,605	5,514	7,694	4,592
Coot	49,750	36,832	24,646	11,165	12,419
TOTALS	533,833	464,914	479,247	392,140	434,274

Canada goose nesting surveys were continued in several areas of the state. The results, as shown in the accompanying table, do not indicate total estimated production. They show population trends based on the number of and hatching success of nests found on the same areas covered in the same manner each year. On this basis, the estimated production on four areas with trend information for seven years is 11 percent below last year and 2 percent below the average for the previous six years. The estimated production on six areas with trend data for five years is 8 percent below last year and 2 percent below the average for the previous four years. The reduction was due entirely to a 29 percent drop from the previous year on estimated production on the Homedale unit. For all practical purposes these birds are non-migratory. The eastern Idaho units all showed an increase. Collectively, it amounted to 19 percent over last year.

COMPARISON OF GOOSE PRODUCTION ON IDAHO STUDY AREAS, 1952-1958

	Glenns Ferry	Homedale	Blackfoot Reservoir	Island Park Reservoir	North Fork Snake River	North Lake	Total*	
No. nests found								
1952	24	208	103	16	-	-	351	
1953	24	250	121	44	-	-	439	
1954	34	216	132	42	39	24	424	(487)*
1955	16	189	117	34	32	31	356	(419)*
1956	15	214	86	38	32	40	353	(425)*
1957	13	253	99	32	35	32	397	(464)*
1958	8	208	89	51	40	31	356	(427)*
No. nests hatched								
1952	16	103	75	12	-	-	206	
1953	11	180	74	36	-	-	301	
1954	9	169	78	36	34	19	292	(345)*
1955	1	125	81	19	21	26	226	(273)*
1956	6	123	61	34	31	34	224	(289)*
1957	8	194	50	23	25	25	275	(325)*
1958	7	151	59	28	35	28	245	(308)*
Average Hatch								
1952	5.1	4.7	4.7	4.0	-	-	4.7	
1953	5.4	5.0	4.8	4.6	-	-	4.9	
1954	4.6	5.5	4.5	4.1	4.8	4.4	5.0	(5.0)*
1955	4.0	4.8	4.8	2.7	4.5	5.2	4.6	(4.6)*
1956	6.0	5.1	5.3	5.4	4.9	5.1	5.2	(5.2)*
1957	5.1	5.3	4.0	4.1	5.5	4.7	5.0	(5.0)*
1958	6.3	5.3	4.5	4.3	4.1	4.3	5.0	(4.9)*
Estimated production								
1952	82	484	352	48	-	-	966	
1953	60	900	355	166	-	-	1481	
1954	41	930	351	148	154	80	1470	(1704)*
1955	4	601	387	52	94	130	1044	(1268)*
1956	36	627	323	185	152	173	1171	(1496)*
1957	41	1030	201	95	136	118	1367	(1621)*
1958	44	798	267	121	145	121	1230	(1496)*

* Excluding North Fork and North Lake

( )* Including North Fork and North Lake

The Canada goose banding program was continued with the emphasis placed on catching as many "locals" as possible. The results of this year's banding operations are given in the table.

Canada Goose Banding Data - Summer, 1958

Area	Male		Female		Uncl.		Total
	Adult	Local	Adult	Local	Adult	Local	
Snake River, Homedale	10	77	6	80			173
Blackfoot Reservoir	14	58	8	61			141
Island Park Reservoir					25	113	138
Minidoka Refuge	18	28	13	37			96
Snake R., Glenns Ferry	1						1
Lewiston Orchards Res.*	7		7				14
Totals	50	163	34	178	25	113	563

* Reared at Lapwai game farm.

Game Farms

Artificial propagation was continued at the Jerome and Lapwai game farms. Both farms raised pheasants and Jerome also produced chukars. Since very few birds were held over winter at Lapwai, the spring release from this installation was small. Brood stock for this year's production at Lapwai came primarily from Jerome. The planting records are given in the following tables.

Pheasant Releases, 1958

Source	Spring Release	Brood Stock	Summer Release	Total
Lapwai	71	1,144	8,187	9,402
Jerome	1,170	2,060	11,305	14,535
Totals	1,241	3,204	19,492	23,937

Chukar Partridge Releases, 1958

County	Spring Release	Brood Stock	Summer Release	Total
Butte	60			60
Twin Falls	150	60		210
Totals	210	60		270

WILDLIFE MANAGEMENT AREAS

Improvement and maintenance of the wildlife management areas continued in 1958. These twelve areas which are scattered throughout the state are managed specifically for wildlife but public use of the areas is allowed and encouraged where such use does not interfere with wildlife production. In addition to an increasing number of fishermen and hunters realizing benefits from the areas, bird watchers, picnickers, boaters, various youth groups, etc., have become aware of the educational and recreational opportunities available on the areas.

As a part of making the areas more productive of wildlife, crop production for the use of wildlife is an important work phase on each of the areas. During 1958 the following total acreages or amounts of crops were produced on the wildlife management areas: 653 acres of small grains, 31 acres of corn, 366 acres of hay plus 289 tons of hay and 117 acres of perennial grasses. In addition, several acres of trees, grasses and shrubs have been planted to improve living conditions for wildlife. Creating additional water areas has been beneficial on many of the areas.

HABITAT IMPROVEMENT

Providing the essentials for year-around-living for various wildlife species is the objective of the Department's habitat improvement program. The planting of trees and shrubs for the benefit of game birds is the major part of the program. During 1958 there were 88,612 trees and shrubs planted in windbreak-type plantings in various areas of the state. Many of the plantings are a result of the cooperative work agreements that the Department has signed with 28 of the state's 51 Soil Conservation Districts. Landowners receiving these plantings agree to open their lands to "hunting by permission." Thus, in 1958, another 23,743 acres of private land were assured to public hunting.

In addition to providing food and shelter for wildlife, the plantings are beneficial to the farmers in other ways: as windbreaks they protect farmsteads, livestock feed lots, field crops, prevent wind and water erosion, control snowdrifts and improve the appearance of the farm.

Tree and shrub plantings made since 1952 are summarized in the following table.

Summary of Programs, 1952 - 1958

Year	No. of Plantings SCD	Private	Dept.	Others	Total	Trees and Shrubs Planted Replants	New Plantings	Acres Planted	Hunting By Permission
1952		31	10	5	46		76,129	99	
1953	21	35	4	4	64	14,256	93,348	96	9,249
1954	99	3	4	2	108	14,455	113,197	130	19,983
1955	140	4	6	6	156	13,013	121,464	164	21,962
1956	114	1	6		124	9,353	90,912	106	20,150
1957	87	6	2	2	97	4,401	91,413	97	16,821
1958	106	4	4	4	118	7,993	80,619	104	23,743
Total	567	84	36	23	713	63,471	667,082	796	111,908

Water Development for Game

In cooperation with the Bureau of Land Management, improvements were made on nine water seeps that were developed in 1957 for Hungarian and chukar partridge. Trees and shrubs were planted adjacent to the seeps to provide food and cover. Seven more seeps were fenced and water pools were constructed during 1958. Livestock water is to be piped out of the fenced areas into watering troughs provided by the Bureau of Land Management. Investigation has shown that these water areas are utilized by birds and their development and preservation should be beneficial in arid sections.

Bitterbrush Seeding in Big Game Ranges

Results of the planting of bitterbrush seed on depleted big game winter ranges in the Boise and Payette River drainages in 1957 were encouraging and additional seeding was done in 1958. Approximately 160 acres of Department-owned big game winter range were seeded during September, October and November of 1958. Chemical treatment of the seed against rodents, insects and fungi with Endrin and Arasan was successful and was repeated for the seed planted in 1958. Additional acreages are being planted by hand in southcentral Idaho but at the time of writing this report, work was continuing and exact acreages to be planted in 1958 were not available.

FURBEARERS AND PREDATORS

Furbearers

The fur resources survey, Federal Aid Project W 108-R, was concluded in 1958. Many of the Department's fur management activities were carried out through this project and important jobs will be continued in the future as part of the fur management program.

Beaver

The statewide survey of the beaver caretaker trapper program revealed that Idaho contains approximately 44,000 miles of streams, over 7,000 miles (17 percent) of which are subject to continual beaver damage complaints.

During the eleven seasons the caretaker trapper program of beaver management was in operation, beaver harvests averaged nearly 8,000 pelts per year. Several years of under-trapping produced over-populations of beaver throughout most of the state; and damage complaints, especially in agricultural areas, had reached serious proportions.

The 1957 Idaho Legislature amended the beaver caretaker law, enabling the Fish and Game Commission to declare open seasons, and in 1957-58 Idaho had its first general beaver trapping season in recent history. A tag costing $1.00 was required for each beaver pelted in addition to the regular trapping license for taking furbearers.

Complete data are not yet available, but preliminary information indicates that a record harvest of approximately 24,000 pelts was posted by the trappers of the state. Field reports indicate a considerable reduction in the overall number of damage complaints, but the problem is still critical in localized areas.

Prior to this first open season, population densities were sampled on major streams of the state by means of an aerial count of beaver food storage piles or "caches," each of which represents one colony. Counts in subsequent years are expected to indicate trends in the beaver populations on these streams.

Most of the trend routes are located in beaver complaint areas and those covered in 1958 indicate that the 1957-58 open season had the desired effect of reducing beaver numbers in these areas.

Aerial Beaver Colony Count by Districts, 1957 and 1958

	Stream Miles Counted*	No. of Colonies 1957	No. of Colonies 1958	Stream Mi. per Colony 1957	Stream Mi. per Colony 1958	Percent Change 1957 to 1958
Dist. 1	(----------Work in progress----------)					
Dist. 2	167	20	11	5.6	15.2	-63
Dist. 3	(----------Work in progress----------)					
Dist. 4	232	54	18	4.3	12.9	-67
Dist. 5	604	273	186	2.2	3.2	-32
Statewide	(----------Incomplete, work in progress----------)					

* Includes only routes which were covered in both 1957 and 1958.

Annual Fur Catch

The 1956-57 trapping season, the latest for which complete data are available, witnessed a continuation of the decline in fur prices and trapping activity. Only 776 trapping licenses were sold (45 percent below the ten-year average) and the catch of the important furbearers (muskrat, mink, and marten) was from 26 to 73 percent under the ten-year average. Beaver were still harvested under the caretaker program in 1956-57.

Species	Number Pelted	Value	Average Price Per Pelt
Muskrat	91,043	$ 55,797.34	.61
Mink	3,407	42,160.65	12.37
Marten	366	2,110.30	5.75
Otter	77	1,528.13	19.85
Raccoon	335	234.36	.70
Fox	7	15.61	2.23
Total	95,235	$101,846.39	-

Predator Control

As in past years, the major predator control activity of the Department consisted of contributing to the cooperative control program administered by the Branch of Predator and Rodent Control, U. S. Bureau of Sport Fisheries and Wildlife. That portion of the program financed by Fish and Game Department funds during the 1957-58 fiscal year is summarized as follows:

Salaries & Wages	Other Expenses	Aircraft Hire	Total Cost	Predators Taken	
				Coyote	Bobcat
$14,108.85	$1,269.90	$2,621.25	$18,000.00	469	285

Additional predator control was effected by a Department trapper assigned to northern Idaho. Trapping activity was directed at known depredation areas, and 79 coyotes and 4 bobcats were destroyed in 1957-58. A part of this program was aimed at showing landowners who have losses from predators how to trap coyotes and bobcats. This directs control operations at the individual animals responsible for depredations on domestic stock at the place where losses are occurring and has proven more effective in reducing losses than widespread indiscriminate trapping over a wide area by hired trappers.

A bounty of $25.00 per cougar was paid on animals taken in the five northern counties in fiscal year 1957-58. Claims were paid on 9 animals during this period, resulting in a total expenditure of $225.00.

Summary of Predator Control Expenditures, 1957-58

Cooperative Program	State Trapper	Cougar Bounty	Total
$18,000.00	$4,987.65	$225.00	$23,212.65

CONSERVATION ENFORCEMENT

The conservation enforcement division operated with a full complement of personnel during the year 1958, consisting of a chief, five district conservation officers and sixty-four regularly appointed conservation officers. A definite line of authority is maintained with conservation officers responsible to the district conservation officer and indirectly responsible to the chief of the division. The district conservation officers are under the supervision of the division chief and in turn the chief of the division is directly responsible to the director.

The primary responsibility of the division is impartial enforcement of the fish and game laws and regulations. In addition to this responsibility, conservation officers work closely with other department personnel in all department activities conducted in their areas. This year conservation officers spent approximately half of their time on enforcement. The remainder of their time was spent cooperating with game, fish and fur biologists in formulating recommendations and suggestions for future seasons, regulations and management programs. They participated in many conservation information and education programs for public schools, youth groups, civic and service clubs, sportsmen's organizations, and all other interested groups. They also assisted radio, television and newspaper outlets of their areas in covering local conservation activities.

Some time was also spent participating in such projects as acquisition of public access, salt distribution and study, collection of fisherman and hunter success information, beaver control, spawn taking, and collection of creel census data.

They cooperate and work closely with city, county, State and Federal agencies.

Increased sales of hunting and fishing licenses definitely indicate that public interest in hunting and fishing is increasing even faster than population numbers. This steadily increasing pressure on our fish and wildlife resources urgently demands better coordinated enforcement as well as progressive wildlife management practices at all levels.

We are continuing to develop and improve a program to give the necessary protection to our natural resources and at the same time to develop public cooperation to the point where a minimum number of arrests is necessary. We feel that the program to discourage game law violations before they occur is being better accepted, as the public realizes increasingly that wildlife is public property to which no one person has a special right.

Through all available means a concerted effort is made to keep the public properly and fully informed of all rules and regulations explaining why such rules and regulations are necessary in wildlife management.

Equipment

During the year the department's two-way short-wave radio system was increased in efficiency. A total of seventy-six mobile units are now installed in department vehicles operated by the Director, Chiefs of Game Management, Conservation Enforcement, Information and Education, Upland Bird Supervisor, some game biologists and all enforcement personnel. The mobile units operate from car to car, from car to repeater to car, from car to aircraft to car and from car to portable unit to car.

In order to increase radio coverage in some parts of the state, two additional repeater stations were installed. Now installed and in operation are eleven repeater stations at the following sites: Mica Peak near Coeur d'Alene, Little Blacktail Mountain near Sandpoint, Elk Butte near Elk River, Cottonwood Butte northwest of Grangeville, Brundage Mountain north of McCall, Shafer Butte north of Boise, Bald Mountain west of Ketchum, East Butte west of Idaho Falls, Baldy Mountain west of Salmon City, Chinks Peak southeast of Pocatello and Ryan Peak east of Rigby. In addition to the above equipment we have 14 portable radio units in operation.

The Department qualified under the Federal Civil Defense program and fifty percent of the entire cost of the radio communications system and installation was paid by Federal Civil Defense. In the event of an emergency our system will be used for security purposes and to augment the State Police Radio system.

The implementation of this modern equipment has increased our efficiency of patrol in many ways. By providing immediate supervision and direction of field personnel the system plays a vital role in the enforcement program. Numerous apprehensions and convictions of game law violators can be contributed directly to the radio system. It appears that the psychological effect produced by use of the radio is a factor in the prevention of violations. The use of radio in aircraft to car operations has been of special value in some instances.

A patrol cabin was constructed at Red River on the South Fork of the Clearwater River near Red River Ranger Station. The United States Forest Service granted a free use permit for a patrol cabin located on the upper Coeur d'Alene River.

Routine maintenance and improvement work was carried on at all conservation officer headquarters sites and patrol cabins.

Patrol cabins are built or acquired in back country areas which are difficult to patrol without shelter and facilities for a short stay. The selected areas receive heavy hunting and fishing pressure, and an increased patrol is necessary to protect the wildlife resources.

INFORMATION AND EDUCATION

General

All regular information and education services of the Department were continued during 1958. Special service projects already established were also continued.

During the past two years over 30,000 Idaho young people have received instruction in hunter safety; the Landholder-Sportsman Council continued its educational and publicity program; and increased emphasis was placed on furnishing wildlife exhibits to state and local county fairs.

Insofar as in-service training of Department personnel was concerned, the three regular district meetings were conducted in each district. The annual Department school at Farragut was replaced this year with the attendance by most of the personnel at the three-day Western Association of Fish and Game Commissioners Conference at Sun Valley during June.

Following is a summary of the information and education work accomplished by the Department during the year.

Information

One phase of the information services of this division includes preparation and release of news articles, photos and related information to newspapers, news agencies and other outlets. Hundreds of requests for hunting and fishing possibilities are answered each year in addition to personal contact with sportsmen.

Public interest in hunting and fishing is emphasized by increased use of news articles issued from the department office. Regular news stories and feature items are issued on a standard basis. Special items are sent out as the news develops. In all, close to 800 separate stories were issued in this manner during the year. News mats are also prepared and sent to Idaho newspapers on the basis of three each month.

The Department received approximately 6,000 letters of inquiry during the year. This number was about the same as in 1957 and showed a large increase over letters received in 1956.

Publications

Publication of the official department magazine, THE IDAHO WILDLIFE REVIEW, continued during 1958 with 16,000 copies printed six times yearly. Subscriptions have increased steadily during the past year and at the present time approximately 15,700 copies are mailed each issue. Over 300 non-residents take the magazine, paying $1.00 per year. It is free to Idaho residents.

Publishing costs have remained stable during the year. A slight increase in mailing cost will take effect next year. Total cost of printing, mailing, photos and engraving amounted to $5,400.54 during the year.

Reprints have been made of articles appearing in the magazine. These deal with fish and game management work, projects, research and related activity. With reprints from previous years, the department now has about 75 different subjects available.

Other materials prepared and published by the Information and Education include: 150,000 fishing regulations; 140,000 game maps with seasons and regulations; 70,000 waterfowl timetables and regulations; 75,000 upland game bird regulations; 10,000 trapping seasons and regulations; 50,000 "Care of Game Meat" pamphlets; 10,000 waterfowl identification sheets; and 10,000 "Mr. Hunter" pamphlets with information about orientation in the woods.

In addition, 25,000 pamphlets titled "Hunting and Fishing in Idaho" were issued. These contain information regarding primary highway access to Idaho, airways, main hunting and fishing regions of the state and material about outfitters, campgrounds and general items of assistance to the traveler in Idaho. These have been mailed on request; sent to Chambers of Commerce; the Idaho Department of Commerce and Development and to Idaho State Ports of Entry.

Other materials include signs for the Landholder - Sportsman program, signs for hunting and fishing closures or description of boundaries, listing of department films and a pamphlet with information of fish hatcheries and production.

Photography and Films

Filming was completed on a 14-minute reel dealing with the importance and management of the rare Trumpeter Swan. This has been edited and narration is being prepared. This should be ready for release early in 1959. Additional motion picture footage was obtained on chemical treatment of large lakes, the new fish screen program and installations and such routine wildlife activities as necessary.

The 35mm color slide library has been enlarged during the year with the addition of many new subjects. These include a set of different hawks and several game animals that were needed to complete the series.

A large number of still photographs were obtained during the year. These include many subjects ranging from scenics of mountains, lakes and streams to detail on many of the projects and activities going on. Requests for use of department photographs have increased to an all-time high during 1958. In addition to regular use for illustrating department publications and news stories, the outside demand has been tremendous.

The Fish and Game Department film library presently contains seventy-two different film titles. The library contains several copies each of films that are most frequently requested, making the total number of reels 128. These 16mm movies are made available free of charge to schools, sportsmen's clubs, scouts, civic clubs, religious organizations and other qualified groups.

Twenty-three new motion picture films were added to the film library during the year. During the fall and winter months demand for these films is very heavy and frequently requests must be turned down or substitutions made because the requested films are in use by another group. Fish and Game Department movies are used quite extensively by Idaho schools in connection with studies on conservation, history, biology, zoology, natural resources, wildlife management, forestry and related subjects.

Among the new titles obtained during 1958 are: THE BEAVER; FIELD DRESSING OF BIG GAME; DEER LIVE WITH DANGER; and TROUBLED JOURNEY, a film on steelhead.

Almost 1,500 films were mailed out for showing during the year, with the heaviest use in April, March, February and January, in that order. Over 234 Department films were shown during April.

Personnel from the Information and Education division showed approximately 500 films in conjunction with personal appearances before various groups during the year.

Radio - Television

A fifteen-minute radio program was produced each week and mailed to Idaho radio stations. The program consists of tape recorded interviews with Fish and Game Department workers on Idaho wildlife and activities of the Department. During the summer months a weekly report on fishing conditions, as reported by field workers, is included in the program.

A master recording is made each week and copies are produced and mailed to radio stations using the service. The program is available free of charge to any Idaho station wishing to receive it. At the end of 1958 the program was being carried by stations in Sandpoint, Coeur d'Alene, Lewiston, Orofino, Moscow, Grangeville, Payette, Weiser, Nampa, Boise, Rupert, Pocatello, Preston, Soda Springs, and Rexburg.

Subjects Used on Radio Programs During 1958

JANUARY - 1. Report on big game hunting for 1957. 2. Information and education activities of the Department. 3. Studies on rough fish control. 4. Statewide report on big game situation by district biologists. 5. Continuation of report by biologists.

FEBRUARY - 1. Statewide report on game bird situation by district biologists. 2. Interview with five district conservation enforcement officers. 3. Habitat improvement work in Idaho. 4. Winter census work on big game.

MARCH - 1. Winter census of game birds. 2. National Wildlife Week. 3. Report on 1957 hunting accidents. 4. Clearwater game and range study.

APRIL - 1. Steelhead fishing. 2. Migratory fish passage over obstacles. 3. Report on inter-department and inter-agency meetings held to receive recommendations for seasons, regulations etc. 4. Helicopter census of bighorn sheep and mountain goats.

MAY - 1. Explanation of 1958 big game seasons and regulations. 2. Study of Clearwater River fisheries resources. 3. Interviews with field workers at Priest River and Coeur d'Alene. 4. Fisheries investigations on Pend Oreille Lake. 5. Explanation of 1958 fishing seasons and regulations.

JUNE - 1. Interview with conservation officer at Bonners Ferry. 2. Opening week fishing in eastern Idaho. 3. General information on fish in the Clearwater River drainage. 4. Big game situation in north Idaho.

JULY - 1. Opening day fishing on Silver Creek. 2. Excerpts from talks presented at the annual meeting of the Western Association of State Game and Fish Commissioners. 3. Cooperative Wildlife Research Unit at the University of Idaho. 4. Banding of mourning doves and Canada geese. 5. Explanation of certain fishing regulations.

AUGUST - 1. Fishing in mountain lakes. 2. Introduction of new species of fish. 3. Idaho's beaver situation. 4. Removal of obstructions and installation of screens for the benefit of migratory fish.

SEPTEMBER - 1. The hunter-safety program in Idaho. 2. Presentation of the actual NRA Hunter-Safety course. 3. Outlook for big game hunting. 4. Conservation Officer at Soda Springs.

OCTOBER - 1. Treatment of Island Park Reservoir. 2. Lost hunters. 3. Outlook for game bird hunting. 4. Idaho's Conservation Essay contest. 5. Results of big game hunting to date.

NOVEMBER - 1. Idaho's furbearing animals. 2. Calling and hunting of waterfowl. 3. Studies on the control of rough fish. 4. C. J. Strike Wildlife Management area.

DECEMBER - 1. Financial aspects of wildlife management. 2. Deer management. 3. Excerpts from talks presented at annual meeting of Idaho Wildlife Federation. 4. Elk and elk management. 5. Artificial feeding of game.

Occasional appearances were made on television to discuss special activities, or in response to requests from television stations. Special information, including the regular weekly news releases was made available for the use of TV stations. A number of Department films have been cleared for television and are being used by Idaho TV stations.

Education

Hunter Safety Program in Public Schools

Safe gun handling received major emphasis in Idaho schools in 1958. Records show approximately 16,000 students contacted in the period January 1 - November 30, 1958.

The course provided for three hours of school time over a three-day period, and included basics of safe gun handling, some actual target work for demonstration purposes, and discussion of conservation of wildlife and other resources.

Officers of the I & E division scheduled and conducted the school programs, with assistance of local conservation officers of the Department, and interested local sportsmen and business men. An important feature of the training was the follow up instruction on the rifle range by local officers and sportsmen. About 2,000 of the youths received this additional training.

Local organizations participating in the program included sportsmen's and service clubs, police departments, and schools in 75 communities where the work was carried on. Thirty-one officers in the Department took part, in addition to approximately 75 other local instructors. These local groups provided time and defrayed costs of .22 caliber ammunition used on the target range.

The course includes film showings on gun safety and a display of Idaho wildlife, with charts and posters dealing with gun safety and general conservation.

The project marked a 25 percent gain in volume of students reached over last year. The Department plans to expand the program in the coming season.

Statewide Essay Contest

The 1958-1959 conservation essay contest sponsored by the affiliated clubs of the Idaho Wildlife Federation is devoted to the theme of: "My Wildlife Heritage; What Shall I do With It?"

Students of junior high and high school age, grades 7 - 12, were invited to discuss the problems of the future of wildlife and related resources, with attention focused on the idea of the need for protecting a heritage of value.

Summer Camp Education for Youth

Field men of the I & E division continued to schedule contacts with Scout and 4-H camps and other youth organizations in summer camp situations in 1958. The camp program is similar to that taken into schools during the winter season, and includes film showings, displays of Idaho wildlife, nature trail work in bird, mammal and plant identification, and firearm safety instruction when desired by camp leaders.

State and County Fair Exhibits

The division expanded its displays at fairs this year, with more aquarium space and live bird and mammal exhibits. Posters and a display of live and mounted hawk and owl specimens drew attention to the beneficial values of these birds of prey. Over 100,000 people viewed these wildlife displays in 1958.

In other county fairs the Department supplied display materials and assited sportsmen in preparing the exhibits.

FISHERIES MANAGEMENT

It is apparent that not only are more people going fishing in Idaho, but they are making more trips each season. The average number of trips per angler increased from 10.4 in 1956 to 10.8 in 1957. It appears the greatest increase in fishing trips occurred with people trying for salmon and steelhead.

As the number of anglers and fishing intensity increased, the harvest of fish has kept pace. For example, in 1957 the trout catch increased 11 per cent over 1956. The warm-water fish and perch take rose by 24 per cent and chinook salmon nearly doubled, coming up 83 per cent over the 1956 take.

Kokanee fishing has remained a popular sport with the total number of this species taken exceeding two million fish a year. Trout head the list with over ten million taken by anglers each season.

Although not taken in such large numbers each year, the mackinaw of Priest Lake and kamloops trout of Pend Oreille Lake are popular with thousands of fishermen. The largest mackinaw reported in 1957 and 1958 were 48 and 49 pounds, respectively. Sturgeon fishing along the lower Snake River continues as a popular sport.

A major problem in the management of Idaho's fishery resource has been the introduction of non-game, or trash, fish species into fishing waters when the non-game fish were used for bait. Nearly fifty lakes and reservoirs have been treated with chemicals to remove all fish as a part of fisheries management in Idaho in the past ten years. These have been stocked with game fish and have furnished outstanding fishing. But, unless stringent action is taken to prevent the use of live fish for bait - and unless the attitude of a number of fishermen changes about this use - much of the work and money will have been wasted.

Whitefish Control Project

During the fall of 1957, a whitefish harvest program was initiated to reduce the number of whitefish in Teton and North Fork of Snake Rivers. An electric seine and 5,000 watt electric generator were purchased and used in the harvest work.

Twenty-two thousand pounds of whitefish were taken from the North Fork of the Snake River and 4,000 pounds from Teton River. These fish were distributed to State institutions and to other charitable organizations.

Subsequently, the North Fork of the Snake River was treated in October, 1958, both above and below Island Park Reservoir where the major portion of electric seining took place. The large numbers of whitefish observed during river treatment indicated that the electric seining had little effect on the population of whitefish in the river.

FISH ERADICATION PROJECTS - LAKES

NAME	COUNTY	MAX. SURFACE AREA-ACRES	STORAGE ACRE FEET-AT TIME OF TREATMENT	UNDESIRABLE SPECIES	RESTOCKED
SPRUCE LAKE	BOUNDARY	5	60	SHINERS, SUCKERS	TROUT
SINCLAIR LAKE	BOUNDARY	5	49	PUMPKINSEED SUNFISH	TROUT
LITTLE WOOD RIVER RES.	BLAINE		200	SUCKERS	RAINBOW
ISLAND PARK RESERVOIR	FREMONT	7,794	17,500	UTAH CHUB	RAINBOW

Rough Fish Control Projects

Fry Creek, a tributary of Pend Oreille Lake, was treated in 1957 and 1958 to eradicate spawning runs of peanose and suckers. Some 6,200 peanose and 150 suckers were killed.

Jewel Creek, a tributary of Pend Oreille Lake, was treated in 1957 and 1958 to control spawning runs of rough fish. Approximately 14,000 peanose and 250 suckers were killed.

Soldier Creek and Reeder Creek, tributaries of Priest Lake, were treated in 1957 and 1958, respectively, for the purpose of eradicating brook trout and suckers in these formerly important cutthroat trout spawning streams. An effort will be made to re-establish a spawning run of cutthroat trout.

Island Park Reservoir and portions of all of its tributaries including the North Fork of the Snake River above Island Park Reservoir and downstream to Big Falls were treated to remove a heavy infestation of Utah chub.

Treatment of the reservoir and streams required 47,000 pounds of 6.5 per cent powdered rotenone and 1,430 gallons of ProNox Fish.

Shoreline and surface sampling on the day after the reservoir was treated revealed that nearly 24,000,000 fish were killed during reservoir treatment. Of this number, 19,602,780 were Utah chub; 4,051,148 shiners; 24,106 suckers; 2,000 dace; 1,000 sculpin; 42,452 rainbow trout; 200 cutthroat trout; 600 brook trout; 60,920 kokanee; and 4,084 whitefish, for a total of 23,789,290 fish. Non-game fish constituted 99.46 per cent, while game fish comprised only 0.54 per cent of the total fish population.

The North Fork of Snake River above and below the reservoir contained large numbers of whitefish, Utah chub, dace, sculpin, brook trout and a relatively small population of rainbow trout.

The reservoir will be restocked with several million rainbow trout fry and fingerling. Tributaries above the reservoir and the river downstream from the dam will be restocked with rainbow trout fingerling and creel-size rainbow trout in preparation for the 1959 fishing season.

Fish Tanks

An expansion of the rearing facilities of the State's fish hatcheries has made it necessary to improve and enlarge its fish transportation equipment. In 1957, the Department purchased two tanks which were of fibreglass construction. One is a pickup tank and has a capacity of 200 gallons and the second is carried on a two-ton truck and has a capacity of 900 gallons. Each tank is enclosed and insulated. The larger tank is equipped with a refrigeration plant capable of maintaining a water temperature of 45° F. Bottled oxygen, dispensed through carbon stones, comprises the water aeration system. To date, these tanks have operated quite satisfactorily; however, future purchases of tanks of fibreglass construction is not recommended because of the difficulties encountered in attaching outlet pipes or remodeling the unit. The tanks lack structural integrity because of the amount of wood which must be used in their construction.

During 1958, the Department purchased two 900-gallon fish distribution tanks and four fish transportation tanks. All tanks are of aluminum construction and insulated with two inches of spun glass. Aeration of the water is accomomplished in the same manner as in the fibreglass tanks.

The transportation tanks will be operated as truck and trailer units. Each truck tank has a capacity of 2,000 gallons and each trailer tank has a capacity of 3,000 gallons. Each tank is also subdivided into compartments of approximately 700 gallons each.

The purchase of these units will greatly facilitate the transportation of fish from Hagerman to redistribution areas around the State.

Columbia River Fisheries Program

The 1957 Legislature amended the Fish and Game Code to permit the Department to construct and maintain fish screens in water courses which carry 125 cubic feet of water per second or less. Following the enactment of this legislation, the Department has been actively engaged in the design of suitable fish screens and in obtaining leases from property owners where screens will be installed.

To date, six screens have been installed. When the program has been completed, there will have been installed approximately 250 screens in the Salmon River drainage. Early in 1959, a contract will be let for a warehouse building in which screens can be manufactured and maintained.

Investigations of fish passage problems at known obstructions include Dagger Falls on the Middle Fork of the Salmon River, Sunbeam Dam on the main Salmon River, the Little Salmon River falls and Selway

Falls on the Selway River. Studies on the Little Salmon River indicate that irrigation demands above the three falls have reduced the river flow to the extent that introduction of anadromous fish above the falls is not economically feasible. The construction of a fish ladder at Dagger Falls is scheduled to begin during fiscal year 1959. No definite plans have been formulated for improvements at Selway Falls and Sunbeam Dam.

Through cooperative agreements with the U. S. Geological Survey, flow and temperature records are being collected on a number of streams which show promise as sources of water for fish hatchery operations.

Middle Snake River Studies

In conjunction with the construction of Brownlee and Oxbow Dams in the Middle Snake River by Idaho Power Company, studies have been made to determine the time of seaward migration of chinook salmon and steelhead trout and to evaluate the effects of the dams on the resident sport fishery.

Seaward migration of both salmon and trout occurs for the most part during spring floods and is correlated with the rise in water temperature of Snake River in April and May, each year. The peak of the chinook salmon migration precedes the peak of the run-off during these months while the peak of the steelhead trout migration approximately coincides with the peak of the spring flood. Movements of both species from tributaries of the Snake River to the Snake River was noted during the fall and winter months. These movements were generally associated with periods of fall rains and winter freezing. Seaward migrations of these fall and winter movements of fish were not detected. Information regarding the time and size of seaward migration will be valuable in determining operation of downstream fish passage facilities.

In connection with the resident sport fishery study, and using temperature data from an associated study, it was anticipated that the sturgeon sport fishery would be lost through most of the section of river inundated by the dams, that Brownlee Reservoir would support excellent warm-water fish populations, and that water temperatures below Brownlee Dam would be suitable for a trout habitat.

From these studies, recommendations have been made to the construction agency for replacement of and mitigation for losses which will occur to resident fish populations in the sections of the river affected by their projects. Among these recommendations are:

(1) That the Company construct some small manageable trout reservoirs near the project area to replace the lost sturgeon fishery.

(2) That the Company make preparations for the stocking of trout below Brownlee Dam.

(3) That a large initial stocking of bass be made in the Brownlee Reservoir at the time of initial filling.

Wildhorse River Transplanting Project

Because Wildhorse River enters the Snake between Brownlee and Oxbow Dams and no provisions are being made to handle the runs of spring chinook salmon and steelhead rainbow trout utilizing the Wildhorse, a project is underway to transplant these runs to the Weiser River drainage. A trapping weir was constructed across Wildhorse River and placed in operation in January, 1958. All salmon and steelhead downstream migrants trapped at the weir have been marked and transplanted to Pine Creek of the Weiser River. An evaluation of their return as adults will be made to determine the success of such a transplanting program.

Costs of the project are being borne by the construction agency. In addition, it is anticipated that the juvenile steelhead trout lost to the sport fishery of the Wildhorse drainage will be replaced by plantings of hatchery trout.

The transplanting program will continue through the Spring of 1960.

Fish Food

The substitution of pelleted trout food for the traditional red meats and fresh fish and fish offal has marked the most drastic change in the operation of fish hatcheries in recent years. During the past two-year period, the consumption of pellets and meal (the same formula is used for both) has increased from 250,153 pounds in 1956 to 1,149,400 pounds in 1958. During the same period, the decline in the consumption of red meat was 1,058,850 pounds.

The production of trout for the period was increased 191,684 pounds.

Creel Census Figures Showing Estimated Total Catch of Game Fish for Years 1951 to 1958 in Pend Oreille Lake

Year	Men	Hours	Kokanee	Trout	Other Game Species
1951	60,172	330,923	820,486	10,750	18,838
1952	57,814	308,850	514,913	8,778	*
1953	99,855	522,692	1,335,881	16,398	73,523
1954	90,566	459,271	1,232,916	11,515	53,182
1955	70,829	330,612	642,045	11,366	19,215
1956	87,813	406,538	1,092,651	11,882	27,199
1957	72,355	331,476	751,113	10,193	44,300
1958**	79,293	354,455	1,126,053	11,070	91,927

* not tabulated

** through September

F 18-R Statewide Creel Census

Each year since 1954 licensed anglers in Idaho, both resident and non-resident, have been sampled for fishing and fish-harvest data. A representative sample of licensees are mailed questionnaires which they fill out and return. Tabulations from these returns give fishing intensity and harvest trends which may be used for formulation of management plans for the future.

Several trends are beginning to be indicated after four years of this census. Most notable of these are the increased fishing intensity and harvest particularly on chinook salmon and steelhead trout.

The average number of fishing trips made each year increased by 15 per cent in 1957. This year also showed a sharp increase in the numbers of licensed anglers.

Idaho Angling and Catch Data, 1954-7.

	Year			
	1954	1955	1956	1957
Licensed anglers	238,250	223,450	217,850	225,320
Angling trips	2,048,000	2,153,000	2,128,000	2,436,500
Per cent of anglers seeking:				
Trout	93.1	93.1	93.4	90.7
Chinook Salmon	7.7	9.5	10.4	14.4
Steelhead Trout	7.8	7.9	6.1	7.8
Total catch of:				
Trout	11,308,400*	9,597,300	9,127,100	10,177,400
Kokanee		1,963,500	2,174,800	2,194,700
Warm-water	2,777,000	3,239,800	2,671,200	3,321,300
Salmon	29,550	38,880	42,690	78,200
Steelhead	25,200	26,250	15,775	39,550
Sturgeon	2,230	2,340	4,390	2,910
Whitefish	- - -	718,400	512,800	565,600
Average seasonal catch/angler:				
Trout	54.5*	49.8	48.1	49.8
Kokanee		67.6	84.6	77.0
Warm-water	57.7	68.3	58.4	66.1
Salmon	1.7	2.0	2.0	2.41
Steelhead	1.5	1.6	1.3	2.25
Sturgeon	1.0	0.9	1.4	0.8
Whitefish	- - -	40.7	25.3	25.1

* Trout and kokanee data combined in 1954.

F 22-4 Experimental Rough Fish Control

During the last two years, the emphasis of this project has been directed toward the development of control measures against rough fish populations based on the findings of life history studies.

Life history studies have been made of carp, at Lake Lowell, and squawfish, at Cascade Reservoir and the Payette Lakes. These studies indicate that both species are vulnerable to control measures during their spawning periods and that applicable methods of control can be developed.

An aerial application of emulsifiable rotenone was made on 43 acres of shallow water at Lake Lowell when carp were crowded into this area during their spawning activities. Approximately 100,000 carp, weighing 300,000 pounds, were killed. Loss of game fish was very small.

The North Fork of the Payette River above Cascade Reservoir was treated with rotenone when squawfish were concentrated in this stream during their spawning migration. An estimated 300,000 adult squawfish were killed. The trout kill was less than 1,000 fish.

Attempts will be made to evaluate the effects of these rough fish removals on game fish populations by age-growth studies and creel census work.

Future plans include continued study of control methods and the results of partial removal of rough fish populations and life history studies of detrimental rough fish populations.

F 32-R Tests for Increasing Returns of Hatchery Trout

The true measure of the success of a fish-planting program is in the numbers of stocked fish returned to the creel. This is particularly true in stocking catchable-size trout since a fairly good investment is represented by each trout stocked. This study is designed to measure the returns of trout under different conditions of rearing and stocking and of specific or racial conditions or other biological factors.

Tests conducted in a lake and stream in central Idaho indicate (1) greater returns to the creel of trout reared on a dry than on a production diet containing meat, and (2) better returns from one large stocking at the beginning of the season than from several smaller plantings spaced throughout the season in both the stream and lake sampled.

Tests conducted in lowland lakes of North Idaho show highest returns to the creel from trout planted before or early in the season than from those planted later in the season. Periodic planting throughout the season, however, was necessary to maintain fishing quality on the smaller, heavily-fished lakes. Returns in per cent from two lakes from each of six

monthly plantings made early in each month were:

	April	May	June	July	August	September
Lake A (small)	58	68	34	37	16	28
Lake B (large)	33	35	14	7	5	6

Additionally, it was learned that better survival of summer-planted fish is obtained if plantings are made at the time of day when water temperatures are optimum for trout.

Analysis of tests conducted in north-central Idaho has not been made. These tests will determine the returns of trout to the creel when planted at fingerling or at catchable size. The economics involved (value of each trout returned to the creel) will be considered.

In southwestern and southeastern Idaho, tests are being conducted on types of equipment used to transport trout. In southeastern Idaho, additional tests on returns of trout to the creel are being made on several lots of fish being reared on different diets.

F 34-R Water Quality Investigations

This study was initiated in June of 1958 to determine the existing sources of pollution in the State and to determine the effects of the pollutants. Methods of improving water quality, where game fish habitat is affected by pollution, were also investigated.

A statewide survey to determine the location and types of pollution is completed. From the survey, the most serious pollution problems appear to be located in the Pocatello area, along the Portneuf River, and in the Boise Valley.

The effects of placer mining (dredging) on a trout stream are being studied on Seigel Creek, a tributary to Red River in Idaho County. Biological, chemical, and physical measurements were made on the stream to determine the changes resulting from dredging. Analysis of collected data has not been completed.

A series of tests to determine if the heavy metal ions in Bear Lake water are factors limiting plankton growth were made. Controlled laboratory experiments, with the chemical content of Bear Lake water the only variable were carried on with Chlorella as a test organism. Growth rates for each culture were then calculated. From this, it does not appear that the heavy metal ions of lead, copper and zinc are factors which limit phytoplankton production.

F 19-D Rehabilitation of Stanley Lake

Following construction of a fish-migration block in the outlet and chemical treatment of Stanley Lake for eradication of all fish, (reported during last biennium) experimental fertilization of its water was attempted Enough ammonium nitrate was added to the lake to raise the nitrogen content of its water so that a normal fertility balance existed among the four basic elements, nitrogen, phosphorus, calcium and potassium.

Within a month plankton organisms associated with nitrogen deficient waters had disappeared. A year later, tests indicated a greater winter survival of planted fish and an approximate doubling of the organic residue of the lake water.

The quality of fishing in Stanley Lake has increased tremendously since the lake was treated for removal of squawfish, suckers and shiners.

THE IDAHO COOPERATIVE WILDLIFE RESEARCH UNIT

The Idaho Cooperative Wildlife Research Unit has been in operation for eleven years. During this time thirty-two men have completed master's degrees in wildlife and fisheries management. These men are now employed in sixteen different states, six of them currently in Idaho, four in mid-western states, two on the east coast, and twenty-six in the western states. Investigations of the Unit have been divided as follows:

Big game	15	Upland game birds	8	Waterfowl	3
Fisheries	5	Furbearers	1		

Active Projects in 1958

1. "The movements, productivity and management of sage grouse in Clark and Fremont Counties, Idaho." The sage grouse project was continued and special emphasis was placed upon winter movements and productivity. In the Clark-Fremont County area sage grouse winter at elevations of 1,000 to 2,000 feet lower than the summer ranges. During inclement weather flocks vary from fifty to 1,000 and break up into groups of ten to fifty during mild weather.

Sage grouse were again trapped on the Red Road strutting grounds and marked with plastic neck bands. Some interchange of strutting grounds was noted. During the 1958 strutting season birds were observed which had been marked in 1956 and 1957. A 50' x 100' nylon net proved to be a valuable addition to the trapping and banding program.

2. "The influence of magpie predation on nesting pheasant and waterfowl populations in southern Idaho." A total of 654 magpies were effectively marked on roosts. There were ninety-two returns of marked birds of which thirty-one nested within a mile of the marking site and sixty-one within a six-mile radius of the marking site. There was a spring population of 270 magpies on 5,000 acres and 329 fledgings produced on a post-breeding population of 599 magpies within the 5,000 acre study area.

Carrion is the principal food of magpies in spring and early summer. Approximately 76 per cent of the winter food are plant materials. Only 1.3 per cent of 203 magpie stomachs contained egg shells at the time when game birds were nesting.

An increase in the magpie population in 1957 and 1958 did not result in a smaller population of pheasants or waterfowl.

3. "Salt in the management of elk in the lower Selway River Area." The three years of data on the upward movement of elk in the spring show that for any given date the elk on the salted portion of the range were at a higher elevation than on the unsalted portion. The unsalted portion of the study area has now been salted to observe if the rate of migration becomes accelerated on the newly salted portion as compared to the salted

area. The mildness of the 1957-58 winter permitted elk to remain at higher elevations than in either 1955-56 or 1956-57 winters.

Two large licks in the eastern portion of the study area concentrated the elk during the spring. There were times when 80 per cent of the elk in the area were observed at these two licks.

4. "A study of the influence of logging on trout streams in Northern Idaho." This study is divided into pre-logging, logging, and post logging phases. The first phase has been completed on two pairs of streams, one pair tributary to the North Fork of the Clearwater River; the other pair tributary to the St. Joe River. The logging phase is underway on the Clearwater River tributaries.

In relocated stream channels away from road fills the population of aquatic insects equaled the undisturbed portions of the stream after one winter. Of the pair of streams on the St. Joe River drainage one stream was more productive; the fish grew faster, lived a year longer, and were caught more readily by sport fishermen than in the adjoining less productive stream.

5. "Post-larval development and diet of the Columbia large scale sucker." The sucker is a serious competitor of trout for food and a predator of salmonoid eggs. A detailed knowledge of the early development and food habits are essential for a complete understanding of the coarse fish problem and for the eradication of the species from trout waters. The morphological details obtained will be an aid for those having difficulty in distinguishing the post-larval stages of this sucker from other minnows which may exist in the same river or lake.

6. "Plant succession and utilization by livestock and big game in a sand dune region in Fremont County, Idaho." This is a new study which involves moose, elk, deer, and livestock. The sand dune area northwest of St. Anthony supports a considerable wintering population of moose and elk and deer. During the spring and fall the same area supports several bands of sheep and some cattle. The study will determine the important forage species for domestic livestock and big game, and the amount present, condition, trend, and current use. The effects of controlled and uncontrolled burning on the important forage species and the extent of competition between moose, elk and deer and the effect of such competition on the forage resource will be studied.

7. "Browsing competition between cattle and white-tailed deer in Northern Idaho." A considerable amount of the lower elevation forest land of Northern Idaho is summer range for cattle and year long range for white-tailed deer. These forest lands have, for the

most part, a shrub understory and forage grasses are not abundant. Cattle are forced to use shrubs for the greater part of their diet. White-tailed deer use many of the more palatable shrubs throughout the year. As a result of this dual use, the more palatable shrubs are showing signs of an overuse. Little is known about the exact diet of cattle on these forest ranges and this project is designed to determine more precise information of this food competition between cattle and whitetails.

BUSINESS ADMINISTRATION

Financing Wildlife

The Idaho Fish and Game Department is financed by people who buy hunting or fishing licenses and take part in wildlife recreation activities. The benefits of the outdoors are available to all who wish to take advantage of them. Hunting and fishing is one of our most important and valuable forms of recreation.

Sportsmen who pay for the propagation and management of wildlife by the purchase of licenses and tags contribute the largest single source of revenue - 71.2 percent of all monies received by the Department. Many make a secondary contribution in the form of a federal excise tax on the manufacturer's level when they purchase sport firearms, ammunition and fishing tackle.

This year, Idaho was an active participant in the Columbia River Fishery Development Program and is now receiving its third source of revenue by appropriations from Congress. Columbia River Development and Wildlife and Fisheries Restoration funds amount to 21.5 percent.

Federal monies are specifically ear marked as to how they can be spent and projects must meet federal requirements before the Fish and Game Department is eligible for reimbursement. Foremost among these requirements are state laws prohibiting the diversion of license receipts for any other purpose than the operation of the Fish and Game Department - Idaho Code 36-2601 and 36-5301.

Upon receipt of all revenue the Fish and Game Department deposits it with the State Treasurer who places the money in a special fund known as "Fish and Game Fund" which is reserved, set aside, appropriated and made available until expended as may be directed by the Fish and Game Commission in carrying out its program.

The financial policies and programs are established by the Commission when they approve the budget for operation and maintenance of the Department each fiscal year. The Fish and Game Department, as well as any other sound business, must carry a substantial amount of operating funds, or working capital. This money must be available to carry on operations during low income periods and in addition have enough to finance federal aid, Columbia River, and other projects until final completion, or until approved for federal reimbursement.

The most important single item in the financing of the Fish and Game Department is that the cost of management, protection and propagation of wildlife is paid from funds provided by those who participate in the sport of hunting and fishing and that no state tax monies are appropriated for this purpose.

Graphs, charts and financial statements are presented on the following pages recording the financial condition for the fiscal year ending June 30, 1958.

Land Acquisition and Construction and Maintenance

The following land acquisition and construction and maintenance projects are briefly summarized to record the activities of these divisions.

The following lands were acquired during the fiscal period.

Tolo Lake Public Access, Idaho County - 40 acres - cost $3,500.00.

Dog Creek Reservoir, Gooding County, easements for reservoir and road right of way and public use area - 186 acres - cost $1,412.50.

Salmon River fish distribution site and warehouse site for Columbia River project, Lemhi County - 5.16 acres - cost $2,750.00.

Bordewick Public Access to Snake River, Twin Falls County - 5.6 acres - cost - gift.

Market Lake Wildlife Management Area, Jefferson County, acquired for waterfowl restoration - segment #3 - exchanged 37.48 acres with Highway Department for 55.32 acres.

Sand Creek Wildlife Management Area, Fremont County, acquired for big game winter range - 640 acres - cost $5,760.00.

The following construction and maintenance was accomplished during the fiscal period.

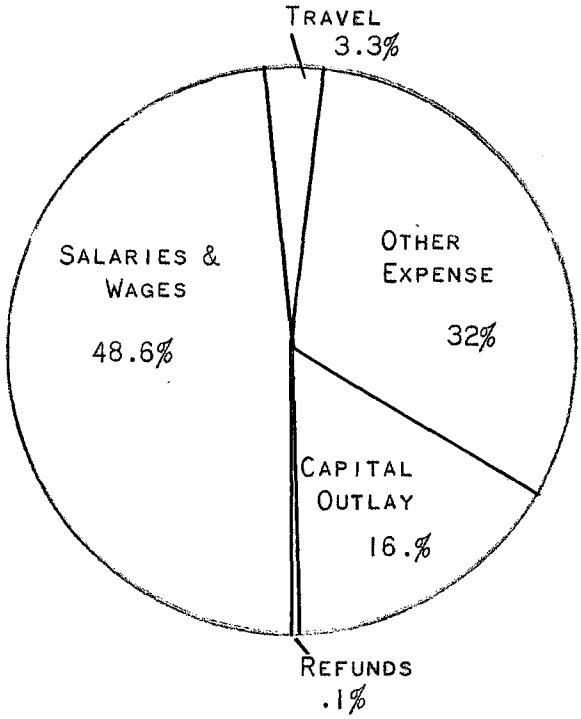
Hagerman Hatchery - painting
Hagerman #17 - construction of ponds
Hagerman #21 - construction of raceways
Grace Hatchery - construction of raceways
American Falls Hatchery - construction of raceways
Sand Dune Lakes - public access constructed
Spirit Lake - improvement of park area
McCall Hatchery - improvement of road and painting
Warm River Hatchery - painting
Bear Valley Cabin - painting and improvement
Red River Cabin - construction
Farragut Refuge - painting
North Idaho Refuge - painting
Sandpoint Hatchery - painting and improvement
Kamiah Distribution Station - painting

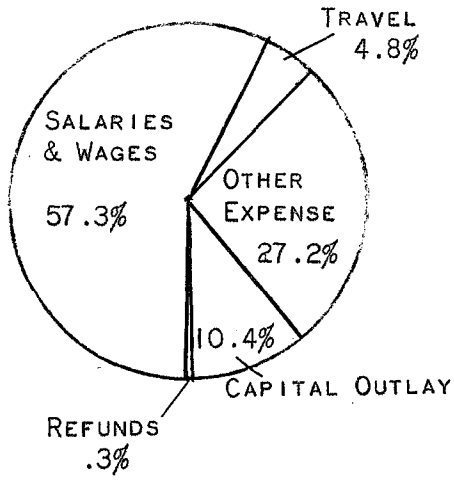
South Fork Boise Cabin - painting and improvement of water supply.
South Fork Boise Hay Storages - painting
South Fork Payette Hay Storages - painting
Star Lake Refuge - improvement and painting
Lapwai Bird Farm - improvement, painting
Stanley Dwelling - improvement of pressure system
Hayspur Hatchery - improvement of roads and drainage
Market Lake Refuge - improvement of fence and irrigation system.
North Lake Refuge - drilled well
Salmon - Columbia River Program - screens and well
Pend Oreille Lake Rehabilitation - K Dams built and maintained
Dog Creek Dam - construction

IDAHO DEPARTMENT
STATEMENT OF
BY

Fiscal Year Ending June 30, 1958

	TOTAL EXPENDITURES	ADMINISTRATION			
		STATE OFFICE	MAINT. ENGR/CONST.	WARE-HOUSE	TOTAL
SALARIES & WAGES	$1,077,895	$71,150	$25,778	$4,325	$101,253
TRAVEL	73,206	6,950	1,451	-	8,401
OTHER EXPENSE	708,220	39,531	7,711	835	48,077
CAPITAL OUTLAY	356,205	9,157	3,443	5,696	18,296
REFUNDS	476	469	-	-	469
TOTAL	$2,216,002	$127,257	$38,383	$10,856	$176,496





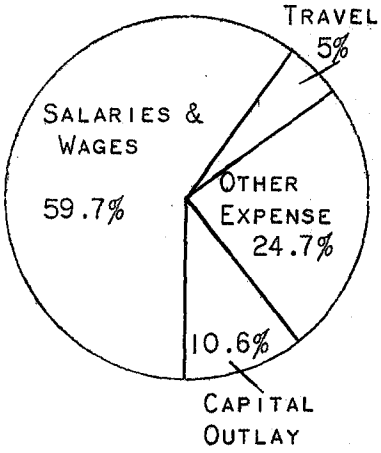
OF FISH & GAME

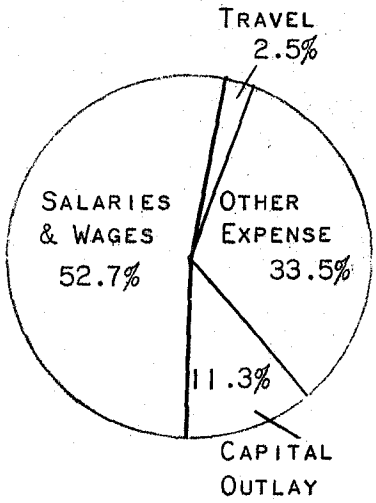
DISBURSEMENTS

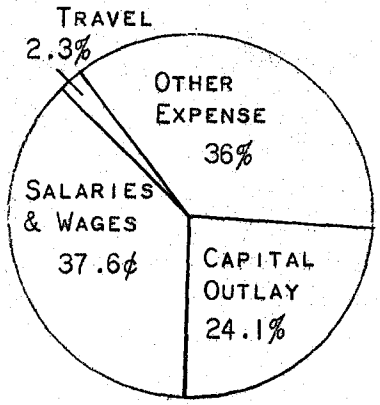
DIVISIONS

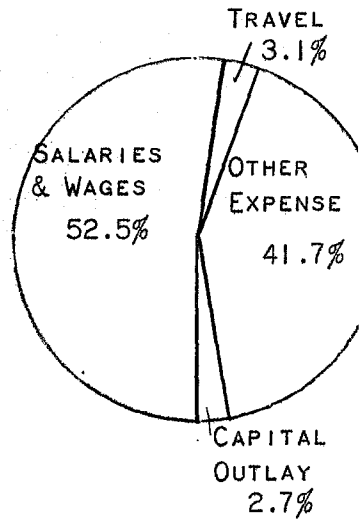
Fiscal Year Ending June 30, 1958

CONSERVATION ENFORCEMENT	GAME MANAGEMENT	FISHERIES	INFORMATION AND EDUCATION
$339,333	$255,460	$345,069	$36,780
28,505	12,545	21,617	2,138
140,073	161,573	329,242	29,255
60,049	55,135	220,905	1,820
-	7	-	-
$567,960	$484,720	$916,833	$69,993









F E D E R A L A I D I N W I L D L I F E R E S T O R A T I O N

FINANCIAL STATEMENT FOR PERIOD 7-1-57 to 6-30-58
Fund 61

Unobligated Federal money	$ 5,515.00
Federal appropriation for the fiscal year	354,522.21
Unused balance	92,677.49
Total federal money available to finance approved restoration projects	$ 491,429.50

The following table shows allocation of funds by project:

PROJECT NUMBER		ESTIMATED COSTS FEDERAL	STATE	TOTAL ESTIMATED COSTS
FW 40-C-17	Coordination	$ 16,789.51	$ 5,596.51	$ 22,386.02
FW 2-D-5	C. J. Strike Wildlife Mgmt. Area	6,300.00	2,100.00	8,400.00
FW 2-D-6	C. J. Strike Wildlife Mgmt. Area	9,000.00	3,000.00	12,000.00
FW 4-D-5	Carey Lake Development	3,975.00	1,325.00	5,300.00
W 36-D-9	Hagerman Refuge	9,750.00	3,250.00	13,000.00
W 55-D-10	North Lake Wildlife Mgmt. Area	11,203.00	3,734.43	14,937.43
w 55-D-11	North Lake Wildlife Mgmt. Area	24,000.00	8,000.00	32,000.00
W 60-D-7	Boundary County Refuge	1,155.00	385.00	1,540.00
W 64-D-7	Boise River Deer & Elk Winter Range	11,175.00	3,725.00	14,900.00
W 73-D-7	Star Lake Mgmt. Area	8,475.00	2,825.00	11,300.00
W 80-D-10	Game Habitat Improvement	28,665.00	9,555.00	38,220.00
W 80-D-11	Game Habitat Improvement	43,500.00	14,500.00	58,000.00
W 89-D-7	Sand Creek Wildlife Mgmt. Area	7,802.25	2,600.75	10,403.00
W 89-D-8	Sand Creek Wildlife Mgmt. Area	12,900.00	4,300.00	17,200.00
W 113-D-4	Primitive Area Winter Range	6,675.00	2,225.00	8,900.00
W 116-D-2	Market Lake Wildlife Mgmt. Area	8,925.00	2,975.00	11,900.00
	TOTAL DEVELOPMENT:	$ 210,289.76	$70,096.69	$280,386.45
W 85-R-9	Game Population Census & Range	$ 33,272.66	11,090.88	$ 44,363.54
W 85-R-10	Game Population Census & Range	40,125.00	13,375.00	53,500.00
W 111-R-4	Artificial Revegetation Studies	7,125.00	2,375.00	9,500.00
W 111-R-5	Artificial Revegetation Studies	6,375.00	2,125.00	8,500.00
	TOTAL INVESTIGATIONS:	$ 86,897.66	$28,965.88	$115,863.54
W 118-L-1	Reclamation Projects Wildlife Mgmt. Areas	$ 2,318.34	$ 772.78	$ 3,091.12

S U M M A R Y

CLASSIFICATION	ESTIMATED COST FEDERAL	STATE	TOTAL ESTIMATED COSTS	PERCENTAGE TOTAL EXPENDITURES
Coordination	$ 16,789.51	$ 5,596.51	$ 22,386.02	5.4%
Development	210,289.76	70,096.69	280,386.45	66.4%
Investigations	86,897.66	28,965.88	115,863.54	27.4%
Lands	2,318.34	772.78	3,091.12	0.8%
TOTAL	$316,295.27	$105,431.86	$421,727.13	100.0%

FEDERAL AID IN FISH RESTORATION AND MANAGEMENT

FINANCIAL STATEMENT FOR PERIOD 7-1-57 to 6-30-58
Fund 65

Unobligated federal money	$ 806.86
Federal appropriation for the fiscal year July 1, 1957 to June 30, 1958	94,303.37
Unused balance from completed projects	30,934.46
Total federal money available to finance approved restoration projects	$126,044.69

The following table shows allocation of funds by projects:

PROJECT NUMBER		ESTIMATED COST FEDERAL	STATE	TOTAL ESTIMATED COSTS
FW 40-C-17	Coordination	$ 4,197.38	$ 1,399.12	$ 5,596.50
F 29-D-1	Cocolalla Lake Fisheries	40,344.75	13,448.25	53,793.00
F 35-D-1	Dog Creek Reservoir	3,918.75	1,306.25	5,225.00
	TOTAL DEVELOPMENT	$ 48,460.88	$ 16,153.62	$ 64,614.50
F 3-R-7	Biological & Economic Survey of Lake Pend Oreille	975.00	$ 325.00	1,300.00
F 3-R-8	Biological & Economic Survey of Lake Pend Oreille	16,275.00	5,425.00	21,700.00
F 15-R-5	Clearwater River Invest.	1,650.00	550.00	2,200.00
F 18-R-4	Statewide Fishing Harvest	2,700.00	900.00	3,600.00
F 22-R-3	Experimental Rough-Fish Control	1,050.00	350.00	1,350.00
F 22-R-4	Experimental Rough-Fish Control	15,517.86	5,172.62	20,690.48
F 32-R-1	Tests for Increasing Returns of Hatchery Trout	8,250.00	2,750.00	11,000.00
F 34-R-1	Water Quality Investigations	5,250.00	1,750.00	7,000.00
	TOTAL INVESTIGATIONS	$ 51,667.86	$ 17,222.62	$ 68,890.48
F 33-L-1	Danielson Lake Public Access	$ 881.25	$ 293.75	$ 1,175.00

SUMMARY

The following table shows total allocation of fish restoration and management funds by the project classification:

CLASSIFICATION	ESTIMATED COST FEDERAL	STATE	TOTAL ESTIMATED COSTS	PERCENTAGE OF TOTAL EXPENDITURES
Coordination	$ 4,197.38	$ 1,399.12	$ 5,596.50	4.1%
Development	48,460.88	16,153.62	64,614.50	43.9%
Investigations	51,667.86	17,222.62	68,890.48	51.2%
Lands	881.25	293.75	1,175.00	0.8%
TOTAL	$105,207.37	$ 35,069.11	$140,276.48	100.0%

IDAHO DEPARTMENT OF FISH & GAME
TABULATION OF LICENSE SALES
BY SERIES

	Resident Fish & Game	Res. Game	Res. Fish	Non-Res. Big-Game	Non-Res. Bird	Non-Res. Fish	Tourist Fish	Shipping Permits	Trophy Lic.	Deer Tags	Elk Tags	Goat	Sheep	Archery Antelope
1947	123,552	32,571	28,970	1,471	876	8,411	27,683	2,890	413	82,034	27,361	140		
1948	123,122	39,043	35,720	1,610	1,260	8,697	28,739	3,552	390	88,229	24,731			
1949	118,443	42,389	39,249	1,352	986	9,023	29,715	2,128	357	83,432	31,262			
1950	117,051	44,452	42,046	1,182	704	9,682	31,340	774	332	89,173	33,855			
1951	118,761	45,701	41,778	2,229	709	11,471	36,528	1,403	564	99,553	43,198			
1952	124,793	48,714	44,106	3,187	820	13,407	42,533	1,542	908	105,562	47,469			
1953	126,772	46,030	44,456	3,309	1,035	14,641	46,632	1,492	899	101,582	44,097			
1954	125,316	46,465	45,393	3,638	1,162	14,823	49,107	1,315	830	103,702	48,201			
1955	118,189	46,315	47,095	3,729	1,133	13,042	41,379	1,062	16	106,840	50,757			
1956	104,944	56,962	54,305	4,046	1,334	12,874	41,686	1,191		114,019	52,627	63	75	89
1957	104,035	57,086	57,504	4,882	1,818	13,837	45,063	1,253		118,329*	50,732	76	193	92

*Of this total, 327 tags were for the Middle Fork and 7,166 were 2-deer tags.

IDAHO DEPARTMENT OF FISH AND GAME
REVENUE AND EXPENDITURE COMPARISON

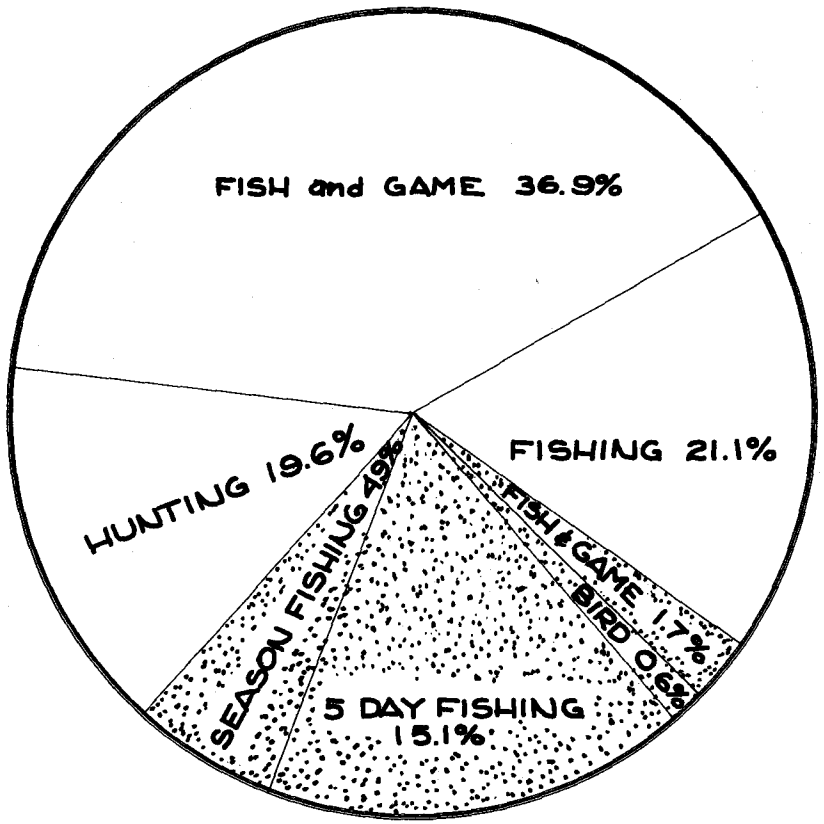
	EXPENDITURES							REVENUE
YEARS	FISH & GAME FUND	PREDATORY ANIMAL CONTROL	PITTMAN-ROBERTSON	DINGELL-JOHNSON	REIMBURSABLE PROJECTS	BEAVER PELTS	TOTAL EXPENDITURES	LICENSE
1957-58	$1,665,433.58	$23,212.65	$261,618.53	$117,072.38	$126,985.10	$21,679.81	$2,216,002.05	$1,697,252.47
1957-56	1,592,846.12	30,432.39	620,966.90	113,833.60	37,507.22	37,950.00	2,433,536.23	1,523,500.96
1956-55	1,316,078.29	32,860.26	446,618.77	92,749.24		52,321.26	1,940,627.82	1,395,822.37
1955-54	1,190,160.95	30,744.11	377,521.87	115,529.63		92,477.50	1,806,434.06	1,364,474.96
1954-53	1,156,832.56	33,985.14	409,535.23	48,794.78		55,354.98	1,704,502.69	1,283,120.00
1953-52	1,021,142.99	29,005.64	321,217.31	28,013.64		82,846.87	1,482,226.45	1,258,275.20
1952-51	986,360.09	27,018.42	243,217.95	7,829.64		56,987.35	1,321,413.45	1,139,871.25
1951-50	1,124,914.38	40,284.39	162,294.42			134,172.50	1,461,665.24	987,709.73
1950-49	1,051,683.39	32,726.88	366,494.77			92,697.08	1,543,602.12	906,618.15
1949-48	976,279.61	51,607.17	138,104.75			88,854.91	1,254,846.44	958,876.60
1948-47	772,029.21	51,537.71	121,255.65			151,241.01	1,096,063.58	877,528.55
1947-46	644,682.04	52,257.54	36,455.81			117,139.66	850,535.05	718,945.20

RESIDENT & NON-RESIDENT SPORTING LICENSE SALES BY NUMBER

FISCAL YEAR ENDING JUNE 30, 1958

RESIDENT SPORTING LICENSE SALES (NUMBER) 231,385 = 78%

NON-RESIDENT SPORTING LICENSE SALES (NUMBER) 66,495 = 22%



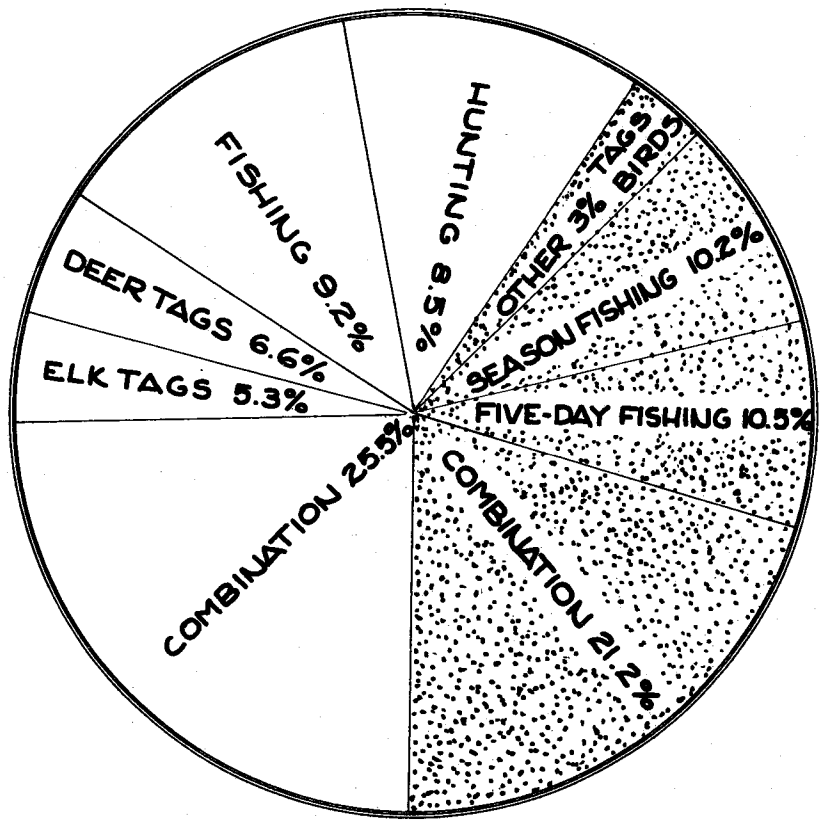
IDAHO DEPARTMENT OF FISH & GAME

RESIDENT & NON-RESIDENT SPORTING LICENSE SALES BY DOLLARS

FISCAL YEAR ENDING JUNE 30, 1958

RESIDENT LICENSE & TAG REVENUES - $900,834.21 = 55%

NON-RESIDENT LICENSE & TAG REVENUES - $734,969.40 = 45%



IDAHO DEPARTMENT OF FISH & GAME

IDAHO DEPARTMENT OF FISH AND GAME
DETAIL OF CASH RECEIPTS
FISH AND GAME FUND #6

JULY 1, 1957 - JUNE 30, 1958

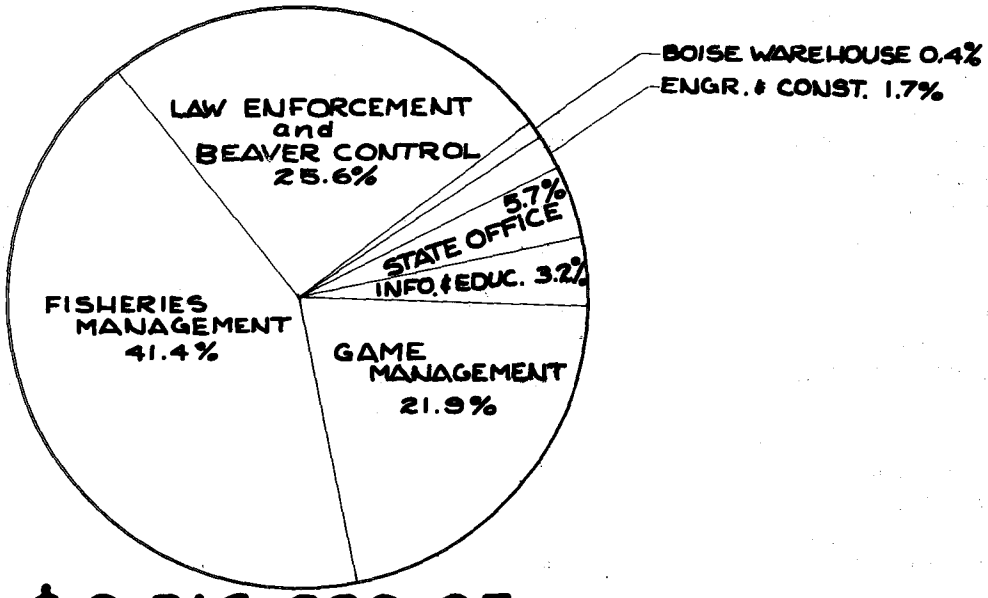
		NUMBER	DOLLARS
1	RESIDENT HUNTING & FISHING	109,968	$417,878.40
1-A	RESIDENT HUNTING	58,516	138,977.43
2-A	NON-RESIDENT HUNTING & FISHING	4,888	348,270.00
1-B	RESIDENT FISHING	62,901	149,392.73
2-B	NON-RESIDENT BIRD	1,831	34,789.00
2-C	NON-RESIDENT SEASON FISH	14,583	166,246.20
2-E	NON-RESIDENT 5-DAY FISH	45,193	171,733.40
	SHIPPING PERMITS	1,214	485.60
	DEER TAGS	118,027	112,125.65
	ELK TAGS	50,732	96,390.80
1-D	RESIDENT TRAPPER	1,033	5,165.00
	COMMERCIAL FISH	199	1,990.00
	RESIDENT OUTFITTER	145	725.00
	NON-RESIDENT OUTFITTER	13	325.00
	GUIDE LICENSE	104	520.00
	RESIDENT FUR BUYER	46	230.00
	TAXIDERMIST	10	100.00
	PRIVATE POND PERMIT	54	540.00
	GAME BIRD FARM PERMIT	38	380.00
4-C	NON-RESIDENT GUN	3	5.70
	COMMISSION SAVED		1,696.41
	BEAVER TAGS	24,987	23,737.65
2-D	NON-RESIDENT TRAPPER	13	975.00
	NON-RESIDENT FUR BUYER	7	140.00
	DEER PERMITS	-	
	ELK PERMITS	1,525	7,625.00
	MOOSE PERMITS	153	3,825.00
	MOOSE TAGS	153	1,530.00
	SHEEP PERMITS	20	500.00
	SHEEP TAGS	213	2,130.00
	GOAT PERMITS	50	250.00
	GOAT TAGS	126	1,260.00
	ANTELOPE PERMITS	1,670	5,010.00
	ANTELOPE TAGS	1,762	1,762.00
	ERRONEOUS LICENSE SALES	-	
	R.A.M. (INSUFF. CHECKS)		541.50
	TOTAL LICENSES AND PERMITS		$1,697,252.47
	FINES AND CONFISCATIONS		20,831.40
	BEAVER HIDES (STATE SHARE)		7,245.09
	MISCELLANEOUS SALES		11,073.56
	SALE OF CAPITAL ASSETS		9,632.50
	DEPARTMENT RENTALS		10,585.05
	REFUNDS		75,727.67
	INSURANCE ADJUSTMENTS		807.42
	INTEREST		262.12
	TOTAL RECEIPTS FUND #6		$1,833,417.28

IDAHO DEPARTMENT OF FISH AND GAME
DETAIL STATEMENT OF EXPENDITURES
FISCAL YEAR ENDING JUNE 30, 1958
FUND #6

	TOTAL	SAL. & WAGES	TRAVEL	OTHER EXPENSE	CAPITAL OUTLAY	REFUNI
FISH & GAME FUND 6	$1,665,433.58	$807,061.43	$54,761.24	$496,853.77	$306,288.50	$468.6
ADMINISTRATION DIV.	176,496.60	101,252.79	8,401.35	48,077.32	18,296.50	468.6
HEADQUARTERS	111,361.84	63,031.73	3,678.64	34,540.90	9,641.93	468.6
COMMISSION	4,164.25	1,000.00	3,036.33	102.92	25.00	
CONSTRUCTION	38,383.23	25,777.79	1,451.51	7,711.32	3,442.61	
SERVICE	13,429.42	7,321.27	234.87	2,244.79	3,628.49	
WAREHOUSE	9,157.86	4,122.00		3,477.39	1,558.47	
CONSERVATION ENF.	546,279.92	339,333.29	28,504.47	118,392.56	60,049.60	
HEADQUARTERS	20,106.01	11,698.67	1,959.25	6,144.73	303.36	
DISTRICT 1	80,757.02	46,363.13	2,803.07	17,893.55	13,697.27	
DISTRICT 2	72,846.96	47,970.60	3,424.48	13,441.85	8,010.03	
DISTRICT 3	108,004.46	68,822.30	5,538.46	22,689.21	10,954.49	
DISTRICT 4	121,317.78	78,758.68	5,708.01	27,366.04	9,485.05	
DISTRICT 5	131,736.30	79,401.91	6,330.21	28,411.74	17,592.44	
BEAVER CONTROL	11,511.39	6,318.00	2,740.99	2,445.44	6.96	
FISHERIES MGMT. DIV.	672,775.13	217,489.43	10,213.89	252,180.04	192,891.77	
HEADQUARTERS	49,394.27	20,030.03	2,395.88	8,829.50	18,138.86	
MANAGEMENT	75,481.97	34,387.85	2,816.81	10,671.88	27,605.43	
TRANSPORTATION	15,314.36	3,336.00	714.04	10,140.92	1,123.40	
AMERICAN FALLS	59,521.48	21,071.89	357.41	32,750.18	5,342.00	
ASHTON	24,511.73	8,712.55	315.15	15,387.45	96.58	
CLARK FORK	32,089.34	11,842.61	290.25	16,778.03	3,178.45	
EAGLE	35,854.05	19,823.26	359.01	9,145.68	6,526.10	
GRACE	41,897.05	11,088.26	190.45	22,864.34	7,754.00	
GRANGEVILLE	3,748.35	962.83	16.60	828.73	1,940.19	
HAGERMAN	183.369.42	28,710.96	395.44	73,846.65	80,416.37	
HAYSPUR	21,649.97	8,929.82	135.65	11,768.04	816.46	
HENRY'S LAKE	5,161.17	4,241.47	170.32	749.38		
MACKAY	62,986.19	13,074.53	957.10	18,996.94	29,957.62	
MCCALL	12,818.33	6,225.38	257.95	2,925.69	3,409.31	
MULLAN (HALE)	9,528.59	5,997.50	229.35	3,219.95	81.79	
SANDPOINT	7,865.47	5,538.50	1.50	1,683.38	642.09	
TWIN FALLS	16,022.22	6,673.14	152.65	7,954.04	1,242.39	
WARM RIVER	4,318.88	2,827.77	110.34	1,380.77		
FERNWOOD-WOLF LODGE	3,731.19	1,346.00	50.80	164.45	2,169.94	
KAMIAH	7,511.10	2,669.08	297.19	2,094.04	2,450.79	
GAME MGMT. DIV.	199,889.09	112,205.80	5,503.93	48,948.77	33,230.59	
HEADQUARTERS	32,178.15	9,094.15	916.03	6,183.14	15,984.83	
BIG GAME	73,038.14	44,902.52	2,544.06	13,639.59	11,951.97	
FARRAGUT MGMT. AREA	16,422.23	10,196.74	219.19	5,383.85	622.45	
BIRD SECTION	31,625.91	24,014.18	1,378.36	5,126.94	1,106.43	
EAGLE HOLDING PENS	357.00			357.00		
JEROME GAME FARM	25,898.00	12,632.85	219.77	10,491.52	2,553.86	
LAPWAI GAME FARM	20,369.66	11,365.36	226.52	7,766.73	1,011.05	
INFORMATION & EDUCATION DIVISION	69,992.84	36,780.12	2,137.60	29,255.08	1,820.04	

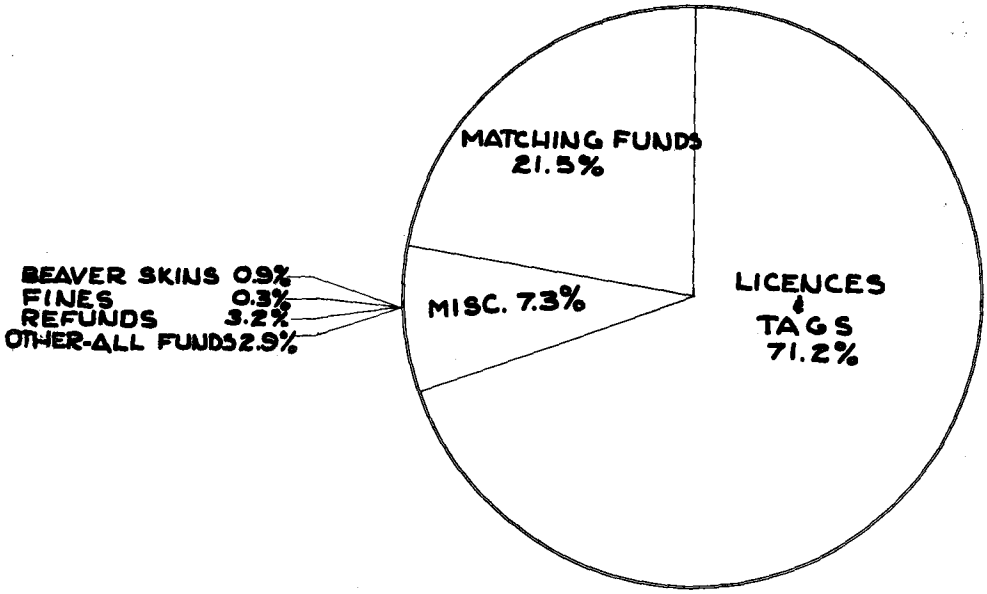
ANALYSIS OF REVENUES & EXPENDITURES
FISCAL YEAR ENDING JUNE 30, 1958
TOTAL FUND OPERATIONS

HOW YOUR FISH & GAME DOLLAR WAS USED



$ 2,216,002.05

SOURCES OF REVENUE



$ 2,380,695.41

IDAHO DEPARTMENT OF FISH & GAME

IDAHO DEPARTMENT OF FISH AND GAME
STATEMENT OT TOTAL FUND OPERATIONS
FISCAL YEAR ENDING JUNE 30, 1958

FUNDS	FISH & GAME FUND	PREDATORY ANIMAL FUND	PITTMAN-ROBERTSON FUND	DINGELL-JOHNSON FUND	REIMBURSABLE PROJECTS	BEAVER PELTS	TOTAL
BEGINNING FUND BAL.	$458,223.52	$15,416.05	$49,996.82	$46,357.51	$92,912.01	$	$662,905.91
REVENUE							
LICENSES	1,697,252.47						1,697,252.47
MATCHING FUNDS			235,352.87	90,418.21	184,725.39		510,496.47
OTHER	136,164.81		14,949.94	104.91	47.00	21,679.81	172,946.47
TOTAL REVENUE	1,833,417.28	15,416.05	250,302.81	90,523.12	184,772.39	21,679.81	2,380,694.41
DEPT. TRANSFERS	-146,000.00	10,000.00	110,000.00	26,000.00			
TOTAL FUNDS AVAIL.	2,145,640.80	25,416.05	410,299.63	162,880.63	277,684.40	21,679.81	3,043,601.32
DISBURSEMENTS							
SALARIES & WAGES	807,061.43	16,804.21	126,449.85	52,511.58	75,067.66		1,077,894.73
TRAVEL	54,761.24	178.23	6,863.24	3,834.62	7,568.42		73,205.75
OTHER EXPENSE	496,853.77	4,781.43	107,842.83	48,566.62	28,495.39	21,679.81	708,219.85
CAPITAL OUTLAY	306,288.50	1,448.78	20,455.11	12,159.56	15,853.63		356,205.58
REFUNDS	468.64		7.50				476.14
TOTAL	1,665,433.58	23,212.65	261,618.53	117,072.38	126,985.10	21,679.81	2,216,002.05
TRANSFERS	26,902.92	122.26	3,326.05	1,118.20	1,407.90		32,877.33
TOTAL DISBURSEMENTS	1,692,336.50	23,334.91	264,944.58	118,190.58	128,393.00	21,679.81	2,248,879.38
FUND BALANCE	453,304.30	2,081.14	145,355.05	44,690.05	149,291.40		794,721.94
LESS ENCUMBRANCES	175,688.99		1,397.82	208.60			177,295.41
OPERATING CAPITAL	$ 277,615.31	$ 2,081.14	$143,957.23	$44,481.45	$149.291.40	-0-	$618,426.53