

ELEVENTH BIENNIAL REPORT

OF THE

FISH AND GAME  
WARDEN

OF THE

STATE OF IDAHO

1925-1926



R. E. THOMAS  
State Game Warden

### Officials and Clerical Force

R. E. THOMAS.....*State Game Warden*  
Boise, Idaho.

W. M. KEIL.....*Fish Commissioner*  
Boise, Idaho.

TURNER SPARKMAN.....*Chief Deputy*  
Boise, Idaho.

J. W. KEEFE.....*Chief Clerk*  
Boise, Idaho.

### Assistant Clerks

AMSEL BURTCH  
Boise, Idaho.

PEARL THOMPSON  
Boise, Idaho.

### General Conservation

Enactment of general laws necessary to the protection, propagation and conservation of fish and game comes within the police powers of the state which by the same means may regulate or restrict the right to take fish or game, and to prohibit the taking thereof for commercial purposes.

Appreciating the necessity of providing machinery for the general purpose of conservation of fish and game within the state, the legislature has by statute created the Fish and Game Department, under the immediate direction of the Governor of the State and the Fish and Game Warden, whose tenure of office is two years subject to the removal by the Governor, upon reasonable cause shown, for neglect of duties, breach of trust, incompetency or malfeasance in office.

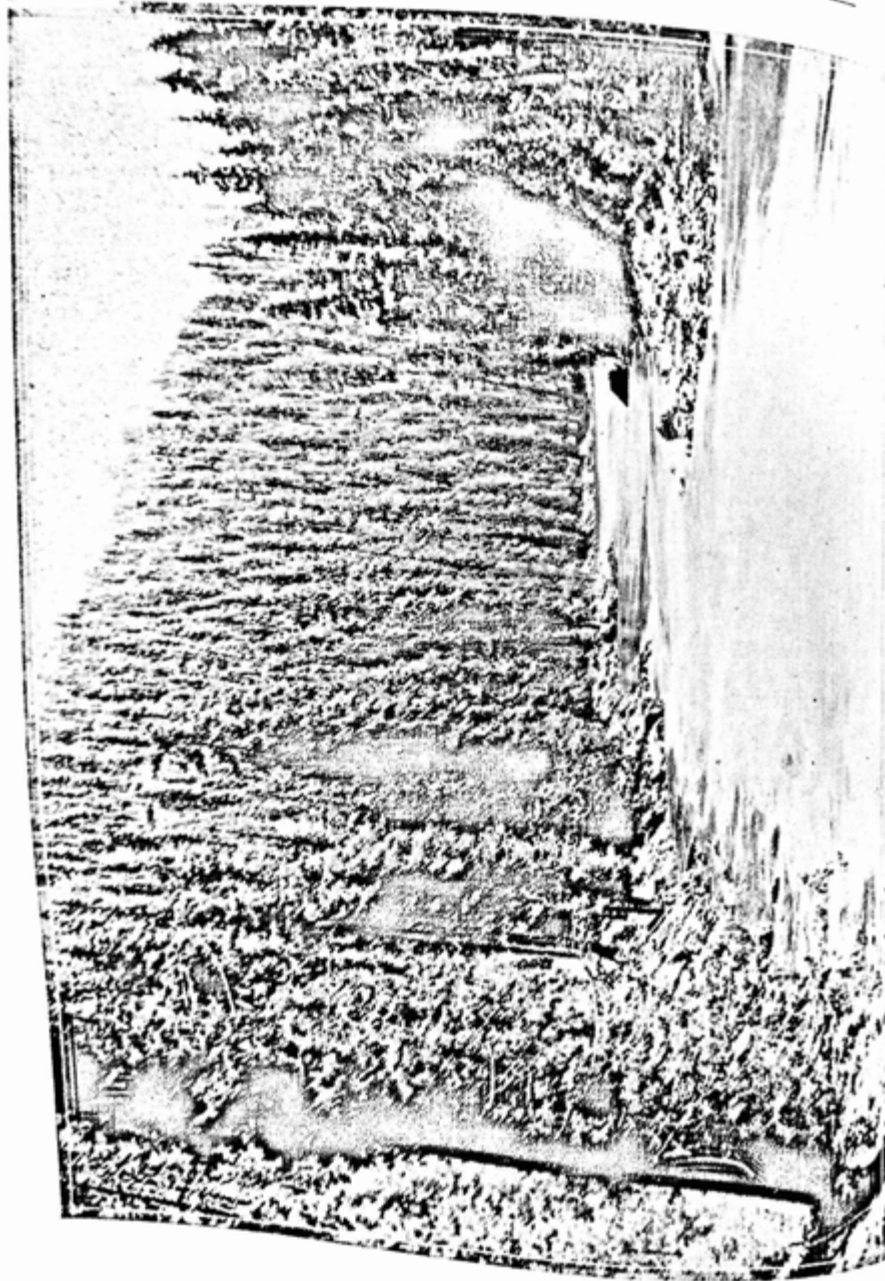
### General Powers and Duties of Warden

General. "The state fish and game warden shall be an active executive officer, and shall at all times take the field in person in the performance of his duties, when possible, and shall personally supervise the protection of all fish and game protected under this chapter and be energetic in the detection and punishment of the violators of the fish and game laws."

### Special Duties of Warden

Special duties governing the supervision of fish hatcheries and fish culture; the maintenance of existing hatcheries, for purposes of hatching, propagation and distribution of fish; the acquisition, by purchase or otherwise of new hatcheries; the discontinuance of existing hatcheries; the care, provision and distribution of food fishes or ova of the same; the purchase of ova or fry or suitable fish for the hatcheries and a prudent distribution of same throughout the waters of the state have been wisely provided for by statute.

Power of appointment for the necessary number of deputies and clerical assistants lies in the State Warden; the supervision of selling licenses and shipping permits throughout the state and the making of an annual report to the Governor and a biennial report to the Legislature are special assignments of the Warden.



HILWAY RIVER NEAR JUNCTION WITH THE CLEARWATER

## Idaho's Topography

Geographically, Idaho might be considered as two separate states, there being no rail communication between the northern and southern parts, except by way of the States of Oregon and Washington. The North and South Highway, in process of construction, will, of course, greatly facilitate travel between these portions but, even then, this avenue will be open only during the summer and early fall months, except possibly in very mild winters. The topography of the state is entirely dissimilar—so, also, are the climatic conditions. In that portion of the state better known as the Panhandle country are located our heaviest stands of timber, large lakes and mining sections. There, irrigation is not a problem and there is sufficient precipitation for agriculture. It is different in Southern and Eastern Idaho. Here, vast sage brush deserts have been converted, seemingly over night, into fertile plains, green fields and bounteous crops through the medium of irrigation projects. In certain portions dry farming is carried on but, in the main, artificial methods of supplying water are necessary for the thousands of acres of orchards, growing fields of grain, pastures and gardens.

## Impenetrable Except By Trail

This dissimilarity, not only in the nature of the state itself, but in its climatic conditions, necessarily has a considerable bearing on the many difficult problems of fish and game supervision. There are portions of the state still practically inaccessible, virgin forests, impenetrable except by trail; sections where rugged peaks interpose a formidable barrier to the coming of the settler. One can readily understand, therefore, that the cost of supervision and the administration of the affairs of a conservation body is much greater than it would be in some of the states in the east and middle west, where travel and accessibility from the standpoint of railway and highway are not so difficult. To arrive at equitable or the right open and closed seasons for big game, game birds and fish, as between both sections of the state, is a perplexing question. Particularly is this so, when, regardless of conditions existing even in adjoining counties, our constituents in one will demand a certain open season, while those in others will ask for something of an entirely different order. The nature of the waters, the conditions of our streams and the methods of keeping them stocked to capacity is another grave proposition, all this necessitating deep consideration.

## Education and Cooperation

A full realization of the immense responsibility that rests upon any organization which endeavors to promote conservation, in one or more of its varied forms, has come to the State Fish and Game Department. Conservation of water, timber, power possibilities and wild life are all more or less intimately connected and many of the obstacles which confront one endeavor applies to the others. Necessity for education along lines of conservation is apparent and unless the public finally approves the effort there is small hope for the ultimate success of the aims of those now furthering these laudable activities.

Remarkable co-operation and appreciation has been accorded this department during the past four years. This condition has been brought about by the persistent efforts of sportsmen's organizations and gun clubs, many of which were initiated by this department, in their close co-operation with the activities of the department in its endeavor to bring before the public a full, frank and instructive campaign of education, looking to the conservation of fish and game.

### Program Prepared

To the end that there may be something definite upon which a presentation of facts can rest, a carefully prepared program has been undertaken. Personal visitations are made to individuals and to organizations where the problems confronting them may be viewed from the standpoint of the public. Full and unprejudiced discussions have in practically all instances brought about a better understanding and closer cooperation for the good of conservation in general and for fish and game in particular.

Correspondence offers a very limited field for the advancement of the program of education, however, this office is constantly adjusting and correcting misunderstandings and giving practical instruction in the needs of the conservation through this medium. Lack of funds prevent the distribution of valuable publications which could well emanate from this office, yet, we are doing much through the Federal Bureau by requesting their assistance in the placement of their publications. In every effort to promote the cause of conservation it is realized that the citizen of tomorrow is the individual to whom our most serious thought should be offered. Boy Scouts, Campfire Girls and school children generally should be instructed in the many beneficial, recreational and aesthetic results which

would come to them. Demonstrations, films, literature and addresses will do much to advance this feature of wild life preservation.

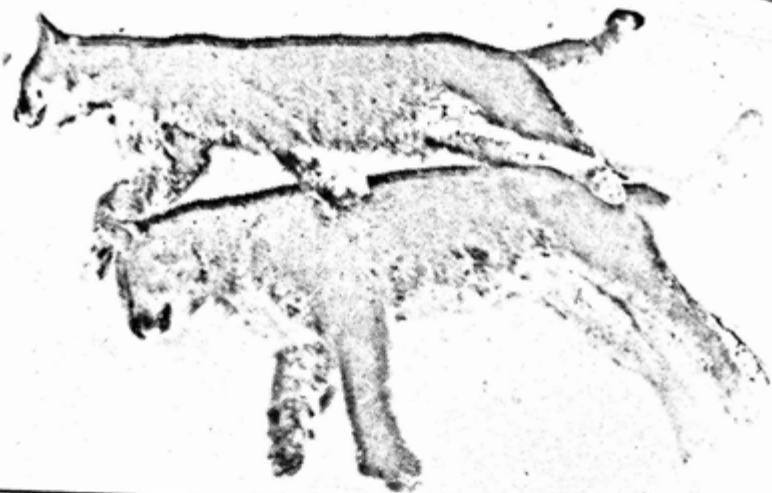
The personnel of the department by precept and example is continually doing an effective work along this line among adults as well as the youth. Field officers in particular are creating a more favorable and appreciative attitude towards a conservation program by their untiring efforts among those who are found engaged in the pursuit of game in the field. It is under such conditions that the officer and sportsman can meet on a common field and discuss the problems from the standpoint of the department and the public. Active and intelligent cooperation on the part of Forest Service officers is an important factor in the advancement of our program which now reaches every portion of the state.

### Actual Field Demonstration

Actual accomplishment of the things advocated by this department in its program of education is having a very decided effect upon the attitude of the public towards a favorable consideration of the intent and purpose of the department. The remarkable achievements of the Fish Bureau will be found in another section of this report and is mentioned here merely for the purpose of showing the scope of our work. Construction, operation and maintenance of the two game farms is a decided advancement along the lines of practical efforts set up with the hope of accomplishing the preservation of game birds and with the idea of instilling real conservation thought in the minds of the public.

The use of large quantities of sulphurized salt in big game habitats is an established practice, natural salt licks are becoming scarce through continuous use or made unavailable because of highway extension. It is a notable fact that animals dying from scurvey or tick infection in areas has been eliminated by the use of the salt, which keeps the deer and elk in the best of physical condition; a phenomenal increase in numbers has also been noted since the distribution of salt has been taken up.

Employment of hunters and trappers for the destruction of predatory animals, especially cougar and coyotes, is but further evidence of the efforts of the department in its desire to conserve the game supply and practice its policy. Predatory birds also receive consideration and their destruction is now a matter of definite policy.



SOME RESULTS OF THE DEPARTMENT'S PREDATORY ANIMAL CAMPAIGN

### Predatory Animals and Predatory Birds

One of the largest contributory causes to the loss of game animals is the depredations of predatory animals. For the past three years the department has conducted a strenuous campaign of extermination against cougar, bobcats, lynx, timber wolves, weasel and coyotes. Destruction wrought by this agency becomes apparent when it is realized that a cougar will kill on the average of two deer a week, during the winter season, and one a week in summer, and a coyote will destroy an average of one deer a month throughout the year. Figures on the operations of timber wolves, bobcats and weasel are not accessible for the reason that their operations are confined largely to

small game animals and birds, however, timber wolves are known to prey upon big game. Operations in connection with the destruction of predatory animals to date show that there has been taken 1796 coyotes, 36 cougar, 31 lynx, 42 bobcats, 2 timber wolves, 49 weasel. The total number of such animals destroyed is not confined to the report given here since the poisoning program in inaccessible areas will account for a large number of coyotes, also a number of pelts taken by trappers were not accounted for, they were shipped to fur markets and no report made to this department. To meet the serious condition which confronts the conservation of game from this destructive agency, this department employs regular salaried hunters and very satisfactory results have been obtained. Conservative estimates show that more game is destroyed by cougar than by all other predatory animals and for this reason experienced hunters with dogs are assigned to the task. During the years 1925 and 1926 there were 36 regular hunters employed for a total of 151 months, two of whom were employed 9 months in one year, and in addition a number of field deputies were engaged in this work at intervals during the winter months. It is to be noted that no year long hunters are engaged for the reason that the most effective work is accomplished during the fall and winter months, however, an extensive poisoning campaign is conducted at all times.

### Cooperation of Sportsmen

Various sportsmen's organizations throughout the state have during the past year, conducted in conjunction with this department a campaign on predatory birds. Clubs pay a bounty of two cents for each crow or magpie head and one cent each for the egg of either. Funds expended by the local clubs in this manner were repaid from the predatory animal fund and all clubs have been reimbursed. Classed among predatory birds, those which prey upon game birds or their eggs, in this state are the goshawk, Cooper's hawk, duck hawk, sharp shinned hawk, magpie, crow and great horned owl. Largest in size is the goshawk, a dark colored bird most frequently found in timbered areas where it feeds upon grouse and other birds. Next in size is the Cooper hawk which is very much like the goshawk, save that it is smaller. The sharp-shinned hawk and the Cooper hawk are sometimes noted as "Blue Hawks" by reason of the fact that they have a bluish cast on the back. The four hawks mentioned are all killers of birds while the crow and the magpie are desig-



THE DEERSLAYER

nated as egg eaters and not killers. It is thought to be pertinent at this time to mention certain of the hawk family which is of value from a game and agricultural viewpoint. The western red-tail, a big hawk which spends much time soaring high in the air, the swainson hawk, known as the squirrel hawk, along with the rough legged hawk and the marsh hawk, feed upon rabbits, rats, mice, other rodents and insects, fall within this group and are highly valuable.

In addition to the larger hawks already mentioned there is found in Idaho a small species, commonly known as the sparrow hawk, which is an insect and rodent destroyer. This hawk is extremely valuable in agricultural areas. Hawks should not be killed indiscriminately since a majority of the species in Idaho are more beneficial than harmful. Hawks designated as killers in this report should be the subject of the sportsmen's fire.

Nearly all tree and ground squirrels are fond of animal matter and it is doubtful if they ever pass up a nest of eggs or young birds. Consequently, the squirrel hawk, while it may occasionally kill a game bird, is more than repaying the sportsmen of Idaho in its operations against the small animals which destroy young birds and eggs.

During the recently initiated program looking to the destruction of predatory birds, the following results have been obtained: 8,478 magpie eggs have been destroyed, 1,738 magpies killed and four crow heads taken. It is with pleasure that we report the destruction of 25 eagles, since these birds are the greatest menace to the young of mountain sheep and mountain goats.

### Departmental Recommendations

All fur bearing animals are declared to be the property of the state, yet, under Section 2771 of the Compiled Statutes of Idaho, as now in force, it is found that fifty per cent of the revenues, derived from the sale of furs from beaver, trapped by the state, where these animals have been found to be a menace, is to be turned over to the property owner, upon the filing of a proper voucher, from whose land the animals were taken, and fifty per cent credited to the State Fish and Game fund. I would recommend that the statute be amended to provide that where beaver or muskrats are damaging any irrigation canal or ditch, growing crops, fruit trees or other personal property, the State Fish and Game Warden be authorized to take such numbers of these animals as will relieve future damage, and that the pelts so taken shall be turned over to the State Fish and Game Warden and sold by him and the amount received from such sale be credited to the State Fish and Game fund.

Under the policy adopted by this department whereby predatory animal hunters and trappers are engaged on a monthly basis there no longer exists the necessity for en-



A WINTER SCENE

gaging trappers on a fifty per cent basis, likewise there appears to be no valid reason why the property owner should be given a gratuity.

Because of unfavorable situations which have arisen under existing laws relative to remittance of state money derived from the several sources by deputy wardens, it is recommended that existing statutes be amended to provide that when any officer who shall refuse or neglect to turn over to the State Fish and Game department any money collected or authorized to be collected by him, or who shall fail, refuse or neglect to turn over and deliver any or all mutilated or unsold licenses or permits on demand by the State Fish and Game Warden, he shall be guilty of felony.

Consistent with the policy now in force in this department relative to the planting of our streams and lakes with fish of the fingerling stage rather than the fry age, I would recommend that Section 2743 be amended to provide that it shall be unlawful to kill, destroy or have in possession any trout or black bass, taken from the public waters of the state, less than seven (7) inches in length. Experience has shown that fingerlings from three to five inches in length, while more expensive to produce, give by far the largest returns in numbers. It is estimated on fairly accurate data that but five per cent of the fry planted are able to survive and reach a stage of maturity, and it is found that approximately 80 per cent of the fingerlings provided do survive until the sportsmen are permitted to make a catch. With a seven inch limit it is hoped that more trout and black bass will become available in all our streams.

At the present time under Section 2674 of the Idaho Compiled Statutes a commission of ten per cent of the sale price is granted to persons permitted to sell licenses (State warden, chief deputy, field deputy, chief clerk, and local deputies, excepted.) This statute was first enacted when the sale of licenses was very limited and the vendors used much time with small return, this condition is now changed and the sale of licenses has become a business asset to many persons. I feel that ten per cent is too high a figure and that the section should be amended and the sum reduced to five per cent.

Present revenues derived from the sale of licenses is not sufficient to meet the required expansion of the department in the conservation policy now in force. Demands upon the fishery bureau far exceed the capacity of the plants which are seriously handicapped by lack of adequate transportation equipment. Four new trucks are

needed—replacement at Hay's Spur, Sandpoint, hatcheries and new trucks at Coeur d'Alene and Evergreen. Old trucks in use are worn out. It is vitally important that the distribution of fish and return of the cans be accomplished with dispatch. Under present conditions the excessive costs of hiring transportation strains the departmental allotments. Game farms are sadly in need of additional buildings and the requests for products from the two farms so far exceed the demands that additions should be made at the earliest possible date as well as institution of new farms.

The introduction of scientific methods in the office of Fish Commissioner, William M. Keil has given astounding results. Mr. Keil came to this department less than three years ago and in that time has taken the field in an active campaign which resulted in an extensive reconnaissance of our waters, supervision of remodeling old hatcheries and construction of six new stations. A fish culturist of national reputation, he has been successful in eradicating disease which caused serious losses in our hatcheries and has by experimental laboratory work brought about improved conditions in the propagation methods in our state. Mr. Keil has in the short period that he has been with this department done more for the bureau than any previous commissioner and has earned for Idaho an enviable position in the nation. He has direct charge of our hatcheries, laboratory research, construction of rearing and holding ponds, spawn taking and water survey. With the ever mounting duties pertaining to this office, we are indeed fortunate in having a man of Mr. Keil's type and I recommend that an increase in the salary of the Fish Commissioner be suggested to the legislature.

Results speak for the efficiency of any department and in presenting this biennial report the activities enumerated show a decided advancement in numerous fields of endeavor. A very decided advancement has been made in hatchery construction; feeding and salting of game animals and birds has resulted in great savings in wild life; close supervision of field conditions against unlawful operations; destruction of predatory animals and birds; arrests of violators; all have added to the duties imposed upon the chief deputy in this department. I believe that the salary now provided for this office is insufficient when considered with relation to duties imposed and I would, therefore, recommend that an increase be made for this office.

During each year there are instances where hunters or fishermen lose their fish and game licenses. A provision

should be made to permit the issuance of a duplicate license or a certificate, which may be used in lieu of such license and recognized by Deputy Game Wardens as authority to hunt or fish, such certificate to be issued upon a proper showing, in affidavit form, indicating the number of the license, the date and where purchased; the payment of a nominal fee for this certificate should be required.

The section permitting the hunting of predatory animals with dogs and making it discretionary on the part of the State Game Warden to issue a permit for this purpose should be amended. Numerous abuses have occurred where such permits have been issued, even to parties purported to be entirely reliable. The responsibility for running dogs in the fields or forests and particularly in big game sections should rest where it belongs on the person or owner who takes such dogs into these sections. As provided in Section 2778 of the Compiled Statutes, the owner of any dogs found running at large and which are tracking or pursuing deer or other game animals shall be guilty of a misdemeanor. We are in favor of the provision, also, that it shall be no defense that such dogs were pursuing deer or other game animals without the aid or direction of their master, and, also, that such dogs, when found so doing, shall be declared a nuisance and may be killed. The use of dogs, therefore, for the purpose of hunting predatory animals should be entirely on the responsibility of the owner of such dogs.

Inasmuch as we are vitally concerned with the taking of an accurate census of remaining game within the State of Idaho, it is recommended that a law be passed providing that the holder of every license shall report his total kill each year at the end of the season, enumerating the various species of game killed, and that failure so to do will result in the refusal of a subsequent license.

The seining of fish should be discouraged and discontinued, except for such seining as may be necessary under the direction of the State Fish and Game Warden and which is provided for under Section 2734 of the Compiled Statutes and vests in the Warden discretionary power. The seining of whitefish and redbfish should also be prohibited. We recommend that a bill be enacted specifically prohibiting the taking of fish in this manner.

There are probably other changes or corrections in the present statutes which will be recommended. The foregoing, however, as well as any other amendments, will be presented to the Fish and Game Committees of the Legislature.





LOOKING DOWN THE MIDDLE FORK OF THE SALMON

### Special Cooperation

Effectual cooperation, requisite to the ultimate success of the conservation of Idaho's wild life, does not lie within the power of any particular group or association of individuals but is possible only where the varied public and private interests are reconciled in a fair appreciation of the rights of all. Whenever one group or class of persons presumes to transgress the personal or property rights of others there is bound to be a conflict of opinion disastrous to the common good.

Unfortunately, in the past, there has been noted an extremely antagonistic feeling between the thoughtless or over zealous hunter and the farmer. Happily, this condition is rapidly passing and a new spirit of co-operation is in evidence. Sportsmen throughout the state and nation are zealously advocating and practicing the things which will bring about the harmony necessary to a complete understanding between the farmer and the hunter.

It is the thoughtless, greedy or over-enthusiastic hunter who engenders the hatred of the farmer. True sportsmen are strongly opposed to the violation of property rights and look with extreme disfavor upon the unsportsmanlike conduct of anyone who encroaches upon the land of another without proper authority. Numerous complaints have been filed in this office in the past and the bitterness evinced is the cause of much regret, however, it is pleasant to note that a real effort on the part of both farmers and sportsmen is now under way to perfect a complete understanding and hearty cooperation.

Much of the misunderstanding in the past has been due to the fact that an unwarranted distinction has grown up wherein a difference was presumed to exist between farmers and sportsmen. It is now realized by the members of gun clubs and similar organizations that membership in such bodies does not grant any particular franchise or privilege not enjoyed by others in respect to property rights, and further, that an affiliation with such organizations imposes a burden in this regard rather than a privilege.

Realizing that wild game is the property of the state and that its conservation is a matter of vital importance, the sportsman also appreciates the fact that it is only by the sincere cooperation of the farmer that its increase is to be accomplished for it is on the farm acreage that safe havens and feed are found. Disregard for property rights, destruction of personal property and like violations are practices not indulged in by true sportsmen.

The meadow, field or pasture of a farmer are just as much his home as is the lawn, garden or back yard of the city dweller and like respect must be accorded each by the other. No farmer would think of coming to a town, step into the yard of a citizen and shoot a bird, neither should the hunter climb a farm fence and proceed to shoot the game on the farm without first obtaining permission.

Ill feeling has no place in the perpetuation of this sport and with a kindly feeling established among all the elements which go to make up the sportsmen's bodies, individual or collective, there is every chance for a continuation of the greatest of outdoor sports in Idaho.

### Field Activities

Year after year the field activities of the department become more complex and more multitudinous. Active patrol calls for the efforts of from forty to fifty men each year. The field force is not, like popular conception has it, confined to selling of licenses and looking for violators; it includes the many features relative to hatchery work, such as spawn taking, fish planting, seining of non-game fish, assisting in construction and maintenance of dams and fishways; other field duties require attention to predatory animal and predatory bird control, transportation of salt, bait and subsistence, territory patrol and complaint investigation.

Wonderful angling streams, beautiful interior lakes, fertile valleys and heavily timbered mountains all combine to make Idaho the game paradise of the west and a mecca for hunters and sportsmen. Appreciation of this wonderland is not confined to residents of the State of Idaho, but is recognized by citizens of other states which have their people in our midst every year in ever increasing numbers.

Without increased revenues, it will be impossible for the department to provide adequate supervision and at the same time cope with the situation as justice to the policy of the department demands. Activities will be curtailed, fish culture retarded, game conservation embarrassed and advancement defeated without some method being provided to care for the heavy demands which are made upon the department.

True, the ever increasing use of our field and streams is promoting the sale of licenses, however, the records show that no material increase is found, save in the sale of non-resident licenses of the varied kinds. Hence, the department is confronted with the necessity of constantly

transferring field men to distant points in an effort to give a maximum of supervision, yet it is contrary to the best interests of supervision to have unprotected areas in any portion of the state. Until the sale of licenses under present values do increase, there is little likelihood of granting proper protection to the several counties at all times of the year, or to meet the desires of those interested in the matter of game conservation. In our endeavor to give a maximum of supervision, the greatest possible co-operation has been in evidence by the employees of this department. Complaints are not numerous, yet it is found that they usually come from districts which are left unprotected because of the necessity of transfers.

The selection of the personnel of the department for field activities is confronted with two outstanding troublesome features—the acquisition of suitable deputies from a personality standpoint, and the offer of meager salaries, however, may it be said to the credit of those now engaged in the work that they are whole-heartedly engrossed in their labors, and are only retained because of their devotion to the work of conservation. It would require but little effort to secure men bent only upon detection of offenders, still, this phase of the work is but a minor feature; a greater field lies in the active cooperation with the public and the type of man required for this work must be selected with care. Intelligent and constructive interpretation of the law is necessary; active cooperation with conservation agencies is essential; punishment of violators is demanded by law; effective general supervision is imperative. The department realizes that no feature of law, no matter how wise the intent, is going to be a success unless it finds favor with the public and to this end officials of the fish and game department are ever quick to place in an honest and unbiased manner the necessity found for conservation.

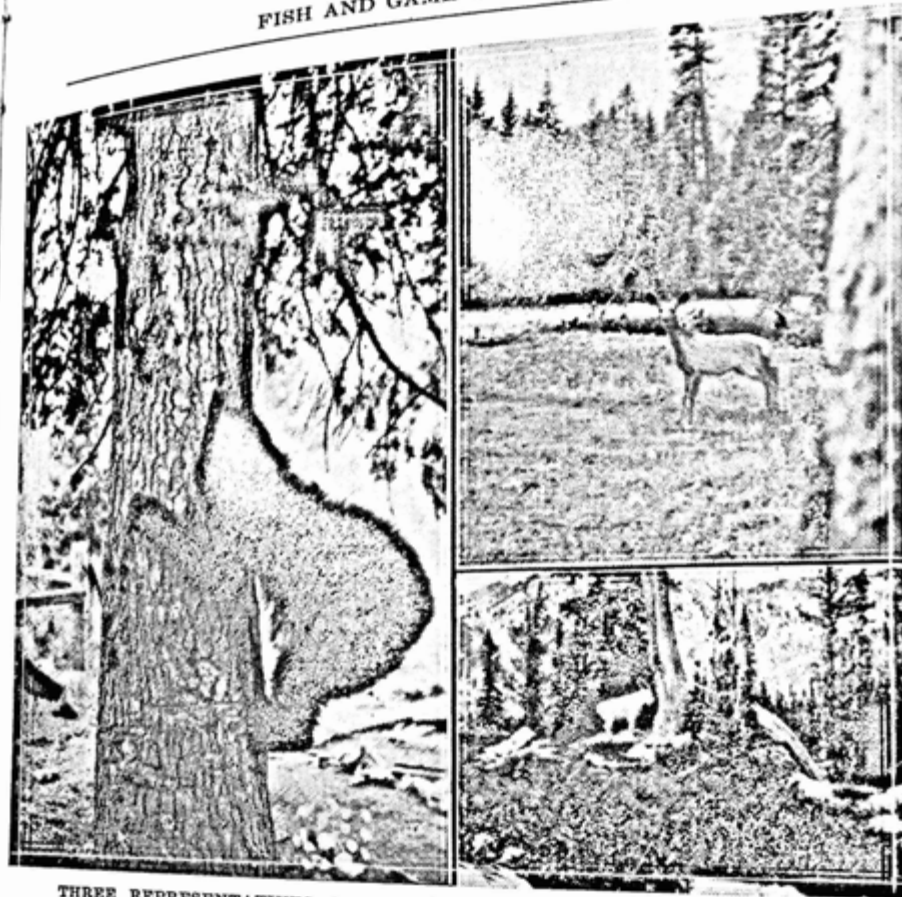
Surveys, inspection trips and location data are made by members of the department. Every section of the state, some portions of which are virtually inaccessible, has been the subject of special inspection trips by the State Warden. Surveys of winter feeding grounds, angling streams, location of scarce and protected animals such as mountain sheep and moose are achieved. Not alone are the inspection or location trips taken but it has been expedient and informative for the State Warden to attend meetings of various associations and clubs which have as a basis for their existence the preservation and protection of game animals and birds. Through this method a close coopera-

tion is secured and a spirit of friendliness extended. National and sectional meetings are found to be a source of inspiration, for there the discussion tends toward an appreciation of the efforts of other states and the prospective policies offered. Legislation, policy and practice are discussed in the most effective way.

### Game Violations

Legislative enactment is the result of a consideration of the general good rather than an attempt to deprive or restrict the individual of some of the so-called personal liberties. The law is made and must be respected. Game laws are enacted for specific purposes and to the end that the general welfare be promoted they must be obeyed, however, no law is effective until sentiment effects a kindly disposition towards it. Enforcement lies in popular approval and it is for this reason, no doubt, that the legislature has attempted, in dealing with the fish and game situation in this state, to devise means whereby the individual might retain all the liberty possible consistent with the general welfare.

Enforcement is a strict injunction given every employee of this department, yet no laurels are extended those who secure numerous convictions but rather it will be found that praise is extended those who are able to bring about a complete and sympathetic understanding of the law. Arrests and convictions are an unhappy incident to conservation, still they are found to be essential in order that protection be made effective. Regardless of the benefits of the law there are always to be found those who either unwittingly or wilfully disobey its mandates. It is this type of citizen who endangers the success of every benefaction. It is well known that the appreciation and respect for fish and game laws is 100 per cent greater than it was a few years ago—this condition is largely due to a better understanding of the purpose of the law. Realizing that the hunting of violators is not a prime factor but rather an incident in the deputy warden's work, it will readily be appreciated that the general activity of the field force has been increased. Ten years ago juries were reluctant to convict while today the percentage of convictions is extremely large. This fact is evidence of the popular approval which the people express towards the policy and laws affecting fish and game in the state. Specific data relative to arrests, convictions and receipts are set out at another place in this report.



THREE REPRESENTATIVES OF IDAHO BIG GAME—WHITE TAILED DEER, MOUNTAIN GOAT AND BLACK CUB BEAR

### Big Game Conditions

Game conditions may well be divided into two subdivisions, namely, physical and numerical, however, the two are closely interwoven in some instances as to almost make them seem inseparable.

It may be said that under ordinary conditions the department cannot correct or promote the physical conditions of big game animals, yet, the results obtained by this department are so striking that they can not be overlooked. A most remarkable improvement in the general condition of the moose, elk and deer within the Selway Game Preserve is a shining example. Deer and elk, in par-

ticular, were found to be infected with mange and infested with ticks. A campaign of relief was instituted and salting with sulphur-salt blocks commenced. Mange disappeared, ticks were eradicated, sleekness appeared, all within the space of one season. Today the salt licks established by the deputy game warden are the stamping grounds for practically all the known game animals of the Preserve. Requirements for artificial salt licks were brought about by the depletion of natural licks and by the migration of game from old licks situated near present highways.

Severe winter seasons are known to be the most disastrous item which affects the physical condition of big game, however, the department has by creation of winter preserves done much to relieve the situation. In some instances feed is purchased and fed to the animals to prevent starvation, often the deputies are engaged in the task of providing food by cutting evergreen foliage and moss in order to give succor where transportation of hay is impossible.

In some cases it is necessary to compel certain species to migrate to new grounds for the reason that their old bedding places, used year after year, have produced disease complication. This condition exists in mountain sheep bands found on the Middle Fork of the Salmon River, Lemhi County, and on the Salmon River ranges in Idaho County.

### Census Returns

Idaho at present retains much of her primitive wilderness where game abounds in their natural habitat undisturbed by man, however, the area is becoming less and less each year and the game is forced into territory where environment is not conducive to the best results. This situation applies to game, both large and small, yet by careful supervision it may be seen from census returns that an increase is steadily recorded. Two independent agencies are engaged in the taking of big game census and their results on the whole as to general conditions are quite similar. One census taken by the field force of this department is made by rechecked estimates, and the other census is based upon returns submitted by the Forest Service to the Department of Agriculture. Each year the reports are to be taken as more accurate since the methods of estimating are becoming more conservative and extensive as well.

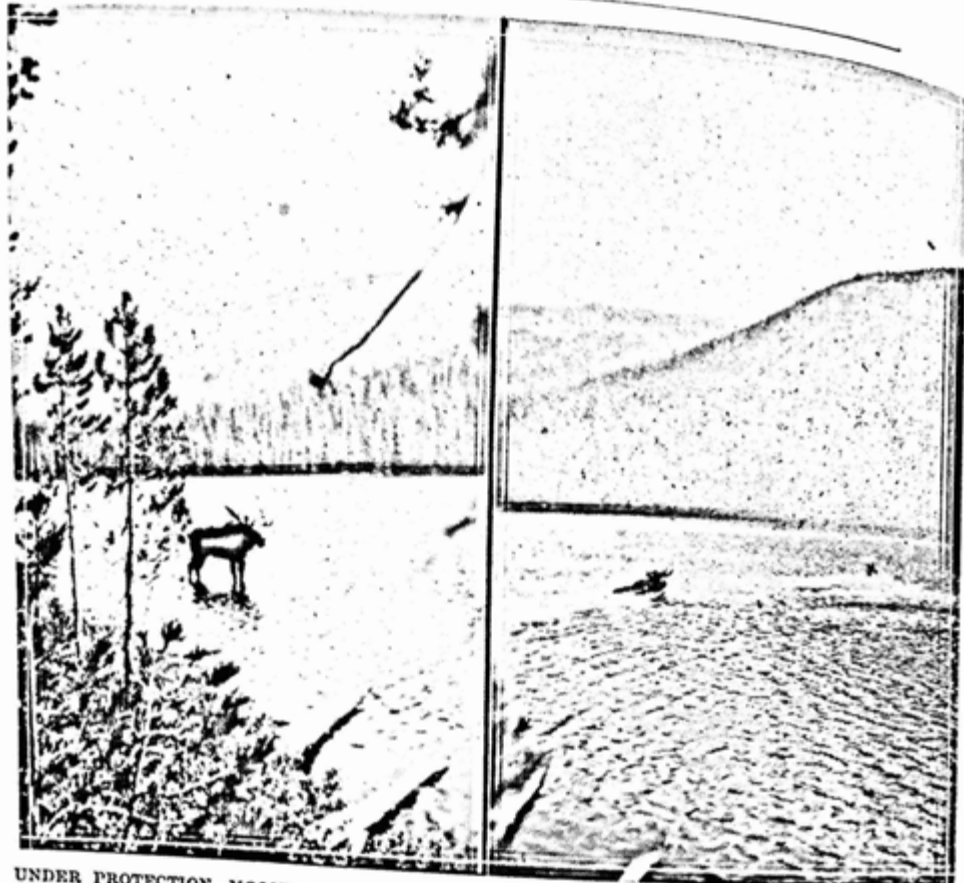
The Federal census covering National Forest areas for the year 1923 and 1925 are as follows:

	Antelope	Caribou	Moose	Elk	Deer	Mt. Goat	Mt. Sheep
1923.....			579	5,213	45,021	3,452	1,222
1925.....	1,495	68	673	5,900	52,639	3,136	1,135

Figures from this source are not available for the year 1926. Data obtained from officers of this department are slightly in conflict with those obtained by the Department of Agriculture in that no decrease is shown in mountain sheep or mountain goats but rather an increase; also a slightly higher increase is reported by this department in the number of moose. However, the figures are so nearly parallel in other items that we may safely assume that elk, deer and moose are on the increase while mountain sheep and mountain goats are holding their own.

It must be remembered that the past three winters have been relatively mild and that the winter kill has not been as heavy as it would have been under less favorable conditions, however, it is also conceded that protected winter ranges, salting, feeding, predatory animal extermination and closer supervision will in a large measure offset the losses previously suffered from severe winters and in the future this loss will be reduced to a minimum.

Caribou enumerated in this report are found in the extreme northern part of the state and range along the international boundary; it is the only known instance in the state and the animals are found in two herds, one on Pend Oreille National Forest and the other on the Kaniksu National Forest. Antelope are found in many counties in the southern part of the state and the number is in excess of that shown in the above tabulation since many antelope are reported from areas outside the national forests. Several sections of the state provide natural habitats for mountain sheep, commonly known as big horns. The bulk of them roam the high mountain fastness of Idaho, Lemhi, Custer and Valley counties. The three species of big game mentioned in this paragraph are protected by closed seasons and it is expected that in time a limited open season may be had on mountain sheep, but it is hardly to be expected that an open season will be had on caribou or antelope since hunters could in one season, without doubt, compel these animals to flee their ranges and thus destroy their natural habitats which are essential to their existence.



UNDER PROTECTION. MOOSE HAVE RAPIDLY INCREASED IN CENTRAL AND EASTERN IDAHO. SPECIMENS PHOTOGRAPHED AT OLD MAN LAKE IN IDAHO COUNTY

### Idaho's Open Season

Idaho is the only state in the Union which at the present time declares an open season on mountain goat. Over three thousand of these animals are now in the mountains and since their only value is for trophies there is little likelihood that they will ever be reduced to a number demanding a closed season. Very few are reported as killed each year and recently checked census show an increase under the present open season.

While the Federal authorities report an increase of approximately sixteen per cent in the number of moose, our own figures compiled by deputy wardens show a much larger number of the valuable game animals in our for-

FISH AND GAME

ests. At present no open season is permitted on moose in Idaho and should not be made until the number increases very materially. No disease has been found among moose and there is every reason to believe that they will under proper supervision show marked increase in numbers during the next few years.

Elk in Idaho are rapidly gaining in numbers; their range is very wide throughout the state. Federal and state estimates each show remarkable increases and, while Idaho is one of the three states left in the Union which permits an open season on this animal, there is no reason for closing the season here. Approximately 350 elk are killed each year and the annual increase is conservatively estimated at over 500 per year under ordinary weather conditions. At least 6,000 elk are now in the state and a material increase in numbers would seriously endanger their existence because of limited winter range. The largest herds are found in central Idaho on the Salmon River drainages.

### Great Deer State

It is not generally known to Idaho citizens that we have three distinct species of deer in our state—commonly known as the white tail, black tail and willow deer. White tail are the most common and are estimated to number approximately 90 per cent of the total which is set at 52,639. Black tail deer are found only in the higher mountains; they are much larger than the white tail and more nearly approach the elk in their habits. The willow deer are not readily recognized from the white tail at a distance; they are a somewhat smaller and in type closely resemble antelope. But few of this species are known and they are found in the northern portions of the state. It would undoubtedly be an excellent thing to close the season on willow deer but the similarity in color and habit would make it extremely hard to distinguish it from the white tail and thereby cause considerable confusion to hunters and thus create a serious situation in enforcement. Some agitation has been caused by a desire to enact a buck law, however, the rapid increase in our deer herds indicate that this situation is not one of serious moment, and is not advisable at this time. It is true that in some localities the number of deer is increasing so rapidly that there is danger from loss through lack of winter feed; it is not thought best by the department that the limit be increased at present, however, it would not be amiss should the Game Warden be permitted to declare special open seasons when



ONE OF THE BEST DEER SECTIONS IN THE STATE IS FOUND NEAR THE JUNCTION OF CAMAS CREEK WITH THE MIDDLE FORK OF THE SALMON

conditions made such action advisable. An annual increase in deer is estimated at 10,000 or approximately five per cent, a very conservative figure; data gathered by the department show approximately 3,000 deer killed a year—this does not represent the total number since many are killed and no report made by the hunter, and it is safe to say that the annual kill comes quite near to the 5,000 mark, so it may be readily seen that the increase far exceeds the death toll.

### Small Game

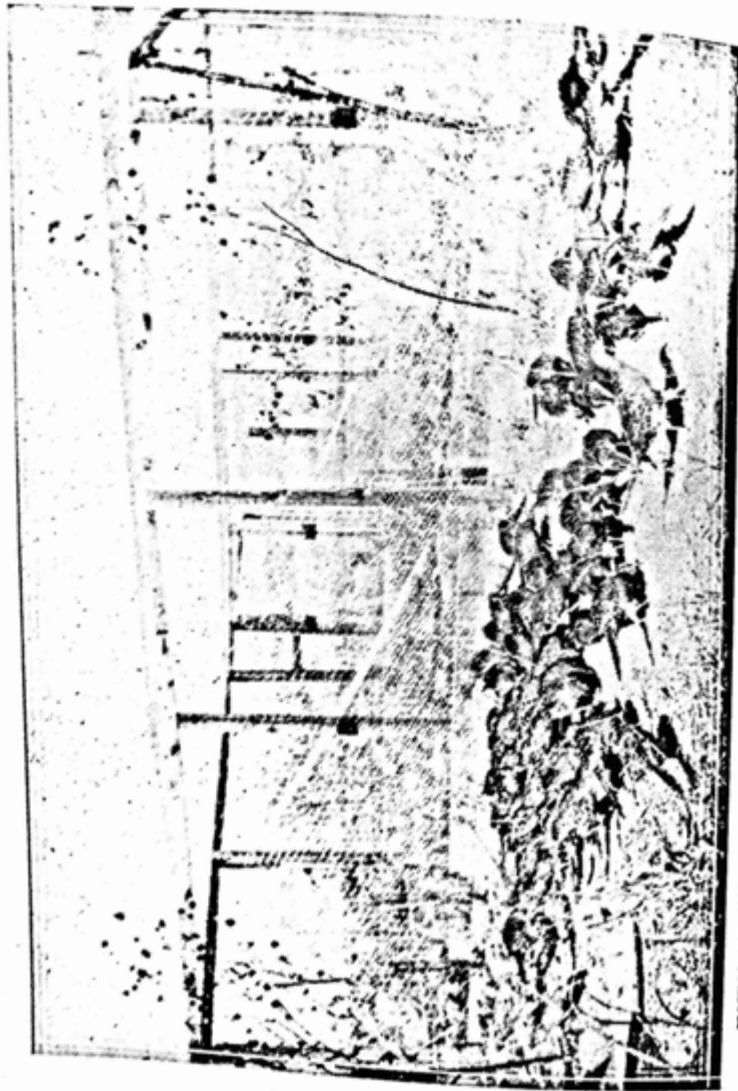
At the opening of the biennium, the game birds of the state had, with two exceptions, shown a satisfactory increase in numbers. Ruffed grouse and the Franklin grouse, commonly known as fool hen, are rapidly disappearing and it is essential that protection be afforded these species or their presence in the state will be but a matter of memory.

It has been necessary for the State Warden to exercise the discretion granted under the law and by proclamation close shooting in different counties. The wisdom of the action has been fully justified and the abundance of game resulting from such closed seasons is evident. The department appreciates the kindly spirit of cooperation manifest by the sportsmen in their effort to assist in conservation brought about by the closed season method. It is only within recent years that help could be obtained, in this regard, from the hunter. Formerly such action by the department was loudly decried as an attempt to deprive the sportsmen of their privileges but now the great majority of closed seasons are made at the request of individuals and organizations.

Game birds now open to shooting at regulated seasons are the Chinese pheasant, Hungarian partridge, California quail, native quail or bob whites, sage hens and the blue, ruffed, pin tail and Franklin grouse. The first three species have been introduced by the department and are not native to the state, the other game birds are natives and have not been propagated at the state game farms. The two state game farms have reared and liberated to date, 1249 Chinese pheasants, 61 Hungarian partridges. The farms have reared and retained for breeding purposes about 500 birds.

### Finest Game Birds

While the Chinese pheasant is recognized as being one of the finest game birds we have in Idaho, considerable opposition has developed to them on account of alleged deprecations or damage done growing crops. It is claimed that



YOUNG CHINESE PHEASANTS RETAINED FOR BROOD STOCK AT HAGERMAN GAME FARM

much damage is sustained growing corn in certain stages through the operations of these birds. Opinion, among farmers, is however divided. It has been suggested, even requested, that a year long open season be granted on these birds and that the killing be permitted without the necessity of obtaining a license. It has been conclusively proven that the Chinese pheasants are large eaters of noxious weed seed. They are also destructive to insect life, and while it is admitted that corn forms a portion of their food, it is thought that they do more good than harm. Intensive investigations were held in Minnesota relative to similarly alleged depredations by these birds with the following results: During the warm or growing months it was found that eighty-five per cent of the food taken from the crops was insect life; during the cold or winter months ninety-two per cent was vegetable life, sixty per cent of which was of weed seeds. Birds killed in the corn fields during a three months period showed an average of fourteen cut worms to five kernels of corn and in many instances the crop was found to be filled with cut worms and not a single kernel of corn. They are also very destructive to grasshoppers and their eggs and, are one of the few species of birds that will eat potato bugs. Investigations carried on in several other states showed like results. This department is now engaged in an investigation in this matter in order to get first hand information relative to the injuries alleged to be sustained by farmers of Idaho. Two stations were established, one at Nampa and the other at Parma. The men in charge of these investigations are in no wise connected with this department and their investigations are carried on without interference. Four birds are killed each month and the results compiled for seasons. An analysis of content and a determination of weights of the several foods found will be incorporated in the reports to be made. The investigation is yet incomplete but it is hoped that the data obtained will be available for compilation and distribution in pamphlet form from this office in the very near future. By this work it is confidently believed that the department will be able to make conclusions of such definite nature, either for or against, the Chinese pheasant, that we may be properly guided in our action in the future.

Hungarian partridges, it is hoped, will in time be one of our principal game birds in southern Idaho as it is now in the northern part of the state. Northern Idaho has been stocked by migrations of these birds from the State of Washington and birds now offer good shooting in all

counties north of the Clearwater river. This department has received from Europe numerous shipments of these birds for distribution and breeding purposes on the game farms. All recent shipments have been planted in southern Idaho except for some twenty pairs which are retained for experimental purposes. The first birds secured from Europe arrived in 1921 and the results now show that this bird is capable of taking care of itself and propagating in most of the regions of the state, where the ground is rolling, with some cover.

### Open Quail Season

California Quail are now becoming a well known bird in many sections of the state. However, shooting is restricted to a few counties in the southern part of the state. With proper protection this bird will soon become a valuable addition to our game bird resources, and its introduction in the state will be a matter of deep appreciation by the sportsmen. Native quail, the commonly known bobwhite, is found in every section of the state, yet the open season on this bird is had in but two counties, however, it is firmly believed that this restriction will be removed so that a much larger field will be available the coming season. In our effort to maintain this species, it has been necessary for the department to feed extensively and conduct a strict campaign against the skunk, weasel and like predatory animals. Bob-whites are peculiar in that they are practically helpless in extreme cold weather or deep snow—they huddle up and die of starvation without attempting to aid themselves. At this point the department desires to express its appreciation of the fine assistance given in the protection of quail by the farmers who voluntarily feed untold numbers. It is essential that quail have a sufficient cover, plenty of food, and careful protection from predatory animals and birds. When these three factors are available the quail will thrive and multiply. Blue grouse are state wide in their distribution and afford wonderful shooting. This remarkable bird is just as numerous at present as it has been at any time past and apparently is well adapted to life in any portion of the state, thereby insuring good shooting for years to come. Sage hens, contrary to popular belief, are increasing in number and may be counted upon as one of the valuable birds for Idaho sportsmen.

Pin tail grouse are numerous in various sections of the state and provide a bountiful supply of shooting during the open seasons. This bird is on an increase and by proper

protection there is little likelihood of its becoming rare or extinct, but on the contrary there is every reason to believe that it will spread throughout the state and afford added hunting. Ruffed grouse and the Franklin grouse, commonly referred to as the fool hen, are on the decrease and careful protection must be had to prevent the extermination of these species. Protection should be given for these two species and their conservation nursed.

### Ducks and Geese

Migratory water fowls provide one of the largest items in the hunter's category and, under the open season approved by the terms of the most recent federal enactment on the subject, the hunters of Idaho have been granted a most acceptable season and with ordinary weather conditions excellent shooting will result. There is small chance to secure data respecting the increase or decrease of the ducks and geese for the reason that their migrations are controlled in a large degree by weather conditions and with an extremely cold winter the scarcity of these fowl will cause alarm when as a matter of fact the absence of the bird is due to migration. In the early part of the 1925 winter a serious malady was noted among ducks in sections of the southern part of the state. Immediately upon receipt of this information, the department secured a number of the birds and forwarded them to the Bureau of Biological Survey at Washington, D. C., for investigation. Analysis showed that death among the ducks was due to pneumonia rather than from alkaline poisoning as was suspected by the department and local investigators.

### Game Refuges

Idaho is reputed to have set aside 3,000,000 acres of game preserves and refuges. This figure is approximately correct when the preserves set aside by statute are added to those created for specific terms under proclamation by the State Game Warden. This area may seem to be disproportionate to the needs of the state but it must be remembered that virtually all of these lands lie within the National Forests and are neither privately owned or subject to location under Federal law and therefore merely open ranges, and are therefore not restricting the use of the lands even for grazing purposes. The areas embraced are with but one or two exceptions highly beneficial to the conservation of big game and in no wise defeat the hunter





SEVERE WINTERS NECESSITATE THE PACKING IN OF SALT AND HAY TO GAME ANIMALS IN VARIOUS SECTIONS OF THE STATE

since all the areas within the national forests are surrounded with hunting grounds of equal or better opportunity during the open seasons.

Four new game preserves were created at the last session of the legislature, namely: Soldier Mountain, Warm Springs Creek, an addition to the Selway, and the Middle Fork Preserves on the Little Salmon River. Of these, the first two appear to serve no useful purpose. The Warm Springs Preserve, consisting of 62,000 acres, in Blaine County is open to grazing and will concentrate the game into a field where scarcity of feed is apt to cause serious damage. The Soldier Mountain Preserve was created without due care as to its usefulness and as a result the boundaries do not embrace the territory conducive to game preservation for the reason that at different seasons the game is of necessity without the confines of the preserve when they should be protected. In the future it would be well for the proponents of game refuges to carefully analyze the situation before seeking the enactment of law creating such preserves, to the end that they may serve a useful purpose. Reconnaissance surveys should be made, boundaries designated in conformity with natural lines and provisions made for proper posting of the limits of the preserve so that error cannot be made by the hunter without knowledge of his mistake.

There are now, all told, within the State of Idaho, eleven preserves created by statute; in addition, there are areas set aside or closed by proclamation issuing from this office. As time passes and the State of Idaho becomes more densely populated, it will be necessary to set aside or create additional preserves or sanctuaries to meet the urgent needs of the department and avoid the resultant encroachments of settlements.

### Proper Marking Essential

Provision should be made for the proper marking or designation of boundaries of existing preserves to the end that the hunter may be advised of the limits or the refuges so that misunderstandings relative to poaching may be eliminated. The exterior lines should be posted or otherwise designated with appropriate signs. Patrol or supervision is essential to maintain the preserves for the purposes for which they were created and this can be accomplished only when a deputy is detailed to the work and a residence established upon the restricted area.

Ordinarily game preserves are created for specific purposes in connection with conservation. Winter feed is a vital factor in the utilization of any refuge and this item must be seriously considered. Grazing by domestic stock is permitted within every preserve created whether within or without National forests. The regulation of this commercial factor will have much to do with the success of the enterprise in game protection. Winter feed is held by this department to be equally important with shooting restrictions. Where the land is heavily grazed by stock it will be readily appreciated that no sustenance can be left for big game consumption.

### Fur Bearing Animals

Trappers' returns from fur bearing animal catches in the United States is estimated at seventy millions of dollars annually. The furs sold are classed under two headings, predatory animals and protected fur bearing animals. Just how extensive the industry in Idaho is, is a matter of speculation since there is no method by which an accurate check can be obtained by this department. The statutes of this state which require a filing of a report is insufficient to compel an even partial compliance. Trappers are generally here today and gone tomorrow so that they are difficult to reach; the law granting them ninety days following the close of the season in which to make their report. The feature of law which permits a trapper to secure a new license about sixty days before the time required to file for the previous year practically nullifies the statute. The most important fur bearing animals in the state are beaver, muskrat, mink, otter, marten, fox and fisher. Beaver is protected throughout the year, however, they may be taken where authorized by the department on showing made that the animals are doing damage to property. Open seasons are had on all other animals classed under this heading and reports indicate that no material decrease is occurring. By a continuance of the present policy there will always be a supply of these animals within our state and an item of real commercial value to those engaged in their capture. The department acknowledges the close cooperation of federal authorities in their actions looking toward the apprehension of poachers who violate the law against beaver killing in particular.

### Permanent Improvement Program

Experience has taught the department that as a matter of stability and improvement it is essential for a well

defined program of permanency, to be planned and carried out. With this view in mind, the department has established a definite construction policy and has consistently followed the outline.

There are constant calls from different sections of the state for the building of fish hatcheries, rearing ponds and game farms; for the appointment of additional deputy wardens, increased allotments of fish distribution and for the delivery of more game birds. These requests have received every consideration from the department and approval where possible. No new hatcheries are constructed unless conditions necessary to the success of the undertaking are found at the place suggested, and, because this department has refused to enter the field after due examination, there have been complaints lodged.

This department has, during the past biennium, established six new hatcheries which added to the four heretofore existing makes a total of ten hatcheries for the state. The addition made during the past two years is readily noted as being in excess of all previous permanent improvements. Permanency is the main objective of the department. In this regard it is well to state that these additions to the property of the department were made possible through the whole-hearted cooperation and financial assistance of individuals and organizations which contributed time and money.

Carrying out the policy adopted, the department established two game farms and founded them on a permanent basis. The farms are located at Hagerman and Lapwai from which points game birds have been distributed to the several sections of the state.

Rearing ponds are an important item in the definite policy of the department and the Warden has ever been alert to foster this feature of fish propagation. Where conditions are favorable, to the building of rearing ponds they have been constructed, and already a number are in operation. The necessity for rearing ponds is no longer an experiment and their presence is here to stay.



TAKING AND FERTILIZING CUT-THROAT TROUT EGGS AT HENRY'S LAKE

## Report of Fish Commissioner

Honorable R. E. Thomas,  
State Game Warden,

Sir:

In submitting this report upon the activities of the Fishery Branch of the Department, it is gratifying to show that during the past biennium, more, real, permanent construction and improvements have been carried out in relation to the fisheries than during any similar period in the history of the Department. Although badly handicapped by the lack of funds for such purposes, much of this work was imperative on account of the rapidly increasing demands made upon the Department for supplies of fish for stocking. The opening up of heretofore comparatively inaccessible regions to motor travel has drawn so heavily on the fish life of these sections, that waters formerly teeming with splendid trout are now in danger of depletion.

On May 1st, 1924, the Fish and Game Department had in operation four hatcheries. Three of these, the Sand Point, Ashton and Hayspur stations had been constructed by the Department, the fourth at Coeur d'Alene, being turned over fully equipped to the state by the sportsmen of Kootenai, Benewah and Shoshone counties. In less than three years, the Department has increased the number of its fish cultural stations from four to ten. With the exception of the one at Grangeville, none of these have been expensive structures, though several of them are capable of giving equal results with those costing many times more. The establishing of these smaller hatcheries over the state has simplified to a large extent the fish distribution problem, allowing many inaccessible sections to be planted direct from the hatchery by truck. By this method of stocking, the fish formerly supplied from far distant points by rail, reach the lakes and streams in much better condition, and more time and greater care can be taken in properly planting them in the most suitable localities.

In addition to the extensive building program carried out, marked progress was shown in the methods of propagation of the various fishes handled at the hatcheries, as evidenced by the more vigorous condition and larger sizes of these as received by applicants. The success or failure of fish cultural operations however must not be judged

by the results of one, or even two seasons, but rather by the average over a number of years. Very often unfavorable weather or water conditions materially reduce the outputs of some of the best stations during a season, and give an erroneous impression of the real value of such an establishment.

### Personal Investigation and Research Work

Hundreds of possible hatchery sites and rearing pond locations were investigated throughout the entire state. The most extensive work of this kind being carried out in the northern counties, as this section of the state is in greater need of fishery development than has so far been possible. Although the physical characteristics of this part of the state should be favorable for the formation of large springs of suitable temperature, with one exception, none could be located that might be utilized to advantage. Streams, lakes and reservoirs in almost every section of the state were inspected as possible sources of egg supply. The water supplies of several of the hatcheries were tested out for oxygen and other gas contents, as occasional heavy losses among the fish were thought to be caused by abnormal water conditions. Little bacteriological research was necessary during the past two seasons on account of the comparative freedom of the fishes in all the hatcheries from diseases of this character. Some slight troubles were experienced with external parasites, but the causes were quickly determined and preventative measures soon arrested the progress of the organism causing the disturbance. The press of other work prevented the beginning of the state-wide biological and ichthyological survey which it is hoped may be eventually completed covering every lake and stream within the commonwealth.

### Construction and Improvements

At the Sand Point station a new building to be used as a combination garage, work-shop and storage-room was constructed entirely by the hatchery force, as were the cement partitions in the rearing ponds and the cabin for spawning operations at Perkin's Lake. The Superintendent and Assistant of the Sand Point hatchery together with the Deputy Game Wardens of Bonner's Ferry and Sand Point carried out the construction of the new rearing station at Ruby Creek in Boundary county near Naples. This construction consisted of an intake dam, pipe line and flume, eight rearing race-ways and a cabin for the accomodation of the man in charge of the feeding.

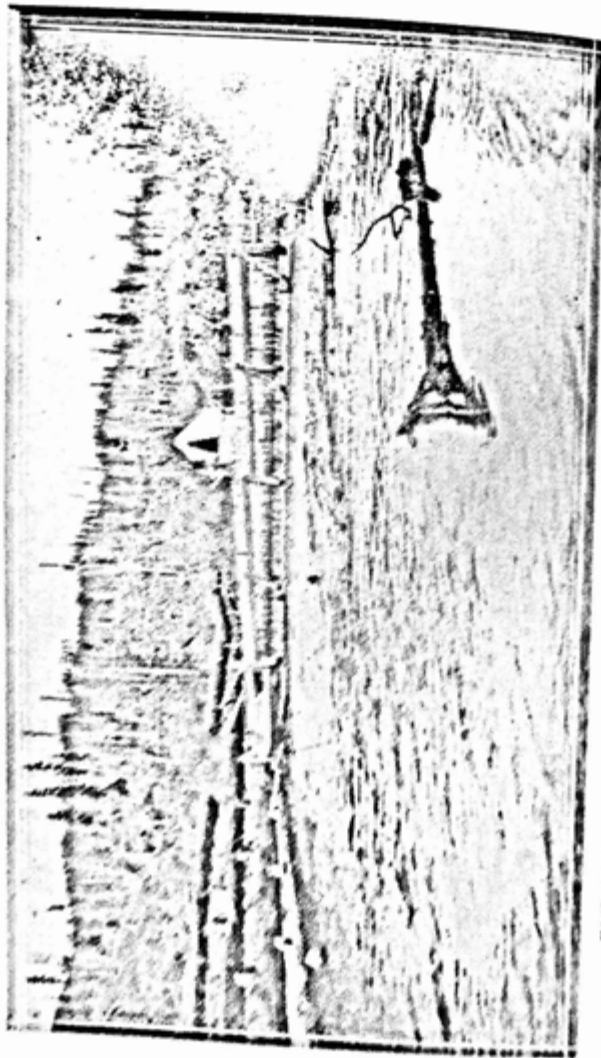
The old electric pump for supplying the Coeur d'Alene hatchery was replaced with a new one of larger capacity which will provide a volume of water sufficient at all times for the entire battery of troughs without the necessity of drawing on the municipal water supply as formerly. It also became necessary to install a new and more adequate cess basin for sewerage disposal at this station as the old one had been condemned by the Board of Health. Owing to the chlorination of the city water supply at Coeur d'Alene, the Department was compelled to safeguard themselves against the possibility of the breaking down of the electric pumping system by installing an auxiliary pump and motor operated by gasoline. In connection with this pumping system, an additional supply of pipe 400 feet in length was carried out into the lake to furnish water of higher temperature for a more rapid growth of the fish.

While the new hatchery building and pools at Grangeville were completed during the fall of 1924 to a point where it could be placed in operation the following spring, much remained to be done that could not be finished on account of bad weather conditions. This was carried out the spring and summer of 1925 by the Superintendent of the station. A garage and other outbuildings were constructed, and these together with the hatchery given two coats of paint. A new road was also completed and given a surfacing of gravel as the old one was almost impassable during wet weather. A two room bungalow as living quarters was added to the Cascade Station, and the hatchery enlarged to accomodate two extra troughs and for storage and working space. An ice house and large refrigerator were also constructed.

The new Evergreen hatchery together with outside rearing pools, bridge across the river and dug-way road from the property to the State high-way were completed during the fall of 1925. Details of this station will be given under Propagation.

In order to prevent the collapse of the Hayspur hatchery building, it became necessary to brace the entire structure with cross beams and truss work. These repairs together with the construction of a large cement distributing cistern for regulating the water supply, and a general overhauling of the superintendent's residence, and the building of six outside rearing races constituted a considerable outlay of money at this station.

The superintendent's residence at Ashton was remodelled to the extent of a new stairway to the second story. The unfinished rooms above were completely ceiled and made habitable as sleeping quarters for the station assistants.



ELK RIVER SPAWN-TAKING STATION WHERE MILLIONS OF EASTERN BROOK ARE COLLECTED ANNUALLY

Porches were added to both the front and rear entrances and the entire building painted inside and out. A well insulated double-walled outside cellar was constructed, as previously it had been impossible to prevent vegetables, canned fruit, etc., from freezing in the house during the severe winter months. The hatchery, grounds, outside buildings and residence were completely wired with electricity, and a new electric food chopper installed in the feed room of the hatchery. Ten new hatching troughs were added at this station to be used for the early hatching of trout for the Henry's Lake rearing pond.

Six hatching troughs and a new cabin were constructed at the Cedar Creek Field Hatchery, and an additional building and ten troughs at Henry's Lake. A large concrete rearing pool was completed and placed in operation at Payette Lakes as an outlet for the congestion of fish at the Cascade hatchery.

### Spawntaking and General Field Operations

With ten hatching stations to be supplied with eggs, and brood stock carried at but two of these, the problem of procuring the requisite number of eggs for capacity operation without resorting to outside purchases, because an undertaking of considerable proportions. Such work requires the services of specially trained men, as not infrequently they are called upon to produce results with the most unsuitable and improvised equipment. Two spawntaking places operated the spring of 1925 were abandoned after having been given a thorough try-out. At any new station opened up, the work for the first season is more or less of an experiment, and quite frequently is barren of results other than the knowledge gained that future operations at that point are impracticable. The collections at Henry's Lake, Cedar Creek, Elk River, Wolf Lodge, Silver and Benewah Creeks, and from the brood stock at Ashton were well up to expectations; but at Mackay, Thorn Creek and the tributaries of Lake Pend 'Oreille were somewhat disappointing. Since closing Perkin's Lake to all fishing, this location gives promise of developing into an eastern brook trout spawntaking station of much value. The attempts to collect cut-throat trout eggs on the Solway River proved a total failure. The spring of 1925, two experienced spawntakers were detailed to assist the Bureau of Fisheries in their operations at Yellowstone Lake, and in return for this cooperation, the Department was furnished 500,000 black-spotted trout eggs.

The Department has been fortunate in securing the services of several new men during the past two years, who are well trained in this work of trapping wild trout, and in the stripping, eying and transporting of the eggs, so collected to the various hatcheries over the state. These men, together with those of the older force who are called upon to perform these duties, frequently in the face of tremendous odds, deserve great credit for the faithful and efficient manner in which this work is prosecuted.

#### RESULTS OF SPAWNTAKING OPERATIONS DURING 1925-1926

Station	Variety	1925	1926
Ashton (Brood stock)	Rainbow	1,000,000	1,500,000
Cedar Creek	Rainbow	1,360,000	1,412,300
Hayspur (Brood stock)	Rainbow	400,000	300,000
Mackay	Rainbow	400,000	375,000
Jenkin's Lake	Rainbow		1,000,000
Springfield Lakes *	Rainbow	10,000	
Elk River	Brook Trout	1,250,000	1,350,000
Perkin's Lake	Brook Trout	250,000	400,000
Silver Creek	Cut-throat	150,000	300,000
Henry's Lake	Cut-throat	1,350,000	2,876,000
Brush Creek *	Cut-throat	50,000	
Benawah Creek	Cut-throat	284,000	145,000
Wolf Lodge	Cut-throat	217,000	660,000
Pend d'Oreille streams	Cut-throat	400,000	300,000
Thorn Creek	Cut-throat		75,000
Sand Point (Brood stock)	Cut-throat		200,000
Yellowstone Lake	Cut-throat	500,000	
		7,621,000	10,893,300

\* Abandoned

### Rearing Ponds

Considerable progress has been made in this state during the biennium in the establishment of rearing ponds. The value of suitably located and properly conducted rearing stations where fish supplied by State or Federal agencies may be held and fed until of larger size before planting has long been recognized. In fact your present Fish Commissioner began publically to advocate this method of cooperative work as far back as 1908. The establishment of such ponds in a community has a tendency to increase the interest of the local sportsmen in the planting and protection of such fish, and to impress on them something of the cost and hard work necessary to produce and plant in suitable waters a sufficient number of these to provide fair angling.

Having directly contributed to such work either by donations of money or labor, they feel a personal interest in the results, and usually may be depended upon to lend

their influence against over-fishing or the violation of any of the rules of good sportsmanship. Many communities though, in their enthusiasm over the possibilities of the rearing pond idea, go to extremes in their demands for the development of these, regardless of whether or not they have a suitable location. If success is to result from the establishment and operation of such ponds, those interested must first assure themselves that the proposed site has as many as possible of the necessary requirements. These are ample water supply of suitable temperature; topography favorable for the construction of pond or ponds so that they may be at all times under perfect control, and accessibility both from a food supply standpoint and distribution afterwards. It is also important that the location be not so far removed that frequent supervision cannot be carried out either by state officials or those directly interested.

Ponds suitable for utilization by sportsmen's organizations are of two types: Small ones constructed of wood, concrete or earth, similar to those in use at hatcheries, and where feeding and cleaning must be daily attended to by someone instructed as to their care, and large ones where the water has been diverted into a basin of considerable area, and in which artificial feeding is unnecessary on account of an abundance of natural food. Whatever type of pond is adopted, must be constructed in such a manner that the water may be entirely drained out and every single fish removed before the next lot is introduced. The impounding of water for such purposes by damming up a creek channel is usually dangerous, unless such stream is entirely spring fed or supplied from comparatively small water-shed.

The Department stands ready at any time to assist sportsmen in the location of these ponds, and to instruct them in the construction and operation of such places as investigation has shown to be adaptable.

Fingerling trout were supplied to the following sportsmen's organizations for rearing ponds during 1926:

Organization	Location	Variety	Amount
Bannock County Sportsmen's Ass'n	Meador Ponds	Rainbow	174,050
Bannock County Sportsmen's Ass'n	Meador Ponds	Steelhead	11,060
Bannock County Sportsmen's Ass'n	Meador Ponds	Steelhead eggs	8,000
Bingham County Sportsmen's Ass'n	Meador Ponds	Rainbow	88,725
Bonneville County Sportsmen's Ass'n	Swan Valley	Rainbow	178,900

Bonneville County Sportsmen's Ass'n	Swan Valley	Cut-throat	17,400
Jefferson County Protective Ass'n	Swan Valley	Rainbow	96,000
Jefferson County Protective Ass'n	Swan Valley	Cut-throat	19,300
Fremon County Fish & Game Ass'n	Henry's Lake	Cut-throat	400,000
Isaac Walton League	Glenn's Ferry	Rainbow	33,750
Southern Idaho Fish & Game Ass'n	Twin Falls	Rainbow	148,400
Emmett Rod & Gun Club	Black Canyon	Rainbow	16,000
Coeur d'Alene F. & G. Protective Ass'n	Malkin's Bay	Cut-throat	350,500
Challis Rod & Gun Club	Challis	Cut-throat	10,000
The Department also operated the following rearing stations:			
Payette Lakes	Sylvan Beach	Ouananiche	3,000
Payette Lakes	Sylvan Beach	Rainbow	72,000
Ruby Creek	Naples	Cut-throat	250,000
Game Farm Pond	Lapwai	Rainbow	50,000

### Cooperation With Forest Service

Invaluable assistance has been rendered the Game Department by the United States Forest Service in the work of investigating lakes and streams, and in distributing suitable fishes to such waters. Owing to the closely related interests of these two agencies, far greater results may be accomplished by working hand in hand than would be possible by a division of efforts along simliar lines. Without exception, the supervisors and rangers in all the great national forests have manifested an increasing willingness to cooperate with the State officials whenever and wherever their regular duties would allow. Both the Forest Service and the Game Department realizing the importance of adopting some permanent policy in the development and maintenance of a fish supply in the high interior lakes and streams, have been conducting extensive stocking and research experiments in the Sawtooth Mountain section. This territory was selected, not only on account of the certainty that it will ultimately become one of the greatest outdoor playgrounds in Idaho, but because the results of such work will effect a larger area of angling waters, than would similar operations in any other part of the intermountain region. From these Alpine-like lakes of the Sawtooth's, spring the larger tributaries of the Payette, Boise, Salmon and Wood Rivers. The success of the past few seasons activity have been noteworthy, and in addition to the establishing of large stocks of salmon and trout into heretofore vacant waters, the knowledge gained of best methods of procedure, will be of incalculable value in developing the fish life under similar

conditions elsewhere. Much of the credit for what has been accomplished, is due Mr. S. B. Locke, District Forest Inspector of the Ogden, Utah, office. Largely through his efforts in investigating and planting the almost inaccessible headwaters, this wonderful country is rapidly being developed into an anglers' paradise. Mr. Locke's report upon the past two seasons inquiry and planting follows:

### Progress of Fish Planting Work in the Redfish Lake Section, Idaho, 1925

#### GENERAL SITUATION, WORK UNDERTAKEN AND RESULTS

A program for building up the fishing in this region, which includes the principal headwaters of the Salmon River as well as the extreme headwaters of the South Fork of the Payette River on the Sawtooth, Challis and Boise National Forests, was undertaken in the fall of 1920. It has been continued cooperatively since that time each year by the Idaho State Game Department, the Bureau of Fisheries, interested individuals and associations, and the Forest Service. With at least 60 lakes having a total area of approximately 5,000 acres and 100 miles of connecting or tributary streams with excellent spawning and food conditions, it is potentially an area of great possibilities in fish production and its proper development will be of high value as a source of food supply as well as recreation. It is a very desirable and attractive summer play ground for the people living in the Snake River Valley in Idaho and in Northern Utah, but can never serve its highest value as such until good fishing is available.

There were two general problems in the stocking work, one to make productive of fish many alpine lakes and streams from which fish had been held by natural barriers, the other to improve fishing conditions in the several lakes easily accessible in the floor of the valley. These lower lakes had excellent spawning inlets and contained an abundant supply of minnows, suckers, squawfish and white fish but few trout.

The success in the vacant waters has been very encouraging and practically all species planted have thrived, these being rainbow, native blackspotted, Yellowstone blackspotted, eastern brook and landlocked salmon from Maine. A few native resident steelhead have been planted, the results not being known as also the results of planting silverside shiners in several lakes. Thirty such lakes previously vacant of all fish life have been stocked.

There have been planted in the inlets of the lower lakes and in the Salmon River from 1920 to 1925, inclusive, 146,000 rainbow, 51,200 eastern brook, 45,000 blackspotted, 48,000 little redfish, 40,500 landlocked salmon and 10,000 Montana grayling. Considering the amount of area and water involved and the period covered this is a relatively small stocking and the entire amount could be absorbed in one year. However, practically all of this planting has been very carefully done and predatory fish are not sufficiently abundant to be much of a factor. Although the full effect of the planting will not be felt for a couple of years longer, it would seem that better results should obtain than are at present apparent. The main object has been to build up a brood stock in the lakes or their inlets and this is not yet in evidence. It is possible that within two years additional results may develop. Possibly

one reason for apparent lack of results is in the small amount of fishing done in the lakes due to a general unfamiliarity of the local fishermen with methods of fishing such waters. Rainbow and eastern brook trout have apparently spawned in some of the lake inlets and a hatch resulted, but such fish have rarely, if at all, been taken yet from the lakes.

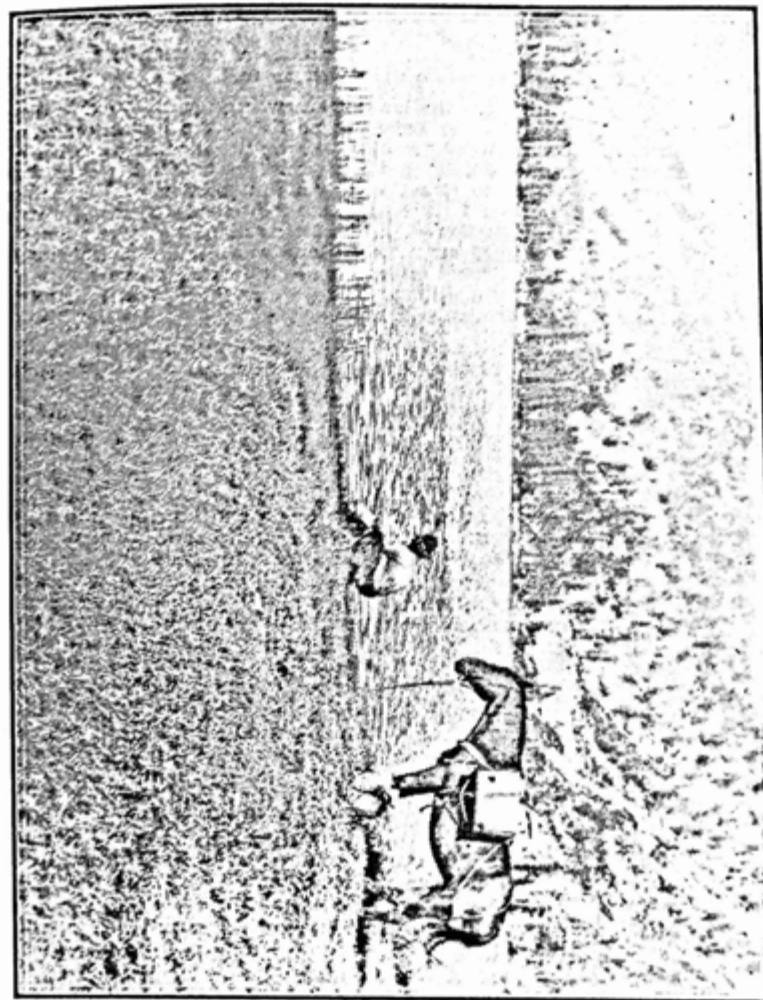
### Observations in 1925

The Champion Lakes which were stocked in 1920 and 1922 were visited. The Yellowstone blackspotted trout planted in the lower lake in 1922 are doing well and have reached about two pounds in weight. The landlocked salmon planted there in 1922 are in fair condition and weigh from 2½ to 3 pounds. This lake is, however, too small and shallow to expect the salmon to thrive. The rainbow, eastern brook and Yellowstone cutthroat planted in the upper Champion Lake are in excellent condition, eastern brook having reached 4 pounds in weight and rainbow trout about 8 pounds. One dead male rainbow, about 7 pounds in weight, was observed which had become stranded in the outlet while spawning. A female rainbow of about 5 pounds weight was transferred from the pool where it was stranded to the lake. It was reported that in late October the eastern brook were spawning in rather deep water in the upper lake. At the same time a school of about 20 landlocked salmon was reported as gathered near the outlet of the lower lake. Rainbow trout planted in August, 1924 as 2-inch fingerlings, had made a growth up to 10 inches in length in the upper lake by the middle of July. A considerable number of fishermen visited these lakes during the summer and obtained excellent sport.

At Toxaway Lake several landlocked salmon from 2½ to 3½ pounds were taken. These fish were in excellent condition. Several rainbow trout from 3 to 4 pounds in weight were seen and one caught. No planting has been done at this lake except for silverside shiners since 1922 in an effort to see if a natural increase would take place. Apparently there has been only a slight natural increase of eastern brook but considerable schools of young rainbow were observed. Some of these were of fish 6 to 8 inches long, but the greatest number from 2 to 4 inches long, these latter being abundant wherever logs or other debris offered shelter. No doubt it will be unnecessary to stock it again with rainbow as the supply will build up naturally. The presence of a fall spawning species also would provide for the highest use of the limited spawning ground and it is hoped that there will be results from the natural spawning of the landlocked salmon which would have occurred in the fall of 1925. However, if these fish entered the outlet for any distance they would be unable to return to the lake, but no doubt would eventually reach some of the lakes below if they were not killed in passing over several high falls.

In 1921 about 500 landlocked salmon were planted in the upper Twin Lake at the head of the Pettit Creek drainage. This is a small lake and does not thaw out until in early July, but the salmon have grown fairly well and several were taken from 2 to 3 pounds in weight. Owing to the lack of a spawning inlet it is doubtful if a satisfactory natural increase will result by natural restocking but the lake is hardly suited to this fish anyway.

Rainbow trout planted in Alice Lake in 1923 and 1924 have made excellent growth. Several were observed in the lake although no fishing was done. Spawning grounds at this lake are extremely limited in the inlets, but fish can drop down the outlet for some distance without going over impassable falls.



PLANTING LANDLOCKED SALMON IN INOGENE LAKE, SAWTOOTH MOUNTAINS  
ELEVATION 8,000 FEET



Imogene Lake, near the head of Roaring Creek, has received plantings of landlocked salmon in 1923, 1924, and 1925, and of native resident steelhead in 1923. The salmon planted in August, 1924, were 10-inch fish this season and in excellent condition. The 1923 planting had grown to about 2½ pounds. None of the steelhead were observed but the observations were very limited and less than 100 were planted in the first place. Since this lake has the best opportunity for natural spawning as well as spawn taking operations of any of the high lakes, it will be interesting to watch the development.

Evidence of results at the lower lakes was generally lacking. Some fishing was done at Alturas Lake but no fish taken indicating results from the plantings. A few landlocked salmon were taken by fishermen and one caught about October 1 was reported as containing eggs practically in a condition to flow freely. An examination of the Alturas Lake inlet on November 1 gave no evidence of the presence of spawning fish. In an examination of a short stretch of the upper inlet to Redfish Lake two fish about 8 inches long were observed, which must have been young landlocked salmon, since this was above impassable falls and only landlocked salmon were planted there. Trolling at Redfish Lake was unproductive of results.

A visit to this section was made in late November, but a careful examination of the streams for spawning fish was impossible, owing to the short time available. The lake outlets were not frozen and one spawning bed recently used was observed a short distance below Redfish Lake. Fishhook Creek above Redfish Lake and below a series of cascades was heavily frozen and filled with anchor ice. It is probable that ice conditions in most of the inlets would make spawn taking operations impractical after November 15 unless spawning occurred in the outlets. The early cooling of these inlets and the low temperature in the lakes should have a tendency to produce early spawning in them.

The Salmon River in the valley above Stanley contained a great abundance of young trout from 3 to 7 inches in length this season. These are either rainbow or resident steelhead. If they are rainbow their presence can be credited to fish planting operations, but, although their presence in such numbers is unusual, I am inclined to think they are native fish. Bull trout are not nearly as abundant as formerly in these waters.

Additional observations at the lower lakes indicate no lack of fish foods and a scarcity of predatory fish. Bull trout are uncommon and squawfish are becoming less abundant. There are quantities of suckers in these lakes. Little redfish were not difficult to obtain at Alturas Lake by trolling with a small spoon after sundown over deep water. Although they are apparently present in numbers in Pettit, Big Redfish and Stanley Lakes, they average several inches smaller in size than at Alturas Lake and are difficult to take with a rod and line.

No boat has yet been used at Yellowbelly Lake and it is not known whether or not the planting work has been successful there.

Although a detailed examination was not made, no positive evidence of the success of the transplanting of weeds was found.

It was found necessary to lift the removable panels from the screen at the outlet of Pettit Lake during high water to prevent damage and they were not replaced. Gill netting of suckers and squawfish was not continued there this season.

Although two plantings of silverside shiners were made at Toxaway Lake and at Lower Champion Lake no results from these were observed. At Toxaway Lake, although there are grassy shallows where

they were planted and tangles of logs in which they could hide in deep water, large trout were present when the first plants were made and may account for the lack of success. At Lower Champion Lake, a small lake offering no shelter for the shiners and well stocked with large trout, their disappearance was possibly expected.

At Imogene Lake and Alice Lake some of them were placed with the original planting of fingerling trout and additional plantings made the second year. No careful examination was made here. It is quite probable that in view of their many natural enemies and lack of hardiness, it may take planting of several thousand to establish them, especially where large fish are already established.

It has taken a lot of difficult work to reach the high inaccessible waters but the results have been encouraging. Much of this was done where trails were entirely lacking and routes of possible access determined as the work progressed. Now that trails are making these lakes accessible, the fish have become well grown and established so that excellent sport is offered.

In some instances too many species have been planted together or some lakes stocked with fish unsuited to conditions, but the situation in such cases seems to be adjusting itself.

## PLANTING WORK IN 1925

Water	Rain- bow Trout	Eastern Brook Trout	Land- locked Salmon	Suna- pee Trout	Steel- head Trout	Species Pre- viously Planted
<b>High Lakes</b>						
Alice .....	2,000		2,000*	1,000		Rainbow
Edna and below (So. Fork Payette river)			500		1,500	Vacant
Vernon (So. Fork Payette river)				1,000		Vacant
Lake S. E. of Toxa- way Lake					500	Vacant
Imogene .....			1,000			L. S., Native Steelhead
5 Bench Lakes above big Redfish	2,000	500				Vacant
5 Lakes on upper in- let to Big Red fish Lake					500†	Vacant
Upper inlet Redfish Lake					500‡	L. S.
Sawtooth Lake					1,000	Vacant
<b>Lower Waters</b>						
Alturas Lake	4,500	2,400	4,500			Same as 1925
Pettit Lake	3,200	2,500	1,000			Same as 1925
Yellowbelly Lake	2,000					Same as 1925
Redfish Lake	6,500	3,500	1,000			Same as 1925
Stanley Lake	4,500	3,000				Same as 1925
Pole Creek and Sal- mon River		7,500				Rainbow, E. Brook, Native
	24,700	19,400	10,000	4,000	2,000	60,100

\*About 50% loss in planting. †About 50% loss in planting. ‡50 planted in each lake. §About 50% loss, planted to avoid loss.

As in the previous work, the planting at the higher lakes was done with pack outfits while in the lower waters the fish were placed in the inlets or small feeders by scattering a few fish in a place from canvas buckets.

The rainbow fingerlings were about 1½ to 2½ inches, the eastern brook 2 to 4 inches, the landlocked salmon 2 to 3 inches, the Sunapee trout 2 to 4½ inches, and the steelhead 1 to 2 inches in length. The losses were all very nominal except for one small lot of landlocked salmon taken by pack horse up Yellowbelly Creek across to landlocked and for one lot of the Sunapee trout taken up Redfish Lake and carried by man packs to several vacant lakes on that drainage. On account of the bad condition of the fish upon reaching the head of the lakes, they were sorted and those in poor condition turned loose in the inlet.

All of the fish used were brought by truck from the Hayspur State Hatchery about 75 miles away. The landlocked salmon were from eggs furnished by the Bureau of Fisheries from Maine and the Sunapee trout were from eggs furnished by New Hampshire Fish and Game Commissioner by exchange with the Idaho Fish Commissioner. The fish were delivered by the State men in charge of this work in excellent condition. Assistance in the planting work was given by a number of local people but more particularly by H. C. Beamer of Hailey, who supervised the planting at Sawtooth Lake, and to D. M. Williams, Tom Williams, and P. G. Snedecor who packed Sunapee trout to lakes accessible only by foot travel. The State Game Department supplied the stock, delivered the fish and paid for pack horses carrying the fish.

Early in September a shipment of aquatic vegetation with its accompanying life forms was gathered at Fish Lake, Utah, and shipped to the Sawtooth Forest where it was planted in the lakes by local Forest Officers.

### Recommendations for Future

There are about twenty small lakes suitable for fish production yet to be stocked. In several of the best of these, two species may be planted, but to avoid conflict on the spawning grounds, which are generally limited in extent, one of these should be a spring spawner and the other a fall spawner. A sufficient number have been reached at present so that there is no pressing demand for completing this part of the program immediately. A few of these may be reached each season.

It is believed that in several of these as well as some of those already stocked, the native cutthroat should be used. Under such conditions it develops to be a very beautifully colored fish and should be placed in a greater proportion of these waters. One or two isolated basins could be stocked with Montana grayling, vacant waters being chosen. If carefully handled the planting in the high isolated basins can serve to perpetuate pure strains of trout which are rapidly becoming mixed in the lower waters. Such an example is the drainage into Roaring Lake in which no other spring spawning fish except the local resident steelhead from Roaring Lake should be planted. It is quite probable that some of the lakes lacking favorable spawning conditions will have to be re-stocked and in such cases care should be taken to duplicate if possible the original stock. An example of this is at Lower Champion Lake where the Yellowstone cutthroats are growing well and are prevented from possible mixing with the native cutthroat.

Since some of the higher series of lakes should be adapted to the California Golden trout it is believed that continued efforts should be made to acquire a small stocking.

The success of the landlocked salmon in several of the high lakes is encouraging but the final test will be as to whether or not they

will reproduce naturally. In such lakes the landlocked salmon are living up to their reputation for gameness, all the local fishermen who have had experience with them readily conceding them to be more game than any other species here. Conditions favor a bright coloring and fly fishing lasts throughout the summer.

Now that the stocking program for the higher lakes is well under way, more attention needs to be given to fish food conditions. As a general condition, there is a very considerable excess of minute or plankton forms compared with the larger insect or crustacean life. Such a condition often results in a rapid growth of young fish with a decided falling off of growth and condition in the larger fish and slow recovery after spawning. In one or two places, such as Alice, Toxaway or Imogene Lakes planting of the silverside shiner should be continued and if possible several thousand instead of several hundred should be used. At Imogene Lake the planting could well be done in a small vacant lake a short distance above, and if successful there would be a natural drift which would eventually stock Imogene Lake. Planting in the lower Twin Lake above Alice Lake could be done under similar conditions. Experiments in establishing aquatic vegetation and its accompanying life are also desirable, but need be neither elaborate nor expensive. Some of the vegetation and accompanying life from the Champion Lakes could be planted in some of the lakes on the west side of the valley.

The situation in regard to the lower lakes is much less satisfactory than with the higher waters. In this case there seems to be an abundant food supply, but rather insufficient results from stocking work. Two factors which in my opinion may influence the results, lie in the small size of the plants compared with the water involved, and the other that the principal inlets have been heavily fished each season and many of the fish planted the previous year taken by fishermen. This is particularly true with regard to the inlet to Alturas Lake and the Fishhook Creek inlet to Big Redfish Lake.

It seems a very essential feature of the program that the inlets be protected as nursery streams. Such protection may be given under a proclamation of the State Game Warden. It seems futile in an attempt to build up a brood stock, to allow the fish to end in a fry pan the year after they are planted. An abundance of stream fishing fully as good or better is available in other streams and the Salmon River so that there is no particular necessity for allowing fishing in the lake inlets.

In view of the increasing tourist use of the section and the large area of water involved, large plantings are recommended as being essential to adequate results in the lower waters; they are all accessible to fishermen and only benefit will result. A planting of at least 150,000 fish a season should be a fair test although several times this number could be well placed here.

There is comparatively slight demand for eastern brook over the State in general and this field offers an opportunity to place to advantage any number of these fish available from the Hayspur hatchery. They would be less inclined to migrate than some of the other species and much will be accomplished if any kind of trout fishing can be developed here. If a drift-out does take place, it could readily be determined where this species was used.

It is very desirable to establish the landlocked salmon in the lower lakes as well as the upper ones. Small plantings in these waters have been made each year beginning with 1921 and this should be a test of the possibilities here without expecting additional shipments of eggs. If a local spawn supply can be developed then additional, and probably greatly enlarged plantings, could be made. No matter how desirable

the fish may be, continued importations of eggs cannot be expected in view of the inadequate supply of spawn. Spawning fish should appear within the next two or three seasons and this is believed to be of sufficient importance to justify the installation of a simple trap in the inlet to Alturas Lake about the middle of September. This could be placed not far above the lake and visited frequently through the fall. The presence of thickets of young lodgepole pine along the stream would make the construction of a trap a simple and inexpensive matter. The water at that season is low and floods infrequent. If sufficient fish appeared to justify it spawn takers could come from the Hayspur Hatchery 60 miles away. Present trail construction plans will make accessible both Toxaway and Inogene Lakes. At Toxaway Lake landlocked salmon have already spawned and some should spawn this year at Imogene Lake. If the season permitted, spawn taking would be feasible at either place but transportation would be much more difficult than from the lower lakes. Even specific information on the spawning of these fish in the higher lakes would be well worth periodic trips there until snowfall made them impractical.

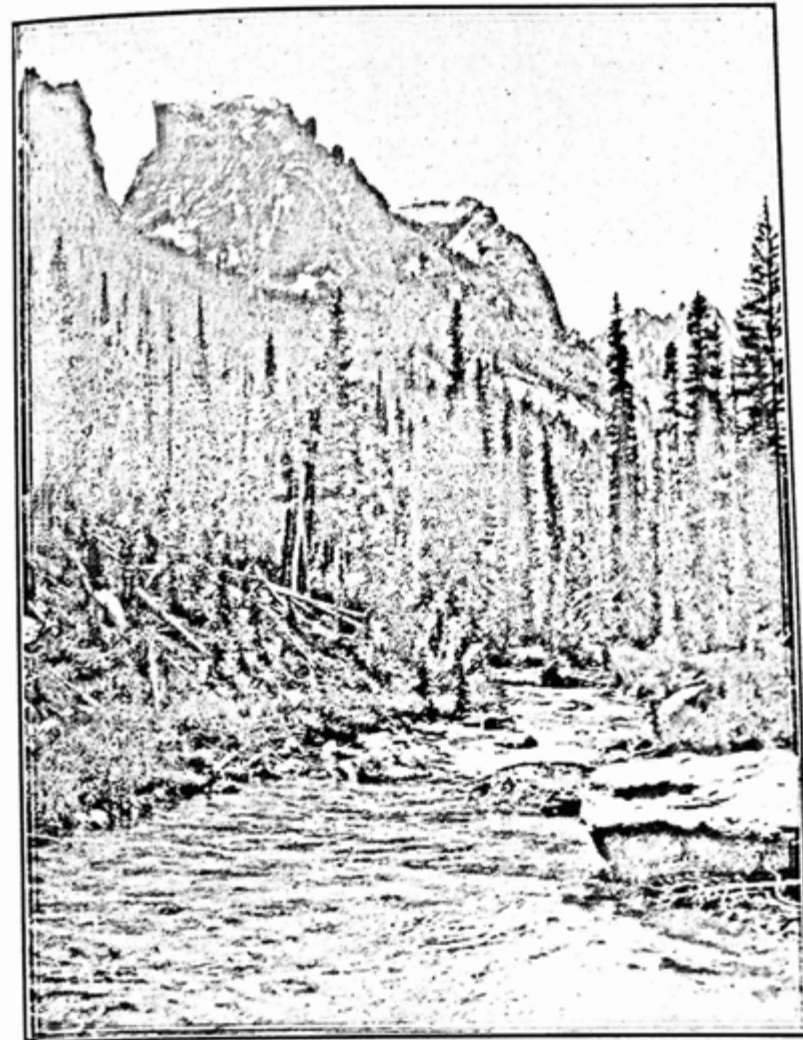
Mr. Tom Williams, who owns a ranch in the valley, is anxious to assist in the fish work in any way, and has offered to care for eggs placed in hatching troughs at a suitable spring near his house. This would provide for the establishment of an eyeing station and might provide means to make this section eventually self-supporting.

It is understood that Mr. Keil, the Idaho Fish Commissioner, has retained about 10,000 landlocked salmon over winter at the Hayspur hatchery. The bulk of these are intended for planting in Payette Lake where he hopes to develop a local spawn supply and which has received plantings of these fish during the years 1921 to 1924, inclusive. There is a small lake now vacant of fish on a branch of Prairie Creek about 2 hours drive from the Hayspur hatchery, which has no outlet, which could be stocked with a few hundred of these fish and held entirely for hatchery production.

Although there is a great abundance of minnows in the lower lakes as well as whitfish and little redbfish in the deep waters, it is believed that the introduction of the fresh water smelt would increase the growth and production of trout there. The chief obstacle to such planting has been the short hatching period and consequent difficulty in shipping long distances. The development of airplane mail service might offer a possible means of transportation, since a package could be delivered between New York and Salt Lake City in 24 hours so that it could be carried from the spawn taking field to the planting waters in from 4 to 6 days. It might, therefore, be possible to make a shipment successfully from Massachusetts or New York points, but it would be preferable to have stock from some of the small fresh water races.

#### Biological Studies.

The most needed and most essential part of the entire program at this time would be the inauguration of systematic biologic studies of the waters of this locality. Such studies could not only be the basis of future plans but would place on record valuable scientific information. A large number of vacant waters have been stocked and although the results have already become apparent, sufficient time has not elapsed to affect the ecology of the life forms in these waters. The whole section presents a wide variety of problems, many of which will find their counterpart in various other parts of the district. In this place they are, however, of greater importance and variety and information gained here could be applied in many other places. The line of investigation would be a general survey and classification of the waters and



UPPER INLET TO REDFISH LAKE. PLANTED IN 1923 AND 1924  
WITH LANDLOCKED SALMON

problems followed by a detailed study of a sufficient number in each type to give the information upon which could be based a definite plan for the management of the water resources. We find such scientific studies essential for the preparation of adequate plans of management of our timber, grazing and game resources and I believe the conditions here justify the building of a plan of administering the water resources in this section on a detailed study and knowledge of the situation.

Such action might well be carried out cooperatively between the State, the Bureau of Fisheries and the Forest Service. If the Bureau of Fisheries could furnish a man capable of such a study as that made of the Rangeley Lakes and Sunapee Lake by Dr. Kendall or of Lake George by Dr. Needham and others, it is very probable that the State and Forest Service could cover the necessary expenses and offer other substantial assistance.

#### Summary of Recommendations.

Additional plantings of the remaining vacant lakes and streams to be accomplished gradually and provision made for Montana grayling, native cutthroat, steelhead and California golden trout. Silverside shiners should be planted in increased numbers in Alice, Toxaway, and Imogene Lakes.

Experimental planting of aquatic vegetation and fish foods should be done in both the higher and lower elevation lakes.

The lower waters should receive greatly increased plantings and a considerable proportion of these of eastern brook, to a total of at least 150,000 per year.

In order to take advantage of any spawning of the landlocked salmon, periodic patrol should be made during the fall and a trap installed in the Alturas Lake inlet.

That a few hundred of the landlocked salmon now on hand be planted in the landlocked lake on Prairie Creek and protected as a future spawn supply.

If any promise of a spawn take develops, a temporary eyeing station be established at the Tom Williams ranch.

That the feasibility of a shipment of eyed eggs of the freshwater smelt by ariplane mail to Salt Lake and from there by auto, a two days' trip to the planting waters, be considered.

Of greater importance than any other action, the undertaking of a biological study in connection with the possible fish production as a basis for a definite plan of management of the water resources of this section, through the cooperation of the Bureau of Fisheries, the State and Forest Service.

#### Work in 1926.

During this season a pack trip was made with the State Fish Commissioner, W. M. Kell, through the high lakes section, a short pack trip taken with fish for planting and several days spent in assistance in handling fish from the hatchery for the lower waters. Considerable valuable information was obtained while on other work.

#### Observations in 1926.

At Hell Roaring Lake there is a great abundance of the native steelhead or rainbow. These are apparently in sufficiently large numbers to cause slow growth and to retard development. A minnow which is quite abundant here was found to be a longnose dace, probably the same *Rhinichthys* reported by Dr. Evermann from Perkins

Lake. The presence of this little fish in a high elevation lake, where other minnows common in the general region do not occur, is interesting.

At Imogene Lake the native steelhead planted from Hell Roaring Lake in 1923 have increased wonderfully. The outlet contained many small fish and the inlet was abundantly stocked with both the present year's hatch and yearlings. The landlocked salmon have thrived, but may not have made as good growth as those in Toxaway Lake. One taken here which weighed about 2½ pounds was probably planted in 1923 since it would apparently have spawned this year. There are still several small lakes in this drainage which should be stocked.

Vernon Lake, on the head of the South Fork of the Payette River was visited. This was planted last year with Sunapee trout but no evidence of their presence was seen. Casual observations at Edna Lake, stocked last year with landlocked salmon and steelhead trout, gave no positive evidence of favorable results. There are two excellent lakes yet to be stocked on a branch of this stream west of the main head of the river and east of Benedict Creek.

A brief examination at Toxaway Lake indicated the presence of some eastern brook trout from natural spawning which now weigh about two pounds each. Landlocked salmon are still in evidence but no small ones from natural spawning were observed.

No careful examination of the upper Twin Lake was made but evidence of attempted spawning by the landlocked salmon there was seen around the outlet. The clearing of the outlet of heavy drift now clogging it would improve the possibilities of a successful spawning. This outlet flows a distance of about 75 feet to enter the lower Twin Lake. The upper Twin Lake has furnished some excellent salmon fishing this season.

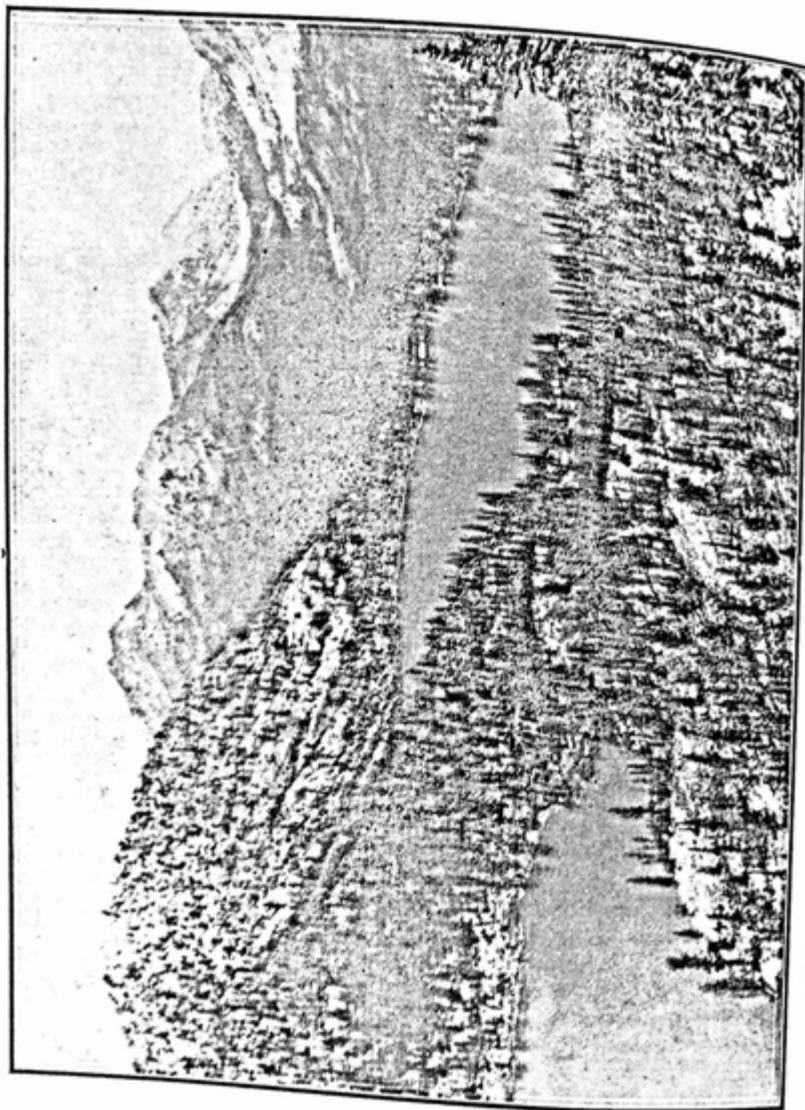
At Alice Lake there is abundant evidence of the survival of the rainbow trout with which it has been planted. In 1925 there were planted also some landlocked salmon and Sunapee trout of which no direct evidence was obtained. It was reported that some fish which might have been the Sunapee trout were taken here.

Although no personal visit was made to the Bench Lakes, near Redfish Lake, stocked in 1925, fish taken there were seen. These were both rainbow and eastern brook and some of them were nearly 14 inches long. During the latter part of the summer practically all those taken were eastern brooks. Since these lakes are quite accessible both for planting and fishing, but lack natural spawning facilities, it will probably be desirable to continue stocking and use them as growing waters. It was the intention to plant several thousand rainbow trout there during the fall of 1926.

Reports from the Champion Lakes indicated the continued growth of the trout there and at upper Champion an abundant natural increase of both rainbow and eastern brooks. There seems to be no natural increase at lower Champion and this may need periodic stocking. The outlet of the upper Champion and a small lake without outlet into which it flows, was reported to contain many small trout. It is probable that if these stay there over winter they will be lost, since snow slides customarily strike this small lake into which the outlet of the main lake flows.

At Washington Lake it was reported that there were many small rainbow trout. Since there are a number of miles of excellent stream below this lake now practically vacant owing to a high fall, the rainbow trout should eventually stock this water.

Nowhere were any results observed from the plantings of silverside shiners. It is my belief that conditions in these high elevation



VERNON AND EDNA LAKES, HEADWATERS OF SOUTH FORK OF PAYETTE RIVER.  
PLANTED WITH SUNAPEE TROUT AND LANDLOCKED SALMON IN 1925

lakes are unsuited to this fish. Confirmation of this belief is found in their absence from Hell Roaring Lake, but where longnose dace and a small black sucker occur in addition to the trout.

#### Results at Lower Lakes.

No particular evidence of results of the stocking at the lower lakes in lake fishing was obtained. Eastern brook trout were seen in the Fishhook Creek inlet to Redfish Lake. In the Salmon River there is abundant evidence of results from rainbow trout planting, some of these of several pounds weight being taken. One landlocked salmon weighing slightly over 6 pounds was taken from the Salmon River a short distance below its junction with the outlet of Redfish Lake.

During the first week in August bull trout were observed entering Fishhook Creek for spawning. It is believed that planting operations in this inlet should be delayed until after these spawning fish had left the stream, or better yet, a rack placed to prevent their ascending it.

On September 25 whitefish were observed running in both inlets to Redfish Lake. This continued while I was there, a period of eight days. These fish enter the inlets in large numbers in late afternoon, spawning principally in early evening and beginning to drop back to the lake about 8 o'clock in the evening. Some few, however, enter the inlets at least up to midnight. Owing to rough water, they are unable to ascend the upper inlet but a few hundred yards. Although they are not prevented by rough water from ascending the Fishhook Creek inlet for some distance, they do not go over a quarter of a mile from the lake. During late September, considerable schools of young whitefish, bearing the conspicuous parr markings, were observed around the shores of the lake.

#### Food Conditions.

At most of the upper lakes the trout were living on very small forms of crustacean and insect life. Among the most abundant form observed in these high lakes, particularly in the granite formation, is a large red diaptomus, probably diaptomus shoshoni. Masses of these were found in trout stomachs and they were observed well distributed in both shallows and over deep waters.

Continued observations confirm former conclusions that, while there is in these high lakes a great abundance of small forms of aquatic life, there is a lack of larger forms. This is to be expected under conditions there where the rock formation is hard granite, the water soft and without abundant aquatic vegetation, and elevation so high that the mean temperature of the water is very low. Such a condition results in excellent growth of the young fish but a definite checking after the first year. Conditions of fish growth would be materially improved by the addition of some form of life which would turn the plankton into a larger form suitable for trout food. It is possible that the longnose dace would answer the purpose and probably it would thrive in these high waters, but it does not run in schools, occurs principally in the shallows and has a habit of hiding persistently under logs, etc., so that it is not easily accessible to trout.

#### SAWTOOTH PLANTINGS IN 1926

Waters Planted	Eastern Brook	Rainbow	L. L. Salmon
Alturas Lake Inlet.....	17,600		2,700
Pettit Lake Inlet.....	5,000	5,000	
Big Redfish Lake Inlets.....	7,200		
Valley Creek.....		3,600	
Frenchman, Smiley and Beaver Creeks.....	3,000		
High Lakes .....	2,400		2,000
	35,400	8,600	4,700

**Planting at High Lakes.**

An exceedingly difficult trip over the divide from the Hell Roaring drainage to some lakes at the extreme head of the upper inlet to Redfish Lake was made to plant these waters with landlocked salmon. No other trout should be planted in these waters and a brood stock here should result in stocking the main Redfish Lake through the ten miles of excellent connecting stream.

Waters now vacant of fish life on the inlet to Alturas Lake were planted to landlocked salmon. It was the intention to plant some of these in the upper inlet to Redfish Lake previously planted only to these fish.

Several high lakes, now vacant of fish, were to be planted by Ranger R. E. Allen from the Stanley Ranger Station.

**Rearing Ponds.**

Several sites for rearing ponds were examined and some very suitable ones seen at the T. H. Williams ranch. The development of a series of these ponds would permit the transportation of the fish from the hatchery when the fish were small and their holding for planting until better able to take care of themselves. These ponds could be stocked to their normal carrying capacity, which would be considerable owing to a heavy growth of vegetation and abundant insect and crustacean life, or supplemental feed could be provided by using suckers and squawfish from nearby waters.

At the Stanley Ranger Station on the Challis National Forest, Ranger Allen constructed an excellent holding pond by installing screens in a spring slough supplemented by water from the river. He contemplates the addition of another such pond. Being in the station grounds, such ponds can be easily looked after and permit the receipt of fish from the hatchery at any time for distribution whenever most convenient.

**Stocking at Lower Lakes.**

Owing to the fact that the planting at the lower lakes was uncompleted at the time I left, figures of the total number planted are not available. These were in excess of any other previous year and would total about 75,000. The fish planted were largely rainbow trout but included also some landlocked salmon for vacant waters, some exceptionally large and well grown eastern brooks and some blackspotted trout. Plantings were made in all the lake inlets as well as in various streams and the Salmon River. Some of the eastern brooks from 4-6 inches long were planted along the lake shores wherever adequate protection was offered. There are several thousand landlocked salmon being held at the Hayspur hatchery to be planted as yearlings in the lower lakes.

In this planting work the State Game Department delivered the fish and did most of the planting at the lower lakes. Local residents and Forest officials assisted in the distribution and Mr. James McDonald furnished a truck for two trips to the hatchery.

**Recommendations for Future Work.**

It is certain that road development and contemplated building of hotels and resorts will increase the use of this section materially within the next few years. Its value as a recreation ground will largely depend upon the fishing obtainable and the responsibility to develop this to its utmost is a definite one. A sound plan for such development should have as a basis biological studies and such are badly

needed. However, until such can be undertaken, the only recourse is larger and more extensive plantings based on the best information available.

The problem for the high lakes is largely one of balancing food supply. Owing to the soft water it seems impractical to obtain results in establishing aquatic vegetation and the most feasible action would seem to be the introduction of some form which could live on the microscopic life and in turn become trout food. The freshwater smelt is the most desirable form available and the possibility of obtaining them should be carefully investigated.

The same condition exists to a considerable extent at the lower lakes and it seems the smelt would be a valuable addition there as well as increasing the chances for the establishment of the landlocked salmon.

A few of the high lakes still vacant may be stocked each season as well as those where a natural increase is not resulting. Several of these should be stocked with the native redsides if possible. Two lakes already mentioned are west of Edna and Vernon Lakes and there are several in the head of the Middle Fork of Boise River near Snowside Mt. These later could be reached on foot and perhaps by horses from Toxaway Lake. There are also several fine small lakes on the head of Alpine Creek. The main range north of Redfish Lake has never been accurately mapped and there are probably several lakes here suitable to fish life.

Until a biological study gives the desired information regarding the lower lakes about the only recourse is in increased plantings of better stock. To make such plantings most economically, holding ponds are desirable where fish brought from the hatchery when they are small and easily transported may be retained until they have reached adequate size for release.

The presence here of the landlocked salmon makes it particularly desirable to study carefully the results obtained. The possibility of spawning fish being located will increase each year and the recommendation for racking the Alturas Lake inlet will be repeated.

The importance of the introduction of the smelt is sufficient to justify careful consideration to determine if there is any possibility of making a shipment of eggs either by air mail or through express. This matter will be considered further in cooperation with the State Fish Commissioner and the Bureau of Fisheries.

**Summary of Recommendations.**

Continued study of conditions and development of a detailed biological study.

Pending such a study, the development of holding ponds and plans for a program of extensive plantings in the lower waters.

The gradual completing of the stocking of high, vacant waters, using in several cases the native blackspotted stock.

A close watch for the presence of landlocked salmon in the lower lakes, particularly of spawning fish.

A full investigation of the possibility of obtaining a shipment of the eggs of the small form of freshwater smelt.

S. B. LOCKE,  
District Forest Inspector.



LARGE MOUTH BLACK BASS BITE READILY IN LAKE PEND O'REILLE

### Propagation

Successful cultivation of game fishes is not possible unless the utmost care has been exercised in selecting the location for such an establishment. Not only the volume, temperature and character of the water supply is vitally important, but its control under any and all conditions is equally necessary. In spite of the fact that several of our hatcheries are badly handicapped with many conditions absolutely unsuitable for good fish culture, the results shown in the past two seasons, operations are commendable. The superintendents and assistants at all the stations deserve much credit for the splendid work they have accomplished in cultivating for the waters of Idaho, the finest supply of fingerling trout our hatcheries have ever distributed.

### Sand Point Hatchery

Owing to the uncertainty of the collection of native trout eggs in tributaries of Lake Pend d'Oreille, this station is dependent largely for its supply, on eyed eggs shipped in from our various field stations. While the temperature of the water supply is unfavorable for the developing of brood stock, 500 native cut-throat trapped in the lake tributaries were transferred to the station ponds, and are to be used as a nucleus in building up a supply of domesticated breeders. Several thousand rainbow yearlings are also being held for this purpose. It had been thought possible to raise the temperature of the water at this station, by bringing down the flow from one of the additional springs owned by the Department and exposing it in a shallow supply pond before using. However, investigation of levels by an engineer disclosed a condition that would necessitate the expenditure of between \$5,000 and \$6,000 before the water could be so utilized, and it was decided that this money might be used to a much better advantage in the establishment of a rearing station elsewhere in this section. The physical conditions of this hatchery are none the best, and many repairs are needed to place the buildings and equipment in good working order. The output for the biennium is given below:

Variety	Size	1925	1926
Rainbow	Fingerlings	375,000	
Eastern brook	Fingerlings	475,000	843,950
Cut-throat	Fingerlings	500,000	340,000
Steelhead	Fingerlings	50,000	548,000
Mackinaw	Fingerlings	100,000	48,000
Steelhead	Yearlings		27,800
Totals		1,500,000	1,807,750

### Coeur d'Alene Hatchery

While usually leading all other hatcheries in the number of fish turned out, this station has never been regarded as one of the really valuable units of the Department's fishery establishments. The development of the fish was greatly retarded by the extremely low temperature of the water supply, and in consequence, the production of good sized fingerling was impossible. Late last summer an auxiliary pipe line was installed for the purpose of supplying water of a higher temperature that could be mixed with the cold water from the bottom of the lake. Although the growing season was well advanced before this change was made, by regulating the flows from the two pipes so that the temperature remained constant at 54 degrees, the fish made a truly remarkable growth in the brief period remaining before distribution began. Under these improved conditions, this hatchery should for the first time since its establishment, supply fingerling fish for which the Department shall not have to apologize. If funds are available next season, at least eight outside nursery pools should be added to this station. A light truck for use in delivering supplies and the local planting of fish is also badly needed. The output of this fishery for the biennium follows:

Variety	1925	1926
Eastern brook	1,155,300	1,052,600
Cut-throat	240,000	772,250
Rainbow		171,000
Totals		1,395,300

### Grangeville Hatchery

This hatchery was opened for the first time the spring of 1925. It was expected at that time that the capacity

could be almost doubled by hatching out an early take of rainbow eggs which could be transferred to the outside rearing ponds in time to accommodate trough room for cut-throat eggs collected later. Delay in securing the rainbow eggs at an early period in 1925 prevented their arrival until the cut-throats from Henry's Lake were ready for delivery, and reduced the output for that season to a single capacity incubation and hatch. In 1926 the collection and delivery of eggs worked out more favorably and although handicapped with low water conditions, this station produced a substantial increase in the number propagated. The output of this hatchery will always be limited to 750,000 No. 2 fingerlings, and if held to the No. 3 size, not to exceed 500,000. The production of fish for 1925 and 1926 follows:

Variety	1925	1926
Rainbow	145,000	224,500
Cut-throat	288,500	496,000
Totals		433,500

### Evergreen Hatchery

After thoroughly investigating for over a year as to its suitability for fish cultural purposes, the site on Gaylord Creek, Adams County, was approved of by the Department, and the property was purchased and turned over to the State by the Washington and Adams County Sportsmen's Association. The work of constructing a road from the hatchery site to the State Highway began immediately, and in less than a month from the time of receiving the deed to the property, the hatchery, residence, pipe line and intake dam, rearing pools, together with a bridge across the Weiser River and roadway were completed. This hatchery, located as it is only a stone's throw from the Pacific and Idaho Northern railway and the North and South Highway is easily the best situated fishery station in the entire state. The conditions for successful propagation are also most ideal, as are the possibilities of developing it into a place of beautiful surroundings—a show place instead of an eye sore as are many of our other hatcheries. The hatchery building is 20 by 32 feet, and constructed in a rustic style of architecture, as is the two-room bungalow residence. The hatchery is equipped with twelve standard hatching troughs supplied from cement distributing cistern, the overflow from which also independently furnishes a water supply for ten out-





VIEW OF LOCHESA RIVER NEAR KOOBERIA, IDAHO COUNTY

side rearing pools. These pools or tanks are 25 feet in length, four feet wide and two feet deep each, and with the troughs in the building can accommodate about 750,000 fingerling trout. The station is supplied with water from a spring fed creek, the source of which is controlled by the Department. This water which stands uniformly at about 52 degrees throughout the summer months, is conveyed to the station from an intake dam by a 12 inch galvanized iron pipe line of 125 feet in length, under a head of 9 feet. The first year's operation of this hatchery during the summer of 1926 confirmed all expectations as to the value of this station, not only from an operation standpoint, but also in regard to the convenience of distribution to the entire Weiser watershed. The larger part of the Little Salmon and Payette Lake drainage may also be reached by direct rail or truck transportation. The output for the year 1926 is given below:

Variety	1926
Rainbow .....	347,200
Cut-throat .....	255,200
<b>Totals .....</b>	<b>602,400</b>

### Cascade Hatchery

This little field hatchery gave an excellent account of itself during the past two seasons. Although handicapped with an inadequate water supply, the fish grew rapidly with less mortality than in any other station operated by the Department. The number of fair sized fingerlings distributed from this hatchery to waters tributary to the Payette River during the biennium were equal to what under former conditions could have been supplied this district in ten years. Its accessibility to the water to be stocked, enabled the interested sportsmen to plant many heretofore vacant lakes and streams. A concrete rearing pond is to be added to this station during the coming summer, which will relieve the congestion in the troughs to some extent. The results of the two years' operations at this hatchery are as follows:

Variety	1925	1926
Rainbow .....	188,000	479,100
Cut-throat .....	270,200	135,000
<b>Totals .....</b>	<b>458,200</b>	<b>614,100</b>

## Hayspur Hatchery

From the standpoint of rapid growth of the fish, this hatchery is easily the most valuable of any of the large year-round places operated. It is also the most important in respect to extensive territory covered by distribution. During the biennium no fish were distributed from this station until they had reached the No. 2 fingerling stage, and many of them were three and four inches in length. With the large amount of repair work carried out at establishment during the past two seasons, the buildings at the present time are in fair condition, but many of the old hatching troughs will have to be replaced within a short time. It is also the intention to build ten additional outside rearing races during the coming season, and if possible, a large brood stock pond. Output for 1925 and 1926 follows:

Variety	1925	1926
Rainbow .....	869,500	845,600
Eastern brook .....	234,300	101,075
Cut-throat .....	140,000	195,500
Ouananiche .....	10,000	10,230
Sunapee trout .....	4,000	
Steelhead .....	2,000	11,060
Totals.....	1,259,800	1,163,465

## Mackay Hatchery

Since the establishment of this field hatchery in 1925, the water conditions in the Mackay reservoir have been so abnormal both from drouth and from repairs carried out at the dam, that successful spawntaking operations have been impossible. These conditions when considered together with the rapid depletion of the supply of rainbows through over-fishing, have all but destroyed this location as an egg collecting point, and also as one of the finest rainbow trout have been taken from these waters during the past three seasons, and a large majority of them during the spawning period while the females were heavy with spawn. Although informed as to what would result from this tremendous drain on the fish life, the local sportsmen allowed this condition to continue until too late before taking definite action, and it will require many years of close protection and heavy replenishing from artificial cultiva-

RAINBOW WEIGHING FROM 3½ TO 5½ POUNDS CAUGHT ON A NUMBER 12 FLY IN SILVER CREEK IN 1926



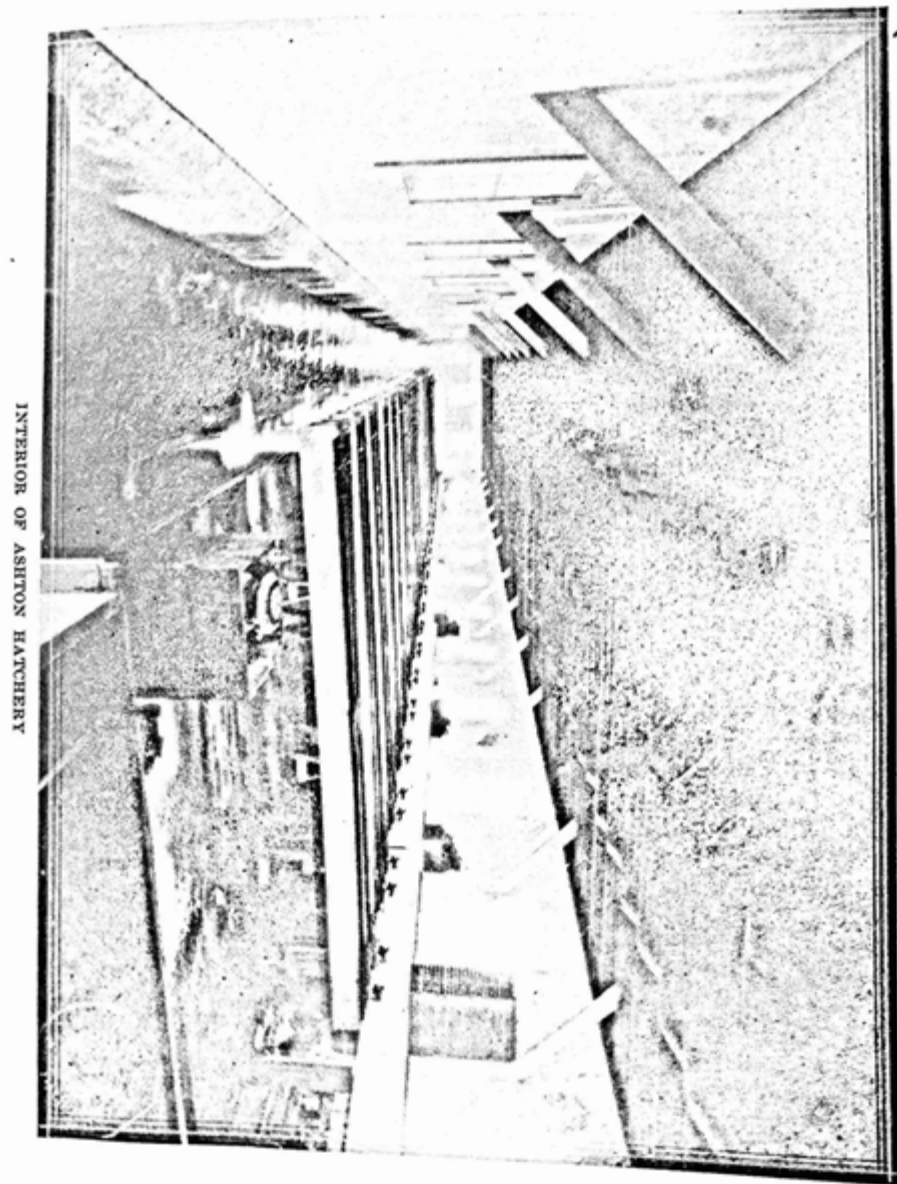
tion to rebuild the angling to its former excellence. Three years ago millions of eggs could easily have been collected from Warm Springs Creek and the Lost River, but during the past two seasons it has been difficult to secure a sufficient number to fill the ten trough hatchery to capacity.

This station was located just above the back-waters of the reservoir in order that it be accessible to the seat of spawn-taking operations. The spring from which the supply of water was taken for the hatchery was found to be heavily charged with a supersaturation of nitrogen, and a tremendous mortality from "gas bubble disease" resulted. The loss of fish and eggs during incubation, hatching and rearing, was almost 50 per cent. At the time of locating this hatchery, doubt was expressed as to its successful operation on account of the character of the water supply and the lack of fall for aeration and de-aeration, and the construction of the building was carried out in the most economical manner. The wisdom of this decision becomes apparent, when it is shown that this hatchery was moved from its former location to one three miles above at an expense of about \$100. The new site of the hatchery is at the extreme head of Warm Springs Creek, and most of the conditions are much more favorable for propagation than at the old location. The distribution for this hatchery is shown below:

Variety	1925	1926
Rainbow .....	175,800	205,400

### Ashton Hatchery

All the trout distributed from this station were held as at Hayspur until of large fingerling size, and the number of cans of fish supplied to applicants were double that of any previous biennium. During 1925 a considerable loss of brook trout in the advanced fry stage was experienced from some disease of undetermined origin. Other matters prevented the investigation of this trouble at the time of greatest mortality, but it is thought to have been caused by the same organism responsible for a heavy loss of cut-throat fingerlings later in the summer of 1925. The parasite occasioning this epidemic was the trematode "*gyrodactylus*"; a microscopic flat-worm, invisible to the naked eye on account of its transparency, but readily discernible with the compound microscope. It was found present in such numbers over the body and fins of the little fish as to cause death within a few days. Investigation disclosed the fact that a similar trouble has been of annual occurrence



INTERIOR OF ASHTON HATCHERY

for many years past, but that heavy losses in the hatchery have been avoided by distributing such fish as soon as possible after the disease made its appearance. Such a practice is rotten fish culture, for there is no way of knowing how many of these fish if heavily infected died after planting. This disease can be controlled if taken in time, and eventually eradicated by thorough disinfection of the water supply to break up the life cycle of the organism's development. This is a difficult problem with a supply pond of the character and size of the one at Ashton, but by having a better understanding of the time and intensity of the infestation, control measures may be instituted that will under ordinary conditions be effective.

There have been many improvements made at this station in the past two years, not only in new construction and equipment, but also in the general appearances of the surroundings. An agreement has been entered into with E. W. Jenkin, of Ashton who operates a commercial fishery a few miles distant from the state hatchery, to allow the Department to handle all the spawntaking operations at this place in return for which the Department is to receive 50 per cent of the rainbow eggs so collected. This should supply a sufficient number of these eggs to not only assure the Ashton station of being filled to capacity, but provide for the summer hatcheries at Cascade, Evergreen and Grangeville also. A new one ton Chevrolet truck was purchased for use at this station last summer. Following will be found the output of this hatchery for the seasons of 1925 and 1926:

Variety	1925	1926
Rainbow .....	814,000	1,152,455
Rainbow eggs* .....	*115,200	*250,000
Eastern brook .....	152,000	
Cut-throat .....	256,000	331,056
<b>Totals</b> .....	<b>1,337,200</b>	<b>1,733,511</b>

\*Eyed eggs shipped to the Salmon Rifle Club, hatched in the Federal hatchery and planted in waters of Lemhi County.

### Henry's Lake Hatchery

This station established the spring of 1924, became in 1925 and 1926 the seat of the most extensive spawntaking operations carried on within the state. The scope of the work increased during the past two years to such an extent that the buildings and equipment utilized for both developing

eyed eggs and for hatching for local distribution, became totally inadequate to handle the number of eggs collected. During the fall of 1925, a new building, equipped with ten standard troughs was added to the station, giving this field hatchery a capacity of four million eyed eggs and 800,000 advanced fry. In cooperation with interested sportsmen of eastern Idaho, a rearing pond was constructed at this station in which 50 per cent of the fry hatched are held and fed until late fall before releasing into waters of the upper Snake River. A new hatchery should be located at this point, one of modern construction and arrangement, as the improvised building and additions now used are unsuitable for the increase in activity that is being contemplated. During the biennium 4,226,000 eyed eggs were shipped from this station to various other hatcheries throughout the state, and the following fish hatched and distributed locally:

Variety	1925	1926
Cut-throat .....	223,000	800,000

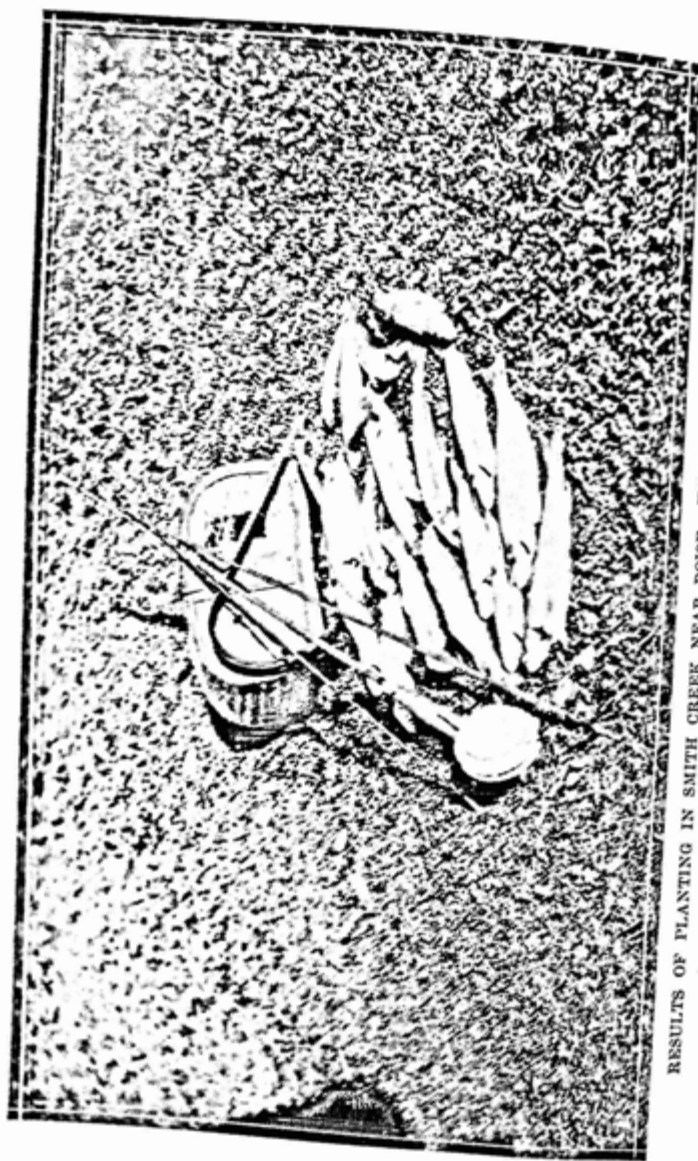
### Cedar Creek Field Hatchery

This station is located at the Roseworth reservoir in Twin Falls County, and was established principally for the purpose of collecting rainbow eggs for transfer to other hatcheries. The buildings and equipment are of the crudest character, and aside from the caretaker's cabin are temporarily set up each time the station is operated. It is hoped that the coming spring, a permanent building may be constructed at least for the eying and hatching equipment. Additional troughs are to be installed next season for hatching the number of fish required by the Southern Idaho Fish and Game Association for their rearing pond at Twin Falls. About 2,472,000 eyed eggs were transferred to other stations in 1925 and 1926, and the following number of advanced fry planted in local waters:

Variety	1925	1926
Rainbow .....	200,000	150,000

### Distribution

The distribution of millions of fish to applicants in every part of the state is an undertaking, the extent of which the public little realizes. The approximate number of fish that may be available from a given hatchery must first be considered in its relationship to the territory to be served from that particular station. The schedules of going



RESULTS OF PLANTING IN SMITH CREEK NEAR BOISE. HOURS CATCH OF EASTERN BROOK

and returning trips arranged for the fish messengers, must correspond with the advance notifications sent out to applicants of the arrival of their fish, so that no delays will be occasioned when the distribution commences. Were it not for the splendid cooperation given the Department by the various railroad and steamship companies, the arrival of thousands of consignments of fish in good condition to their destination would not be possible. The Department is also fortunate in having in their employ a number of trained fish messengers whose efficiency in the exacting work of fish transportation is not exceeded elsewhere in the country. No work connected with fish cultural operations demands a greater expenditure of mental strain and physical wear and tear than a trip of 24 hours duration with live trout. A large share of the success enjoyed by the fishery branch during the past two years must be credited to these loyal and efficient distribution men who have safely delivered thousands of shipments of fish to all parts of the state.

Although ten fish cultural establishments were operated last season to almost full capacity, the numbers of fish distributed fell considerably short of the reported plantings in former years from four hatcheries. This was largely due to the holding of many of these fish to large fingerling size before planting. Instead of sending out from 1,000 to 2,000 advanced fry to the can, the number of these fingerlings that could safely be carried per can averaged only 500, and in many instances, from 350 to 400. Few persons realize that a 2½ inch trout is four times as large at one of 1½ inches, or that a four inch fish is six times larger than a two inch one. While our larger hatcheries have a capacity of three million fry, not many more than a million No. 2 fingerlings can be successfully accommodated without the use of outside rearing ponds.

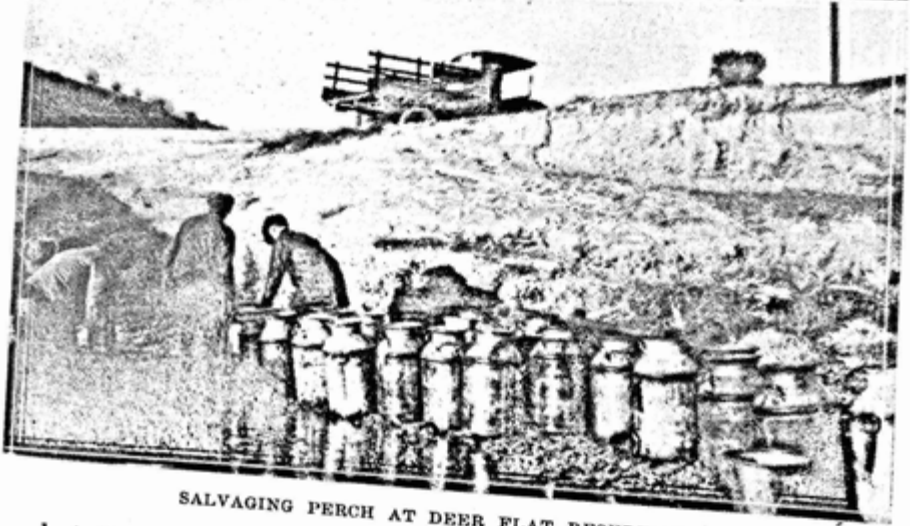
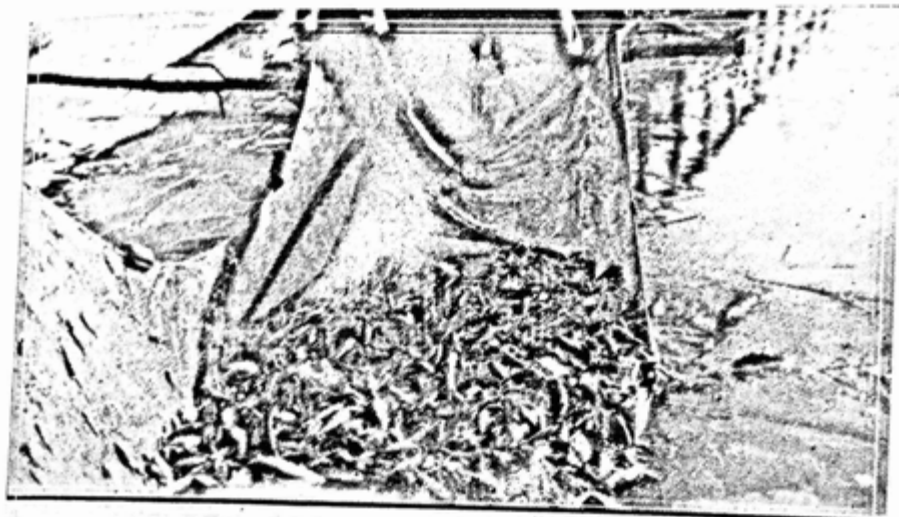
TOTAL DISTRIBUTION FOR ALL HATCHERIES DURING BIENNIUM

Station	1925	1926
Sandpoint .....		
Coeur d'Alene.....	1,500,000	1,807,750
Grangeville .....	1,395,300	1,995,850
Evergreen .....	433,500	720,500
Cascade .....		602,400
Hayspur .....	458,200	614,100
Mackay .....	1,259,800	1,163,465
Ashton .....	175,800	205,400
Henry's Lake.....	1,337,200	1,733,511
Cedar Creek.....	223,000	800,000
*Brush Creek.....	200,000	150,000
Totals .....	7,010,800	9,792,976
*Abandoned.....	28,000	

County	1925	1926
Ada	60,500	57,000
Adams	84,500	504,800
Bannock	225,500	247,050
Bear Lake	90,000	82,200
Benewah	344,000	325,500
Bingham	98,000	126,185
Blaine	320,100	402,825
Boise	56,000	116,000
Boundary	770,000	1,429,750
Bonner	135,000	221,972
Bonneville	27,500	17,200
Butte	33,500	15,075
Camas	33,000	26,500
Canyon	60,500	81,700
Carter	81,000	36,000
Caribou	97,500	97,880
Cassia	677,000	495,000
Clark	229,300	275,730
Clearwater	80,000	108,750
Custer	80,000	75,000
Elmore	597,000	1,237,161
Franklin	16,000	16,000
Fremont	15,000	6,250
Gem	376,500	534,000
Gooding	125,000	67,320
Idaho	599,300	6,000
Jefferson	70,000	1,136,650
Jerome	40,000	66,500
Kootenai	115,200	60,000
Latah	9,000	250,000
Lewis	30,000	28,500
Lemhi	30,000	30,000
Lincoln	20,000	37,000
Madison	65,000	70,000
Minidoka	35,000	15,000
Oneida	10,000	10,000
Nez Perce	10,000	10,000
Owyhee	332,500	446,700
Payette	70,500	42,000
Power	290,000	353,900
Shoshone	465,200	614,100
Teton	35,000	99,000
Twin Falls		
Valley		
Washington		

**Salvage Work**

The water conditions while being fairly normal during 1925 became extremely low in 1926, although in most cases less serious than in 1924. One hundred fifty thousand large-mouth black bass were removed from over-flooded sloughs in Bonner and Boundary counties and returned to suitable water in these counties. No accurate record can be given of the number of yellow perch removed from canals and returned to the Deer Flat Reservoir, but it is estimated that several million of these were handled. In connection with this rescue work at Deer Flat, a number of shipments of perch were distributed to other sections of the state in 1925,



SALVAGING PERCH AT DEER FLAT RESERVOIR

but the Department is endeavoring to discourage the promiscuous planting of these spiny-finned varieties in all sections where there is the least possibility of them becoming established in trout waters, and for this reason refused to distribute fish of this kind during 1926.

Respectfully submitted,  
W. M. KEIL,  
State Fish Commissioner.

## FINANCIAL

### Revenue

The department's largest item of revenue is derived from the sale of fish and game licenses and permits. These sales amounted in 1925 to \$150,955.15 and in 1926 to \$164,830.10, or \$315,785.25 for the biennium, exceeding the license sales of the biennium of 1923-1924 by \$17,305.00. Other items of revenue consist of fines, confiscations, miscellaneous sales, etc. The total revenue for the biennium from all sources amounted to \$347,996.23, as against \$334,721.04 for the previous biennium, an excess in the years 1925 and 1926 of \$13,275.19.

### Disbursements

Although every effort was made to operate along the lines of strictest economy, the expenditures for the biennium of 1925-1926 were higher than of preceding years. In part, this was due to the intensive campaign for the destruction of predatory animals carried on by the department and also on account of considerable additional construction, including hatcheries and two game farms and the increased cost of maintenance on this account. The construction, permanent improvement and maintenance of hatcheries now in operation cost the department \$67,660.89 for the biennium. The same expenditures on account of our game farms amounted to \$11,249.95. More than \$25,000 was expended in the destruction of predatory animals and vermin.

While the cost of taking spawn amounted to \$5,947.88, fish distribution was also quite an item, the amount expended for this purpose being \$6,666.16. This latter item does not however, represent the entire cost, for the reason that almost all of our field force, or regular salaried men, are from time to time engaged in fish planting and therefore, a portion of their salaries could properly be charged to this account. Since they are being paid however, as assistant chief and local deputy game wardens, the segregation would prove difficult.

Personal services, which includes the salaries of the State Game Warden, Fish Commissioner, Chief Deputy, the office force and all field men, other than those connected with the hatcheries, game farms and those engaged regularly in spawn taking and fish distribution, together with their traveling and other expenses, necessarily constitutes the largest or main item of expenditure, aggregating \$222,096.63. Good men cannot be secured or retained in service unless sufficient inducement is offered. The expense of patrolling a state as large as Idaho, many portions of which are practically inaccessible, is quite an item and the demands for more and additional wardens to take care of the situation are constantly being received. Naturally also, as more fish hatcheries are constructed, necessarily, additional men must be employed, cost of operation is greater and these costs will of course, increase from year to year as progress is made.

Printing also constitutes a heavy expenditure. There is required, in addition to the printing of all the various classes of fish and game licenses, a recompilation of five thousand copies of the fish and game laws, the publication and distribution of a biennial report, the printing of all the report and receipt forms required by the department in the transaction of its business, stationery and other miscellaneous printing. These items amounted, during the biennium, to \$6,328.38.

The total warrant issue of the years 1925 and 1926 was \$350,416.86 as compared with \$313,886.82 in 1923 and 1924.

Commencing with the year 1925, a system of weekly reports was inaugurated as between the various members of our field force and the Department. It is the purpose of these reports to secure needed information with respect to wild life in the wardens' separate districts, the condition of the various streams at different periods of the year, a census, so far as possible, of the number of game birds and game animals noted therein and, in addition thereto, it is required that such reports shall include the purpose of all trips made by our field force, together with the amount of travel or mileage between various points, any expenses incurred therefor, with the dates, etc. This system has proved of considerable value to the Department in checking all voucher claims, particularly matters pertaining to travel.

The department's finances are in excellent shape and from time to time are periodically audited. Balances remaining in the various funds on January 1st, 1926, are as follows: Game Fund, \$58,067.16; Game Warden's Preda-

tory Animal Fund, \$2,687.06; Special Suspense Fund, \$184.33, or a total balance of all funds of \$60,938.55. During the year 1925 there were sold licenses and permits of all classes numbering 75,818 and as heretofore stated, resulting in a revenue of \$155,955.15. In 1926 there were sold 82,913 7/18 licenses, amounting to \$164,830.10. The above constitutes a record, since it represents the largest license sale receipts in the history of the game department.

Attached hereto and made a part of this report, is a complete tabulated statement of the receipts of the department from all sources, the total warrant issue by months, the balances in the various funds, a tabulation of the license sales of all classes, together with the number of arrests made during the biennium, the number and nature of the violations and the number and amount of fines collected.

### Our Acknowledgement

Much of the success we have attained in the conservation of wild life during the year has been derived through the cooperation and assistance rendered us by gun clubs, sportsmen's associations and individuals generally. To all these we extend our sincerest thanks.

The cooperation and aid given us by the United States Bureau of Biological Survey, the United States Forest Service and its employes, the United States Bureau of Fisheries, the railroads and other common carriers and the American Railway Express Company has been of the greatest service and to these too, we desire to voice our gratitude.

Particularly are we indebted to United States Game Warden W. H. Ransom, of Spokane; United State Game Warden Harry Barmer, of St. Louis; George Tonkin, formerly of Baker, Oregon, and now of California, and S. B. Locke, of the Ogden Forest Service. To these and all others who have been found ever ready with encouragement and help, our obligation is acknowledged.

To the various field men, in fact, the entire personnel of the Game Department, we are grateful for their conscientious efforts in making the administration of our affairs a success.

## Game Department

January 1, 1925 to December 31, 1925

### Receipts:

		\$ 63,174.85
By balance in fund Jan. 1, 1925.....		
By sale of resident fish and game licenses.....	\$119,104.20	
By sale of non-resident fish and game licenses.....	3,610.00	
By sale of non-resident bird licenses..	3,842.75	
By sale of non-resident fish licenses..	16,869.60	
By sale of tourist licenses.....	247.50	
By sale of alien game licenses.....	47.50	
By sale of alien fish licenses.....	750.50	
By sale of alien gun licenses.....	152.00	
By sale of resident trappers' licenses	5,282.00	
By sale of non-resident trappers' licenses.....	47.50	
By sale of re-shipping permits.....	471.60	
By sale of selling and shipping permits.....	210.00	
By sale of private pond permits.....	130.00	
By sale of taxidermist licenses.....	190.00	
		\$150,955.15
By 301½ fines.....	\$ 7,812.20	
By 93 confiscations.....	1,250.60	
By sale of beaver hides.....	4,176.90	
By sale of fish.....	313.15	
By sale of pelts.....	44.75	
By sale of predatory animal pelts.....	331.50	
By rental of Warm River building.....	40.00	
By sale of domestic hens.....	45.72	
By court costs.....	28.00	
By miscellaneous.....	43.85	
By commission saved.....	163.95	
		\$ 14,253.62
By cancellation of warrant number 69738.....	3.50	
		\$165,212.27
		\$228,387.12

### WARRANT ISSUE 1925

To January warrants for December claims.....	\$ 12,109.99
To February warrants for January claims.....	11,321.40
To March warrants for February claims.....	13,476.70
To April warrants for March claims.....	17,492.14
To May warrants for April claims.....	16,164.24
To June warrants for May claims.....	16,259.87
To July warrants for June claims.....	14,800.01
To August warrants for July claims.....	15,616.67
To September warrants for August claims.....	17,225.05



20  
 EXPENDITURE STATEMENT, BUDGETING  
 By Division Accounts for Department of Health  
 By Department Accounts for Department of Health  
 By Department Accounts for Department of Health

**OPERATION IN CLOW YEAR, 1936**

Balance on hand January 1, 1936  
 Receipts for 1936 Departmental purposes  
 Unappropriated balance January 1, 1936  
 Total revenue appropriated for year ending Dec-  
 ember 31, 1936  
 Total amount paid 1936  
 1936 Departmental purposes  
 1936 Departmental paid  
 Balance on hand December 31, 1936

**OPERATION IN PRIMITIVE ANIMAL YEAR**

Balance on hand January 1, 1936  
 Receipts for 1936 Departmental purposes  
 Unappropriated balance January 1, 1936  
 Total revenue appropriated for year ending Dec-  
 ember 31, 1936  
 Total amount paid 1936  
 1936 Departmental purposes  
 1936 Departmental paid  
 Balance on hand December 31, 1936

**OPERATION IN U. S. PRIMITIVE ANIMAL YEAR**

Total revenue appropriated for year ending Dec-  
 ember 31, 1936  
 Total amount paid 1936  
 Balance on hand December 31, 1936

22  
 EXPENDITURE STATEMENT, BUDGETING

**Cama Department**

January 1, 1936 to December 31, 1936

Balance on hand January 1, 1936  
 Receipts for 1936 Departmental purposes  
 Unappropriated balance January 1, 1936  
 Total revenue appropriated for year ending Dec-  
 ember 31, 1936  
 Total amount paid 1936  
 1936 Departmental purposes  
 1936 Departmental paid  
 Balance on hand December 31, 1936

**WAGLEY FUND 1936**

Total revenue appropriated for year ending Dec-  
 ember 31, 1936  
 Total amount paid 1936  
 Balance on hand December 31, 1936

## ELEVENTH BIENNIAL REPORT

To April warrants for March claims.....	12,707.39
To May warrants for April claims.....	16,289.95
To June warrants for May claims.....	14,688.52
To July warrants for June claims.....	11,133.33
To August warrants for July claims.....	17,124.86
To September warrants for August claims.....	15,900.06
To October warrants for September claims.....	13,131.17
To November warrants for October claims.....	14,272.67
To December warrants for November claims.....	22,581.26
	<u>\$171,272.02</u>

## OPERATION IN GAME FUND, 1926

Balance on hand January 1, 1926.....	\$ 42,419.63
Reserve for 1925 accounts payable.....	10,542.94
Unencumbered balance January 1, 1926.....	31,866.69
Total revenue for year ending December 31, 1926.....	<u>\$182,597.21</u>
Total warrant issue 1926.....	\$160,949.68
Total transfers to game warden's predatory animal fund.....	6,000.00
	<u>\$166,949.68</u>
1925 accounts paid.....	10,542.94
1926 accounts paid.....	150,406.74
Transfer to game warden's predatory animal fund.....	6,000.00
Balance on hand December 31, 1926.....	<u>\$ 58,067.16</u>
	<u>\$225,016.84</u>

## OPERATION IN PREDATORY ANIMAL FUND

Balance on hand January 1, 1926.....	\$ 939.38
Reserve for 1925 accounts payable.....	885.81
Unencumbered balance January 1, 1926.....	53.57
Total warrant issue 1926.....	\$ 939.38
1925 accounts paid.....	885.81
1926 accounts paid.....	53.57

## OPERATION IN G. W. PREDATORY ANIMAL FUND

Balance on hand January 1, 1926.....	\$ 5,883.27
Reserve for 1925 accounts payable.....	505.20
Unencumbered balance January 1, 1926.....	5,378.07
Total revenue for year.....	186.75
Total transfer from game fund.....	6,000.00
Total revenue apportionment for year.....	<u>\$ 6,186.75</u>
	<u>\$ 12,070.02</u>

## FISH AND GAME WARDEN

Total warrant issue 1926.....	\$ 505.20	\$ 9,382.96
1925 accounts paid.....	8,877.76	
1926 accounts paid.....		\$ 2,687.06
Balance on hand December 31, 1926.....		

## SPECIAL SUSPENSE FUND

1926 Receipts:		
June 30—By assignment of warrant (Salisbury account).....	\$ 184.33	\$ 184.33
By balance fund January 1, 1926.....		\$ 184.33

## EXHIBIT "A"

Tabulation of fish and game licenses of the years 1922, 1923, 1924 and 1925, revenue for which was received and reported during calendar year of 1925.

No. Sold	Class	Amount
66,169	Class 1 Resident fish and game licenses @ \$ 1.80	\$119,104.20
152	Class 2-A non-resident fish game licenses @ 23.75	3,610.00
223	Class 2-B non resident bird licenses @ 4.75	1,059.25
293	Class 2-B non-resident bird licenses @ 9.50	2,783.50
6,248	Class 2-C non-resident fish licenses @ 2.70	16,869.60
275	Class 2-E tourist licenses @ .90	247.50
1	Class 3-A alien fish and game license @ 47.50	47.50
79	Class 3-B alien fish licenses @ 9.50	750.50
32	Class 3-C alien gun licenses @ 4.75	152.00
1,112	Class 1D resident trappers' licenses @ 4.75	5,282.00
2	Class 2-D non resident trappers' licenses @ 23.75	47.50
1,179	Re-shipping permits @ .40	471.60
21	Selling and shipping permits @ 10.00	210.00
19	Private pond permits @ 10.00	190.00
13	Taxidermist licenses @ 10.00	130.00
75,818		\$150,955.15

## EXHIBIT "B"

Tabulation of 1925 fish and game licenses issued, revenue for which was received and reported during the calendar year 1925.

No. Sold	Class	Amount
60,036	Class 1 resident fish and game licenses @ \$ 1.80	\$108,064.80
130	Class 2-A non-resident fish and game licenses @ 23.75	3,087.50
293	Class 2-B non-resident bird licenses @ 9.50	2,783.50
5,627	Class 2-C non-resident fish licenses @ 2.70	15,192.90

## ELEVENTH BIENNIAL REPORT

275	Class 2-E tourist licenses.....	@	.90	247.50
1	Class 3-A alien fish and game license.....	@	47.50	47.50
75	Class 3-B alien fish licenses.....	@	9.50	712.50
27	Class 3-C alien gun licenses.....	@	4.75	128.25
699	Class 1-D resident trappers' licenses.....	@	4.75	3,320.25
2	Class 2-D non-resident trappers' licenses.....	@	23.75	47.50
580	Re-shipping permits.....	@	.40	232.00
15	Selling and shipping permits.....	@	10.00	150.00
13	Private pond permits.....	@	10.00	130.00
19	Taxidermist licenses.....	@	10.00	190.00
67,792				

## EXHIBIT "C"

\$134,334.20

Tabulation of fish and game licenses of the years 1922, 1923, 1925 and 1926 revenue for which was received and reported during the calendar year of 1926:

No. Sold	Class	Amount
72,687 7/18	Class 1 resident fish and game licenses.....	@ \$ 1.80 \$130,837.30
142	Class 2-A non-resident fish and game licenses.....	@ 23.75 3,372.50
448	Class 2-B non-resident bird licenses.....	@ 9.50 4,256.00
6,532	Class 2-C non-resident fish licenses.....	@ 2.70 17,636.40
462	Class 2-E tourist fishing licenses.....	@ .90 415.80
1	Class 3-A alien game licenses.....	@ 47.50 47.50
80	Class 3-B alien fishing licenses.....	@ 9.50 760.00
35	Class 3-C alien gun licenses.....	@ 4.75 166.25
1,267	Class 1-D resident trappers' licenses.....	@ 4.75 6,018.25
14	Class 2-D non-resident trappers' licenses.....	@ 23.75 332.50
1,194	Re-shipping permits.....	@ .40 477.60
20	Selling and shipping permits.....	@ 10.00 200.00
21	Taxidermist licenses.....	@ 10.00 210.00
10	Private pond permits.....	@ 10.00 100.00
82,913 7/18		

\$164,830.10

## EXHIBIT "D"

Tabulation of 1926 fish and game licenses issued, revenue for which was received and reported during the calendar year 1926.

No. Sold	Class	Amount
64,784	Class 1 resident fish and game licenses.....	@ \$ 1.80 \$116,611.20
130	Class 2-A non-resident fish and game licenses.....	@ 23.75 3,087.50

## FISH AND GAME WARDEN

853	Class 2-B non-resident bird licenses.....	@	9.50	3,353.50
5,970	Class 2-C non-resident fish licenses.....	@	2.70	16,119.00
445	Class 2-E tourist fishing licenses.....	@	.90	400.50
70	Class 3-B alien fish licenses.....	@	9.50	665.00
23	Class 3-C alien gun licenses.....	@	4.75	109.25
593	Class 1-D resident trappers' licenses.....	@	4.75	2,816.75
5	Class 2-D non-resident trappers' licenses.....	@	23.75	118.75
858	Re-shipping permits.....	@	.40	343.20
13	Selling and shipping permits.....	@	10.00	130.00
10	Private pond permits.....	@	10.00	100.00
20	Taxidermist licenses.....	@	10.00	200.00
73,274				

\$144,054.65

## Classification of Disbursements

## A. PERSONAL SERVICES

Fish and Game  
General

## Year 1925

A1	Salaries of regular officers and employes.....	\$ 74,974.78
A3	Services of extra help.....	1,104.33
A9	Miscellaneous services.....	443.00
	Total.....	\$76,522.11

## B. SERVICES OTHER THAN PERSONAL

B1	Transportation of persons.....	\$ 22,466.16
B2	Transportation of things.....	453.78
B3	Board and lodging.....	2,787.33
B4	Subsistence and care of animals.....	1,535.42
	1. Feed for game birds, etc.....	\$ 1,465.47
	7. Storage of autos.....	69.95
B5	Communication services.....	
B6	Printing.....	1,485.36
B7	Publication of notices.....	5,020.78
B9	Special and miscellaneous services other than personal.....	238.12
	1. Repairing equipment.....	
	3. Court and public office fees.....	\$ 661.77
	9. Miscellaneous (men and teams).....	7.00
	Total for services other than personal.....	728.55

\$ 35,384.36

## C. MATERIALS

C2	Metals and metal products.....	\$ 44.03
C4	Lumber.....	16.84
C6	Paints and painters' materials.....	13.95
	Total for materials.....	\$ 74.82

## ELEVENTH BIENNIAL REPORT

## D. SUPPLIES

D1	Stationery, scientific and educational supplies			
	1. Office supplies .....	\$ 321.97	\$ 478.29	
	3. Scientific supplies .....			
	6. Newspapers .....	148.07		
	7. Books .....	.25		
		8.00		
D2	Fuel .....			
	1. Solid fuel .....	\$ 7.00	\$ 1,026.23	
	2. Liquid fuel (gasoline) .....	1,018.23		
	3. Mantles .....	1.00		
D3	Mechanics', engineers', and electricians' supplies .....			
	1. Oil .....	\$ 230.33	\$ 965.90	
	5. Electricians' supplies .....	104.80		
	9. Mechanics' supplies .....	630.77		
D48	Brooms and brushes .....			
D6	Wearing apparel .....		.15	
D6	Forage and other supplies for animals .....		35.50	
D8	Explosive .....		284.20	
D9	Miscellaneous supplies .....		6.05	
	2. Water and ice .....	\$ 4.25	126.32	
	5. Badges .....	117.60		
	8. Packing receptacles .....	1.47		
	9. Miscellaneous .....	3.00		
	Total for supplies .....		\$ 2,922.64	

## E. EQUIPMENT

E11	Heating equipment .....		\$ 9.00	
	Item			
	1 Heating stove .....	\$ 9.00		
E21	Production and construction equipment .....		1.50	
	Item			
	1 File .....	.20		
	1 Pr. pliers .....	.30		
	1 Square .....	1.00		
E32	Transporting and conveying equipment .....		1,412.50	
	Item			
	1 25-6-45 Buick touring car F No. 1230224—M No. 137368 \$ 1,645.00			
	Less allowance on old Buick 250.00	\$ 1,395.00		
	1 Boat .....	17.50		
E48	Office equipment .....		402.31	
	Item			
	1 No. 5 Underwood typewriter. \$ 83.03			
	Less rental on old machine... 5.00	78.03		
	3 Steel transfer cases .....		21.75	
	1 Post index file .....		12.75	

## FISH AND GAME WARDEN

1 Monroe Calculator No. KA-12-20315	300.00	240.00	
Less allowance on old mch....	60.00		
1 Underwood typewriter less 10-10%	102.50	43.03	
Less credit on old machine....	40.00		
1 Bobstitch fastner and staples		6.75	
E82 Produce-yielding animals			297.00
27 Pr. Hungarian partridges at \$11.00 per pr.			7.70
E971 Fish screens		7.70	48.95
Item			
E973 Fish seines			2.25
Item			
1 Minnow seine .....		7.08	
Dip net .....		23.46	
3 Seines .....		7.20	
1 20x5 inch minnow seine .....		1.16	
Twine for seines .....		2.20	
2 Dip nets .....		5.60	
1 Minnow seine .....			.50
E974 Hatchery equipment			
Item			
1 Graduate .....		.50	
Total for equipment .....			\$ 2,179.46
F. STRUCTURES			
F1 Shelving in vault .....			\$ 47.40
Total for structures .....			\$ 47.40
H. REFUNDS			
H52 Refund on licenses .....			\$ 699.80
Total for refunds .....			\$ 699.80
J. FIXED CHARGES			
J1 Rents .....			\$ 56.25
J5 Insurance .....			799.83
J6 Membership fees .....			50.00
Total for fixed charges .....			\$ 906.13
RECAPITULATION			
A Personal services .....			\$ 76,522.11
B Services other than personal .....			35,384.36
C Material .....			74.82
D Supplies .....			2,922.64
E Equipment .....			2,179.46

F Structures .....	47.40
H Refunds .....	699.80
J Fixed charges .....	906.13
Total expenditures for the year 1925.....	\$118,736.72

## Classification of Disbursements

### A. PERSONAL SERVICES

#### Predatory Animal Fund.

A Salaries of regular officers and employees.....	\$ 3,892.06
A3 Services of extra help .....	64.19
Total for personal services .....	\$ 3,956.25

### B. SERVICES OTHER THAN PERSONAL

B1 Transportation of persons .....	\$ 608.82
B2 Transportation of things .....	103.61
B3 Board and lodging .....	130.37
B4 Feed for horses .....	43.60
B5 Communication services .....	8.17
B7 Publication of notices .....	1.00
B9 Miscellaneous services .....	57.50
Total for services other than personal....	\$ 957.87

### C. MATERIALS

C2 Metals and metal products .....	\$ .35
Total for materials .....	\$ .35

### D. SUPPLIES

D13 Scientific supplies .....	\$ 70.25
D2 Fuel .....	4.93
D3 Oil .....	1.60
D4 Cleaning supplies .....	.05
D9 Miscellaneous supplies (horses for coyote bait) .....	18.90
Total for supplies .....	\$ 95.73

### E. EQUIPMENT

E21 Production and construction equipment.....	\$ 17.90
Item	
1 Doz. No. 4 Newhouse traps .....	\$ 17.90
Total for equipment .....	\$ 17.90

### RECAPITULATION

A Personal services.....	\$ 3,956.25
B Services other than personal .....	957.87
C Materials .....	.35
D Supplies .....	95.73
E Equipment .....	17.90
Total expenditures for the year 1925.....	\$ 15,028.10

## Classification of Disbursements

### B. SERVICES OTHER THAN PERSONAL

Game W. Predatory	
A. Fund	\$ 249.23
B98 Bounty paid on magpie heads and eggs.....	\$ 249.23
Total for services other than personal..	

### RECAPITULATION

B Services other than personal.....	\$ 249.23
Total expenditures for the year 1925....	\$ 249.23

## Classification of Disbursements

### A. PERSONAL SERVICES

Game Farm	
A1 Salaries of regular officers and employees.....	\$ 1,100.00
A3 Services of extra help .....	353.33
Total for personal services .....	\$ 1,453.33

### B. SERVICES OTHER THAN PERSONAL

B1 Transportation of persons .....	\$ 128.13
B2 Transportation of things .....	85.04
B3 Board and lodging .....	4.60
B4 Feed for game birds .....	192.86
B5 Communication services .....	4.22
B6 Printing .....	2.85
Total for services other than personal	\$ 417.70

### C. MATERIALS

C2 Metals and metal products .....	\$ 309.95
C3 Non-metallic mineral products .....	5.20
C4 Lumber .....	295.88
C5 Fiber products .....	17.85
Total for materials .....	\$ 628.88

### D. SUPPLIES

D5 Wearing apparel .....	\$ 3.00
D8 Explosives .....	19.00
D9 Miscellaneous supplies .....	91.15
4. Pheasants eggs .....	\$ 82.50
9. Miscellaneous .....	8.65
Total for supplies .....	\$ 113.15

### E. EQUIPMENT

E11 Lighting equipment .....	\$ 1.80
Item	
2 Wall lamps .....	\$ 1.80

ELEVENTH BIENNIAL REPORT

FISH AND GAME WARDEN

E22 Production and construction equipment		Item		12.58
		1 Garden rake		
		1 Shovel	1.30	
		1 Spade	1.25	
		1 Pick	1.25	
		1 Ft. snags	.33	
		1 Sledge	2.00	
		1 Spading fork	3.40	
		2 Staple pullers	1.55	
			1.50	
E24 Caretaking equipment		Item		6.50
		1 Lawn mower		
E26 Produce-yielding animals		Item		6.50
		53 Hens, at each	\$ 1.00	\$ 83.00
		1 Hen		.75
		Quail		6.00
		5 Bantams		12.50
		40 Young pheasants, each at..	.25	10.00
		29 Chinese pheasants, each at...	1.00	29.00
		9 Young pheasants, each at ...	.50	4.50
E274 Hatchery equipment		Item		22.45
		Chicken waterers		2.65
		1 Food chopper	2.50	
		1 Chopping bowl	1.60	
		1 Knife	.15	
		1 Garden hose	1.25	
		50 Ft. canvas hose	3.00	
		3 Doz. tin cups, at per doz	1.00	3.00
		12 Galv. water cups		3.00
		6 Fountains		1.20
		1 Gal. milk can		4.10
Total for equipment			\$	189.08

RECAPITULATION

A	Personal services		\$	1,453.33
B	Services other than personal			417.70
C	Materials			628.88
D	Supplies			113.15
E	Equipment			189.08
Total expenditures for the year 1925...			\$	2,802.14

Classification of Disbursements

A. PERSONAL SERVICES

Ashton Hatchery		Item		
A1	Salaries of regular officers and employees.....		\$	2,948.92
A3	Services of extra help .....			145.35
Total for personal services .....			\$	3,094.27

B. SERVICES OTHER THAN PERSONAL			\$	83.40
B1	Transportation of persons .....			641.35
B2	Transportation of things .....			27.69
B3	Board and lodging .....			61.31
B5	Communication services .....			5.01
B8	Electricity .....			9.25
B9	Repairing equipment .....		\$	828.01
Total for services other than personal				

C. MATERIALS

C2	Metals and metal products .....		\$	38.70
C3	Non-metallic mineral products .....			9.15
C4	Lumber .....			7.70
C5	Fiber products .....			10.45
C6	Paints and painters' materials .....			42.30
Total for materials			\$	108.30

D. SUPPLIES

D1	Stationery, scientific, and educational supplies .....		\$	4.30
	1. Office supplies .....	\$	1.45	
	3. Scientific supplies .....		2.85	
D2	Fuel .....			305.12
	1. Coal .....	\$	120.10	
	2. Gasoline .....		182.52	
	3. Mantles .....		2.50	
D3	Mechanics', engineers', and electricians' supplies .....			60.60
	1. Oil .....	\$	11.75	
	5. Electricians' supplies .....		10.00	
	9. Mechanics' supplies .....		38.85	
D48	Brooms and brushes .....			3.40
D5	Wearing apparel .....			147.15
D61	Hay .....			61.00
D69	Fish food .....			1,930.59
D8	Explosives .....			5.35
D9	Miscellaneous supplies .....			367.25
	2. Water and ice .....		85.20	
	4. Fish eggs .....		261.30	
	8. Packing receptacles .....		.40	
	9. Miscellaneous supplies .....		20.35	
Total for supplies				

E. EQUIPMENT

E38 Transporting and conveying equipment.....		Item		\$	1.85
		2 Horse blankets		1.50	
		Hame straps		.35	
E45 Kitchen, dining room and household utensils					

ELEVENTH BIENNIAL REPORT

Item			
E47	1 Egg beater .....	\$ .60	
	Bedding .....		15.00
Item			
	1 Mattress .....	15.00	
E53	Cleaning equipment .....		5.75
Item			
	3 Tubs .....	\$ 5.75	
E975	Fish seines .....		68.82
Item			
	1 Bag seine .....	\$ 68.82	
E974	Hatchery equipment .....		241.23
Item			
	1 Net frame .....	\$ 1.00	
	1 No. 222 Chopper with plate and knife .....	225.00	
	1 Alum. pan .....	.80	
	1 1 5/64 in. plate and knife for grinder .....	6.18	
	1 Scoop .....	2.75	
	1 Cream can .....	5.50	
Total for equipment .....		\$ 333.25	
<b>F. STRUCTURES</b>			
E1	Building .....	\$ 863.84	
Total for structures .....		\$ 863.84	
<b>J. FIXED CHARGES</b>			
J1	Rent on structures .....	\$ 5.00	
Total for fixed charges .....		\$ 5.00	
<b>RECAPITULATION</b>			
A	Personal services .....	\$ 3,094.27	
B	Services other than personal .....	828.01	
C	Materials .....	108.30	
D	Supplies .....	2,887.76	
E	Equipment .....	333.25	
F	Structures .....	863.84	
J	Fixed charges .....	5.00	
Total expenditures for the year 1925 .....		\$ 8,120.43	

Classification of Disbursements

<b>A. PERSONAL SERVICES</b>		
Hay Spur Hatchery		
A1	Salaries of regular officers and employes .....	\$ 2,465.00
A3	Services of extra help .....	83.00
A9	Miscellaneous services .....	1.50
Total for personal services .....		\$ 2,549.50

FISH AND GAME WARDEN

<b>B. SERVICES OTHER THAN PERSONAL</b>		\$	17.53
B1	Transportation of persons .....		452.48
B2	Transportation of things .....		27.75
B3	Board and lodging .....		66.54
B5	Communication services .....		363.67
B9	Special and miscellaneous services other personal .....	\$ 328.67	
	1. Repairing equipment .....	35.00	
	9. Miscellaneous .....		
Total for services other than personal .....		\$	927.97
<b>C. MATERIALS</b>			
C2	Metals and metal products .....	\$	77.10
C4	Lumber .....		199.08
C5	Fiber products .....		5.00
C6	Paints and painters' materials .....		97.85
Total for materials .....		\$	379.03
<b>D. SUPPLIES</b>			
D1	Office supplies .....	\$	3.50
D2	Fuel .....		476.86
	1. Wood and coal .....	\$ 307.70	
	2. Gasoline .....	165.96	
	3. Mantles .....	3.00	
	4. Candles .....	.20	
D3	Mechanics', engineers', and electricians supplies .....		104.50
	1. Oil .....	\$ 26.20	
	5. Electricians' supplies .....	16.10	
	9. Mechanics' supplies .....	62.20	
D48	Brooms and brushes .....		21.05
D6	Forage and other supplies for animals .....		1,174.77
	1. Hay .....	\$ 35.00	
	9. Fish food .....	1,139.77	
D8	Explosives .....		2.90
D9	Miscellaneous supplies .....		453.80
	2. Water and ice .....	\$ 75.00	
	4. Fish eggs .....	375.00	
	8. Packing receptacles .....	.20	
	9. Miscellaneous .....	3.60	
Total for supplies .....		\$	2,237.38
<b>E. EQUIPMENT</b>			
E11	Lighting equipment .....	\$	.75
	1 Lamp pump .....		
E17	Heating equipment .....	\$	.75
E18	Pumping equipment .....		3.75
	1 Stove shield .....		
Total for equipment .....			30.00

	<b>Item</b>		
	1 1½ H. P. engine .....		30.00
E21	Production and construction equipment .....		
	<b>Item</b>		6.60
	1 Hammer .....	\$	1.50
	1 Scythe .....		4.10
	1 Garden rake .....		1.00
E273	Fish seines .....		
	<b>Item</b>		.90
	1 Bobbinette seine .....	\$	.90
E274	Hatchery equipment .....		
	<b>Item</b>		11.95
	4 Spawning pans .....	\$	3.25
	2 Egg beaters at .....	.60	1.20
	2 Feed pans at .....	.95	1.90
	3 Spoons at .....	.20	.60
	4 Fish aerators .....		5.00
	Total for equipment .....	\$	53.95
<b>F. STRUCTURES</b>			
F1	Building .....		323.82
	Total for structures .....	\$	323.82
<b>J. FIXED CHARGES</b>			
J1	Rent on structures .....		35.00
	Total for fixed charges .....	\$	35.00
<b>RECAPITULATION</b>			
A	Personal services .....	\$	2,548.50
B	Services other than personal .....		927.97
C	Materials .....		379.03
D	Supplies .....		2,237.38
E	Equipment .....		53.95
F	Structures .....		323.82
J	Fixed charges .....		35.00
	Total expenditures for the year 1925 .....	\$	6,506.63

**Classification of Disbursements**

<b>A. PERSONAL SERVICES</b>			
Sandpoint Hatchery			
A1	Salaries of regular officers and employes .....	\$	2,650.00
A2	Services of extra help .....		143.00
	Total for personal services .....	\$	2,793.00
<b>B. SERVICES OTHER THAN PERSONAL</b>			
B1	Transportation of persons .....	\$	39.86

			85.60
B2	Transportation of things .....		4.55
B3	Board and lodging .....		.50
B47	Storage of auto .....		46.30
B5	Communication services .....		
B9	Special and miscellaneous services other than personal .....	\$	160.23
	1. Repairing equipment .....	\$	72.23
	9. Miscellaneous .....		88.00
	Total for services other than personal .....	\$	337.04
<b>C. MATERIALS</b>			
C1	Raw materials .....	\$	44.00
C2	Metals and metal products .....		39.33
C3	Non-metallic mineral products .....		19.50
C4	Lumber .....		221.00
C5	Fiber products .....		9.93
C6	Paints and painters' materials .....		6.15
	Total for materials .....	\$	339.01
<b>D. SUPPLIES</b>			
D1	Scientific supplies .....	\$	.90
D2	Gasoline .....		272.88
D3	Mechanics', engineers', and electricians' supplies .....		124.57
	1. Oil .....	\$	42.40
	5. Electricians' supplies .....		8.20
	9. Mechanics' supplies .....		74.27
D48	Brooms and brushes .....		3.25
D5	Wearing apparel .....		12.00
D69	Fish food .....		365.47
D9	Miscellaneous supplies .....		759.35
	4. Fish eggs .....	\$	750.00
	8. Packing receptacles .....		5.00
	9. Miscellaneous .....		4.35
	Total for supplies .....	\$	1,538.72
<b>E. EQUIPMENT</b>			
E11	Lighting equipment .....	\$	3.50
	<b>Item</b>		
	1 Lantern .....	\$	2.00
	Stove pipe .....		1.50
E21	Production and construction equipment .....		30.65
	<b>Item</b>		
	1 Pr. ice tongs .....	\$	3.25
	1 Shovel handle .....		1.00
	1 12 in. file .....		.50
	2 Files .....		.40
	1 50-ft. steel cable .....		7.00
	1 Snatch block .....		4.50
	1 Scraper .....		14.00
E53	Cleaning equipment .....		
	<b>Item</b>		
	1 Wash boiler .....	\$	2.75



## ELEVENTH BIENNIAL REPORT

E971 Fish screens	Item		1.50
3 Lin. yards, 42 in. wire cloth		\$ 1.50	
E973 Fish seines	Item		65.00
1 60-ft. minnow seine		\$ 65.00	
E974 Hatchery equipment	Item		2.65
6 4 Qt. milk pans		\$ 1.20	
1 Large spoon		.25	
1/2 Doz. milk pans		1.20	
Total for equipment		\$ 106.05	
<b>F. STRUCTURES</b>			
F1 Building		\$ 256.80	
Total for structures		\$ 256.80	
<b>RECAPITULATION</b>			
A Personal services			
B Services other than personal		\$ 2,793.00	
C Materials		337.04	
D Supplies		339.91	
E Equipment		1,538.72	
F Structures		106.05	
256.80			
Total expenditures for the year 1925		\$ 5,371.52	

## Classification of Disbursements

## A. PERSONAL SERVICES

## Coeur d'Alene Hatchery

A1 Salaries of regular officers and employes		\$ 2,460.00
A3 Services of extra help		43.75
Total for personal services		\$ 2,503.75

## B. SERVICES OTHER THAN PERSONAL

B1 Transportation of persons		\$ 41.73
B2 Transportation of things		142.07
B3 Board and lodging		36.90
B5 Communication services		67.24
B8 Furnishing of heat, lights and electricity		321.96
B9 Special and miscellaneous services other than personal		96.75
1. Repairing equipment		\$ 6.75
2. Repairing structures		90.00
Total for services other than personal		\$ 706.65

## C. MATERIALS

C2 Metals and metal products		\$ 10.58
C4 Lumber		27.77
C5 Fiber products		6.55
C6 Paints and painters' materials		64.65
Total for materials		\$ 109.55

## FISH AND GAME WARDEN

<b>D. SUPPLIES</b>		\$ 136.30
D2 Fuel:		
1. Solid fuel (coal and wood)		\$ 131.05
2. Liquid fuel		5.25
D3 Mechanics, engineers', and electricians' supplies:		12.04
1. Oil		2.50
5. Electricians' supplies		9.54
D48 Brooms and brushes:		3.00
D69 Fish food:		206.30
D9 Miscellaneous supplies:		45.13
2. Water and ice		9.25
8. Packing receptacles		15.90
9. Miscellaneous		
Total for supplies		\$ 427.92
<b>E. EQUIPMENT</b>		\$ 522.00
E18 Pumping equipment:	Item	\$ 522.00
1 Pump		
E21 Production and construction equipment:		2.60
Item		
1 Shovel		\$ 1.75
1 Wood rasp		.85
E974 Hatchery equipment:		1.30
Item		
1 Egg beater		\$ .50
1 Butcher knife		.50
1 Strainer		.30
Total for equipment		\$ 525.90
<b>RECAPITULATION</b>		
A Personal services		\$ 2,503.75
B Services other than personal		706.65
C Materials		109.55
D Supplies		427.92
E Equipment		525.90
Total expenditures for the year 1925		\$ 4,273.77

## Classification of Disbursements

## A. PERSONAL SERVICES

## Grangeville Hatchery

A1 Salaries of regular officers and employes		\$ 1,000.00
A3 Services of extra help		55.32
A9 Miscellaneous services		14.50
Total for personal services		\$ 1,069.82

## B. SERVICES OTHER THAN PERSONAL

B1 Transportation of persons		\$ 7.40
B2 Transportation of things		59.79

ELEVENTH BIENNIAL REPORT

B3	Board and lodging.....		27.70
B47	Storage of autos.....		2.05
B5	Communication services.....		4.57
B9	Special and miscellaneous services other than personal:		
	1. Repairing equipment.....		14.80
	9. Miscellaneous (use of men and teams) \$	14.80	54.35
	Total for services other than personal	39.75	
<b>C. MATERIALS</b>			
C2	Metals and metal products.....		156.15
C3	Non-metallic mineral products.....		40.99
C4	Lumber.....		162.35
C6	Paints and painters' materials.....		121.62
	Total for materials.....		132.70
<b>D. SUPPLIES</b>			
D1	Office supplies.....		457.66
D2	Fuel:		
	1. Solid fuel.....		.55
	2. Liquid fuel.....	51.00	128.35
	Total for fuel.....	77.35	
D3	Mechanics' supplies.....		77.65
D4	Cleaning supplies.....		13.70
D6	Fish food.....		99.50
D8	Explosives.....		1.00
D9	Miscellaneous supplies.....		2.15
	Total for supplies.....		322.90
<b>E. EQUIPMENT</b>			
E11	Lighting equipment:		
	Item		4.25
	1 Lamp.....		1.00
	1 Lantern.....		2.00
	1 Lamp, complete.....		1.25
E12	Heating equipment:		43.05
	Item		
	1 Heater.....		24.50
	6 Joints stove pipe.....		1.80
	1 Damper.....		.25
	1 Elbow and collar.....		.40
	1 Stove.....		15.00
	2 Joints pipe.....		.60
	2 Elbows.....		.60
E21	Production and construction equipment:		27.15
	Item		
	1 Pair sure grip.....		.50
	1 Pair pliers.....		.50
	1 Expansion bit.....		2.75
	1 Screw driver.....		.50
	1 Pair tin snips.....		2.25
	1 Rip saw.....		4.70
	3 Files.....		.50
	1 Nail.....		1.50

FISH AND GAME WARDEN

			4.50
	1 Jack plane.....		4.70
	1 Hand saw.....		2.25
	1 Square.....		2.50
	1 Axe.....		
E32	Transporting and conveying equipment:		\$ 570.85
	Item		
	1 Ford truck.....	\$	685.85
	Less allowance on old car.....		115.00
E35	Transporting and conveying equipment:		202.00
	Item		
	40 No. 881 Jersey milk cans.....	\$	202.00
E37	Telephonic and telegraphic equipment:		13.05
	Item		
	1 Phone and insulators.....		13.05
E42	Furniture and furnishings:		66.50
	Item		
	1 Dining room set.....	\$	14.00
	1 Chair.....		7.50
	1 Dresser.....		12.50
	1 Bed, springs and mattress.....		32.50
E44	Draperies and window shades:		3.00
	Item		
	Window shades.....	\$	3.00
E45	Household utensils:		22.55
	Item		
	1 Set knives and forks.....	\$	2.00
	1 Set teaspoons.....		.60
	1 Set tablespoons.....		.90
	1 Tea kettle.....		1.50
	1 Stewer.....		.95
	1 Pan.....		.30
	1 Pan.....		.55
	1 Set dishes.....		6.75
	1 Syrup pitcher.....		.50
	1 Vegetable dish.....		.45
	1 Can opener.....		.15
	1 Stewer.....		.35
	1 Dish pan.....		.60
	1 Sifter.....		.35
	2 Butcher knives.....		2.25
	1 Set aluminum.....		1.00
	2 Cups.....		.15
	2 Frying pans.....		.80
	2 Aluminum lids.....		.35
	2 Spoons.....		.25
	1 Egg beater.....		.25
	1 Coffee pot.....		1.00
	1 Bake pan.....		.35
	1 Salt and pepper set.....		.20
E53	Cleaning equipment:		

PLANTING MATERIALS		From	
1	Stocks		
2	Planting materials		
Total for planting materials			
EQUIPMENT			
3	Equipment		
4	Planting equipment		
Total for equipment			
BUILDING			
5	Buildings		
6	Planting buildings		
Total for buildings			
LAND			
7	Land		
8	Planting land		
Total for land			
OTHER			
9	Other		
10	Planting other		
Total for other			
Total for all items			

### Classification of Disbursements

GENERAL DISBURSEMENTS		
11	General disbursements	
Total for general disbursements		
PLANTING DISBURSEMENTS		
12	Planting disbursements	
Total for planting disbursements		
EQUIPMENT DISBURSEMENTS		
13	Equipment disbursements	
14	Planting equipment disbursements	
Total for equipment disbursements		
BUILDING DISBURSEMENTS		
15	Building disbursements	
16	Planting building disbursements	
Total for building disbursements		
LAND DISBURSEMENTS		
17	Land disbursements	
18	Planting land disbursements	
Total for land disbursements		
OTHER DISBURSEMENTS		
19	Other disbursements	
20	Planting other disbursements	
Total for other disbursements		
Total for all disbursements		

PLANTING MATERIALS		From	
1	Stocks		
2	Planting materials		
Total for planting materials			
EQUIPMENT			
3	Equipment		
4	Planting equipment		
Total for equipment			
BUILDING			
5	Buildings		
6	Planting buildings		
Total for buildings			
LAND			
7	Land		
8	Planting land		
Total for land			
OTHER			
9	Other		
10	Planting other		
Total for other			
Total for all items			

### Classification of Disbursements

GENERAL DISBURSEMENTS		
21	General disbursements	
Total for general disbursements		
PLANTING DISBURSEMENTS		
22	Planting disbursements	
23	Planting materials	
24	Planting equipment	
25	Planting buildings	
26	Planting land	
27	Planting other	
Total for planting disbursements		
EQUIPMENT DISBURSEMENTS		
28	Equipment disbursements	
29	Planting equipment disbursements	
Total for equipment disbursements		
BUILDING DISBURSEMENTS		
30	Building disbursements	
31	Planting building disbursements	
Total for building disbursements		
LAND DISBURSEMENTS		
32	Land disbursements	
33	Planting land disbursements	
Total for land disbursements		
OTHER DISBURSEMENTS		
34	Other disbursements	
35	Planting other disbursements	
Total for other disbursements		
Total for all disbursements		

## ELEVENTH BIENNIAL REPORT

D4	Cleaning supplies.....		4.15
D5	Wearing apparel.....		31.31
D6	Fish food.....		96.79
D9	Miscellaneous supplies:		9.40
	2. Water and ice.....	\$	4.60
	9. Miscellaneous supplies.....		4.80
	Total for supplies.....		\$ 153.25
<b>E. EQUIPMENT</b>			
E21	Production and construction equipment:		\$ 9.00
	Item		
	1 Saw.....	\$	1.50
	1 Shovel.....		1.75
	1 Rake.....		1.25
	1 Shovel.....		1.75
	1 Axe.....		2.75
E2	Production equipment:		9.00
	Item		
	Cook stove.....	\$	9.00
E45	Household equipment:		2.40
	Item		
	2 Spoons.....	\$	.15
	1 Kettle.....		1.00
	1 Dish pan.....		1.25
E49	Equipment for convenience and comfort:		16.00
	Item		
	1 12'x14' 10 oz. duck tent.....		16.00
E971	Fish screens:		1.90
	Item		
	Galv. wire cloth and screen.....	\$	1.90
E974	Hatchery equipment:		199.99
	Item		
	1 Graduate picker and tube.....	\$	3.90
	Spawning pans.....		2.00
	Molasses gates.....		11.30
	2 1¼" Molasses gates.....		2.80
	1 Meat grinder.....		7.00
	1 5/64" plate for grinder.....		2.00
	1 5/32" Plate for grinder.....		1.20
	1 Colander.....		.75
	1 32 oz. graduate.....		1.00
	1 No. 22 Enterprise chopper knife.....		.79
	1 Perforated pan.....		1.50
	1 Dip net.....		1.00
	2 Pans.....		1.10
	1 Knife.....		.85
	1 Meat chopper.....		10.60
	Egg trays.....		150.70
	1 Galv. pan.....		1.50
	Total for equipment.....		\$ 199.99

## FISH AND GAME WARDEN

<b>F. STRUCTURES</b>		\$	627.30
F1	Building field hatcheries.....		166.65
F4	Building fish pond.....		29.35
F7	Building troughs for hatchery.....		110.68
F9	Material for fish pond at McCall.....		
	Total for structures.....	\$	933.98
<b>J. FIXED CHARGES</b>		\$	40.00
J1	Rent on structures.....		40.00
	Total for fixed charges.....	\$	40.00
<b>RECAPITULATION</b>			
A	Personal services.....	\$	3,282.78
B	Services other than personal.....		1,047.89
C	Materials.....		638.77
D	Supplies.....		153.25
E	Equipment.....		238.29
F	Structures.....		933.98
J	Fixed charges.....		40.00
	Total expenditures for the year 1925.....	\$	6,334.96

## Classification of Disbursements

## A. PERSONAL SERVICES

<b>Fish Distribution.</b>			
A1	Salaries of regular officers and employes.....	\$	1,889.00
A3	Services of extra help.....		52.60
	Total for personal services.....	\$	1,941.60

## B. SERVICES OTHER THAN PERSONAL

B1	Transportation of persons.....	\$	269.35
B2	Transportation of things.....		241.95
B3	Board and lodging.....		601.05
B5	Communication services.....		41.39
B9	Special and miscellaneous services other than personal:		
	1. Repairing equipment.....	\$	6.25
	9. Miscellaneous (men and teams).....		41.00
	Total for services other than personal.....	\$	1,200.99

## C. MATERIAL

C2	Metal and metal products.....	\$	1.00
	Total for materials.....	\$	1.00

## D. SUPPLIES

D12	Scientific supplies.....	\$	1.00
D22	Liquid fuel (gasoline).....		
D3	Mechanics', engineers', and electricians' supplies:	\$	.50
	1. Oil.....		18.00
	5. Electricians' supplies.....	\$	4.50
	9. Mechanics' supplies.....		7.15
D5	Wearing apparel.....		1.35

## ELEVENTH BIENNIAL REPORT

D92	Water and ice		156.30
	Total for supplies		\$ 191.60
<b>E. EQUIPMENT</b>			
E973	Fish seines:		
	Item		\$ 2.50
	1 Net	\$ 2.50	
	Total for equipment		\$ 2.50
<b>RECAPITULATION</b>			
A	Personal services		\$ 1,941.60
B	Services other than personal		1,200.99
C	Materials		1.00
D	Supplies		191.60
E	Equipment		2.50
	Total expenditures for the year 1925		\$ 3,337.69

## Classification of Disbursements

## A. PERSONAL SERVICES

## Spawn-taking.

A1	Salaries of regular officers and employes		\$ 1,608.12
A3	Services of extra help		248.57
A9	Miscellaneous services		.75
	Total for personal services		\$ 1,857.44

## B. SERVICES OTHER THAN PERSONAL

B1	Transportation of persons		\$ 194.70
B2	Transportation of things		28.92
B3	Board and lodging		654.58
B47	Storage of auto		.50
B5	Communication services		3.92
B9	Special and miscellaneous services other than personal:		
	1. Repairing equipment	\$ .48	31.48
	2. Miscellaneous	\$ 31.00	
	Total for services other than personal		\$ 914.10

## C. MATERIALS

C2	Metals and metal products		\$ 11.54
C3	Non-metallic mineral products		3.00
C4	Lumber		33.32
C5	Fiber products		4.91
C6	Paints and painters' materials		1.00
	Total for material		\$ 54.07

## D. SUPPLIES

D13	Scientific supplies		\$ .50
D21	Fuel:		3.57
	1. Solid fuel	\$ 1.00	
	2. Gasoline	\$ 2.57	
D4	Cleaning supplies		2.85

## FISH AND GAME WARDEN

D5	Wearing apparel		.75
D9	Miscellaneous supplies:		2.00
	2. Water and ice		.85
	3. Packing receptacles		
	9. Miscellaneous		
	Total for supplies		\$ 94.29

## E. EQUIPMENT

E11	Heating equipment:		\$ 1.75
	Item		
	1 Lantern		1.55
E21	Production and construction equipment:		
	Item		
	2 Files	\$ 80	
	1 Hammer handle	.25	
	2 8" files	.50	
E45	Household equipment:		2.30
	Item		
	2 Dish pans	\$ 1.20	
	1 Fry pan	.65	
	1 Pan	.45	
E53	Cleaning equipment:		.85
	Item		
	1 Wash tub	\$ .85	
E9	Miscellaneous equipment:		69.71
	Item		
	Cedar Creek fish trap	\$ 69.71	
	Total for equipment		\$ 76.16

## RECAPITULATION

A	Personal services		\$ 1,857.44
B	Services other than personal		914.10
C	Materials		54.07
D	Supplies		94.29
E	Equipment		76.16
	Total expenditures for the year 1925		\$ 2,996.06

## RECAPITULATION

A	Personal services		\$111,023.85
B	Services other than personal		43,200.48
C	Materials		2,792.31
D	Supplies		10,986.41
E	Equipment		4,720.56
F	Structures		4,710.24
G	Land, interests in land, and rights		25.00
H	Refund		699.80
J	Fixed charges		986.13
	Total of all expenditures for the year 1925		\$179,144.84

### Classification of Disbursements

#### A. PERSONAL SERVICES

##### Fish and Game General Year 1926

A1	Salaries of regular officers and employees	\$ 77,313.89
A2	Special services	100.00
Total for personal services		\$ 77,413.89

#### B. SERVICES OTHER THAN PERSONAL

B1	Transportation of persons by rail, auto or other means	\$ 26,982.22
B2	Transportation of things by freight, express or other means	295.80
B3	Board and lodging	1,598.58
B4	Repairing equipment and use of horses	515.05
B5	Communication services	1,282.92
B6	Printing	1,307.60
B7	Publication of notices	484.30
B9	Court and office fees	7.30
B10	Protective, preventative and sanitary services	2.50
Total for services other than personal		\$ 32,776.27

#### D. SUPPLIES

D1	Office supplies	\$ 633.77
D2	Fuel	.05
D3	Mechanics' supplies	11.32
D4	Cleaning supplies	3.15
D6	Forage and other supplies for animals, fish and birds	539.16
D7	Packing receptacles	2.15
D8	Explosives	5.65
D9	Agriculturists' and florists' supplies	34.03
D10	Laboratory, scientific and refrigeration supplies	134.02
Total for supplies		\$ 1,363.30

#### E. EQUIPMENT

E1	Lighting equipment	\$ 5.52
E2	Production equipment	4.00
E3	Transporting and conveying equipment	767.50
E4	Household equipment	19.75
E6	Educational equipment	179.82
E7	Inspecting equipment	11.00
E9	Miscellaneous	35.31
Total for equipment		\$ 1,022.90

#### F. STRUCTURES

F1	Building materials and labor	\$ 274.42
Total for structures		\$ 274.42

#### H. REFUNDS

H4	Refunds	\$ 922.50
Total for refunds		\$ 922.50

#### J. FIXED CHARGES

J1	Rent on structures	\$ 30.00
----	--------------------	----------

### FISH AND GAME WARDEN

J5	Insurance	827.31
J6	Membership fee	25.00
Total for fixed charges		\$ 882.31

#### RECAPITULATION

A	Personal services	\$ 77,413.89
B	Services other than personal	32,776.27
D	Supplies	1,363.30
E	Equipment	1,022.90
F	Structures	274.42
H	Refunds	922.50
J	Fixed charges	882.31
Total expenditures for the year 1926		\$ 114,655.59

### Classification of Disbursements

#### A. PERSONAL SERVICES

##### Predatory Animal Funds Year 1926

A1	Salaries of regular officers and employees	\$ 9,265.61
Total for personal services		\$ 9,265.61

#### B. SERVICES OTHER THAN PERSONAL

B1	Transportation of persons by rail, auto or other means	\$ 497.31
B2	Transportation of things by freight, express or other means	37.35
B3	Board and lodging	153.10
B5	Communication services	8.70
B10	Protective, preventive and sanitary services	324.77
Total for services other than personal		\$ 1,021.23

#### D. SUPPLIES

D6	Forage and other supplies for animals, fish and birds	\$ 3.25
D9	Agriculturists and florists supplies	5.25
D10	Laboratory, scientific and refrigeration supplies	27.00
Total for supplies		\$ 35.50

#### RECAPITULATION

A	Personal services	\$ 9,265.61
B	Services other than personal	1,021.23
D	Supplies	35.50
Total expenditures for the year 1926		\$ 10,322.34

### Classification of Disbursements

#### A. PERSONAL SERVICES

##### Bliss Game Farm Year 1926

A1	Salaries of regular officers and employees	\$ 1,898.97
Total for personal services		\$ 1,898.97

## ELEVENTH BIENNIAL REPORT

B. SERVICES OTHER THAN PERSONAL	
B1	Transportation of persons by rail, auto or other means..\$ 67.56
B2	Transportation of things by freight, express or other means .....
B5	Communication services .....
	Total for services other than personal .....
D. SUPPLIES	
D3	Mechanics' supplies .....
D6	Forage and other supplies for animals, fish and birds.....
D10	Laboratory, scientific and refrigeration supplies .....
	Total for supplies .....
E. EQUIPMENT	
E1	Lighting equipment .....
E8	Game birds .....
E9	Game farm equipment .....
	Total for equipment .....
F. STRUCTURES	
F1	Building material .....
	Total for structures .....
G. LAND	
G1	Lease on Game Farm .....
	Total for land and rights .....
RECAPITULATION	
A	Personal services .....
B	Services other than personal .....
D	Supplies .....
E	Equipment .....
F	Structures .....
G	Lands and rights .....
	Total expenditures for the year 1926 .....

## Classification of Disbursements

A. PERSONAL SERVICES	
Lapwal Game Farm Year 1926	
A1	Salaries of regular officers and employes .....
	Total for personal services .....
B. SERVICES OTHER THAN PERSONAL	
B1	Transportation of persons by rail, auto or other means..\$ 434.50
B2	Transportation of things by freight, express or other means .....
B3	Board and lodging .....
B4	Work of man and team .....
B5	Communication services .....
B6	Printing .....
	Total for services other than personal .....

## FISH AND GAME WARDEN

D. SUPPLIES	
D2	Fuel .....
D3	Mechanics' supplies .....
D4	Cleaning supplies .....
D6	Forage and other supplies for animals, fish and birds.....
D8	Explosives .....
D9	Agriculturists and florists supplies .....
D10	Laboratory, scientific and refrigeration supplies.....
	Total for supplies .....
E. EQUIPMENT	
E2	Production equipment .....
E4	Office, household and camping equipment .....
E8	Game birds .....
E9	Game farm equipment .....
E10	Construction, repairing and wrecking equipment .....
	Total for equipment .....
F. STRUCTURES	
F1	Building material .....
F5	Ornamental structures.....
	Total for structures .....
RECAPITULATION	
A	Personal services .....
B	Services other than personal .....
D	Supplies .....
E	Equipment .....
F	Structures .....
	Total expenditures for the year 1926.....

## Classification of Disbursements

A. PERSONAL SERVICES	
Ashton Hatchery Year 1926	
A1	Salaries of regular officers and employes .....
	Total for personal services .....
B. SERVICES OTHER THAN PERSONAL	
B1	Transportation of persons by rail, auto or other means..\$ 245.79
B2	Transportation of things by freight, express or other means .....
B3	Board and lodging .....
B4	Repairing equipment .....
B5	Communication services .....
B6	Printing .....
B8	Furnishing of heat, light and electricity .....
	Total for services other than personal .....
D. SUPPLIES	
D2	Fuel .....
D3	Mechanics' supplies .....
	Total .....

D4	Cleaning supplies .....	5.70
D5	Communication services .....	65.93
D6	Forage and other supplies for animals, fish and birds.....	2,711.07
D9	Agriculturists' supplies .....	508.15
D10	Scientific and refrigeration supplies .....	74.75
	Total for supplies .....	\$ 3,587.15
<b>E. EQUIPMENT</b>		
E2	Production equipment .....	.85
E3	Transporting and conveying equipment .....	765.00
E9	Hatchery equipment .....	247.19
	Total for equipment .....	\$ 1,012.04
<b>F. STRUCTURES</b>		
F1	Building material .....	286.75
	Total for structures .....	\$ 286.75
<b>J. FIXED CHARGES</b>		
J4	Interest on warrant .....	8.53
	Total for fixed charges .....	\$ 8.53
<b>RECAPITULATION</b>		
A	Personal services .....	3,120.78
B	Services other than personal .....	1,041.75
D	Supplies .....	3,587.15
E	Equipment .....	1,012.04
F	Structures .....	286.75
J	Fixed charges .....	8.53
	Total expenditures for the year 1926 .....	\$ 9,057.00

### Classification of Disbursements

#### A. PERSONAL SERVICES

##### Hay Spur Hatchery Year 1926

A1	Salaries of regular officers and employees .....	\$ 2,668.00
	Total for personal services .....	\$ 2,668.00
<b>B. SERVICES OTHER THAN PERSONAL</b>		
B1	Transportation of persons by rail, auto or other means .....	160.98
B2	Transportation of things by freight, express or other means .....	574.18
B3	Board and lodging .....	17.85
B4	Repairing equipment and use of team .....	31.00
B5	Communication services .....	78.05
	Total for services other than personal .....	\$ 862.06
<b>D. SUPPLIES</b>		
D2	Fuel .....	190.18
D3	Mechanics' supplies .....	.85
D4	Cleaning supplies .....	3.25

FISH AND GAME WARDEN		113
D6	Forage and other supplies for animals, fish and birds.....	1,670.48
D10	Laboratory, scientific and refrigeration supplies .....	86.00
	Total for supplies .....	\$ 1,950.76
<b>E. EQUIPMENT</b>		
E9	Hatchery equipment .....	176.82
	Total for equipment .....	\$ 176.82
<b>F. STRUCTURES</b>		
F1	Building material .....	11.70
	Total for structures .....	\$ 11.70
<b>J. FIXED CHARGES</b>		
J1	Rent on structures .....	40.00
J5	Insurance .....	76.50
	Total for fixed charges .....	\$ 116.50

<b>RECAPITULATION</b>		
A	Personal services .....	2,668.00
B	Services other than personal .....	862.06
D	Supplies .....	1,950.76
E	Equipment .....	176.82
F	Structures .....	11.70
J	Fixed charges .....	116.50
	Total expenditures for the year 1926 .....	\$ 5,785.84

### Classification of Disbursements

#### A. PERSONAL SERVICES

##### Sandpoint Hatchery Year 1926

A1	Salaries of regular officers and employees .....	\$ 2,986.00
	Total for personal services .....	\$ 2,986.00
<b>B. SERVICES OTHER THAN PERSONAL</b>		
B1	Transportation of persons by rail, auto or other means .....	426.34
B2	Transportation of things by freight, express or other means .....	87.87
B3	Board and lodging .....	13.00
B4	Repairing equipment .....	24.15
B5	Communication services .....	51.24
	Total for services other than personal .....	\$ 602.60
<b>D. SUPPLIES</b>		
D2	Fuel .....	21.15
D3	Board and lodging .....	10.65
D4	Cleaning supplies .....	5.20
D5	Wearing apparel .....	1.50
D6	Forage and other supplies for animals, fish and birds .....	687.16
D7	Packing receptacles .....	5.00
D9	Agriculturists' supplies .....	150.00
D10	Laboratory, scientific and refrigeration supplies .....	5.15
	Total for supplies .....	\$ 885.81



<b>E. EQUIPMENT</b>		
E9 Hatchery equipment	\$	56.70
Total for equipment	\$	56.70
<b>F. STRUCTURES</b>		
F1 Building materials	\$	107.22
Total for structures	\$	107.22
<b>RECAPITULATION</b>		
A Personal services	\$	2,986.00
B Services other than personal		602.60
D Supplies		885.81
E Equipment		56.70
F Structures		107.22
Total expenditures for the year 1926	\$	4,638.33

### Classification of Disbursements

#### A. PERSONAL SERVICES

##### Coeur d'Alene Hatchery Year 1926

A1 Salaries of regular officers and employes	\$	2,820.90
Total for personal services	\$	2,820.90
<b>B. SERVICES OTHER THAN PERSONAL</b>		
B1 Transportation of persons by rail, auto or other means	\$	19.00
B2 Transportation of things by freight, express or other means		49.43
B3 Board and lodging		2.50
B4 Repairing equipment		6.75
B5 Communication services		69.44
B8 Furnishing of heat, light and electricity		419.48
Total for services other than personal	\$	566.60
<b>D. SUPPLIES</b>		
D1 Office supplies	\$	5.82
D2 Fuel		118.70
D3 Mechanics' supplies		22.15
D4 Cleaning supplies		2.25
D5 Wearing apparel		43.90
D6 Forage and other supplies for animals, fish and birds		384.83
D9 Agriculturists' supplies		5.30
D10 Laboratory and refrigeration supplies		14.45
Total for supplies	\$	597.45
<b>E. EQUIPMENT</b>		
E1 Lighting equipment	\$	2.05
E4 Office, household and camping equipment		22.50
E9 Hatchery equipment		82.65
E10 Construction equipment		1.10
Total for equipment	\$	108.30

### FISH AND GAME WARDEN

<b>F. STRUCTURES</b>		\$	1,027.17
F1 Building material			175.00
F2 Reservoirs, wells and cisterns			1,202.17
Total for structures	\$		2,820.90
<b>RECAPITULATION</b>			
A Personal services	\$		566.60
F Services other than personal			597.45
D Supplies			108.30
E Equipment			1,202.17
F Structures			5,295.42
Total expenditures for the year 1926	\$		

### Classification of Disbursements

#### A. PERSONAL SERVICES

<b>Grangeville Hatchery</b>		
A1 Salaries of regular officers and employes	\$	1,395.10
Total for personal services	\$	1,395.10

#### B. SERVICES OTHER THAN PERSONAL

B1 Transportation of persons by rail, auto or other means	\$	279.01
B2 Transportation of things by freight, express or other means		42.73
B3 Board and lodging		3.50
B4 Repairing equipment		.15
B5 Communication services		13.70
Total for services other than personal	\$	339.09

#### D. SUPPLIES

D2 Fuel	\$	54.40
D3 Mechanics' supplies		6.05
D4 Cleaning supplies		3.20
D5 Wearing apparel		10.25
D6 Forage and other supplies for animals, fish and birds		125.16
D9 Agriculturists' supplies		1.50
D10 Scientific and refrigeration supplies		2.40
Total for supplies	\$	202.96

#### E. EQUIPMENT

E1 Lighting equipment	\$	.65
E2 Production equipment		6.25
E4 Household equipment		.50
E9 Hatchery equipment		16.50
E10 Construction equipment		2.50
Total for equipment	\$	26.40

#### F. STRUCTURES

F1 Building material	\$	48.45
Total for structures	\$	48.45

#### RECAPITULATION

A Personal services	\$	1,395.10
---------------------	----	----------

## ELEVENTH BIENNIAL REPORT

B	Services other than personal .....	339.09
D	Supplies .....	202.96
E	Equipment .....	26.40
F	Structures .....	48.46
Total expenditures for the year 1926 .....		\$ 2,012.00

## Classification of Disbursements

## A. PERSONAL SERVICES

Evergreen Hatchery  
Year 1926

A1	Salaries of regular officers and employees .....	\$ 768.78
Total for personal services .....		\$ 768.78
<b>B. SERVICES OTHER THAN PERSONAL</b>		
B1	Transportation of persons by rail, auto or other means .....	44.04
B2	Transportation of things by freight, express or other means .....	30.18
B3	Board and lodging .....	34.32
B5	Communication services .....	26.90
Total for services other than personal .....		\$ 135.44
<b>D. SUPPLIES</b>		
D2	Fuel .....	1.45
D3	Mechanics supplies .....	16.36
D4	Cleaning supplies .....	3.05
D5	Wearing apparel .....	2.15
D6	Forage and other supplies for animals, fish and birds .....	104.63
D8	Explosives .....	2.05
D10	Scientific and refrigeration supplies .....	31.30
Total for supplies .....		\$ 160.99
<b>E. EQUIPMENT</b>		
E1	Lighting equipment .....	3.25
E2	Production equipment .....	8.50
E4	Household equipment .....	30.80
E9	Hatchery equipment .....	118.91
E10	Construction equipment .....	5.65
Total for equipment .....		\$ 167.11
<b>F. STRUCTURES</b>		
F1	Building material .....	\$ 26.04
Total for structures .....		\$ 26.04
<b>J. FIXED CHARGES</b>		
J5	Insurance .....	\$ 70.50
Total for fixed charges .....		\$ 70.50
<b>RECAPITULATION</b>		
A	Personal service .....	\$ 768.78
B	Services other than personal .....	135.44
D	Supplies .....	160.99

## FISH AND GAME WARDEN

E	Equipment .....	167.11
F	Structures .....	26.04
J	Fixed charges .....	70.50
Total expenditures for the year 1926 .....		\$ 1,328.86

## Classification of Disbursements

## A. PERSONAL SERVICES

Cascade Hatchery  
Year 1926

A1	Salaries of regular officers and employees .....	\$ 997.81
Total for personal services .....		\$ 997.81
<b>B. SERVICES OTHER THAN PERSONAL</b>		
B1	Transportation of persons by rail, auto or other means .....	15.22
B2	Transportation of thing by freight, express or other means .....	41.89
B3	Board and lodging .....	.50
B4	Repairing equipment .....	1.50
B5	Communication services .....	.70
Total for services other than personal .....		\$ 59.81
<b>D. SUPPLIES</b>		
D2	Fuel .....	\$ 7.75
D3	Mechanics' supplies .....	7.50
D4	Cleaning supplies .....	1.25
D5	Wearing apparel .....	.60
D6	Forage and other supplies for animals, fish and birds .....	175.18
D8	Explosives .....	.30
D10	Scientific and refrigeration supplies .....	10.05
Total for supplies .....		\$ 202.63
<b>E. EQUIPMENT</b>		
E1	Lighting equipment .....	\$ 1.25
E4	Household equipment .....	3.00
E9	Hatchery equipment .....	99.20
E10	Construction equipment .....	.45
Total for equipment .....		\$ 103.90
<b>F. STRUCTURES</b>		
F1	Building material .....	\$ 77.70
Total for structures .....		\$ 77.70
<b>RECAPITULATION</b>		
A	Personal services .....	\$ 997.81
B	Services other than personal .....	59.81
D	Supplies .....	202.63
E	Equipment .....	103.90
F	Structures .....	77.70
Total expenditures for the year 1926 .....		\$ 1,467.85

## Classification of Disbursements

### A. PERSONAL SERVICES

Henry's Lake Hatchery  
Year 1926

A1	Salaries of regular officers and employes.....	\$	502.00
	Total for personal services.....	\$	502.00
	<b>B. SERVICES OTHER THAN PERSONAL</b>		
B1	Transportation of persons by rail, auto or other means..\$		12.15
B2	Transportation of things by freight, express or other means.....		3.50
B3	Board and lodging.....		283.20
B4	Repairing equipment and use of man and team.....		38.00
	Total for services other than personal.....	\$	327.15
	<b>D. SUPPLIES</b>		
D3	Mechanics' supplies.....		2.85
D7	Packing receptacles.....		5.50
	Total for supplies.....	\$	8.25
	<b>E. EQUIPMENT</b>		
E10	Construction equipment.....		2.65
	Total for equipment.....	\$	2.65
	<b>F. STRUCTURES</b>		
F1	Building material.....		45.00
	Total for structures.....	\$	45.00
	<b>RECAPITULATION</b>		
A	Personal services.....	\$	502.00
B	Services other than personal.....		327.15
D	Supplies.....		8.25
E	Equipment.....		2.65
F	Structures.....		45.00
	Total expenditures for the year 1926.....	\$	896.15

## Classification of Disbursements

### A. PERSONAL SERVICES

Mackay Hatchery  
Year 1926

A1	Salaries of regular officers and employes.....	\$	972.95
	Total for personal services.....	\$	972.95
	<b>B. SERVICES OTHER THAN PERSONAL</b>		
B1	Transportation of persons by rail, auto or other means..\$		120.00
B2	Transportation of things by freight, express or other means.....		5.74
B5	Communication services.....		.55
	Total for services other than personal.....	\$	126.29

### D. SUPPLIES

D2	Fuel.....	\$	26.80
D3	Mechanics' supplies.....		.85
D4	Forage and other supplies for animals, fish and birds....		30.25
D10	Scientific and refrigeration supplies.....		8.45
	Total for supplies.....	\$	66.35

### F. STRUCTURES

F1	Building material.....	\$	44.95
	Total for structures.....	\$	44.95

### RECAPITULATION

A	Personal services.....	\$	972.95
B	Services other than personal.....		126.29
D	Supplies.....		66.35
F	Structures.....		44.95
	Total expenditures for the year 1926.....	\$	1,210.54

## Classification of Disbursements

### A. PERSONAL SERVICES

Spawn-taking  
Year 1926

A1	Salaries of regular officers and employes.....	\$	1,762.03
	Total for personal services.....	\$	1,762.03
	<b>B. SERVICES OTHER THAN PERSONAL</b>		
B1	Transportation of persons by rail, auto or other means..\$		143.49
B2	Transportation of things by freight, express or other means.....		
B3	Board and lodging.....		104.33
B4	Repairs to structures and equipment.....		187.68
B5	Communication services.....		31.00
	Total for services other than personal.....	\$	159.91
	<b>D. SUPPLIES</b>		
D2	Fuel.....		482.41
D3	Mechanics' supplies.....		
D4	Cleaning supplies.....		.15
D6	Forage and other supplies for animals, fish and birds....		24.32
D7	Packing receptacles.....		1.45
D10	Scientific and refrigeration supplies.....		1.00
	Total for supplies.....		13.25
	<b>E. EQUIPMENT</b>		
E1	Lighting equipment.....		7.15
E3	Household equipment.....	\$	47.32
E5	Hatchery equipment.....		
E10	Construction equipment.....		7.55
	Total for equipment.....		10.15
	Total expenditures for the year 1926.....	\$	2,763.99

## ELEVENTH BIENNIAL REPORT

		<b>F. STRUCTURES</b>	
F1	Building material		
	Total for structures	\$	264.82
		<b>RECAPITULATION</b>	
A	Personal services		264.82
B	Services other than personal		1,762.02
D	Supplies		482.41
E	Equipment		47.32
F	Structures		295.24
	Total expenditures for the year 1926	\$	2,851.82

## Classification of Disbursements

## A. PERSONAL SERVICES

Fish Distribution  
Year 1926

A1	Salaries of regular officers and employes		1,617.16
	Total for personal services	\$	1,617.16

## B. SERVICES OTHER THAN PERSONAL

B1	Transportation of persons by rail, auto or other means	\$	283.85
B2	Transportation of things by freight, express or other means		448.00
B3	Board and lodging		800.76
B5	Communication services		38.27
B6	Printing		.30
	Total for services other than personal	\$	1,571.18

## D. SUPPLIES

D3	Mechanics' supplies		5.80
D5	Wearing apparel		5.95
D10	Scientific and refrigeration supplies		103.44
	Total for supplies	\$	115.19

## E. EQUIPMENT

E2	Production equipment		.20
E4	Household equipment		18.04
E9	Hatchery equipment		6.70
	Total for equipment	\$	24.94

## RECAPITULATION

A	Personal services		1,617.16
B	Services other than personal		1,571.18
D	Supplies		115.19
E	Equipment		24.94
	Total expenditures for the year 1926	\$	3,328.47

## RECAPITULATION

A	Personal services		\$109,990.47
B	Services other than personal		40,808.87
D	Supplies		10,639.75
E	Equipment		3,420.24
F	Structures		4,300.35

## FISH AND GAME WARDEN

G	Land and rights		112.00
H	Refunds		922.50
J	Fixed charges		1,077.84
	Total of all expenditures for the year 1926		\$171,272.02

Segregation of Arrests for the Biennium  
1925-1926

## VIOLATIONS OF LAW PERTAINING TO FISH

	Paid fines	204
	Sentenced to jail	7
	Cases dismissed	20
	Sentences suspended	22
	Fines remitted by court	29
	Acquittals	6
	Defendants left state	5
	Total arrests	293

## VIOLATIONS OF LAW PERTAINING TO GAME BIRDS

	Paid fines	138
	Sentenced to jail	5
	Cases Dismissed	8
	Sentences Suspended	18
	Fines Remitted by court	14
	Acquittals	1
	Total arrests	184

## VIOLATIONS OF LAW PERTAINING TO GAME ANIMALS

	Paid fines	30
	Sentenced to jail	4
	Cases dismissed	3
	Sentences suspended	7
	Fines Remitted	8
	Acquittals	2
	Total arrests	54

## VIOLATIONS OF LAW PERTAINING TO FUR-BEARING ANIMALS

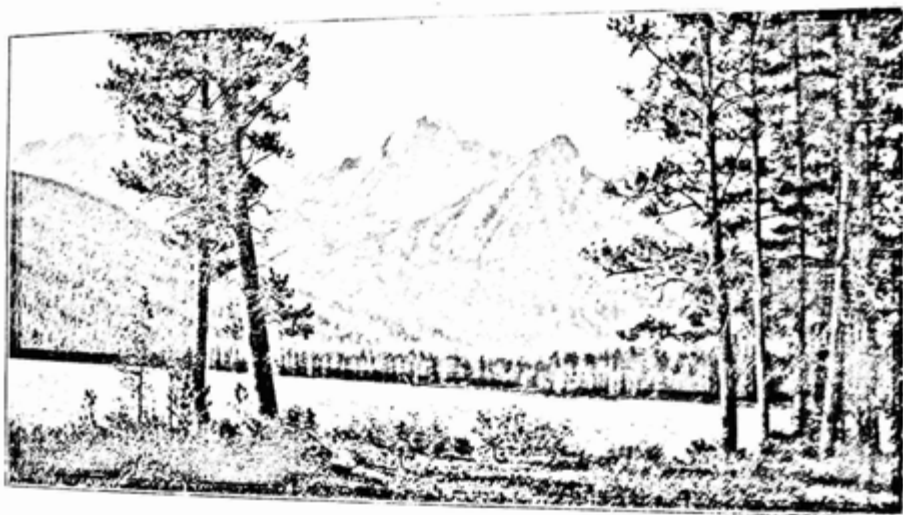
	Paid fines	52
	Sentenced to jail	3
	Cases Dismissed	9
	Sentences suspended	2
	Fines remitted by court	7
	Total arrests	73

## GAME LAW VIOLATIONS IN GENERAL

	Paid fines	98
	Sentenced to jail	2
	Cases dismissed	5
	Sentences suspended	4
	Fines remitted by court	19
	Acquittals	2
	Left state	1
	Total arrests	131

## RECAPITULATION

Total numbers of paid fines .....	522
Total number sentenced to jail .....	21
Total number cases dismissed .....	45
Total number sentences suspended.....	53
Total number of fines remitted .....	77
Total number of acquittals .....	11
Total number left state .....	6
Total arrests for the biennium .....	735
Fines collected amounting to.....	\$ 15,999.55



STANLEY LAKE IN THE SAWTOOTH DISTRICT