



**OREGON
WILDLIFE**

SEPTEMBER 1980

OREGON WILDLIFE

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Cover – The blue grouse is one of the most widely distributed game birds in Oregon. Ralph Denney's feature article this month looks at the status and future of all the upland game species.

Photo by Ken Durbin

A PLACE TO LIVE

The other day as we sat waiting for the traffic light to change at the junction of Highway 217 and Allen Boulevard just west of Portland, we were cogitating about the face of the land. When we first moved to the area there were broad fields of grass and brushy fencerows that almost always held pheasants and quail. Dramatic changes have taken place and on a large scale.

Not all of the natural setting has been lost, but it is being chewed up piece by piece. At the intersection where we sat, there had been some small depressions along each side of the freeway. These usually had a bit of water in them and a good stand of cattails. This small bit of habitat usually was home for some blackbirds and in most years it was the territory for a pair of nesting mallard ducks.

We have often sat waiting for the signal at this spot and at times have been annoyed by the delay, as have a great many other motorists. The highway, designed as a bypass, has grown in popularity to the point that the signals on it are being eliminated to make for smoother traffic flow. The building of the overpass and the related filling have eliminated the mini-marsh that once housed the ducks and blackbirds.

It is easy to overlook what is happening to the wildlife habitat when it disappears in small bits and pieces. The elimination of farmland and other types of habitat is quite obvious when a large shopping center or housing project sprawls across many acres all at once. But the construction of a simple freeway overpass? What possible difference can that make? It makes a difference to the pair of ducks that raised a family there. In the long run, we wonder if it may not make quite a difference to the numerous drivers who pass the point each day.

Many of the drivers will notice no difference since there are probably a great number who never saw the ducks and considered the cattails unsightly. But to those of us who did see the ducks and the other birds using the mini-marsh, the area has been changed to just one more bland, sterile piece of roadside.

Folks can give vent to great amounts of emotion over one sick bird or a crippled animal, but the filling of a small roadside pothole simply does not arouse strong emotional response.

Ray Dasmann in his book, *A DIFFERENT KIND OF WORLD* tries to put this into perspective when he writes, "The human instinct is to care for the sick, mend the injured . . . With wild animals we know the habitat must come first. It is better to be hard-hearted toward the animal but tender toward his environment."

Our country has been built on the idea that nature must be pushed back and conquered to make progress. Whether we continue to have a variety of wildlife largely depends on how well we can make progress without destroying the natural base from which all of this valuable resource arises. □

R.E.S.

COMMISSION AND COMPACT MEET

The Columbia River Compact will meet at 10 a.m. on Friday, September 12 to consider the late fall gillnet season for the lower Columbia River and any necessary adjustments to the Treaty Indian fall season above Bonneville Dam.

On Friday, September 19, beginning at 8 a.m. the Fish and Wildlife Commission will conduct a general business meeting, and the following day, September 20, also beginning at 8 a.m. will hear staff and public recommendations for 1981 angling regulations. Seasons will not be set, however, until October 25.

All three meetings will take place in the main conference room at Fish and Wildlife Department headquarters, 506 SW Mill Street in Portland. □

HUNTER EDUCATION PROGRAM	
INSTRUCTORS APPROVED	
Month of July22
Total Active.	1,418
STUDENTS TRAINED	
Month of July	381
Total to Date	272,847
HUNTING CASUALTIES	
REPORTED IN 1980	
Fatal	0
Nonfatal	2



A bird in the bush?

OREGON'S UPLAND BIRD BONANZA

*by Ralph Denney
Upland Bird Staff Biologist*

Fewer than one-third of Oregon's hunters take advantage of the upland bird bonanza that exists in this state. The variety available in Oregon is outstanding by comparison with practically all the other states in the nation.

Other states harvest more upland birds, but few have the variety of hunting experiences offered here. South Carolina hunters harvest 2.5 million bobwhite quail annually, and shotgunners in South Dakota take two million pheasants annually, but after these major species are accounted for, other species contribute relatively little to the bag.

The Oregon upland bird hunter will have the opportunity this year to pursue ten species of game birds in seasons running from August 30 through January 18, 1981, a period

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of four and one half months. Seasons will be open for one or more species throughout that period of time and in all types of habitat.

In addition, four other species are found in the state, but in numbers too low to allow seasons. These include the native sage and Franklin's grouse; and introduced bobwhite quail and eastern wild turkey.

Let's take a look at those species individually to see where we have been, where we are now, and where we might be headed in the future.

RING-NECKED PHEASANT

Next year marks the centennial of the first successful introduction of pheasants into Oregon. That introduction in 1881 was the beginning of the spread of the ring-necked pheasant throughout much of the U.S. We

will take only a brief look at that history here since a more detailed article on the pheasant is planned next year.

After its introduction from China, the pheasant made a remarkable adaptation in a very short period of time. Pheasants were moved from the original release area in the mid-Willamette Valley to other parts of Oregon and to other states where their increase was equally spectacular.

To supplement wild stocks of birds, Oregon has operated as many as four game farms which produced 60,000 to 70,000 birds per year in the late 1940's. Western Oregon farms raised and released primarily the Chinese ring-neck while eastern Oregon farms produced the Mongolian subspecies. The Mongolian was a larger darker strain compared with the Chinese bird.



A Chinese ring-necked pheasant cock about to do his famous disappearing fast routine.

In 1965 the last of the eastern Oregon game farms at Hermiston was closed, and propagation was concentrated at the E.E. Wilson facility north of Corvallis. Since then an annual average of 21,000 pheasants of the Chinese ring-necked variety have been produced with birds released throughout the state.

As the habitat base shrinks through development, higher human populations and changes in land use practices, we can expect less area that will support pheasants. We will probably never see again the high populations once present in the Willamette Valley. But there is room for optimism that we can maintain a higher density on the remaining habitat. This rationale comes after looking at countries with higher human populations than ours that also have high pheasant densities. China, for example, with its extremely dense population still supports the ring-necked pheasant. England with its high human population annually harvests more pheasants than the entire U.S. Oregon is looking to both of these countries for pheasant brood stock to secure birds that have had centuries to adapt to their conditions.

In efforts to achieve a higher population of pheasants, the Department
Page 4

is changing directions with its present game farm operation. With approval from the legislature at its next session, we plan a complete change in our game farm program.

An historical summary of the propagation program finds nearly 18,000 roosters being raised annually for the gun. Pheasants were sexed as day old chicks and the females given away to the public or disposed of. For the past two years production has shifted to raising both sexes for release in the wild. This transition has raised a number of questions. First, and foremost, "are those game farm birds contributing to the hunter?" Secondly, "are they reproducing in the wild after they are released?" The answer is yes for the roosters released directly for the gun, but probably no for hens producing in the wild.

In working with both wild and game farm birds we see obvious differences. Our present game farm pheasants are direct descendants of birds reared at the E.E. Wilson area 30 years ago. Through selection over the years we have developed a bird that is large, colorful and easy to handle. This was not by design, but just happened over the 30-year period.

The wild birds, on the other hand, are smaller, more varied in coloration

and very difficult to handle. Our design is to turn over our present game farm birds and produce a bird that has come more directly from the wild. Pheasants have been captured in both eastern and western Oregon the past two winters to provide brood stock to meet this end. We have progeny from both of these strains at the game farm now, plus crosses of the two. We have also crossed wild birds with existing game farm stock to attempt introduction of the wild gene into that stock.

This summer tagged and radio-equipped game farm pheasants have been released in three areas of the Willamette Valley to provide base data on survival and nesting habitat preferences of our present stock. In successive years we will monitor releases of those cross strains on hand. In addition we are attempting to secure wild strains of the Chinese pheasant from China, and the English black-necked pheasant from Great Britain. Pure strain and cross strains of these two will be monitored to find the best survival with the most production.

The English black-neck looks very encouraging for the Willamette Valley as it has survived for years under basically similar habitat type and climatic conditions. We are optimistic we can find a bird that will adapt to the habitat that is available and survive existing and future changing conditions.

Future plans for an additional incubator at the game farm will allow us to expand our cooperative chick give-away program from 7,000 to 16,000 birds annually. This program involves providing the public with up to 50 day-old chicks to rear to ten weeks of age. The agreement with cooperators is that they will release half of the birds and may keep the other half for their efforts.

In addition to finding "a new kind of pheasant" there is an urgent need to modernize and automate the 30-year old propagation facilities at the E.E. Wilson Wildlife Area. With modernization we can not only expand a release program for new strains of birds, but will also be able to supplement wild stock in those years of low densities at a more cost-effective ratio.

Our eventual goal is to again provide some 90,000 Oregonians with the annual opportunity to harvest 340,000 pheasants which is equal to those years from 1959 through 1964. This goal, in the face of the shrinking habitat base, can only be accomplished by more production on those acres that are available. Western Oregon populations are the major concern at this time as populations have decreased rapidly in the past 20 years. In eastern Oregon pheasant populations are in better shape and will remain primarily dependent on agricultural activity.

In 1979 a statewide total of 62,547 hunters reported taking 245,598 pheasants.

QUAIL

"The Quail of Oregon", by Dr. John Crawford in our June 1980 issue presented an excellent history, population, status and hunting picture of Oregon's three quail species.

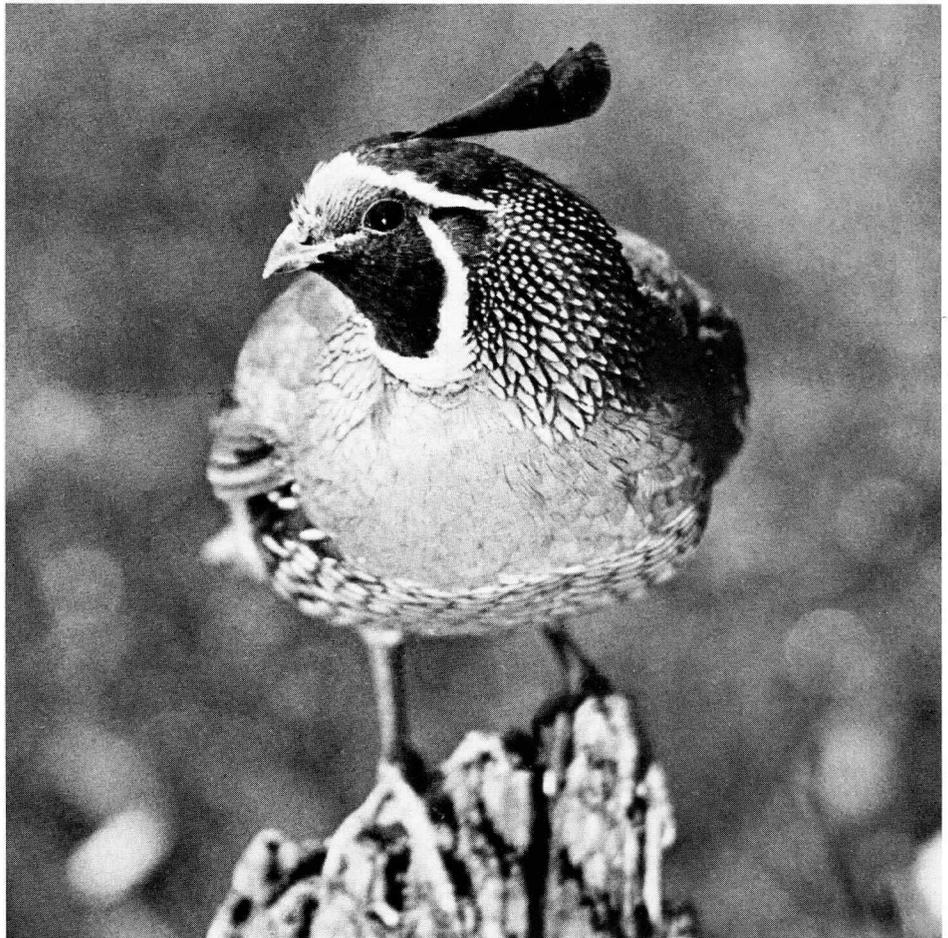
Bobwhite

Stocks introduced in the late 1800's flourished for a time but have suffered steady decline since the 1950's. At this time bobwhite are rarely seen, with reports coming mainly from the Ontario and upper Willamette Valley areas. Reintroductions of bobwhite from transplants of both game farm and wild stocks have been unsuccessful. The future is dim unless land use practices change drastically to benefit bobwhites.

Valley Quail

Originally found only in southern Oregon, this adaptable little quail was transplanted and has flourished throughout the state. Brushy habitat, periodic severe temperatures, and avian predators all have a depressing effect on valley quail populations. In superior habitat and in good nesting years it is not uncommon to see three or four hundred valley quail in a winter concentration. Sub-zero temperatures and a wet spring can easily reduce that same basic covey to fewer than 20 birds the following winter.

With the high mortality rate of 30 to 60 percent annually, management is geared to harvesting the surplus



The valley quail, once native only to southwestern Oregon, is now found throughout most of the state.

quail each year. Though not a primary species, some 30,000 hunters reported taking more than 200,000 valley quail in 1979. The majority of the harvest was taken while hunting pheasants and chukars.

Mountain Quail

Another native quail in Oregon, the mountain quail, is found throughout much of the state in varying densities. Western Oregon is the stronghold. Little is known about the mountain quail and the effects of vegetative changes on the overall population. The elevational migration common to this species often gives the impression of low populations in areas of abundance the previous year. Often this is not the case.

The mountain quail offers an opportunity that many hunters pass by. Even though there may be good populations nearby, the challenge of getting a clear shot at a brush-loving speedster that does not like to fly can be frustrating. A good dog and an open bore shotgun, however, can pro-

vide some action much like hunting ruffed grouse in an alder patch. Last year nearly 14,000 hunters reported taking 50,000 mountain quail.

CHUKAR PARTRIDGE

For many Oregon hunters the chukar is THE BIRD. Attempts to establish this bird in Oregon took place over a period of years beginning in the early 1930's, but it was not until mass releases of nine to eleven thousand birds each year were made in the early 1950's that the species firmly took hold.

Between 1952 and 1964, 117,000 chukars were released in every potential habitat type in Oregon. Some releases were unsuccessful, but where the habitat was to their liking we now have chukars. Population levels have risen and fallen, and many thought the chukars would follow the pattern of the Hungarian partridge which flourished after its introduction near the turn of the century but then tailed off to relatively low numbers. To date this has not been



A characteristic pose for the chukar. Getting close enough for a shot is something else!

the case. Although populations have varied through the years, the relative abundance has remained high.

Future management of chukars will center on careful monitoring of populations so seasons can be set designed to take full advantage of harvestable surpluses.

In addition, a close relative of the chukar, the French red-legged partridge, has been obtained from Idaho this spring. Game farm releases of chukars will be discontinued and production of red-legs substituted. The Department will release large numbers of red-legs in rolling foothill hab-

itat. The red-leg prefers habitat that is somewhere between the rimrock canyons chosen by chukars and the bunchgrass-grain habitat of the Hungarian or timber habitat of the forest grouse.

Although chukar hunting is not as popular as pheasant hunting, a solid corps of chukar hunters pursue these birds each year. Chukar hunting is, to say the least, a demanding physical sport. Last year 30,000 hunters fought the steep terrain, hot and cold weather and other elements to take 260,000 chukars.



The French red-legged partridge looks a lot like the chukar. Striping on the neck is one characteristic which identifies it.

HUNGARIAN PARTRIDGE

In the early 1900's the introduced Hungarian partridge reached its peak in both eastern and western Oregon. Since the 1950's populations have declined to very minimal populations in western Oregon and moderate population numbers in eastern Oregon. A bird of the rolling bunchgrass foothills, especially near grain agricultural crops, the "Hun" is found in good numbers where habitat needs are met. Management is dictated by land use practices which provide ample spring nesting habitat and winter food to sustain the birds through the cold months.

Hunting the Hungarian partridge is a sport filled with heart stops. Often the hunter encounters Huns while hunting chukars. The covey rise is startling with six to twenty birds literally exploding into the air. Being smaller and faster than the chukar it is difficult to adjust to the change. In 1979, 10,500 hunters reported harvesting 36,000 of these partridges.



Hungarian partridge.

FOREST GROUSE

Blue Grouse

One of Oregon's native game birds, the blue grouse is found throughout the timbered areas of the state. Habitat for the blue grouse exceeds that of any other upland species with over 15 million acres where one might find this bird. Although blue grouse are scattered far and wide, population numbers have a reputation of being cyclic. This is true from the standpoint that variations occur from year to year, but statewide,

these variations occur at different times in different places. In other words, when population densities are low in one area they might be high a short distance away.

Highest populations are found near open ridges throughout western Oregon in the Coast and Cascade ranges, and throughout the Blue Mountains in eastern Oregon. A harvest of 65,000 blue grouse was reported by 26,000 forest grouse hunters last year.

Ruffed Grouse

The ruffed grouse is another native bird of Oregon. Smaller than the blue, the ruffed grouse fills the habitat along and adjacent to brushy stream bottoms over much of Oregon. A major game bird in the northern tier of states, the ruffed grouse in Oregon is hunted by a few dedicated shotgunners who work the brushy areas in hopes of a fleeting shot. Usually more grouse are heard than seen, but when the shot is successful, the hunter is in for a taste treat. Forest grouse hunters reported taking 72,000 ruffed grouse in 1979.

Sage Grouse

The desert species of the grouse family is the sage grouse. Originally found throughout the nontimbered areas, the sage grouse has been the victim of shrinking habitat. Although much of the desert area still exists, populations have remained low for the past ten years. Analysis of data since the 1940's shows no correlation between hunting and the population decline.

The sage grouse is probably the only truly cyclic upland game bird in the state. Since 1940 we can trace four of these cycles and each time the peak is lower than the preceding peak. In addition, production as measured by average chicks per brood is lower. As a result, there has been no authorized season for sage grouse in the past four years.

What of the future for grouse? A virtually untapped resource is available for hunters of forest grouse. The total harvest is probably less than 15 percent of the population, whereas we could safely harvest up to 35 percent without hurting the basic breed-

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The ruffed grouse, a master of camouflage, melts into its background.

ing population. Since forest grouse are of the less popular species, a low priority has been placed on working with these birds. More sophisticated census techniques will be attempted to help define habitat preferences of the birds so the hunter can utilize the resource that is available.

More refined methods of census for sage grouse populations will also be undertaken to pinpoint areas that consistently produce high densities. These areas will then be analyzed to determine the missing factors in other areas. It may be possible to correct the habitat requirements necessary for high populations.

Not mentioned previously was the population of sharp-tail grouse that was once present in northeastern Oregon. Habitat changes resulted in the demise of this native grouse. The Department has scheduled a reevaluation of the former sharp-tail habitat to determine if further changes have shifted back which might provide the necessary requirements of this species. If so, we will attempt the reintroduction of sharp-tail grouse to some of its former range.

WILD TURKEY

After many attempts to introduce wild turkeys into the state, success was finally achieved in the early

1960's. Best success followed the release of the Merriams wild turkey in Wasco County where huntable populations have been available since 1965. Other releases of the Merriams turkey have encountered varying degrees of success. These birds are reported throughout the Blue Mountains of northeast Oregon in low numbers.



Oregon holds a promising potential for the wild turkey.

Spectacular results followed introduction of the Rio Grande turkey to southwestern Oregon in 1975. Population growth was so rapid that the first limited season on gobblers was allowed in 1979.

The future is bright for the wild turkey in Oregon. A research project is now underway in Wasco County in cooperation with the U.S. Forest Service and Oregon State University to determine habitat preferences of those birds. Upon completion, we hope to apply this knowledge to transplants elsewhere in the state where the best potential for success exists.

MOURNING DOVES

The mourning dove is a prolific nester in Oregon, but with the onset of cool wet weather, usually by mid-September, ninety-five percent of these birds leave Oregon for wintering grounds in California and Mexico. Populations have remained relatively stable in Oregon. It is common for doves to successfully nest two or even three times. Federal law does not allow hunting prior to September 1 of each year. So the early migration often reduces hunter success in Ore-

gon while contributing much to the harvest in California.

Little can be done to increase dove populations. Flexibility in choice of nesting habitat provides sites throughout the state, while hunting contributes little to the annual increase or decrease of dove populations. The 1979 season with 22,000 participants reporting a harvest of 210,000 doves is near average for the state.

BAND-TAILED PIGEON

The band-tailed pigeon in Oregon is primarily a bird of the Coast Range. But it is also seen in the Cascades and occasionally in eastern Oregon. Once numerous populations declined from the early 1960's through 1975 when more restrictive bag limits were placed on the bird. Since 1975 a very gradual increase has been recorded both in mineral spring census and in harvest data analysis. The accompanying table shows these trends.

The band-tail in northwestern Oregon has a unique physiological requirement that necessitates visits to mineral springs or coastal estuaries

to obtain calcium during the period of lactation (production of pigeon milk to feed the young). Although the yearling pigeon will attempt nesting, it is often unsuccessful, producing nothing or at most one squab.

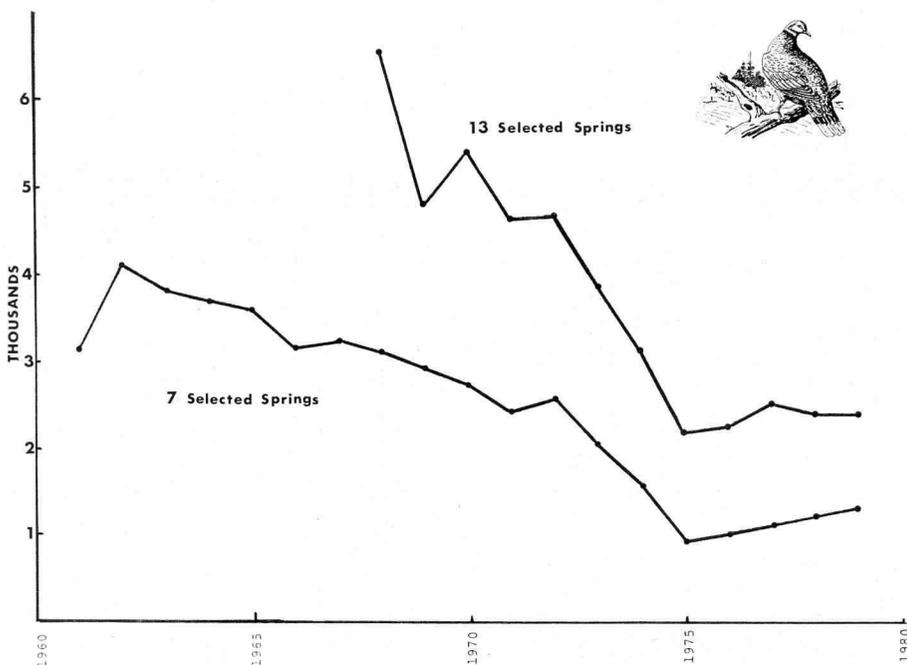
The older, experienced breeder, on the other hand, usually produces two young yearly, barring some natural disaster. It is the older birds that are most dependent on the mineral springs, and therefore most vulnerable to shooting at these sites. The dependence on these areas slackens off quickly during the first two weeks of September, but the season has traditionally started September 1. Harvest at mineral springs during the early part of the season has usually been heavy to the older birds which are the most important contributors to the breeding population.

Research in the past few years has verified the vulnerability of older nesting birds early in the season. In order to preserve more of the older birds, the Commission adopted a delayed season opening of September 13.

The bag limit reduction of 1975 marked the beginning of slow increases in band-tail populations. But further restrictions are believed necessary to achieve a faster recovery. Results from the delayed opener, barring other natural disasters, should be seen in a two to three year period. Although hunters will be inconvenienced during that period, population gains should benefit both the birds and the hunter in the future.

We are optimistic for the future as we write this quick review of each of our upland bird species. Exciting challenges lie ahead, among them the search for a "new kind" of pheasant, improvement of low sage grouse populations, possible reintroduction of sharp-tail grouse, introduction of the French red-legged partridge, expanded transplants of wild turkeys and efforts to bring an improvement in band-tailed pigeon populations. These programs and others will keep the Department's biologists busy, and some of them will require approval for new programs when the legislature considers the Department's budget for 1981-82. But the results will mean more opportunity for more people to enjoy the upland bird bonanza of Oregon. □

BAND-TAILED PIGEON MINERAL SPRING CENSUS



BIRD HUNTING OUTLOOK — 1980

by Ken Durbin

Last year Ralph Denney poked his head into my office having just returned from making chukar and pheasant brood counts with several district wildlife biologists. "I have two words of advice," he said. "Buy shells!"

His forecast was borne out by last year's excellent seasons, and it appears upland hunters have nearly as much reason to be optimistic this year. Upland bird populations, with few exceptions, are at levels comparable to or improved over last year. Seasons set recently by the Fish and Wildlife Commission reflect this outlook and are detailed elsewhere in this issue.

The following species review is based on information gathered by district wildlife biologists throughout the state. Because of abundant moisture this spring and good production of ground cover which made observing birds and their broods difficult, most biologists feel their data is quite conservative.

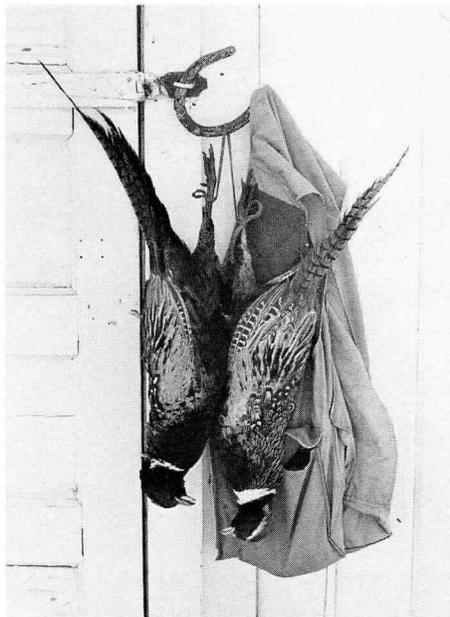
Upland Birds

Ring-necked pheasant populations are stable or above last year's densities. In western Oregon this has been true for the last three years although this level is down seven percent from the 10-year average. Chick production on the west side showed an increase this year.

In eastern Oregon the pheasant population trend is up from last year and 18 percent above the 10-year average. Although chick production dropped back slightly it is still on par with the 10-year average. The unsettled weather this spring has caused renesting attempts and biologists have observed four distinct age classes of young pheasants. Ten percent of the broods were less than three weeks old by August 1.

Western Oregon valley quail suffered a setback this year because of the cool, wet summer. Population trends are down 57 percent and nesting success was down as well. On the east side, the valley quail population trend showed only a slight decline and summer production was good.

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Many hens appeared to be bringing off late broods.

Trend and production data for mountain quail in western Oregon show near average population levels. Eastern Oregon populations remain at very low levels and these birds are found in relatively few areas. No season was set for mountain quail in eastern Oregon again this year.

Chukar partridge populations wintered well last year with only a slight decline in measured population trend and brood size averaged 10.7 chicks which compares well with the 11.5 per brood average recorded last year. Two exceptions were Grant and Willowa counties where populations are low. The 1979 season was an exceptional one in Oregon with the second highest harvest on record, and this year looks to be likewise.

Although Hungarian partridge populations are down a bit from last year's record high, they nonetheless remain at the 10-year average. Chick production was also near average.

Forest grouse trend data which records grouse per mile observed on regular sample routes has been determined ineffectual in measuring grouse populations. Routes used in the past are being abandoned because

of changes in habitat, increased traffic on back roads and mileage restrictions imposed on the Department.

Instead, routes will be replaced by spring blue grouse hooting and ruffed grouse drumming counts, supplemented by random brood counts and annual harvest data. Although ruffed grouse drumming counts were down this spring, blue grouse hooting counts increased over last year. Willowa County grouse trends were low. It is generally believed grouse populations in most areas could support a substantially heavier harvest without impacting breeding populations.

Waterfowl

Waterfowl hunters can expect some decline in fall flights of ducks and some species of geese this year.

Overall, production of ducks is below that of last year. A high carry-over of returning adults, however, is expected to maintain the population at a level similar to those seen in the mid-seventies.

Production of the larger subspecies of Canada geese is near average with the exception of the dusky Canada goose that winters in the Willamette Valley. Nest predation by brown bear on the Copper River Delta has resulted in reduced production of young this year.

A reduced flight of the small Canada goose (cacklers) is expected because of storm tides that destroyed nests over much of the nesting area.

White-fronted goose production was variable by area due to weather conditions and a flight similar to last year is expected. Production of snow geese was down this year due to poor nesting conditions on the breeding grounds this spring.

Average to below average production was recorded in black brant nesting areas and a somewhat reduced flight is expected this winter.

Hunter success can be expected to decline somewhat this season, at least for those species which had poor nesting seasons and which will have a preponderance of older birds that have already experienced one or more hunting seasons. □



Tower behind Lost Creek Dam allows water of varying temperature to be released from the reservoir.

MORE ON THE ROGUE

by Barry McPherson,
Research Biologist

An article in last month's *Oregon Wildlife* provided an update on research conducted by the Oregon Department of Fish and Wildlife on salmon and steelhead in the Rogue River basin. The following provides some elaboration on the previous article as well as new information.

Lost Creek Dam on the Rogue River near Trail and Applegate Dam near completion on the Applegate River near Copper were built by the U.S. Army Corps of Engineers. Current research conducted by ODFW on salmon and steelhead in these streams is also funded by the Corps. Fishery research is being conducted on both rivers.

Both Lost Creek and Applegate were designed as multipurpose dams with substantial fishery benefits pro-

jected. Some of the benefits were expected to result from decreased water temperatures downstream in the summer. Both dams have the capability to control release temperature by withdrawing water from various depths (the lower depths being cool and the upper levels being warm from the summer heating).

Lost Creek Dam began to fill in February 1977, but the reservoir did not reach full pool until the spring of 1978 due to the drought in the winter of 1976/77. Experimental water releases during the first two seasons of normal operation (1978 and 1979) showed that both increased flow and cooler water temperatures released from Lost Creek Dam helped to cool the Rogue over 100 miles

downstream. A 5° reduction in release temperature decreased river temperature downriver to the head of the canyon when flow was 2,400 cubic feet per second, but only affected river temperature down to the Gold Hill-Grants Pass area when flow was down to 1,800 cfs. This resulted in water temperature reductions at Agness of 3-4 degrees Fahrenheit when compared with years prior to construction of Lost Creek Dam when flows and snowpack were similar.

Since the effect of Lost Creek Dam on temperature is greatest in the upper Rogue, the influence of temperature on the intensive spring chinook fishery in the first 25 miles below the dam during early summer is of special concern. Some anglers claim

that cooler temperatures hurt the angling (as reported in our previous article), others feel that warmer temperatures hurt the angling.

The disagreement among anglers is not surprising since the research team has been unable to show that release temperatures between 47 and 55°F have any effect on angler success from the bank or from boats during mid-May through mid-July. This finding is based on streamside checks of thousands of anglers during the last two years. Perhaps the techniques of some anglers work best in cooler water while the techniques of the others work best in warmer water. The research revealed that even abundance of fish had only a minor effect on angling success.

Water temperatures to be released from Lost Creek Dam are recommended by the ODFW research team. Recommendations are updated as needed, based on research findings concerning fish survival, juvenile growth, adult migration and angler success.

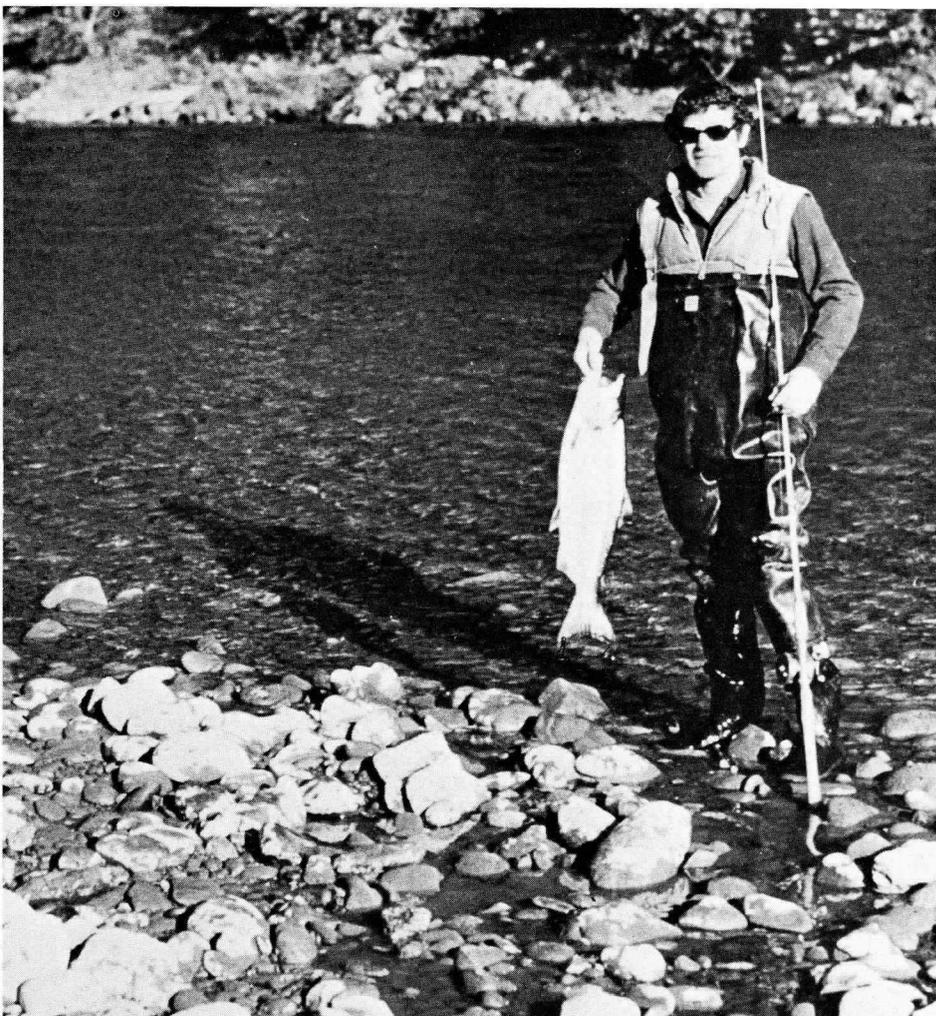
The current recommendations for mid-September through mid-June are that water released from the dam each week should match the average for that week prior to construction of the dam. Recommended temperatures released during the summer have ranged between 50 and 55°F and future recommendations will probably be within this range. Prior to the existence of Lost Creek Dam, temperature at this point in the river sometimes exceeded 60°F. The research currently indicates that releases below 50°F will retard juvenile growth in the river and hatchery, while releases above 55°F will contribute to disease problems in fish in the river and hatchery.

Research on the Rogue River is planned to continue through early 1986. Studies on the Applegate River are planned to end in early 1989. The long study periods are necessary in order to sort out effects of the dams from the uncontrollable effects of the weather and variation in abundance of salmon and steelhead in the Rogue Basin. Both fish and anglers will continue to be studied in order to determine the best schedules of temperature and flow to be released from the dams. □

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Rogue research crews must be fair hands as whitewater boatmen.



Anglers disagree whether cooler water temperatures hurt or improve the fishing. Author believes differences may be due to different angling techniques.

1980 GAME BIRD SEASONS SET

Upland bird and waterfowl hunters will find regulations generally similar to last year although there are some significant rule changes made for some species under seasons set August 15 by the Fish and Wildlife Commission.

Possession limits equal to three daily bag limits were adopted for forest grouse, pheasant and partridge. The more liberal limits will allow energy-conscious hunters to make longer bird hunting trips even though they might have to settle for going less often.

A 12-day western Oregon grouse season will run from December 20-31 in addition to the regular season similar to last year. This will, for the first

time in many years, provide the opportunity for late-season upland bird hunting in western Oregon. Hood River and Wasco counties are also included in this season. Washington has had a similar season for some of its west-side counties and it has grown steadily in popularity.

Seasons for cock pheasants statewide and valley quail in western Oregon (also for chukars and huns where they are released on west-side management areas) was extended an additional week to include the Thanksgiving weekend. Even though the season was lengthened, the western Oregon bag limit for valley quail was reduced from ten to five daily since populations have dropped back slightly.

Again, no open seasons were set for sage grouse or mountain quail in eastern Oregon.

Opportunities for spring turkey hunters were doubled under seasons set for 1981. Two hunt periods are scheduled in each of the four areas open for spring grouse hunting last year. Each area will have twice the number of tags authorized in 1980, equally divided among the two hunt periods, or 800 in all. The Department will not begin accepting applications for those hunts until after the first of next year.

Waterfowl seasons will be similar to last year. One minor change in the federal framework within which state regulations are set lumps mergansers with ducks. Last year mergansers were listed separately with their own bag limit.

Black Brant season was cut by nearly 50 percent because of steadily declining numbers of birds found wintering in the U.S. in recent years. Staff biologist Ralph Denney said there is apparently no major decline in the black brant population, but the majority of birds are now wintering in Mexico. The shorter season (or refuge areas in some states) is an attempt to entice more of these birds to winter in their traditional U.S. coastal areas.

Steel shot will be required for waterfowl hunting on the same areas as last year — Sauvie Island Wildlife Area; William Finley, Ankeny and Baskett Slough National Wildlife Refuges in the Willamette Valley; and Umatilla NWR in northeast Oregon.

Upland bird and waterfowl seasons adopted August 15 by the Commission are listed in the following table. Also listed are seasons for mourning doves and band-tailed pigeons which were set earlier. Because of printing delays the regulations synopsis will probably not be available at license agents when the first seasons begin on August 30. A simple flyer listing seasons, dates, areas, bag and possession limits is being sent to all license agents in the interim.

The printed regulations should be available early in September. □

1980 GAME BIRD SEASONS

	OPEN SEASON	OPEN AREA	DAILY BAG LIMIT	POSSESSION LIMIT
Blue & Ruffed Grouse	Aug. 30-Sept. 28	*Eastern Oregon	3	9
	Aug. 30-Nov. 4 & Dec. 20-31	*Western Oregon and (Hood River & Wasco Counties)	3	9
Chukar & Hungarian Partridge	Oct. 4-Jan. 18, 1981	*Eastern Oregon	8	24
	Oct. 18-Nov. 30	*Western Oregon and Klamath County	4	8
Cock Pheasant	Oct. 18-Nov. 30	*Eastern Oregon	3	9
		*Western Oregon	2	8
Valley Quail	Oct. 18-Dec. 31	*Eastern Oregon	10	20
	Oct. 18-Nov. 30	*Western Oregon	5	10
	No Open Season	*Eastern Oregon		
Mountain Quail	Aug. 30-Nov. 4	*Western Oregon	10	20
Turkey	No Fall Season.	Controlled Spring Gobbler Seasons in April 1981.		
Mourning Dove	Sept. 1-Sept. 30	Entire State	10	20
Band-Tailed Pigeon	Sept. 13-Oct. 12	Entire State	5	5
Duck (includes mergansers)	Oct. 18-Jan. 18, 1981	Entire State	7(a)	14
Coot	Oct. 18-Jan. 18, 1981	Entire State	25	25
	Oct. 18-Jan. 18, 1981	*Western Oregon	2	2
	Oct. 18-Jan. 18, 1981	*Eastern Oregon	3(b)	6
Goose	(see following exceptions:)			
	Oct. 18-Dec. 21	Baker & Malheur Counties	2	2
	Oct. 18-Oct. 31	Klamath & Lake Counties	1(c)	2
	Nov. 1-Jan. 18, 1981		3(b)	6
Black Brant	Dec. 13-Feb. 1, 1981	Entire State	4	8
Common Snipe	Oct. 18-Jan. 18, 1981	Entire State	8	16

- (a) Bag limit may include not more than 2 readheads or 2 canvasbacks or one of each daily, nor more than 4 redheads or canvasbacks in the aggregate in possession. The bag limit includes mergansers.
- (b) Daily bag limit is increased to 6 provided 3 are dark geese and 3 are white geese. White geese are snow geese and Ross' geese. All other geese are dark geese (Canada, cackling, white-fronted).
- (c) Daily bag limit is increased to 2 provided 1 is a dark goose and 1 a white goose. The possession limit is increased to 4 provided 2 are dark geese and 2 are white geese.

USDA SETS FISH AND WILDLIFE POLICY

Agriculture Secretary Bob Bergland has issued a memorandum establishing a "Policy on Fish and Wildlife" that will be heeded by all Agriculture Department agencies.

The new policy's goal is "to develop and implement authorized program policies and actions that will support the economic, aesthetic, ecological, recreational, and scientific values of fish and wildlife, improve their habitats, and insure the presence of viable diverse naturally occurring wildlife populations ..."

The policy states that "fish and wildlife habitats on National Forest System lands will be managed to maintain viable populations of all existing native vertebrate species and to maintain and improve habitats of indicator species."

The policy also calls for assistance to private landowners to improve fish and wildlife habitat. It requires all Department agencies to conduct their activities in a manner that assists threatened and endangered species. And, it requires the agencies to conform with the policy within 12 months.

Wildlife Management Institute

WON'T BE HUNTING THIS YEAR

Two Klamath area hunters will not be hunting this year because of a game law violation during the muzzle loader season last year. According to a story in the *Klamath Falls Herald and News* a Klamath Falls man and one from Phoenix were cited for illegal possession of deer during a closed season. They were charged with shooting the deer with a regular rifle during the muzzle loading season.

Following a jury trial earlier this year, they were sentenced to 10 days in jail each, fined \$1,000 each and prohibited from hunting for two years. The violation took place last year on Hart Mountain. A tip of the sportsmen's hat to Judge Charles Foster who passed sentence on the violation. □

OREGON WILDLIFE



THE MOLE

Somewhere beneath your lawn, garden or pasture, a mole could be working right now and you'd never know it. That is until your lush, green landscape begins "erupting" into a miniature mountain range of small volcano-like mounds. Making mountains (out of molehills) is part of the daily routine of this member of the Insectivore family of which four varieties are found here in Oregon.

The largest and most prevalent is Townsend's mole, which grows from six to nine inches long and is usually brownish-black in color. This mole is found primarily in the moist, fertile soils of the Willamette Valley and makes the most enemies among homeowners and farmers.

The Coast mole is about half the size of Townsend's mole and occupies the same general range, but can also be found further eastward. The Broad-Handed mole, almost as big as Townsend's mole, has a silvery-grey or coppery-brown appearance and can be found primarily in the Klamath Basin of south-central Oregon and into northern California.

The Shrew-mole is somewhat the black sheep of the family, looking and acting more like a shrew than his three brothers. This variety is present primarily along the coastal lowlands, but is not very abundant.

Like pocket gophers, moles spend most of their time underground in a self-created complex network of tunnels. The endless search for food keep this animal clawing away at fresh earth with two oversize front hands which are equipped with very sharp fingernails.

When the mole feels it is time to clean excess earth out of the tunnel he starts pushing it to the surface, building a conical shaped mound, with the hole directly in the center. Gophers also build mounds, but in a flatter, more fan shaped fashion with the tunnel hole at one end.

Insectivore means "insect eater", and while moles eat both insect larvae and small bugs, nearly 75% of this animal's normal diet consists of earthworms. Some plant material can also find its way into the Townsend's mole diet.

Oregon's three most common mole varieties all have soft, velvety fur-covered bodies with a pointed snout on one end, hairless tail on the other. The large front hands make the mole look like its ready to do the breast-stroke while two little beady eyes are almost nonexistent.

Moles begin life in a litter of three to four around March or April. Average life-span is about three years during which the mole is continuously active, taking no time out for hibernation. However, surface activity tends to slow down during cold periods or dry spells. □

Bob Kuhn

THIS AND THAT

compiled by Ken Durbin

NEW DOG DISEASE HERE

Dog owners who have not already become aware through the news should know about a newly-emerged virus that has been affecting canines across this country — and world wide — since its discovery in 1978.

The disease called “parvovirus”, is highly contagious and often deadly, especially among puppies. Believed to be a mutation of the feline parvovirus (cat distemper), it causes vomiting, diarrhea, lethargy and dehydration in dogs. The virus spreads rapidly through physical contact, via feces, or can be physically “carried” from one dog to another by for example, a man who has come in contact with an infected animal.

Fortunately, researchers have recently produced an effective vaccine. Unfortunately, it is made by only one laboratory and has recently been in short supply, and some veterinarians have had difficulty obtaining enough virus to fill demands.

Puppies of any age may be safely vaccinated. The first shot is recommended at or before nine weeks of age with a second inoculation given two to four weeks later. Adult dogs receive two doses two to four weeks apart. Annual revaccination consisting of a single “booster”, is advised.

If you own a hunting dog or family pet and have not already done so, you may want to give your veterinarian a call and ask his opinion on this severe disease.

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WEED REMINDER

A request and reminder to those of you who may be taking livestock from western to eastern Oregon for the hunting seasons. If you are taking bedding or feed along in the form of hay or straw, be sure it is weed free.

The weed control people from the east side suggest putting horses on weed free hay for at least 48 hours before going east of the mountains to prevent carrying Tansy ragwort or other noxious weeds across the mountains.

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STRIKE THREE AND YOU'RE OUT

A recent monthly report from non-game wildlife specialist Charlie Bruce reported an event most of us could live happily without. A resident of Stayton was bitten by a rattlesnake on his property. Some folks have a black cloud hanging over them, apparently, as Bruce reported the same person was bitten again the next day in the same area.

Rattlesnakes are not common in the Willamette Valley, but there are a few isolated areas where they are found, and the Stayton-Aumsville area is one of them.

*

ONE BIG CLONE!

A lot of scientists would like to see a live mammoth, but time travel hasn't yet been worked out. Nevertheless, a group of Soviet scientists have high hopes. Their technique is cloning. They hope to find a live or undamaged cell in a frozen mammoth (such as the baby found in 1977 in Siberia), introduce the nucleus into a cell— probably an egg cell — of a live elephant, implant it into an elephant and let nature take its course.

Pennsylvania Game News

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UNDOING NOAH

Dr. Norman Meyers, author of *The Sinking Ark* says that at least one species disappears from the face of the earth every day. That figure includes insects. In a recent interview he commented: “It is my belief that by the year 2000 we will have lost one million species — or anything up to 20 percent of the planet's present stock of life forms. Quite likely (the present rate of extinction) is already as high as 10 (species) a day. Nobody knows for sure. But what we do know is that the pace of destruction, the rate of loss, is growing. And will continue to grow. Unless, that is, present policies are reversed. Certainly we are going to lose a great many species and on sad but essential task facing conservationists is to decide which to try to save and which to let go. We cannot save the lot.”

African Wildlife

MANATEE MORTALITY UP

Florida's manatees, a unique group of totally aquatic herbivores that evolved along the same ancestral line as the elephant which is still their closest living relative could be swimming to extinction as they are sliced by motorboat propellers, crushed by barges or drowned when they became entangled in discarded fishing gear. According to a recent count there are only 800 to 1,000 manatees still swimming in Florida's coastal waterways. A three-year study of manatee mortality reveals that from 60 to 80 animals die each year mostly from run-ins with men and their machines.

African Wildlife

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N.J. CITIZENS WANT NONGAME "CHECKOFF"

A recent poll revealed that 73 percent of New Jersey's citizens favored “a place on the state income tax form where people could check off a small contribution to finance the protection of endangered species.”

Of the 1,002 respondents interviewed, 94% indicated that protecting endangered species was very important. The respondents' attitude toward hunting apparently has no effect on their opinion toward protecting endangered species. Sixty-six percent of those who strongly approved of hunting and 69% of those who strongly disapproved of hunting consider endangered species protection important.

Additionally, 69% of the respondents approved of “spending more from the New Jersey State Treasury to aid in the protection of wildlife.”

With regard to the income tax refund checkoff, 76% of the respondents said that they would contribute to finance a wildlife protection fund; 30% would give \$2.00, 26% would give \$5.00 and 20% would give \$10.00.

Seventy-two percent of the hunters favored the checkoff and 73% of the nonhunters favored the checkoff.

The state income tax refund checkoff system is working well in Colorado (which originated the idea), Oregon and Minnesota.

Wildlife Management Institute

SEPTEMBER 1980



Oregon's

WILDLIFE WINDOW

Fall is a time when hunting seasons open. It is a time when some fishing seasons begin too and others close. There are some species that have no open or closed season. This is all done through various laws and regulations.

The oldest recorded laws governing wildlife are referred to in the Bible about the time of Moses. Oregon's oldest laws were set by the legislature in 1872. How would you go about locating a copy of these?

Most laws and regulations set in early days *closed* the time when animals could be taken for a few months. Today, many of our fish and wildlife rules *open* the time when wildlife can be taken for a few months at most. Do you see the change in concept?

There are a lot more laws and regulations to be followed today than there were 50 years ago or even 20 years ago. Who makes all these rules? To answer that we must first realize that there is a difference between a law and a regulation. Laws are made by the legislature. They are usually much broader than regulations and often permanent unless a future legislature changes them. These are found in a book called the Oregon Wildlife and Commercial Fish Code.

Regulations are mostly short-term in nature. They usually are good for no more than a year. Some are changed more often than that. Regulations are set by the Fish and Wildlife Commission. A synopsis of regulations that are presently in effect can be obtained anywhere hunting and fishing licenses are sold. That means

most stores that sell outdoor supplies.

Laws and regulations are of no value unless someone makes sure they are obeyed. Oregon is almost unique in its system of wildlife law enforcement. Only two states have enforcement done separately from the agency that manages the fish and wildlife. The Oregon State Police are primarily responsible for this enforcement in Oregon. What other state has a system similar to this? How would you find out? What advantages and disadvantages do you see in our system? What about the states where enforcement is a responsibility of the

wildlife department?

Only certain kinds of courts handle most fish and wildlife law violations. How could you find out what courts in your area act on this kind of crime? Most fishing and hunting violations are classed as misdemeanors. A few serious ones are classed as lesser felonies. The legislature decides this separation and sets the maximum penalties. Judges in the courts then can set the actual fine or jail sentence within these bounds.

Next month we will bring you more on laws and regulations and the fines involved. Watch for it!□

THIS MONTH'S WINDOW

What's the Law?

Have students discuss and record fish and wildlife laws as they think they are without looking ahead of time.

Obtain copies of the Code and various regulations synopses. Check the accuracy of what the law was thought to be with what it really is.

Does everyone agree with the laws and regulations? Assign groups of students to write new ones the way they think they should be. Defend them in front of the rest of the class.

FISH AND WILDLIFE COMMISSION OPPOSES ANTI-TRAP MEASURE

The Fish and Wildlife Commission unanimously adopted a motion to "express its opposition to Measure Number 5 on the November 4, 1980 ballot for the following reasons:

"Populations of furbearing mammals, like all wildlife resources, must be regulated to prevent over-utilization of habitat and controlled to prevent overabundance. If numbers cannot be controlled, damage to forest and fruit trees, and crops will multiply rapidly, man-made dikes and ditches will need costly repair, and predation on livestock and wildlife

species will increase unchecked. Trapping is the major tool available to control furbearer populations. In addition, traps are also used to solve many of the wildlife damage complaints that are received by the Department of Fish and Wildlife and other agencies. Without these tools, the Department cannot meet its statutory charge to manage furbearing mammals in a manner that is compatible with primary uses of the lands and waters of the state."

The Commission adopted the position after listening to presentations

from both proponents and opponents of the ballot measure. The measure would, if passed by a vote of the people, "forbid sale and use of snare and leghold traps, except temporarily to control predatory animals causing livestock loss, with State Agriculture Department permit. After November 1, 1985, measure would forbid sale and use of snare and leghold traps for any reason except to protect human health and safety, with State Health Division permit. Would not forbid use or sale of mouse, rat, gopher traps, or live 'box' traps."□

MORE FISH MANAGEMENT PLANS

The Fish and Wildlife Department continues to evaluate waters under the state's wild fish policy.

On Saturday, September 20, the Fish Division staff of the Department will present its recommendations for 1981 angling regulations to the Fish and Wildlife Commission. As part of that package the staff will also make recommendations for management of trout under the wild fish policy

adopted in 1978.

Management abstracts upon which future plans will be based are being prepared for the following waters: (1) Davis Lake, (2) Mann Lake, (3) Lemolo Reservoir, (4) Paulina Lake, (5) Wallowa Lake, and (6) the Blitzen River.

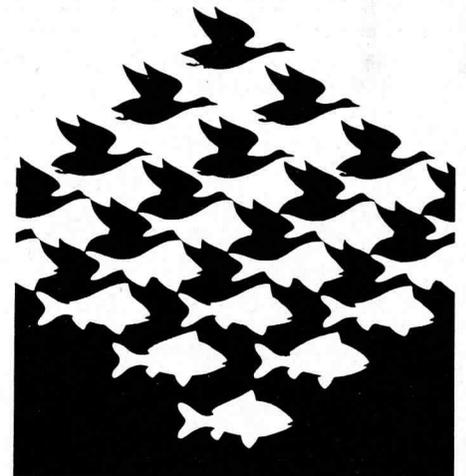
We will report more on these management plans after they are presented to the Commission.□

NATIONAL HUNTING-FISHING DAY — SEPTEMBER 27

Sportsmen have played the central role in the development of this country's conservation conscience. They were the first to warn of the dangers wildlife and fish resources faced in the path of an expanding civilization. They helped establish the nation's wildlife refuge system and helped finance the purchase of refuges, wintering ranges, wetlands, and public hunting areas in nearly every state of the union. They continue to contribute billions of dollars each year to the nation's economy and millions more for wildlife management in every state.

So, it's appropriate that one day a year should be set aside to recognize the commitments and contributions of this country's hunters and fishermen. National Hunting and Fishing Day, set for September 27 this year, will focus on the continuing efforts of the sportsmen devoted to preserving the hunting and fishing sports. The theme: "Helping Insure the Future".□

NATIONAL HUNTING & FISHING DAY®



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