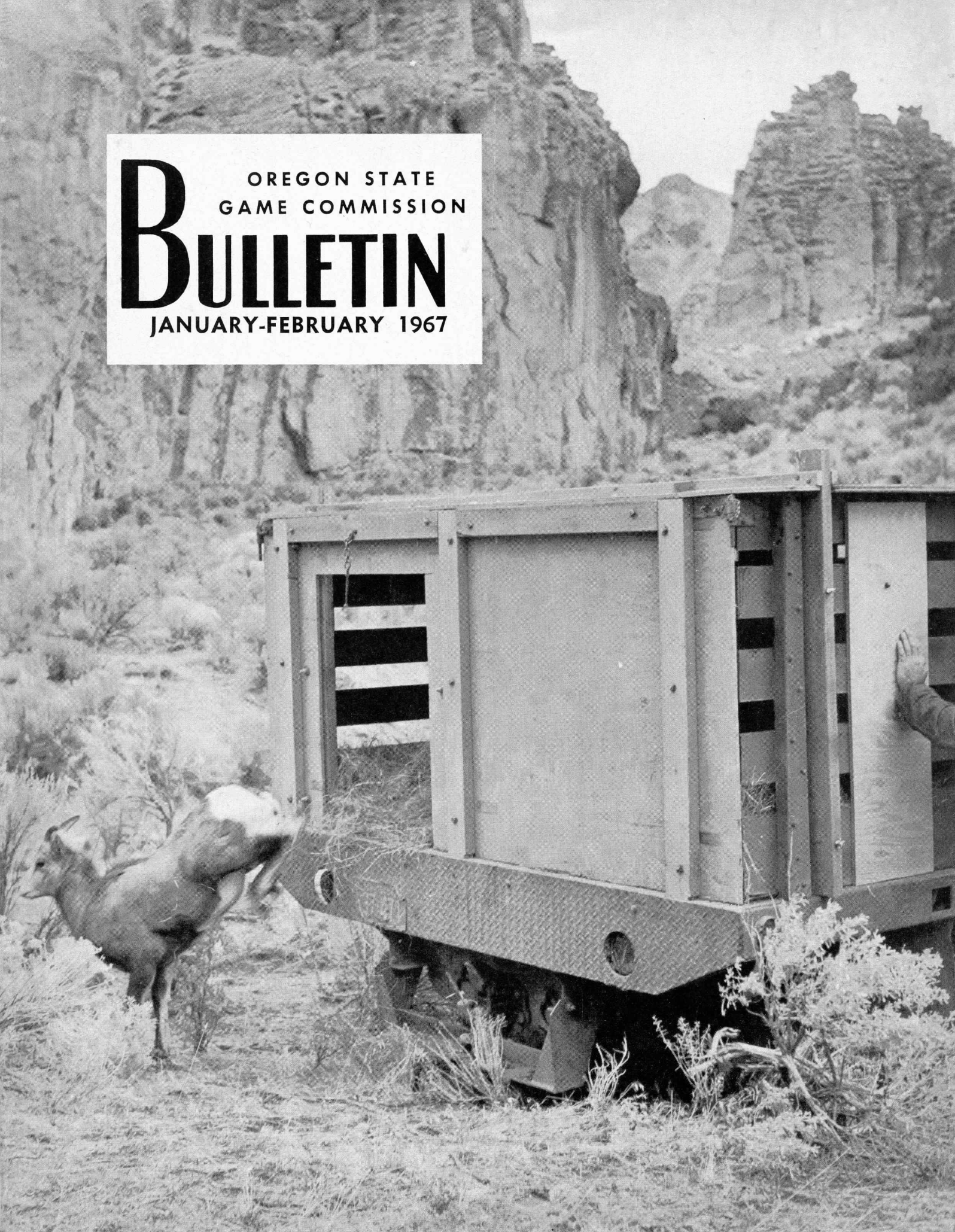

OREGON STATE GAME COMMISSION BULLETIN

JANUARY-FEBRUARY 1967

OREGON STATE GAME COMMISSION
BULLETIN

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The Cover

Mountain sheep being turned loose in the Leslie Gulch area near Owyhee Reservoir. Sheep were transplanted from the Hart Mountain herd in November 1965. (Photo by Dave Luman)

BULLETIN HUNTER SAFETY TRAINING PROGRAM

Instructors Approved

Months of October and November	59
Total to Date	3,893

Students Trained

Months of October and November	2,723
Total to Date	104,013

Firearms Casualties Reported in 1966

Fatal	11
Nonfatal	52

SOME BIRD HUNTING AVAILABLE YET

Bird hunters still have a chance to get out and try their luck. The black brant season is open through February 15, with a bag limit of 3 birds a day or in possession.

The general waterfowl season closed January 5 but the Columbia Basin area season extends through January 15. Also open through January 15 are the quail and partridge seasons in eastern Oregon.

WHY? By Hawk Hyde*

There is a senseless war going on, not between nations but between Agriculture and the Public, a war neither can win but both must lose. The tragedy is that when elephants fight, it is the ant which is trampled; in this case, the ant is our vanishing wildlife heritage. Eighty percent of our wildlife is dependent not upon the Government, but upon private agriculture for its livelihood; the fate of many species, such as the greater sandhill crane, lies in the hollow of the farmer's hand. Yet no legislation could possibly force the farmer to shoulder the burden of wildlife; no legislation could force him to care. If, in the end, he comes to care, it will have to be because he wants to care.

If the Public is at fault for not understanding the problems of Agriculture, and, indeed, aggravates the fight, the farmers and ranchers themselves have really done little to state their case. Yet how immeasurably the welfare of each group is entwined in the other. Unthinking, the Public attacks the agriculturist on all fronts. Pick up any magazine, read how the villain farmer created the dust-bowl, how he is destroying wildlife with pesticides, how he is draining the marshes. School movies show him plowing up duck and pheasant nests, clearing the forests for crops, taking water from the rivers, fencing off his land from public access, costing the public money by growing too much grain.

Every such attack widens the rift, drives away the greatest potential ally wildlife ever had. Good farming is in most cases bad wildlife management. The farmer drains his marsh not only to farm more intensely, but because the marsh attracts hunters who leave his gates open and shoot his livestock. He plows up his hedges and fence rows, not only to halt the spread of noxious weeds, but also to cut down the number of pheasants and quail, which, in turn, attract less hunters to trample his crops. Even if there were no hunters, the feed required

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REPRINTED FROM THE OREGON CATTLEMAN (April 1966)

*On his Klamath County ranch Mr. Hyde has created several hundred acres of marshes especially for wildlife.

1967 ANGLING RULES NOW AVAILABLE

Copies of the official synopsis of 1967 angling regulations were distributed last month to license agencies and other outlets.

The general angling seasons are essentially the same as before. Trout season extends from April 22 through October 31 in all zones except streams in Zones 1, 3, and 4 and Cascade Lakes. For these the general season is from May 20 through October 31. Exceptions are listed in the synopsis by zones.

Because of excellent returns of hatchery fish to coastal rivers, winter steelhead fishermen will have more opportunities to try their luck. The season on Columbia River tributaries is extended a month from February 28 to March 31. On several coastal streams deadlines were moved upstream or removed, thus opening more water to angling. Deadline changes on the Rogue and tributaries open up about 40 miles of stream for steelhead fishermen and a longer season is provided.

The Deschutes River downstream from the Sherar Falls fish ladder deadline will be open to salmon and steelhead fishing the year around.

Boat fishing restrictions were removed from the Miami, Kilchis, and Smith Rivers.

RAYMOND K. WOOD

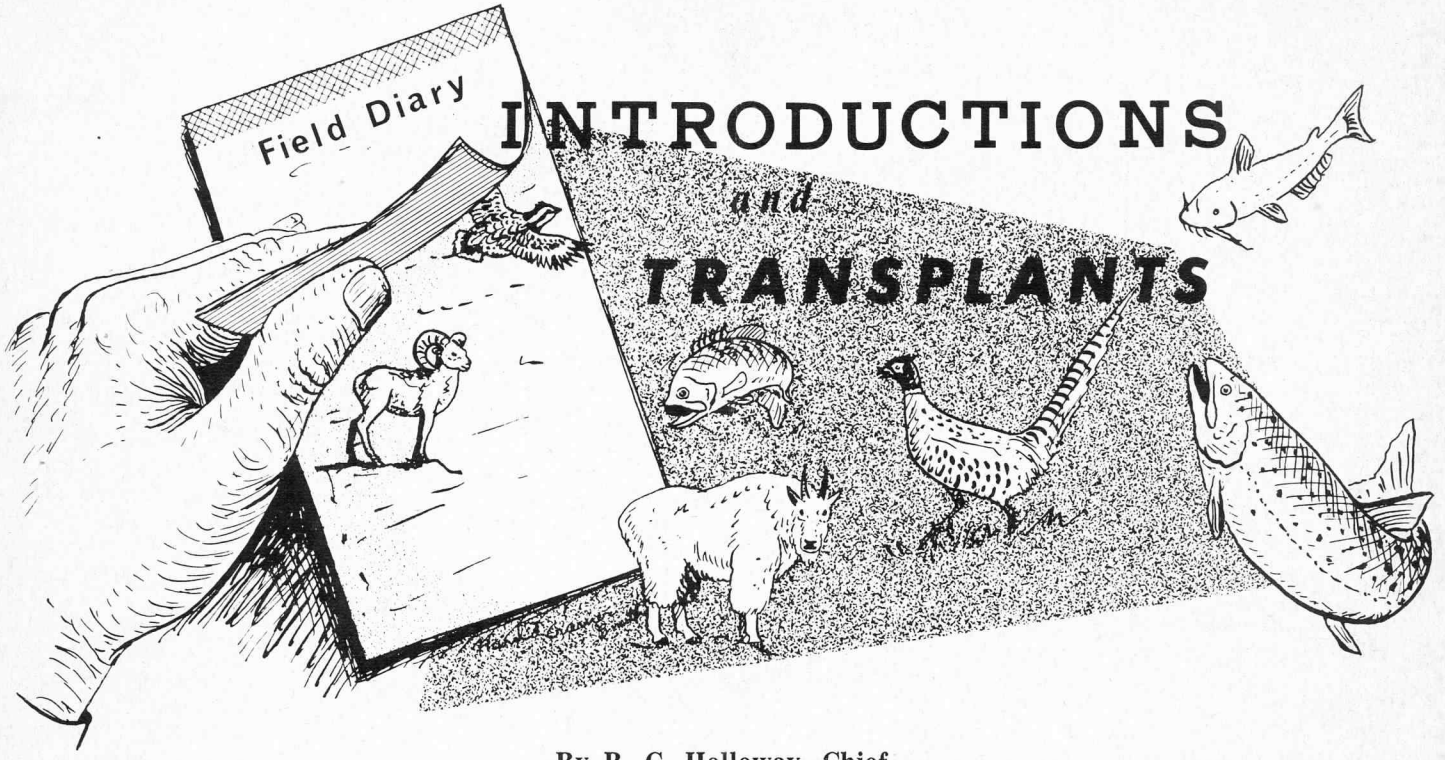
Assistant superintendent of the Gnat Creek hatchery in Clatsop County, Raymond K. Wood, died of a heart attack on December 17.

He had just reached his 20th anniversary of service with the Game Commission. He started work November 9, 1946, at the Rock Creek hatchery in Douglas County. There he served as assistant superintendent as well as at the old McKenzie hatchery before his assignment to Gnat Creek.

Ray was 52 years old. Survivors are his wife Jane, son Dan, daughters Joanne and Donna, and a brother Clair.

An efficient, hard working employee and with a pleasant and friendly disposition, Ray will be greatly missed by his many friends and fellow workers.

Fall egg-take at Game Commission fish hatcheries yielded around 19 million eggs from spring chinook, fall chinook, Atlantic salmon, brook trout and fall spawning rainbows. Spring egg-taking operations will start in the near future. Expected production for 1967 is in excess of 22 million game fish of all species.



By R. C. Holloway, Chief
Information & Education Division

IN LESS THAN TEN YEARS the Commission must meet the recreational needs of close to a million fishermen and hunters. And this must be accomplished in the face of a rapidly expanding population and attendant increasing competition for use of the land and water resources. Management of the highest order will be required to maximize fish and game production and recreational opportunities. Today's efforts will prove entirely inadequate to meet tomorrow's needs.

Should the wildlife resource remain in a static condition, it is obvious that the return to each sportsman will be less in 1975 than it is today. If we follow the pattern of history, a further reduction in bag limits and length of seasons would be in order so that the available supply can be spread among a larger number of sportsmen. Whether or not further reductions are made depends largely on the kind of management program the Commission is able to conduct in the years immediately ahead. Certainly, smaller bags and shorter seasons are not necessarily inevitable.

Science and experience have combined to provide many of the techniques and tools needed to increase fish and game production, not only under natural conditions but through artificial propagation as well. Management will become much more sophisticated than it is today. Implementation of existing knowledge plus that which will come through further research and experience must be done as rapidly as finances will permit.

Some of the techniques and tools of demonstrated management value have been discussed in previous Bulletin articles. In this issue we intend to discuss some of the contributions that have been made and some of the possibilities that may exist from the introduction and transplantation of wildlife species. There is nothing new about these kinds of activities; they have been going on for many years, but only in relatively recent times has science played a key role.

In the November 1963 issue of the Bulletin, an article titled "Let's Introduce Widgets" described many of the introductions that have been made—some successful, others unsuccessful. Biologists have always been concerned with the indiscriminate introduction of alien species. They have a right to be concerned when one considers the havoc that has been brought about by ill conceived and unjustified transplants. All too frequently earlier efforts of this kind were the product of politics or personal inclination rather than careful scientific planning and evaluation. That we lucked out on some of these, such as the introduction of the ring-necked pheasant from China in 1882, is contrasted with the damage that has resulted from the introduction of the European carp or the danger that exists from the presence of nutria and opossum. In the latter case it is suspected, although not proven, that this unique North American marsupial arrived here along with the Civilian Conservation Corps in the 1930s. Some of the boys from the South just couldn't bear to be separated from the wild friends they had known back home.

Among recent examples of successful introductions is the Merriam's turkey. But the 1961 transplant of wild turkeys into Oregon was not the first attempt by any means. Wild turkey releases were made by private individuals prior to the turn of the century and the Commission made several efforts between 1926 and 1933. Prior to the 1961 introduction, the

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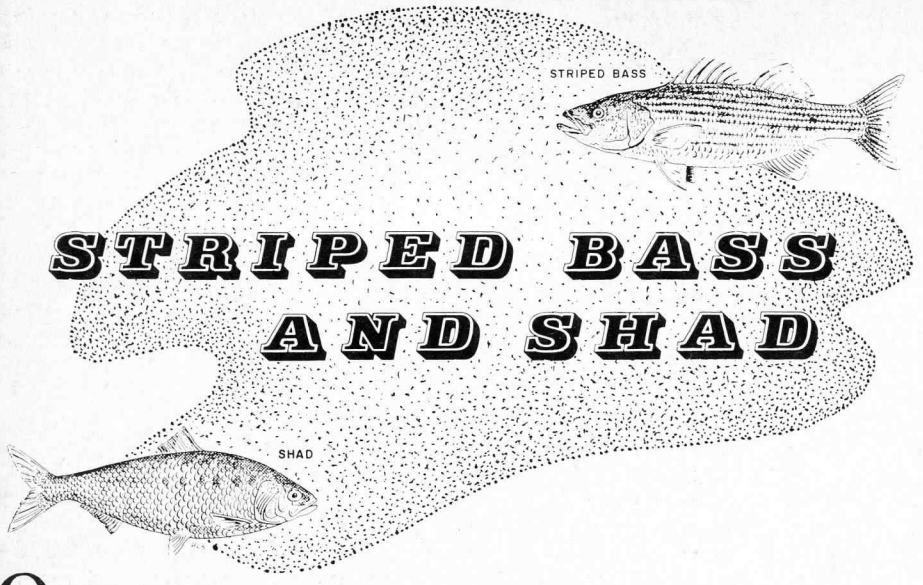
The Hungarian partridge was one of the early introductions in the state.



OF THE MANY GAME FISH introduced in the West Coast, the shad and striped bass are among the most successful.

It is amazing that these species were successfully transplanted at such an early date in view of the poor transportation facilities available at that time. Air jets were not to come on the scene until some 70 years after the first introduction was made.

Seth Green, a fish-culturist from New York, shipped the first American shad to the Sacramento River in California in 1871. About eight years later, Livingston Stone, another fish-culturist, transported and released 132 small striped bass in San Francisco Bay.

The success of these early plants of shad and striped bass was soon observed by both anglers and commercial fishermen. Obviously, both species found conditions favorable for spawning and growth, and they began to appear in drainages north of the Sacramento. The shad continued to migrate to the north and eventually entered streams as far north as the central coast of Alaska. The striped bass also migrated north in the Pacific Ocean but apparently found conditions unfavorable north of the central Oregon coast. Although a few striped bass have been recorded in the Columbia River, this species appears to be confined to certain streams south of the Siuslaw River.

Striped Bass

Spawning runs regularly enter the lower Umpqua River but they are rarely found in streams farther north; such as the Siuslaw, Yaquina, and Tillamook Bay tributaries.

The only areas in Oregon known to have runs of sufficient size to provide a fishery are Coos Bay and Winchester Bay.

It is unlikely that striped bass will become numerous in other stream systems. It would appear that they cannot reproduce in streams north of the Umpqua River because of some unknown factor, possibly water temperature. Striped bass spawn in bays where the tidal influence keeps the eggs in suspension until small fish emerge. The velocity of the current during the egg incubation period appears to be one of the key factors in successful reproduction. Striped bass have reached maturity and reproduced successfully in fresh-water reservoirs on the East Coast, but in each instance water velocity in the upper portion of the impoundment is such that eggs remain in suspension until they hatch.

Striped bass along the Oregon coast may remain in fresh or brackish water for their entire lives, but most are thought to migrate to the ocean and return to fresh water to spawn.

Generally, striped bass spawn at 2 to 7 years of age. Males usually spawn when 3 years of age and females at 4 years; however, both sexes may spawn at an earlier or later age. Striped bass live to a respectable age as compared to trout or salmon. Scale samples of large fish caught in Coos Bay show that some striped bass may be upwards of 20 years old. These fish occasionally exceed 50 pounds in weight. A 20-pound striper is not unusual for Oregon.

Spawning occurs from about mid-May through most of July. It is estimated that a 50-pound female may produce 5,000,000 eggs.

The sport fishery on Coos Bay area extends throughout the year. However, from early spring through July, anglers work the tidal portions of the Millicoma and South Fork Coos Rivers where the bass are congregated for spawning. In late summer and fall, anglers follow the bass down to the tide flats and bay areas where the fish apparently move to a source of food. Bank angling is popular in the South Fork of Coos and Millicoma Rivers, while in the bay area anglers fish either from boat or the bank. Since angling regulations were changed to permit night angling, most fishing is done after dark.

There are many baits and lures used to take striped bass. Cut bait and herring are very popular; however, many anglers prefer to cast surface or underwater plugs. A number of years ago, a record striped bass was taken in Coos Bay on a popping bug and fly rod.

Winchester Bay on the lower Umpqua also provides a fishery for striped bass. Although most bass are taken in the 25-

Contributing District Fishery Biologists

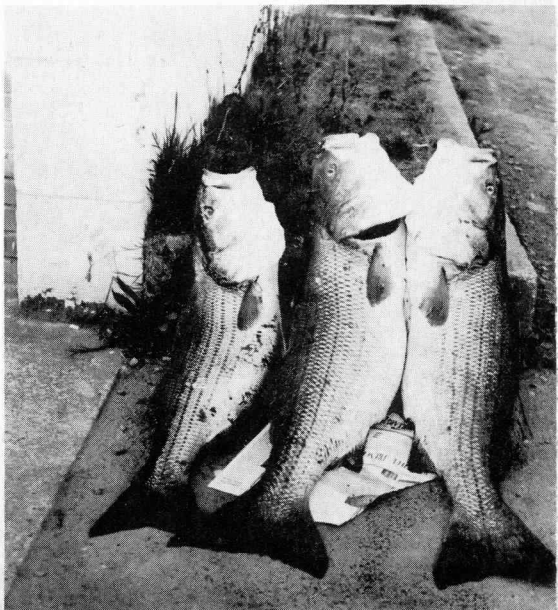
Edward H. Schwartz, Coos-Coquille District
Ronald L. McDivitt, Lower Umpqua District
William E. Hosford, Lower Columbia District

Editor

Fred E. Locke, Chief, Lake and Stream Management

Photos below cour

Striped bass



mile tidewater section below Scottsburg, striped bass are taken as far upstream as Sawyer Rapids. The lower tidewater portion of Smith River, an Umpqua River tributary entering the bay at Gardiner, is also a popular place to fish. Umpqua striped bass anglers use much the same lures and baits as those used in the Coos Bay area. Again, the upper bay produces the best catches in May and June. Striped bass are available in the lower bay throughout most of the summer months.

Striped bass are not easy to catch and success depends on the area fished and the season. In general, the catch rate for striped bass is similar to that recorded for steelhead.

One can obtain various opinions on the fighting abilities of striped bass. Most sportsmen agree that a steelhead or salmon of equal weight will provide a more spectacular battle. However, any 20- to 50-pound fish on the end of a line is a challenge to the angler. Stripers, at least in Oregon estuaries, are known for making one or two extremely long, powerful runs before they can be landed.

The flesh is considered by some to be excellent for the table, while others are not at all impressed and place it far down the list as a table fish.

A striped bass fishery undoubtedly is waiting for the adventurous angler along the Oregon coast. Many striped bass are taken by surf casting along the California coast, but to our knowledge this method of fishing is not used for stripers in Oregon. Since large striped bass have been observed on the sand beaches north of Coos Bay, it would seem logical that these fish could be taken by surf casting between Coos Bay and Reedsport. Other sand beaches between Coos Bay and the California border would seem likely spots to support a beach fishery for stripers.

Shad

Shad enter numerous streams along the Oregon coast. Probably the most important run is in the Columbia River where it is taken by both commercial and sport fishermen. Recent changes in the water quality of the Columbia River appear to favor shad reproduction. Runs over Bonneville have been exceptionally large in the past 6 years. The peak count at Bonneville occurred in 1965 when 600,000 plus fish passed through the fishways. They are now found in the Snake River above Ice Harbor Dam—a long distance from the ocean for a fish which usually confines its fresh-water migration to the first or second pool above tidewater. It is interesting to note that fishery biologists from the State of Pennsylvania recently obtained eggs from Columbia River shad in order to reestablish this species in a number of their streams.

Although shad enter most of the coast streams, their presence is not too well known among sportsmen except in the Columbia, Coos, and Umpqua systems. A fishery has flourished on the Coos River for many years and some anglers make annual trips to the Coos especially to fish for shad. Word that the shad are in sends many anglers to the forks of the Coos and Millicoma Rivers.

The shad spends most of its life in the ocean and enters fresh water to spawn. Anglers fish the spawning run which extends from the first part of April until the first of July. Most of the shad are caught in May and June at the peak of the spawning run.

Spawning usually occurs at the head of tidewater. Eggs are released near the surface of the water and remain in suspension. A large female may produce over a half million eggs. Males usually spawn when 3 to 5 years old and the females from 4 to 6 years of age. Many shad return to the ocean after spawning and enter successive spawning runs. Although shad usually range from 2½ to 6 pounds, a record 14-pound female was taken on the West Coast.

The shad is becoming more popular as a sport fish with Oregon anglers. Some of the important fishing areas in the Columbia system are Bradford Island below Bonneville Dam, mouth of

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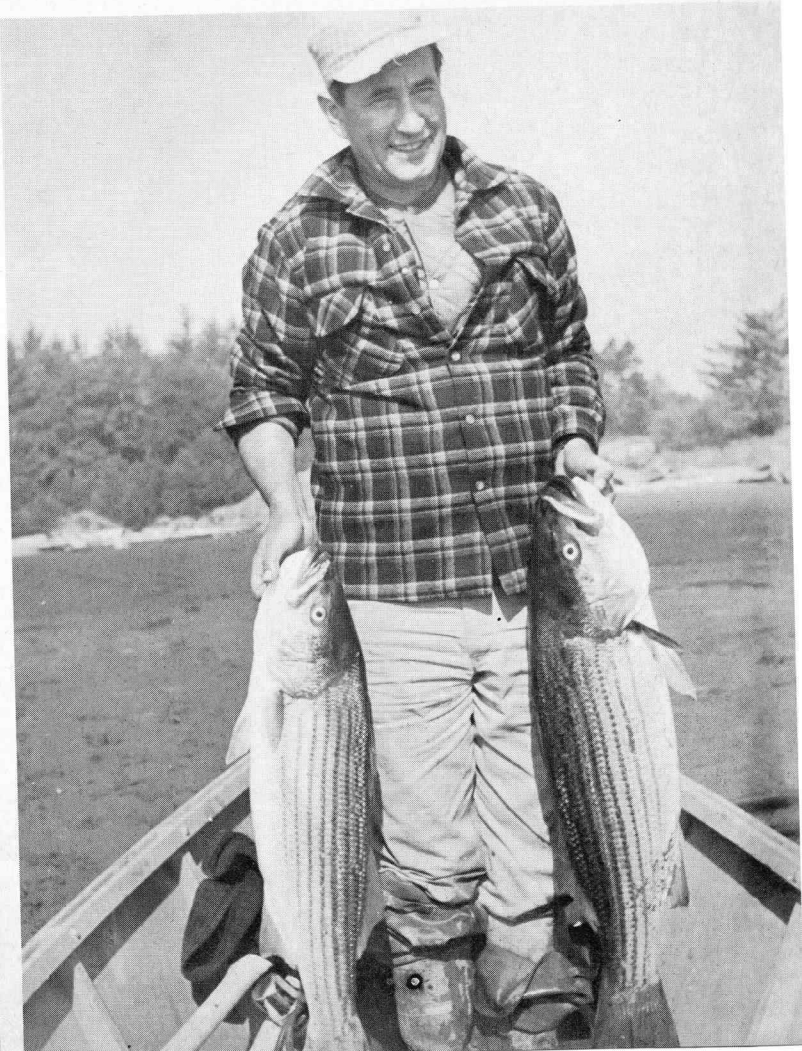
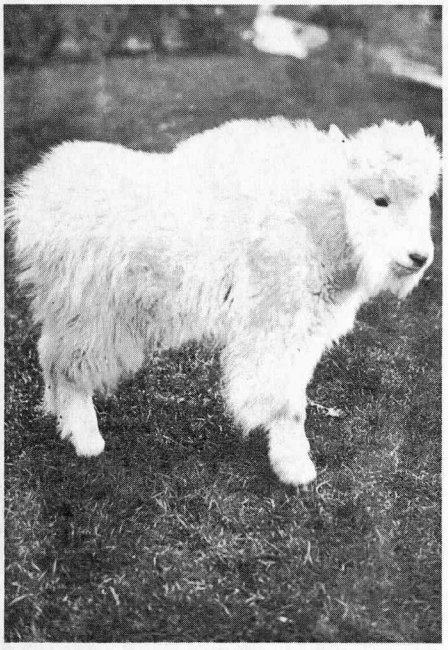


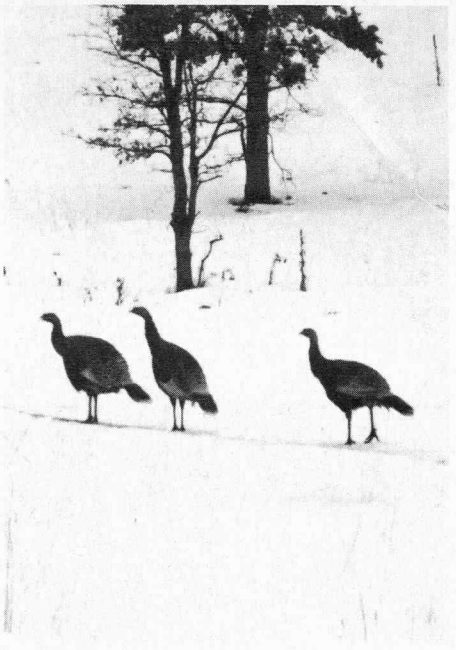
Two nice stripers taken in Coos Bay by Fred Locke.

esy of The Tackle Box, Coos Bay

A nice string of shad.



For two years a very limited hunt has been permitted for Rocky Mountain goats in the Wallowa area. The goats were first introduced in 1950.



Wild turkeys in the snow. Introduced in 1961, the Merriam's turkey increased enough to permit limited hunting in 1965 and 1966.

Introductions And Transplants

(Continued from Page 3)

climate, food supplies, and other characteristics of eastern Oregon ranges were compared with conditions in other western states where transplants had been successful. Only after thorough investigation was the decision made to transplant the birds and the results have proven the wisdom of proceeding in a careful, scientific manner. Four races of wild turkey are found in the United States. Failure of earlier introductions to become established in the wild probably resulted from attempts to transplant races or mixtures of domestic stock which could not adapt to the environment in which they were placed.

The chukar partridge is another case in point. Thorough investigation of the environmental requirements of the many subspecies of this bird preceded the decision to introduce a stock native to India.

There is ample evidence that new species of game animals and birds have added much to the enjoyment of Oregon hunters. The native California bighorn, which disappeared from Oregon in the early part of the century, is an example of a reintroduction that has proved successful. Restocked originally on Hart Mountain in Lake County, they have been transplanted into the Steens and the Owyhees, and biologists are looking at other sites where this animal may find a friendly home. The fisher, a furbearer, is another example of a native animal that has been reintroduced. Mountain goats now roam the high peaks of the Wallowas. The initial introduction was made in 1950; and although numbers remain small, they have increased substantially over the years.

Two other species of upland game birds have been added to the Oregon scene in addition to those previously mentioned. They are the bobwhite quail and Hungarian partridge. The former was first introduced in 1879 and at present its numbers are fairly limited in the state. The "Hun" first arrived in Oregon in 1900. Although not a widely sought after game bird, it does possess excellent sporting qualities.

One has to examine the fish resource to fully appreciate the contribution that introduced species are making. It is here that the greatest number and variety of imports have been added. Today, as a matter of fact, Oregon anglers have available to them a larger number of non-native kinds of game fish than those which are native. One that comes to mind immediately is the eastern brook trout, found in many mountain lakes and in some of our streams. This native of the Eastern seaboard has filled an important niche in our lake fisheries. The loch leven or German brown trout is another import, this one from Europe. It has been established for many years in the Deschutes River system and in several of the large central Oregon lakes as well as in other waters. The Atlantic salmon is a fairly recent import from Quebec. The Commission has experienced unique success in rearing this fish at its Wizard Falls station on the Metolius River. Hosmer Lake, in central Oregon, now supports a high quality fishery on this close cousin of the steelhead trout. The famous lake trout of Odell were not always there. They, too, are an import from the eastern part of the country; and because of the size which they attain, provide some spec-

(Continued on Page 7)

Atlantic salmon brood stock at Wizard Falls hatchery. Fish are stocked in such lakes as Hosmer Lake, noted for its excellent fly fishing.

One of several fisher brought from British Columbia in 1961 for release in Oregon.

A pair of chukar partridge held by Vic Masson, regional supervisor of the southeast region, which the chukars have found much to their liking.

Introductions And Transplants

(Continued from Page 6)

tacular and rewarding fishing. Golden trout, a strain of the native rainbow, were introduced a few years ago into several of the high elevation lakes in the Cascades and the Wallowas. All these introductions have added to the variety of fishing experiences.

Initial planting of the striped bass on the Pacific Coast was at San Francisco Bay in 1879. Subsequently, this fish spread along the coast, and in Oregon is now most abundant in Coos Bay and in the Coquille and Umpqua Rivers. Striped bass are native to the Atlantic Coast. Another Atlantic Coast native is the shad. This fish was introduced on the Pacific Coast almost 100 years ago. He is now found in the Columbia River and some tributaries as well as in several coastal streams.

In volume and variety the many species of warm-water game fish constitute the major contribution to our non-native fish population. None of these fishes; such as, bass, crappie, perch, catfish, and sunfish, are native to Oregon. Readers interested in learning more about how and when these fish arrived here should obtain a copy of the book titled "The Coming of the Pond Fishes" by the late Ben Hur Lampman.

Although there have been some unfortunate introductions, generally speaking we can be thankful that our predecessors had the foresight and initiative to recognize the value of the many non-native wildlife forms that now provide so much recreation. What would it be like today if we had to count on only the native species to provide fishing and hunting? The outlook would be bleak, indeed.

The foregoing illustrates what has been done through the introduction of wildlife from other parts of the country and the world. The end is not in sight by any means. State fish and game departments and the federal government are constantly on the lookout for game and fish species that show promise of adapting to conditions in the United States. It is reasonable to expect, based on past experience, that some of these will find a new home in Oregon. It appears now that with big game, the available environmental niches are pretty well taken care of. But who can tell what opportunities may arise in the future of which we are not now aware. Certainly the potential for adding to and building up our upland game bird populations has not been exhausted. The Commission is presently attempting to find a bird that would be suited to the coastal region. Even if no new game fish species are introduced, the possibility exists of bringing in forage fish that will step up the productivity of existing sport fisheries.

Aside from introductions, transplanting of presently existing species into habitat not presently occupied has and will increase recreational opportunities. For example, Roosevelt elk have been moved into areas in which they have not previously been found. Kokanee have been established in many waters in which they were not native originally. Similar work has been done with upland game birds. Many other opportunities still exist.

The demand on our wildlife resources will increase and the rate may be more rapid than that which has been experienced in the last fifteen to twenty years. It is absolutely essential that the Commission be in a position to take advantage of every opportunity that may exist to meet this demand. Further introductions of new fish and game species and transplanting of some of those now here can assist in accomplishing this goal.

WHY?

(Continued from Page 2)

to support wildlife on any farm or ranch amounts to a measurable percentage of the income.

To the Public, private property is a dirty word. A clean field is a dump for beer cans, unharvested grain is but to trample, fences are to cut, cattle, rural phone insulators, and water tanks but to shoot, newspaper columns but a place to grumble about the farmer.

Far better it would be for the Public to say, "Mr. Farmer, we need your help. Much of our remaining wildlife looks to your private land for food to eat, a home, a nesting place, a place to rest. Please create a small marsh, a pond, a woodland, brush patch, or a fence row on your place; please spare some food for wildlife when they are faced with starvation. We appreciate the fact that this will take sacrifice and effort on your part, money out of your pocket. And for this we will thank you by trying to understand your problems, by teaching our children by example, to keep your fields clean of garbage, to close gates, and be careful with fire and firearms, to avoid vandalism. We shall teach them that the country is your home, that we are but guests therein."

All over the land, given this new appreciation, the farmer will cooperate with the public, for he was a naturalist before they were, and a love of wildlife is inherent in his very nature. If the Public will but work with the farmer and not against him, he will accept the challenge, create a small marsh here, a haven there, which, nationwide, will add up to an effective refuge no government in the world could match.

Farmers, ranchers, the Public — all would be benefactors. Once more the pheasant would flush from the hedgerow, the hermit thrush pipe cool from the moist woodland, and the lonely call of the sandhill crane fall once again from the heavens upon the prairie land.

Striped Bass And Shad

(Continued from Page 5)

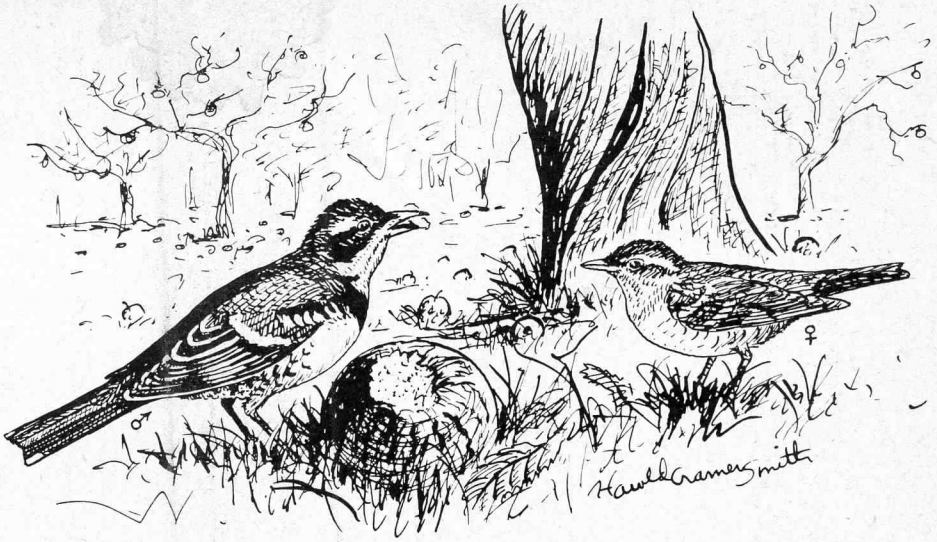
the Sandy River, and the Willamette below Oregon City falls. Most of the shad taken by anglers in the Coos system are caught above the forks of the Millicoma and South Fork Coos Rivers. In the Umpqua River system, shad are caught in the tidewater areas of the main stem and Smith River; however, the major sport fishery on the Umpqua occurs above Scottsburg.

There are two important factors to consider when shad fishing. They prefer small lures or flies and they have a soft mouth. Many shad pull loose from the hook even with a light rod tip. In addition to having a soft mouth, the shad is very acrobatic when hooked. Thus, even the most experienced anglers consistently lose fish. Although shad are occasionally taken on salmon and steelhead lures, the most successful anglers use small spinners, wobblers, or flies. There are several flies tied especially for shad. The lead-headed fly or jig fly has become extremely popular in recent years.

On the East Coast, shad are considered a delicacy, and skeins of eggs are esteemed by many and rated as one of the top fresh-water or marine fishery products. Anglers in Oregon usually prefer salmon or trout for the table, but those who have tasted smoked or kippered shad need no further encouragement. Although the shad contains many bones, it is a simple matter to separate the flesh once the fish is cooked.

There are undoubtedly a number of unknown areas in Oregon which would produce shad if fishermen were to do some experimental angling. Large schools of these fish have been observed surfacing in the Bonneville pool between Bonneville Dam and The Dalles. It will be up to an aggressive angler to devise ways and means to take these fish by hook and line.

General opinion among deer hunters checked in the field by game biologists indicate that the 1966 season probably was one of the best in quite a few years. High hunter success was especially noted on the eastern Oregon mule deer ranges. Detailed information on the big game seasons is now being compiled and will be published in a coming issue.



The Varied Thrush

THE VARIED THRUSH is a common permanent resident of the heavily forested areas in Oregon but, due to the remote regions it inhabits, it remains a stranger during much of the year. When winter snows cover its mountain retreats, however, the bird is forced to descend to lower elevations or migrate to a warmer climate. It is then that the strange looking "robin" surprisingly makes its appearance in farm yards and urban areas. Because of its presence during the cold winter period, it has become known locally as the Alaska, or winter robin.

In coloration, size, and habits the varied thrush closely resembles the familiar robin but can readily be distinguished by the black band across the breast and the presence of orange bars on the wings and above the eyes.

By early May the varied thrush returns to its mountain home where it constructs its nest in the low branches of a small tree. The nest, very similar to that built by robins, is fashioned of twigs, rootlets, moss, and plant fibers and bound together with mud. The three or four speckled, bluish eggs hatch in about fourteen days and in another two weeks the spotted young have left the nest.

Insects, bugs, and worms comprise much of the diet but when these commodities become scarce during the cold winter months, the menu by necessity shifts to one of seeds, fruits, and berries. It is then that windfall apples and pears in old orchards become especially attractive and bring this beautiful thrush into our backyards.

—C. E. Kebbe

BIRDS IN OUR LIVES

For a book on birds with a different approach readers will be interested in BIRDS IN OUR LIVES, recently published by the Bureau of Sport Fisheries and Wildlife.

It is a factual story about birds and people. It tells of the positive values of birds—of the enjoyment and inspiration that birds give to millions of people. It tells also of problems, warning, and hopes, too.

The book has 576 pages and is attractively illustrated with 80 wash drawings and 372 photographs. The authors—61 in all—write with authority, clarity, and simplicity.

The book is available through the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402. The price per copy is $9.

BIRDS IN OUR LIVES was written to give readers, in all walks of life, an opportunity to achieve a greater appreciation and deeper insight into the impact of birds on our civilization. The book is of interest to birdwatchers, artists, photographers, poets, naturalists, sportsmen, farmers, gardeners, and many others.

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