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Sporting  
Vol. I, No. 4  
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# MONTANA

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STATE DOCUMENTS



Vol. I - No. 4

*Official Publication of  
The Montana Fish and Game Department*

# STATE OF MONTANA

*John W. Bonner, Governor*

## MONTANA FISH AND GAME COMMISSION

*Edward M. Boyes, Chairman*

*Walter Banka*

*Elmer Johnson*

*Thomas S. Morgan*

*William Carpenter*

*Robert H. Lambeth, Secretary*

### *The Commissioner's Message*

The sole aim of your Fish and Game Commission is, of course, so to manage the wildlife resources of the State as to insure their perpetuation for the use and enjoyment of all citizens. Many problems confront the Commission in pursuing that aim. There is one I should like to stress in this month's message.

I should like to point out the need for a warm friendship between the farmer and the sportsmen who hunt over the farmer's land. That friendly feeling will be forthcoming, I am sure, if we sportsmen treat the farmer with the consideration that is his due. Place yourself in his position. How would you feel if your fences were cut, your gates left open, crops trampled, cattle and horses now and then wounded and sometimes killed, your wife and children frightened by stray bullets singing around their ears? You, too, would become angered and would be justified in putting up "No Trespass" signs if all this happened to you. We cannot blame the farmer if he does likewise for his own protection.

After all, the farmer is raising the game the sportsment hunt. Let's treat him with fairness. If we do there will follow a friendship and co-operation on the farmer's part all true sportsmen desire and without which no satisfactory program of wildlife conservation can be carried out.

*Ed Boyes*

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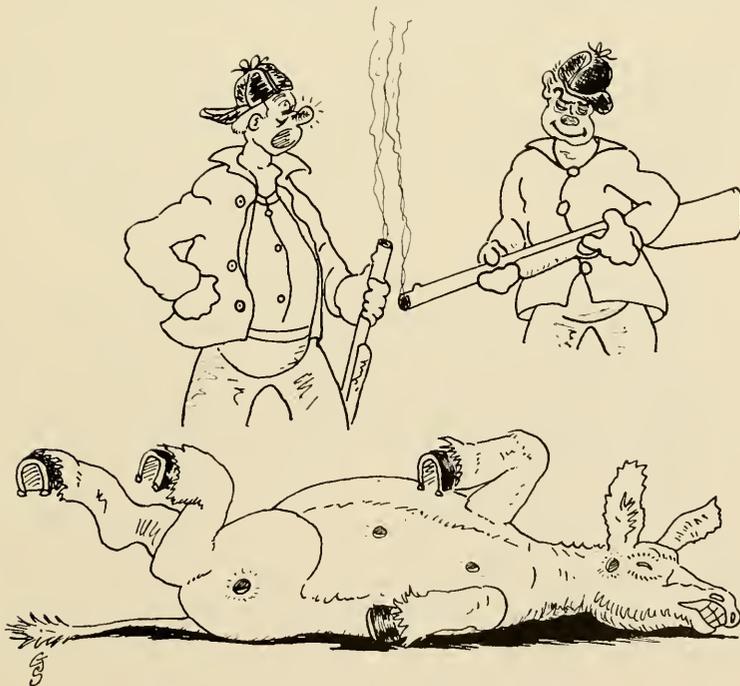
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### COVER PICTURE

A good day for ducks is just ending. A guy doesn't even mind being tired after such a hunt. Where else on earth is hunting so good as it is in Montana.

NAEGELE PRINTING CO., HELENA, MONT.



SHAY - IS THIS A MOOSH  
OR AN ELK ?

## *Editorial* - FLIPPER FIRES !!!!

Smouldering embers, gray ashes, and burned bodies may be the fate of some beautiful forest or verdant prairie if YOU are not careful. In just one thoughtless moment a neglected campfire or cigarette can turn into a blazing holocaust, a forest that took nature hundred of years to create.

Your responsibility to extinguish all possible fire hazards is a serious one and yet so simple to observe. The extra bucket of water on a campfire or the carefully disposed-of cigarette butts in an ash tray may save millions of dollars, much of nature's beauty and even human life. So simple—so effective, and yet so often ignored!

Officials of the U. S. Forest Service report that nine out of every 10 fires are caused by human carelessness. Certainly a nation which rates so high in education and intelligence could almost eliminate this 90 per cent fire loss which man alone is causing.

In an effort to assist in reducing the tragic losses to our natural resources, field employees of this Fish and Game Department have been authorized to apprehend for necessary legal action any persons found in violation of the federal laws against cigarette and live match flipping or any other careless handling of fire.

Thus to the force of forest and highway officers another group of nearly 100 men will be added in the fight to protect forest and prairie — the homes and food supplies of our wild animals.

## *Hey, Sport—*

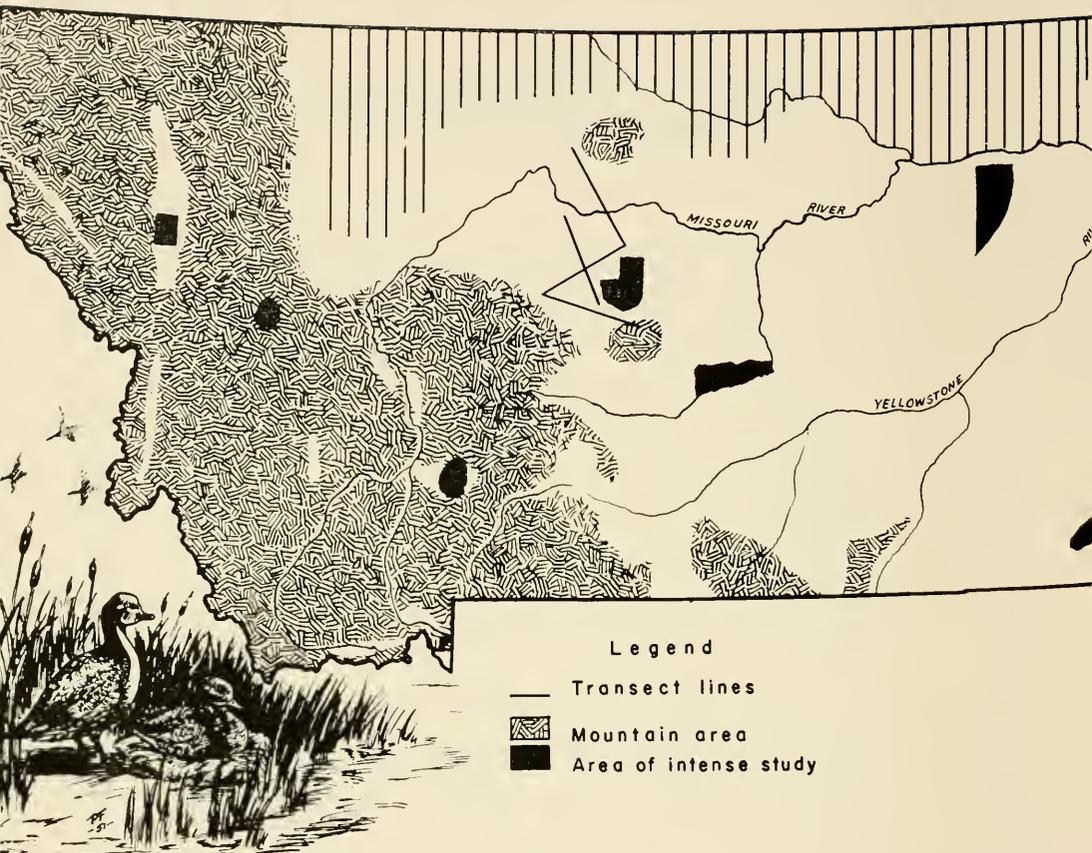
With this release, the Montana Fish and Game Department has completed four issues of its official magazine "Sporting Montana." The objectives of this publication are to inform the hunters, fishermen, and wildlife lovers of this state how activities and plans have progressed in the management of the state's valuable wildlife resources.

However, we also want it to be an interesting, live magazine, and one that you, the reader, will look forward to receiving.

Thus, we are requesting that you let us know what features you like, what you don't like, or what you would like to see added. Your frank comments will be appreciated and will guide us in preparing future issues.

— Sporting Montana

## MONTANA



# OUT FOR THE COUNT

By WYNN FREEMAN

Waterfowl hunting regulations for 1951 have been set. Some of the hunters are well satisfied; a few are not. But regardless of personal ideas and feelings on the subject, the story behind the establishment of regulations should be an interesting one.

The Montana Fish and Game Department reported its yearly findings of the extent of spring migration, cen-

sus of resident waterfowl, and nesting success to the Fish and Wildlife service for its use in setting the season and limit. The service also hears from other states in the northern tier, Alaska, and the Canadian provinces. The size of the area involved in each of the more than 47 reports varied from large geographical subdivisions the size of a state or province, to

small county-size areas that were intensively studied.

### spring migration

Montana's work is typical. The waterfowl study begins when the first birds arrive in the spring. Comparisons of the intensity of the spring migration through Montana from year to year are made from weekly counts in areas specially selected.

Using the airplane as standard counting equipment, they fly in a straight line between two predetermined points and count birds for  $\frac{1}{8}$  mile on each side, which means that by the time they have flown for four miles, they have taken in a square mile of land surface. It is on the square mile basis that the comparison of figures is made from year to year.

### Continuous Season, Oct. 12-Nov.30

Daily Bag .....	Ducks 5*	Geese 5*	Coot 10
Possession Limit .....	Ducks 10	Geese 5	Coot 10

### Shooting Hours

Opening Day—12 noon to one hour before sunset.

Remainder of Season—One-half hour before sunrise to one hour before sunset.

\*Wood Ducks—Limit for bag and possession is one Wood Duck.

\*Geese—Bag and possession limit may not include more than two Canada geese or subspecies; two whitefaced geese; or one Canada goose or its subspecies and one white-fronted goose. (No snow geese may be taken in Beaverhead Galatin, or Madison counties.)

When counts indicate that the transients have moved on, there is the task of counting the resident waterfowl. Actually, it would be impossible to count all the birds; therefore, the waterfowl biologists have resorted to making counts on sample areas so they can arrive at an easy-to-compare figure.

### potholes and reservoirs

Distribution of the waterfowl over large areas is determined largely by the number of water areas available, and in this type of survey, waterfowl numbers are also dependent upon the frequency of water areas. The area north of the Missouri river is the greatest one for waterfowl production



The waterfowl study begins when the first birds arrive in the spring. . . How many sportsmen would like to get the above picture in their gun-sights?

in Montana, since the "great ice sheet" of days gone by which gouged out the numerous potholes, came only as far south as the Missouri. Consequently, that is where studies have been concentrated. For the third consecutive year strip censuses were taken at 12-mile intervals between the Missouri and Canada, as far east as the North Dakota border to the mountains on the west. (See map). That's a lot of territory, too—more than 1,800 miles by plane. Each census strip was  $\frac{1}{4}$  mile wide.

A second natural division of waterfowl habitat is a region south of the Missouri and east of the mountains (see map 1) where a number of man-made stock water reservoirs are increasing its importance to waterfowl tremendously. Here, the strip census cannot be used. Instead, four large tracts were selected within which all

the birds on each reservoir were counted. That total area measured 588 square miles. Here, too, the department has the figures of three years to use comparatively.

#### **and, in the mountains**

The third natural division encompasses the remaining portion of the state, or the mountainous area, so much of which is uninhabitable for waterfowl, that only certain valleys are checked for population trends. Airplane coverage has been small, in relation to the habitable water area.

By this method of aerial sampling, the waterfowl numbers are studied in Montana. Enough of each area is covered by sampling year after year to indicate whether the population is up or down. That of nesting ducks in Montana in 1951 was down slightly from the high in 1950. The

goose population, conversely, was up.

From the air, comparative information also is obtained on the available water for nesting birds each spring. All of the water areas are tabulated on each flight and a note is made as to the fullness of each pond. By flying the same routes over the same area each year, the aerial census takers can gather accurate comparative information on water areas and birds occupying them.

### **back to earth**

Here, the aerial method ends. The rest is done by car to determine what species of ducks constitute the resident population that has already been counted, and what success they had on Montana's nesting grounds.

Only back roads are used for these roadside counts, where the birds are relatively undisturbed. The car routes

form a network and the same ones are traveled each year.

Now a closer check is made: are there more pintails than mallards this year? did the number of ruddy ducks increase? how are the others making out?

But that's not all. Nesting success and how many of the brood will actually take wing must be considered, for upon the nesting success of the season lies the ultimate success of the hunting season. For example, if it were possible for each of 100,000 pairs to raise a brood of eight ducklings to the flying state instead of the usual coverage of 4.5 ducklings in Montana, it would mean an additional 350,000 ducks to hunt this fall.

Perhaps by now the picture the administrator sees is beginning to form. Take the report of this study made in Montana and combine it with a sim-

(Continued on page 24)

One of the numerous potholes north of the Missouri river "gouged-out" by the "great ice sheet," upon which waterfowl are dependent.





## YOU'RE ROCKING THE BOAT

Fishing trips turned tragedy have claimed the lives of 19 fishermen in Montana since May of this year. Some cases were unavoidable, some unnecessary. But it's 19 too many.

Thirteen of the drowning victims were boat fishermen who went down after their crafts capsized in the waters of Lake Frances, Flathead lake, Fort Peck lake, Huntley Dam, and the Missouri and Big Hole rivers. The other six were bank fishermen.

Only the statistics can speak for this year's vanquished fishermen Boats!

So should boat fishing be outlawed?—Or should people be reminded that they may drown in deep waters, and that boats, though an essential piece of lake fishing equipment, are also long eyelashes that wink at fate and tease Old Man Water to take their careless occupants.

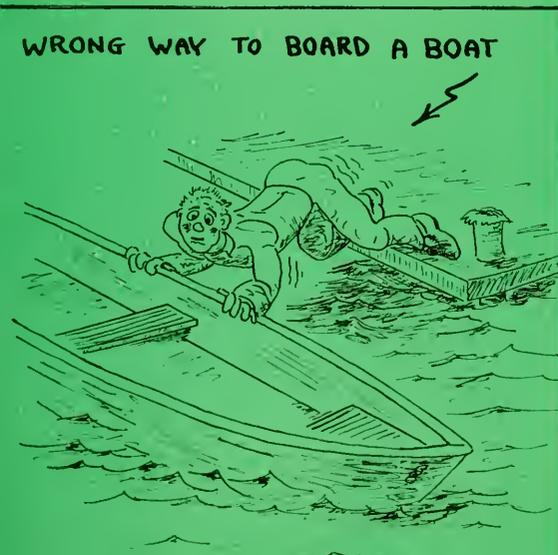
Usual boat upsets are caused by: lake in boat instead of vice-versa; too much weight, or improper distribution of same, rough and dangerous waters; and disregard for basic boating and bathing principles.

Please consider the following truths to be self-evident!

\*MAKE SURE THE BOAT IS SAFE.



RISKY SHIFTING ~



WRONG WAY TO BOARD A BOAT

Unless you're intending on exploring native fish habitat first hand, never venture into water in an unsafe or unsure boat, and always carry life preservers and a bailing pail with you.

**\*MAKE SURE THE WATER'S SAFE.** Don't go into rough waters even if the fishing is good, and ever be on the alert for logs, rocks, and stumps.

**\*BOARD YOUR CRAFT PROPERLY.** Step into the center of your boat from a crouching position, making sure the boat is close to the dock.

**\*DISTRIBUTE WEIGHT EVENLY.** Divide your occupants evenly within the boat from stem to stern, or you'll dunk your boat and passengers.

**\*TAKE CARE WHEN SHIFTING.** If positions must be shifted, do it one at a time, keeping the shifting weight in the center.

**\*DON'T BELIEVE IT!** When they say "The more, the merrier." Find

out how many your boat can handle, and **never** crowd it. When the sides of the boat are barely above water level, that's your cue to start worrying, Mac. The ripples caused by another boat or a mediocre wave can just about create a swimming party.

**\*DON'T BE DUMB.** Learn the basic rules of boating before you don your skipper's cap, and if you don't know how to swim, sell your boat and fish from shore.

**\*DON'T DIE WITH YOUR BOOTS ON!** Boots are practically a necessity for stream fishermen, but you may as well tie a weight around your neck as wear them in a boat. Wear light-weight clothing that you can get out of quickly.

Now, you'll say—"Well! Everyone knows these rules."

Well, buddy if they do, let's hope they practice them.

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# THE BIG SALE

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By **WALTER J. EVERIN**  
Chief Deputy

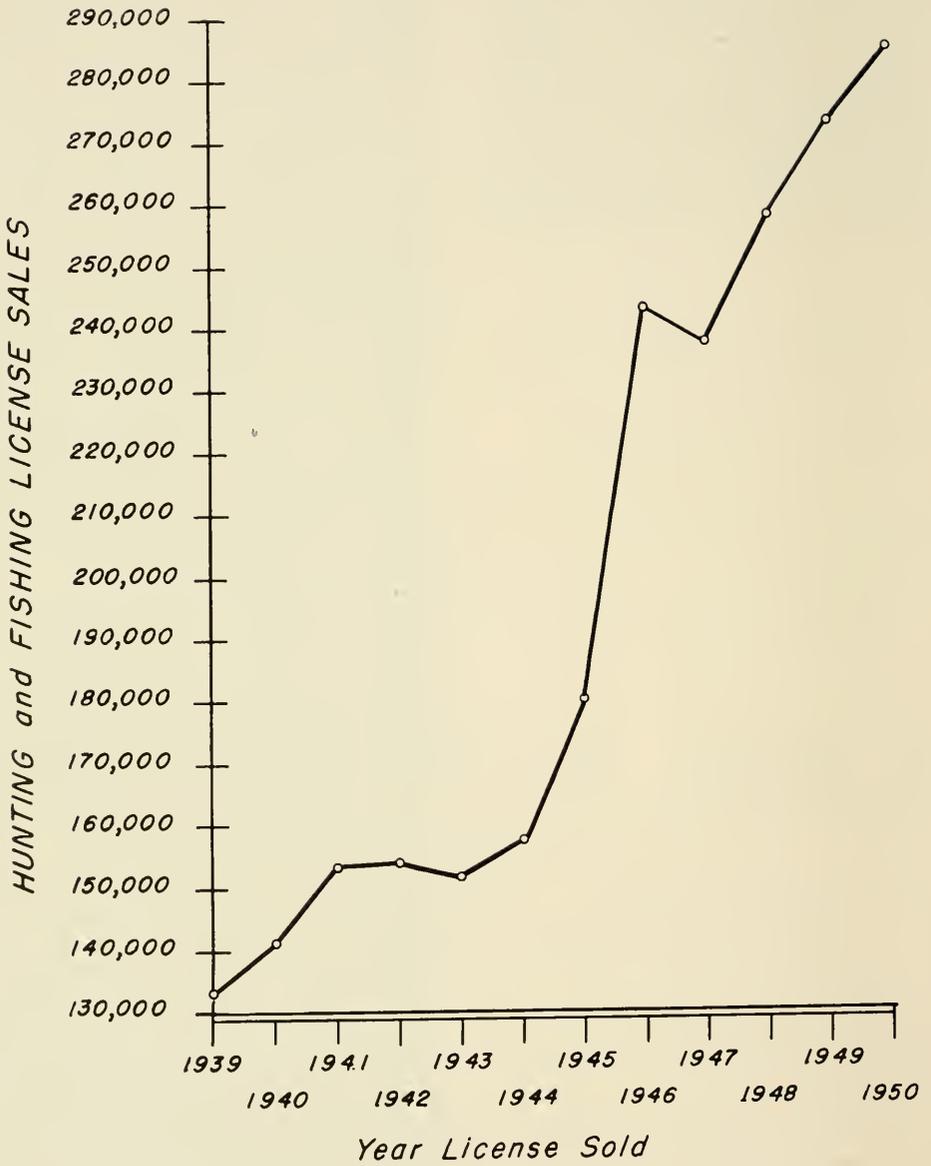
**Every fourth Montanan now owns a fishing license; how much more will license sales increase?**

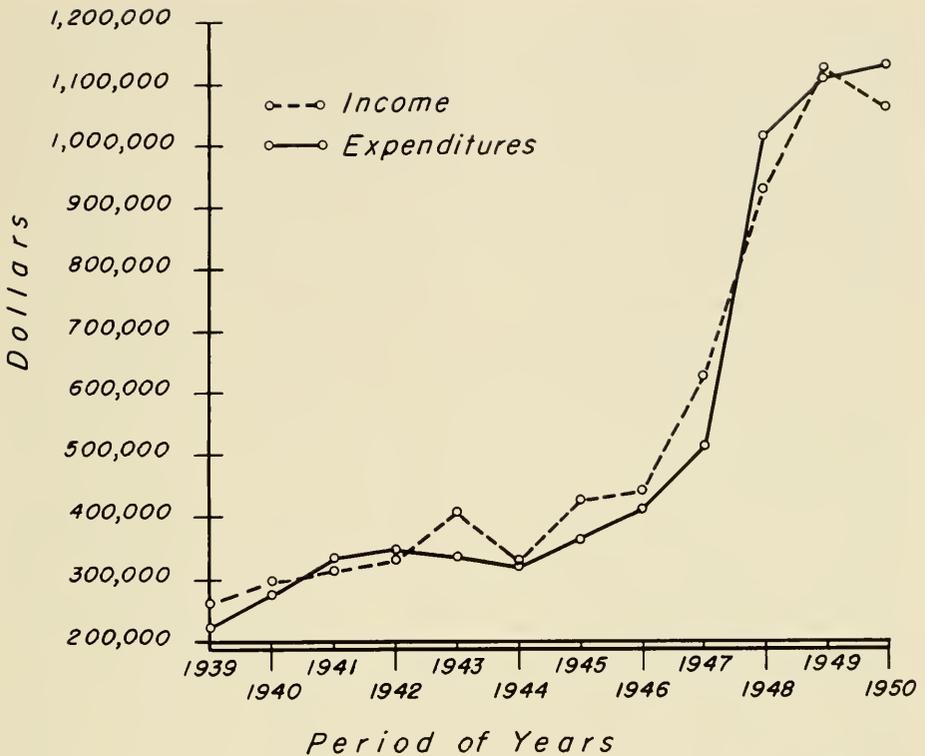
During the past ten years there has been an upswing in the national sale of sporting licenses. On the national scale, the increase has amounted to more than 85 per cent. In Montana the accelerated license sales has kept close pace with the national trend, lagging to about 78 per cent.

Here are some of the factors which

may have contributed to this rising trend:

(Any increase in population can be ruled out, since Montana's population has increased but a small per cent during the past ten years.) Increased wildlife populations may have some influence, since increases in deer and antelope have made





hunting more attractive to sportsmen. However, populations of fish and game birds and other big game animals have shown no sizeable increase. Improved roads and methods of transportation have contributed by making fishing water and hunting areas accessible to more people, a fact reflected in the substantial increase in non-resident license sales. Greater leisure time of the people due to modern methods of production, greater earning power, and shorter working hours, is perhaps one of the main reasons why more people have more time to devote to hunting and fishing for outdoor recreation.

However, no single factor is alone responsible. A combination of many, such as those mentioned, have resulted in this nation-wide trend.

#### vertical line

A glance at the chart showing the license trend illustrates the rapid rise of license sales in Montana for the past eleven years. This graph shows an almost vertical rise on the coordinate line for the years 1945 and 1946; then a drop in sales for one year, and another sharp rise for the next four years. A continuation of this line which may still be rising, depending on future license sales, would show a gentle tapering off. It is doubtful that it can continue to rise

at the rate shown on the chart for much longer, unless there is a proportional upswing in the state's population, or that non-resident license sales should account for any future rise. It is notable that already one person out of each four of our total population purchases a resident hunting and fishing license.

#### **the reaction**

As a sharp contrast to the rising number of wildlife pursuers, let's examine the wildlife resource, so far as this state is concerned, to determine how wildlife has reacted to the increased hunting and fishing pressure. In most instances the population of big game animals such as antelope, deer, and bear, still have an annual increment larger than the present harvest of hunters.

Fishing pressures have been met with a reduction in the bag limit when it has been deemed necessary. Hatchery introduction of legal size fish are being liberated an an all-time high.

Predator control has reduced the numbers of game animals and game birds which may have eventually fallen to predators. A favorable weather cycle which has produced above normal moisture in most areas of the state for the past ten years has increased natural vegetation, resulting in a more favorable wildlife habitat.

#### **roadside hunter**

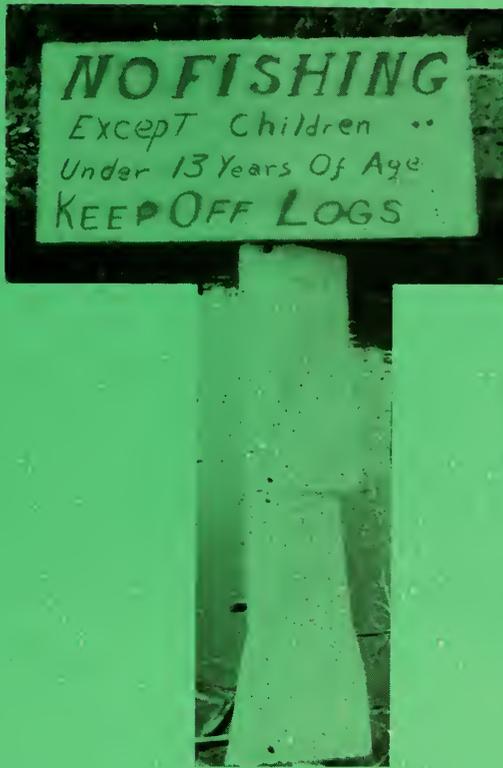
The main management problem seems to center around hunter distribution. Areas which contain a surplus of wildlife may be too remote for a great number of today's roadside

hunters whose effective hunting range may be from a few hundred yards to five or six miles from car travel. Local hunting pressure in some areas of Montana are very light as compared to wildlife available. Full utilization of some species of wildlife is a goal which we are yet striving to attain in Montana.

Fishing pressure on certain favored streams in the state has been great according to our standard—yet as compared to actual number of fishermen in states with a much greater population, we cannot consider any of our streams as having too great a fishing pressure. The department's fisheries research studies on one of the more heavily-fished streams has shown that although a greater number of fishermen on such a stream may reduce the catch per average fisherman, yet a large fish population may still be present and available for the expert anglers.

#### **greater abundance**

In the many years to come, an ever increasing number of hunters and fishermen will exert an increased hunting and fishing pressure on the wildlife resources of the state. It may be optimistic to believe that sportsmen many, many years from now will enjoy a greater abundance of wildlife than we know today. This situation is true today as compared with wildlife populations of fifty years ago. Improving management practices and an ever-increasing knowledge of the innumerable needs of wildlife almost assures this prediction.



## *This Is About All Kinds of Kids --Except Bad Ones--*

In this topsy-turvy world there's something almost spiritual about a kid out fishin'. Maybe the "little monster" has a frog in his pocket or an unkind name in mind for his new teacher, but still there's something about the fact that he's fishing that makes you confident he's being prepared to take his future place as a good sportsman and citizen.

For nearly half a century sports-

men have planted and reared fish to insure better fishing sport, but not until very recently have they entertained the idea that angling could be better yet if they reared conscientious fishermen with which to stock our fair waters.

This year, the 1951 state legislature, after a crusade for kids staged by Senator Don Valiton and Montana outdoor columnist, John Willard,



## *All Over Mon*

gave the Montana Fish and Game Department "... authority to declare certain fishing waters within the State of Montana closed to fishing by all persons, excepting . . . that class of persons whose ages are twelve years or less; it being the purpose of this Section to provide suitable fishing waters for the exclusive use and enjoyment of juveniles . . . at such times and in such areas as the State Fish and Game Commission shall in its discretion deem advisable and consistent with its policies relating to fishing in the State of Montana."

When it came time to set fishing regulations shortly thereafter, sportsmen from thirteen Montana towns requested local waters set aside for kids. After the closures were grant-

ed, the waters in most of the places were stocked with legal size fish, and opening days were highlighted with children's derbys.

In Livingston the civic-minded members of the Park County Rod and Gun Club stocked a portion of a small channel of the Yellowstone river with 3,000 legal sized rainbows and turned it over to the kids. The area is within the city limits, extends for more than 14 blocks, and borders Sacajawea park with its football and softball fields, picnic area, band shell, and playground equipment. Aug. 12, Bobby Eck, a 12-year-old New Jersey lad, copped the prize in the kids fishing derby which was co-sponsored by the Park county club. It will be an annual event.



Photo by Warren N. Reichman, Missoula

## *ina, Kids Fish*

The kids at Troy are doubly fortunate, with two fishing spots — a stream and a pond—sponsored for them by the Troy Rod and Gun club. Callahan creek is a small stream, easy to patrol and supervise, which gives forth native and brook trout. The pond built in the city park in 1949 by the club solely as a place for children to fish is also a swimming and wading pond and is not more than three feet deep. The water here comes from a natural spring. Club members and Senior Boy Scouts patrol the grounds, and on opening day, the scouts set up a lunch stand while the kids fish for the nicest catch. Local merchants and citizens donate prizes. A. T. Lindsey, the club president, says the youngsters appreciate and

enjoy their fishing, and that they are becoming a crop of promising little citizens.

Red Lodge Rod & Gun club members dedicated a portion of Rock creek inside the city limits to the youth, and decided they had made a mistake in their choice. They found that Rock creek is too large a stream to be safe unless the children are chaperoned, and that it should be better stocked. So next year they will look around for a more suitable location. However, they do report a successful fish derby. They flushed fish from an old fish hatchery pond into Rock creek, and the kids had a real hey-day.

More than 80 children registered for the Lakeside fish derby near Kali-



Livingston youth fishes in Sacajawea Park

Photo by Ruben L. Hansen

spell this year when the Flathead Lake Wildlife Association, Flathead Sportsmens Association, and the Whitefish Rod and Gun club sponsored the contest in Stoner creek. Spring creek also is set aside for juveniles. This year the project was an experiment to see if it was worthwhile. It was.

Lee H. Brown, of the Flathead Sportsmen said, "Personally, I had

more kick out of watching the kids fish than I ever got out of fishing myself."

Warm Springs creek, which runs right through Washoe Park in Anaconda is sponsored for juvenile fishing by the Anaconda Sportsman's Association. There are camp grounds, tables, stoves, etc. They, too, have an annual derby, with "biggest fish" prizes for the sports-loving boys and girls—and the girls are as enthusiastic as the fellows.

The Anaconda Sportsmen see only one thing wrong with the set-up as it is. They would like to see the fishing open to children under 15 years of age instead of 13.

Senator M. J. Lott, of Madison county set aside the sloughs on his property near Twin Bridges for the children to fish, and he has taken it upon himself to plant the fish there. As yet, there has been no derby, but any day is derby day for the Madison county kids who fish there.

The Billings kids help the sportsmen to keep track of winter fish kill

### TROY POSTS POND RULES





Kalispell Kids

by turning in tagged fish which they catch in Broadwater Drain, where as many as 52 young anglers fish daily. To the Billings Rod and Gun club, the kids' fishing stream is its pet project. Could anyone think of a more worthwhile one?

#### and, in missoula:

This is what the Western Montana Fish and Game Association has to say about its kids' pond:

"One is reminded of Longfellow's poem, 'The Barefoot Boy' when visiting our kids' fish pond. Here, all day long, you can see youngsters fishing, both boys and girls, and actually catching fish.

"The Western Montana Fish and Game Association sponsored its first fish pond seven years ago. This kiddies' fish pond was located four miles southwest of Missoula along the Bitterroot river. The waters were good and many fish were caught; however, this site had several disad-

vantages. First, its distance from Missoula; then, the banks were steep, and the water was fairly deep. It was difficult to supervise this area and the mosquitoes were large and numerous. In addition, high water often took out our headgates, and let all of the fish out of the pond.

"Two years ago the fish pond was moved to Greenough Park, which is a public park adjacent to the city. Rattlesnake creek flows through the area, and there are homes close to the park. Rattlesnake creek is reserved for kids fishing for about four

Derby Day, Troy





—Photo by Ruben L. Hansen

Johnnie Lindsey, Troy, voted "best sportsman" at derby

miles. There is about one-half mile of water in the park on which we constructed a dam and made a large pond where the trout are confined. This year we constructed two more dams, thus giving a larger fishing area. These ponds were stocked at the beginning of the season by the State Fish and Game Department with 2100 fish, and 600 trout are added every two weeks. The advantages of this location are obvious. It is close to the city, and the boys and girls can walk to the site, the waters are not deep, the area is adjacent to homes, and so can be supervised both by our members and by the Missoula city departments.

"Kids not only from Missoula, but from every state in the Union, and many from Canada, have enjoyed fishing in this spot. The fish pond committee, under the chairmanship of L. C. Stimson, has done a wonderful job on this fish pond. On certain days ice cream is served to the kids. There are picnic tables and fireplaces

in the park close by. The project is sponsored and paid for entirely by the Western Montana Fish and Game Association. We believe that the kids' fish pond is one of our most important projects, and we are sure that it is contributing to the education of the youngsters in good sportsman-like conduct. These young people will be members of our club in a very few years."

Other towns which have reserved fishing waters for children are Philipsburg, Helena, Deer Lodge, Butte, Choteau and Billings. They are to be congratulated on their interest in furthering recreation for their youth.

Those who have not yet initiated such projects in their communities might profit from the experiences of those who have. It's simple; just take one small stream or pond, stock well with fish, add chaperones, a dash of playground, and flavor with public interest, and you have the recipe for keeping mom's and pop's hair from turning gray.

**GET Sporting MONTANA For Your Friends**

**It's FREE**

Send this coupon to:

SPORTING MONTANA  
Montana Fish & Game Dept.  
Helena, Montana

Name \_\_\_\_\_

Address \_\_\_\_\_

City and State \_\_\_\_\_



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Every time I go out in the fields to knock off prairie dogs, I just can't help but recollect a pretty impressive incident that happened when I was about half as high as a raccon's eye.

I was in a big Prairie dog "town" —oh, I'd say it would cover 200 acres —shooting them little critters with a .22 rifle. I just had one sighted in when I heard a faint "whooshing" sound which grew louder by the second. Sceered to death, I wheeled around and saw an eagle coming almost straight down out of the sky with half closed wings, about 300 feet above me and slightly off to the side. Right then I started thinkin' all sorts of sentimental thoughts, like one who is doomed, 'cause I figgered for sure my time was up. That old bird was headed right for me. Then, when he was about 30 feet off the ground, he leveled off slightly and

hit a prairie dog, about 100 feet from me.

He must've hit the rodent with his closed foot, as it rolled about 20 feet at least from the impact. I dunno how fast the bird was traveling when he hit the "dog", but it was plenty fast—all I know is that it happened in a matter of seconds.

Then the eagle flapped his wings, and wheeled up into the air, circled around, and came back to its prey. He picked up the dead animal in his claws and took off, his huge wings beating the air. Since then I have seen eagles attack jack rabbits and coyotes, and have heard some people say they have seen them kill young antelope and deer. Ha! I reckon I was pretty sceered that day, but if I'd used my noggin, I'd a knowed not even a bird would relish a critter like me with quivverin' bones and a yallar liver.

# PHEASANT



## *forecast*

By W. R. BERGESON

Oil up your guns, fellas — pheasant hunting looks pretty good this fall.

With the probable exception of the Milk river and Yellowstone valleys, most of Montana's major pheasant producing areas will provide ring-neck hunting at least as good as, or even better than, the 1948-50 average.

This prediction is based on winter and early spring breeding stock tallies, nesting studies, early brood counts, and weather conditions. Of

course, even the best-laid bets can go wrong, but everything considered, it looks as if Montana pheasant hunters can anticipate the best hunting since 1940-42.

To be specific, the real hot spots this year will be the Conrad-Valier area, the Fairfield bench, the Flat-head valley, and the lower Yellowstone valley in the vicinity of Sidney.

Other areas where good hunting can be expected will be the Big Horn and Musselshell river valleys.

In the Milk river valley, pheasant populations from Chinook to Wolf Point were dealt another card from the bottom of the deck by Old Man Winter. The 1949-50 winter, one of the most severe on record, caused heavy pheasant mortality along the Highline; this was followed by the cold late spring with snow as late as June which resulted in poor early hatches. The 1950-51 winter started out favorably enough but extreme cold and deep snow, followed by a disastrous March blizzard, caused unusually heavy winter losses again.

#### **yellowstone**

In the Yellowstone valley, particularly around Billings, pheasants have never recovered toward previous highs, principally because of the marked change in land use, which has materially reduced both the quantity and quality of suitable pheasant habitat.

As previously mentioned, many factors are measured to determine dates and length of season as well as bag limits. One of the most important measuring sticks are the winter and early spring breeding stock tallies. Observations are made throughout Montana pheasant ranges during the winter months to determine the ratios of hens to roosters, then during the months of April and May pheasant crowing counts are conducted. This latter technique is based on the fact that pheasant roosters during the breeding season, like their barnyard counterparts, advertise to the world

in general that their territories and harems are inviolable. Accordingly, established routes are traveled every spring from daylight to about an hour after sunrise and, at one-mile intervals, stops are made to listen and record all pheasant calls heard during a two-minute period. Thus, an index is established whereby spring breeding populations can be compared with other areas and with previous years.

#### **winter losses**

Generally speaking, all areas showed fair increases in the breeding cock populations with the exception of the Kalispell, Bitterroot and Billings routes. Even portions of the Milk river valley showed increases but the heavy winter losses of hens there will

#### **PHEASANT SEASON**

Oct. 28 - Nov. 12

Bag limit—4 cocks

Possession Limit—4 cocks

#### **HUNGARIAN PARTRIDGE SEASON\***

Oct. 28 - 30

Bag limit—3

Possession limit—3

#### **SHOOTING HOURS—**

(Pheasants and huns)

Sundays—noon to 5 p. m.

Weekdays—8 a. m. to 5 p. m.

\*Huns may not be hunted in Beaverhead and Madison counties, the Moiese Valley in Lake county, or the Forest Service winter range in Sanders county.

probably make the current year's crop of young birds short.

Because of the abnormally cold late spring which has plagued all species of upland game birds again this year, early broods in many sections of Montana have been wiped out, but due to the remarkable trait of the pheasant hen which causes her to be a persistent re-nester, broods will probably be equal to, or larger than, those of last year; this, coupled with the generally larger breeding population present this year, should make the 1951 pheasant season one of the best for hunters since the happy days of 1940-1942.

Montana hunters killed in the neighborhood of 212,000 pheasant roosters during the 1950 season. On the basis of observed sex ratios preceding and after the hunting season it is apparent that if hunters would scrupulously obey the law and not shoot hens, pheasants could stand either a longer open season or a more liberal bag limit. When the sex ratios remain nearly the same before and after hunting, one must conclude that either the cock crop is not adequately harvested, or that hens are shot in nearly equal proportion. Probably the true answer lies someplace between these two hypotheses.

How much effect does hunting have on the abundance of pheasants? Is it possible to shoot out the birds in certain areas? Pheasant workers are unanimous in the belief that given suitable cover and ample protection for the hen it is next to impossible to overshoot an area where the birds have become established.

### **simple arithmetic**

It can be shown by a few facts of pheasant biology and a little simple arithmetic that the shooting of cock birds does not have any great effect on the population. The first fact to understand is that pheasants, unlike Old Soldiers, don't live forever—they do die. Of the birds present in the fall, nearly 75 per cent will normally be dead by the following fall. So saving a bird by not shooting it this fall doesn't mean that it will still be there a year from now. The second point is that young birds, the current year's hatch, make up the bulk of the birds present during the hunting season; and that hens are the important link in the production of these young birds. Cocks are generally surplus. Suppose you had 10 cocks and 10 hens in the spring. Assume that hens bring 6 young apiece to the hunting season; if half these young are roosters, we will have a fall crop of 30 young and 10 old cocks, or a total of 40 cocks. Now, if we assume a heavy kill has been made and there were only 5 cocks and 10 hens going into the breeding season, the fall crop would be 30 young and 5 old cocks or a total of 35 cocks. Thus harvesting half of the cocks one season only made the next season's population 12.5% less at the most than if none had been shot at all. The effect of hunting would be even less, since many of the cocks killed by the gun would have died from other causes anyway.

### **the season**

The pheasant season is usually set by the Commission during its Septem-

ber meeting, although setting the 1950 season was delayed until October because the late growing season and late hatches made it impossible to gauge the fall crop of birds accurately. Determining the dates and length of season as well as the bag limit requires the patience of Job and the wisdom of Solomon on the part of the Commission. Seasons should be in reasonable proportion to the

available supply of birds and must be held after all crops are completely harvested. The demands of sportsmen must be balanced against the rights of the landowner since like any other harvestable crop, pheasants are a product of farm-lands. In the meantime, we can oil up our guns for what looks like a very good pheasant season in '51.

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## OUT FOR THE COUNT

(Continued from page 7)

ilar one made in South Dakota, Alberta, and so on through the 47 reports submitted to the Fish and Wildlife service. The information resulting from such a combination of findings should provide a sound basis for determining the welfare of the birds.

### nesting in '51

The nesting season in 1951 was a good one in Montana. Although there were fewer birds at the beginning, the number of broods observed over the same area was greater than 1950. Also the size of the individual broods was larger in 1951 than in 1950. If, then, the reports from other states and provinces indicate a similar success on the nesting grounds, the waterfowl picture at this point should look brighter than it has at any time during the past few years. However, when dealing with a migratory species, the success in reproduction in one small area is not a true indication of the welfare of that species. In Montana the picture looks

good, but it may not have improved in Alberta for example, where they had a snowstorm at the height of the nesting season, or in North Dakota where they had floods. When all of the studies are complete and when the reports are submitted and checked one with another, then is when the status of waterfowl is determined. Then is when it can be determined what the harvest can be and how many days and birds per day can be allowed in order to harvest these birds.

The reports are in, they have been checked, and the season has been set. Great strides forward have been made in the gathering of information in which sound regulations can be made, and progress is still being made in methods of gathering this information. Every good sportsman should take the responsibility of getting behind a well-organized and directed fact-finding study of his game. For it is only through such studies, which show us the way to better, more equitable regulations, that our sport can be maintained.

# Drawing for Permits

By R. H. LAMBETH  
State Game Warden

If you're one of the disappointed applicants who did not get an antelope or moose permit this year, then this explanation of the why and wherefore of the "drawings" will interest and, perhaps, console you. Some sportsmen are against drawings, many for them, and many take them for granted; can you think of a fairer way?



The 1951 antelope drawing. Drawing the numbers is Bob Watson, Helena sportsman who did not apply for a permit. Assisting is John Willard, wildlife columnist, and Fish and Game employees.

There are two principal ways of limiting distribution of a commodity if the supply is less than the demand. One is by excessive cost, which would then allow only the financially able to afford the commodity. The other is by drawing.

It is obvious the former system would not be suitable in the case of wildlife. First, because it is the belief of the Montana Fish and Game Commission that wild game should

be distributed among all the people, regardless of means. Secondly, only the Montana Legislature can control the cost. The only fair and equitable system, then, is to use a drawing as a means of distributing the surplus of game when the surplus is not enough to supply needs of an open hunting season. It has been the policy of the department to conduct drawings in such a manner that there cannot be a question of fairness or honesty of the drawing. This department has never directly done the drawing of names or numbers for either antelope or moose, and only rarely in the case of small special seasons, for deer and elk.

The dates of drawings are announced to the hour at the time the season is established, long before the drawing is held. Members of organized wildlife clubs are called in to do the actual drawing. The department personnel record numbers as they are drawn and, of course, do the work of notifying the applicants who have been successful.

There are no drawings of any nature that are not open to the public. We know of no fairer way to conduct a drawing to insure equal opportunity for all applicants.



## Count 'Em and Reap

By W. K. THOMPSON

The pronghorns were on their way out, until well, read it for yourself . . .

Back and forth across the sage-studded prairie, in long straight flights, the little yellow and tan airplane has droned its monotonous way. Two hundred and forty eye straining, muscle tiring hours, the fish and game department's airborne technicians have methodically combed the ridges and coulees in this year's systematic search for pronghorned antelope. Pilot-biologist, Don Brown, with assistance from Don Johnson, Hereld Demaree and Bud Dow, has airstripped a major portion of Montana's antelope range. This annual job of counting the state's pronghorn population is done for one very important reason—so

the antelope can be made available to Montana sportsmen as another huntable big game animal.

It is interesting to look back upon the history of this fleetfooted prairie species. Early explorers reported antelope almost as numerous as the buffalo but like the buffalo they started to disappear. By 1915, many people believed the antelope was doomed to extinction, along with the bighorn badland sheep, at the hands of an unthinking population.

### **good break**

However, things began to break in favor of the antelope about that time. Public attitude changed toward a feeling for conservatism, the game

department was able to increase the effectiveness of its law enforcement program and the slow road to recovery began.

In 1941 it became apparent that pronghorn antelope were becoming quite common in some areas. So the wildlife restoration division was assigned the task of determining the location and numbers of the species. Permission was obtained to rent a small airplane for about twenty hours. This enabled the research division to cover a small percentage of the potential antelope range. A year later it was decided to organize a mobile crew to obtain more information. A two-place airplane was rented, and a three-quarter-ton truck was equipped for hauling gas and camping equipment. Bob Cooney, Lloyd McDowell, and the author were assigned as biologists and ground crew. Walt Hensley, Billings, was employed as pilot. With this setup they managed to get a highly efficient coverage of key areas. Many interesting experiences happened; the crew lived on jack rabbits and set up house keeping in a tent during sub-zero weather. Hay fields and prairie became landing fields and rapidly the major antelope areas were covered.

**artificial introduction**

As accurate information was compiled one thing became quite apparent. Some areas had good antelope populations while others were absolutely empty. This pointed toward a chance to give mother nature a little assistance. So from areas of abundance, pronghorns were cap-

tured and transported to regions of scarcity until most of the holes had been filled by the artificial introduction of nearly 4,000 antelope.

However, it also became apparent that there were enough antelope to allow a certain amount of hunting. Obviously there weren't enough to permit unrestricted hunting as, without a doubt, entire herds might be exterminated. So in 1943 it was decided to permit 750 hunters to enjoy the sport of hunting prairie pronghorns. In order to be as fair as possible all hunters interested in the sport submitted applications and a public drawing was held to determine the fortunate nimrods. Thus started a type of mangement that has been continued since that date. Results have been most gratifying and using this system has resulted in Montana hunters having the opportunity of havesting surplus animals and yet give antelope herds a chance to increase.

**and its results**

An interesting example of the results of this program can be shown in that portion of southern Wheatland and a part of Sweetgrass counties which are known to antelope hunters as areas 3 and 4. The following tabulation is a four-year record of this region which is approximately 584 miles square.

**Antelope Data — Areas 3 and 4**

Date	Total Population	Animals Trapped	Hunter Harvest
1948 .....	3165	448	350
1949 .....	3820		650
1950 .....	4214		900
1951 .....	4499		1250*

\*(Permits this year)

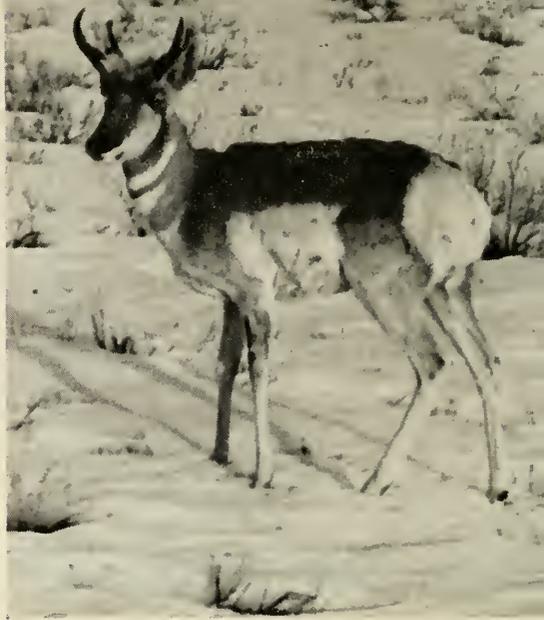
This example is typical of nearly all of Montana's antelope ranges. Increases have resulted from several things. The day of the homesteader is gone and thus the antelope which were almost a matter of necessary diet have been saved from the daily menu. Public awareness of wildlife values has become more evident each year, while for those who fail to recognize that game is public property, the fish and game department has greatly increased the effectiveness of its law enforcement organization. The almost complete elimination of coyotes by 1080 control has also had its effect. Last but far from least the careful management by distribution and hunting as effected by the department has kept the herd sex ratio composition well balanced. Animals have been scattered by hunting and the increase has continued.

**the bright future**

The future for Montana antelope hunting is good. It is doubtful however, if an unrestricted hunting season will be advisable at least in the foreseeable future. Uncontrolled hunting results in the easily accessible herds being overhunted and the more remote herds hardly touched.

Each antelope herd of any substantial size can take, and actually needs, a controlled harvest depending upon the varied conditions which exist. Perhaps males only should be taken, or maybe either sex, but in any case these easily accessible animals must have some protection by limiting the number of hunters in each area.

One thing is apparent from the comments and letters the department



receives: most Montana sportsmen, any of whom were doubtful about the value of counting antelope, are now enthusiastic about the management program. It has meant a fine sport with beautiful trophies and good meat for 31,450 Montanans since the program started in 1943—another case where research and management have paid off in pleasure and hunting for Montana sportsmen.

**Antelope Permits Issued, 1943-1951**

Date	Permits Issued*
1943 .....	750
1944 .....	650
1945 .....	1550
1946 .....	2475
1947 .....	2725
1948 .....	2675
1949 .....	3665
1950 .....	8400
1951 .....	8560
	31450

\*Approximately 90 per cent of all permit holders are successful.

## *Who Will Claim the Spoils?*

A few days ago a man came into the main office of the Fish and Game Department with his 12-year-old son. He proudly bought two big game licenses, one for him and one for Bud.

"Gonna teach the kid how to hunt," he said, "since he's big enough to fire a 12-gauge and a large hunting rifle. 'Broke him in on a .22 rifle and a 4.10 just hunting gophers and small predators. Now we're gonna try the big stuff."

One could see that Bud was eager to learn the chase and practice real adult sportsmanship, for before he left, Bud stuck a big game map and the book of game laws into his jacket pocket.

It was a commonplace happening. A large percentage of the year's total big game licenses are sold to juveniles. Age doesn't seem to make any difference, if the youths can handle guns and have good sporting blood.

The significance of that specific incident, however, became more ap-

parent later that day when one of the deputies up in the northern part of the state reported that a juvenile had been arrested, fined, and jailed for killing four deer and leaving them to waste. By the time the warden learned of the crime and reached the scene of the massacre, the deer weren't fit for even a scavenger's palate.

That incident, too, is too commonplace. But what youth wants a criminal record before he's even old enough to call himself a man?

Most of the "Bud" hunters will never be read of in game arrest records. They've been taken under an older person's wing and taught what to shoot, how to shoot, and when to shoot. The unfortunate ones obviously were taught how to shoot by someone who dismissed class before the chapter on "rules and sportsmanship" was taken up.

Of course it isn't the kids' faults. Again, the spoils lay at the feet of their elders.

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## PLEDGE

I give my pledge as an American  
to save and faithfully to defend  
from waste the natural resources of  
my country its soil and minerals,  
its forests, waters, and wildlife.

