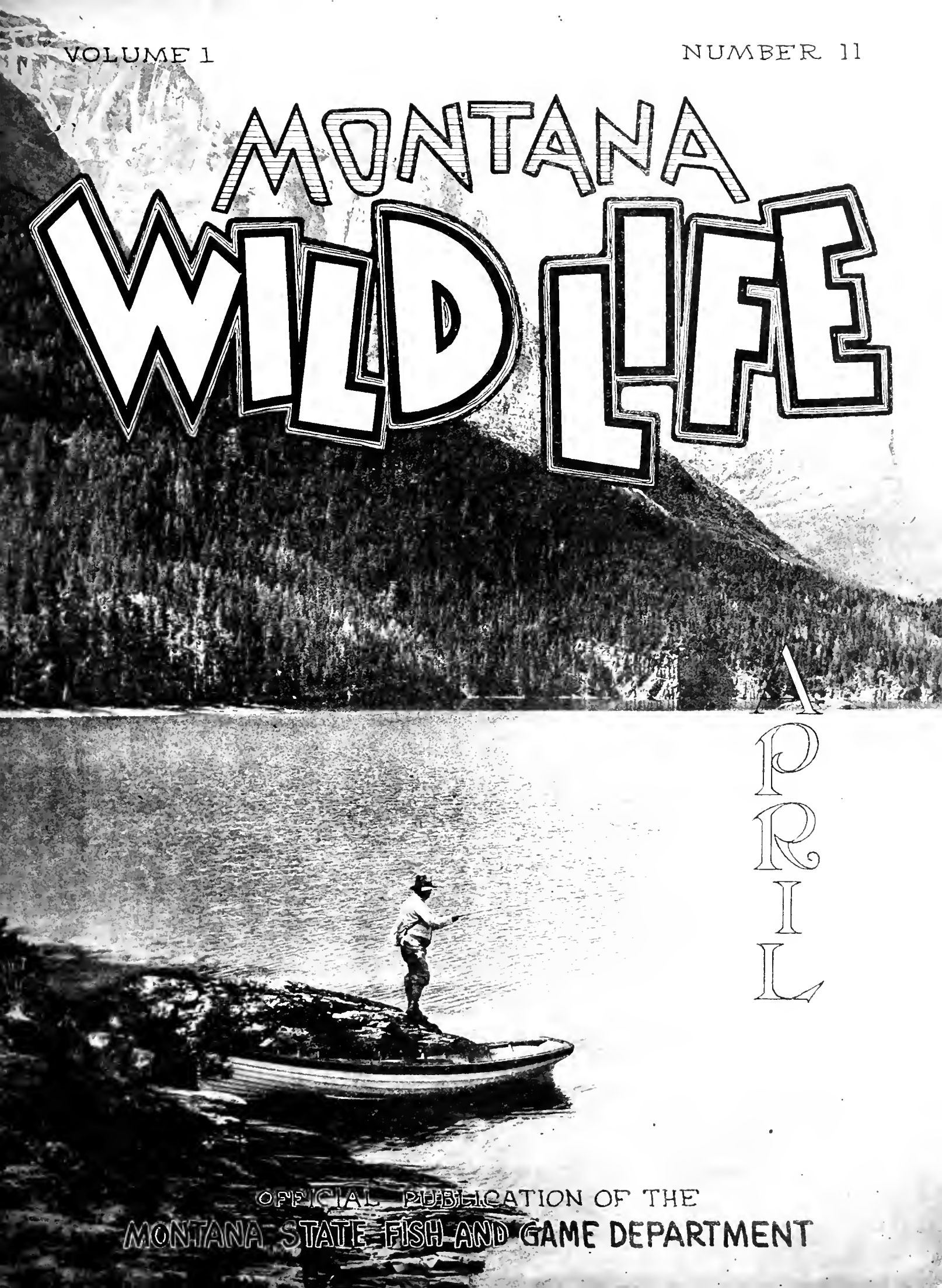


VOLUME 1

NUMBER 11

# MONTANA WILD LIFE



P  
R  
I  
L

OFFICIAL PUBLICATION OF THE  
MONTANA STATE FISH AND GAME DEPARTMENT

## Protect the Other Man

By J. Nort White

Helena, Montana



*When roaming through the country,  
Perhaps on pleasure bent,  
Don't scatter your camp refuse  
On every wind that's sent.  
The chap who does his duty,  
Who's always in the van,  
Will clean up camp behind him and  
Protect the other man.*

*When lighting up your campfire  
For boiling coffee and—  
Be careful where you start it  
On some other feller's land.  
And when the meal is finished,  
You've packed up pot and pan,  
Don't leave around the litter, but  
Protect the other man.*

*Not all who fish are ruthless  
Nor all who hunt are rude,  
The most of men use caution  
When these sports are pursued.  
So if you'd shower honors  
On members of your clan,  
Just leave things as you find them—  
Protect the other man.*

# MONTANA WILD LIFE

The Official Publication of The State Fish and Game Commission

VOL. I.

HELENA, MONTANA, APRIL, 1929

No. 11

## Marlowe Again Heads Commission

WHEN Governor J. E. Erickson announced the reappointment of Thomas N. Marlowe of Missoula to the State Fish and Game Commission for a period of four years, beginning April 15, sportsmen of Montana unanimously approved the selection and gave thanks to the governor for making possible at least four years more of the intensified program of conservation of wild life in which the Commission is engaged. At the annual meeting of the Commission on April 17, attended by all members, Mr. Marlowe was unanimously re-elected chairman, with Robert H. Hill again selected as State Fish and Game Warden after being given a vote of confidence and esteem.

Mr. Marlowe was appointed to the Commission to succeed Judge W. M. Bickford of Missoula and in 1921, when the five-member Commission was created by the act of the legislature, he was elected chairman. He has held the important post since that time and under his leadership Montana has taken a position of establishing progressive precedents in fish and game conservation among states of the Union. At the annual meeting of the Commission, which was held jointly with the gathering of all deputy game wardens of the state,



THOMAS N. MARLOWE OF MISSOULA  
Chairman of Montana's State Fish and Game Commission

Earl A. Fry of Seattle, who is associated with the Dupont Powder company in fish and game work, spoke briefly in connection with the establishing of the state game farm and later at a meeting of deputies outlined game surveys undertaken by ammunition companies.

Game Warden Hill advised the Commission that at a former meeting Duck Creek, a tributary to the Madison River in Gallatin county, was closed to fishing. The petition and the order which was published were worded incorrectly. It was incorrectly closed "from its source in Gallatin county to where it flows into the Yellowstone National Park," while it should be closed from where it flows into Hebgen Lake to the Yellowstone National Park line, and this correction was ordered made and republished.

A telegram was read from the Western Montana Fair Association, asking for a wild life exhibit at the fiftieth annual fair in Missoula, September 17 to 20.

Mr. Hill read a petition from the citizens of Troy, Lincoln county, asking that the following streams

in Lincoln county be open to fishing from April 20 to May 20 of each year so that the sportsmen in that community might be able to fish for the ocean run of rainbow trout:

O'Brien Creek from its mouth to the Troy city water dam; Yaak River from its mouth to Yaak River Falls; Star Creek from its mouth to Star Creek Falls. Discussion followed as to the advisability of allowing fishing during the spawning season. The petition was granted. Deputy Warden Corrington in that district was asked to investigate results.

The Secretary read a letter from the Izaak Walton League chapter at Great Falls, asking the Department to cooperate in securing an elk count of the Sun River herd and it was agreed that, inasmuch as the season is too late to make an accurate count, the elk being back in the hills, this be deferred until the proper time.

Action was deferred on the petition from the Madison Valley Rod and Gun Club of Ennis, asking that the Tobacco Root Game Preserve be abolished inasmuch as it is too small and does not serve as a preserve for deer and other game animals. Mr. Hill suggested that the deer in Madison county need protection because they have an open season on both sexes. The matter was referred to the Secretary for investigation who will report at a future meeting, it being agreed that if the sportsmen of Madison county want a larger game preserve they should make application, stating the boundaries.

Mr. Hill read another petition from the Madison Valley Rod and Gun Club, which was denied, asking that the ice fishing law be permanently suspended on Madison Lake, thereby opening Madison Lake to fishing throughout the entire year.

The matter of closing O'Dell Creek for a longer period was discussed. It was explained that the extra closed season now on the creek, from October 1 to December 1, is not sufficient for the protection of loch leven trout while spawning, and it was decided that O'Dell Creek and all its tributaries in Madison county be closed from October 1 to May 21 of each year, for the protection of spawning fish.

Mr. Hill advised that he had asked Deputy Marshall to make an inspection of conditions in the Gallatin River, relative to installing a fish ladder over the dam near Gateway. He read Mr. Marshall's report, in which he stated that the only fish that were impeded by this dam to any great extent were the whitefish. The matter was deferred for further investigation by the game warden.

Deputy Warden W. A. Hill of Missoula inspected the dam in the Big Blackfoot River near Milltown, Montana, and advised in his report that it would be impossible to install a fish ladder at the present time. This matter was also deferred for further investigation.

The Secretary read a letter from Mr. Loudon, chairman of the Yakima County Game Commission, Yakima, Washington, asking if Mr. Harris, now of Poplar, Montana, and a former Washington game warden, could trap some pinnated grouse in Montana for planting in Washington, and the petition was tabled because the grouse are now nesting and it would be unwise to attempt to trap them at this time.

The request of members of a private club in North Carolina to secure some

### TRAPPERS' LICENSES NEAR RECORD MARK

**T**RAPPERS' licenses have established a near record in Montana during the season which closes May 15. During the last year 1,777 licenses at \$10 each have been issued by the Department. The big year was in 1925 when 1,843 licenses were issued immediately after the season was opened on muskrats. Until 1919 records of the Department fail to show the issuance of trapping licenses because they were not required by law. Trapping of marten and fisher was permitted only by license, hence, until 1925 when the muskrat season was opened, comparatively few trappers' licenses were issued. The following official figures show the number of licenses issued each year since the law became effective in 1919:

1919	.....	181
1920	.....	139
1921	.....	165
1922	.....	227
1923	.....	106
1924	.....	181
1925	.....	1,843
1926	.....	1,338
1927	.....	1,027
1928	.....	1,773
1929	.....	1,777

grouse and prairie chickens for planting in their vicinity was denied in view of the fact that the request was made by a private club.

L. R. Daems, Secretary of the Musselshell Valley Sportsmen's Club, asked that the deputy at Roundup be transferred to either Martinsdale or Harlowton, because most of the hunting and fishing in that locality is around the two towns. State Warden Hill was instructed to investigate and to change the deputy to that neighborhood if deemed best. Mr. Hill advised that the same club had made a request that loch leven trout be planted in the Musselshell River. The field assistants advised that they were in favor of such a planting inasmuch as the Musselshell River is a tributary of the Missouri.

The Commission authorized the Game Warden to appoint a deputy for Glacier, Toole and Pondera counties after investigation.

Mr. Hill read a letter from J. H. Shebn of Toston offering to lease his 1800-acre ranch to the Commission for the state game farm. The game farm plans have been referred to Mr. Hill and Mr. Marlowe. It was stated, however, that it is not the intention of the Department to purchase a site for the game farm.

The Musselshell Valley Sportsmen's Association asked that the Commission cooperate in building one or two good rearing ponds. John W. Schofield, field assistant in charge of hatcheries, advised that he had been making a survey of that locality for good sites, and will return to that locality to make further arrangements. He was granted permission, if he can find suitable places upon which ponds can be built, to build one or two rearing ponds, the cost not to exceed \$100 each.

Dr. Treece and Warden Hill were authorized to investigate boat difficulties at the Somers hatchery thoroughly and report as soon as possible.

The purchase of a motor for the boat being built for Warden Goldsby for use in patrolling Flathead Lake was ordered.

Ed. Boyes of the Libby Rod and Gun Club requested the Department to seine Crystal Lake, in Lincoln county, to determine what kind of fish are in the lake so that future plantings may be more successful. Discussion followed as to what kind of seine could be used. It was decided that a gill net would be necessary. Mr. Dorrington endorsed the request of the Libby club, and the matter was referred to Dr. Treece.

John Tressler of Malta asked that Lake Bowdoin in Phillips county be closed to the trapping and killing of muskrats, inasmuch as these animals are practically extinct in this lake. Deputy Cosner endorsed this request and the Commission ordered the lake closed to the trapping and killing of muskrats for two years.

The Commission at a previous meeting gave the McNeil Brothers at Bowdoin permission to seine for carp in Nelson Reservoir, but had not opened the reservoir to seining. Deputy Harry Cosner explained that the McNeils, through a wire net device, hoped to rid Nelson Reservoir of carp. The Commission ordered that seining for carp be permitted in the following area in Nelson Reservoir: All that part of Nelson Reservoir beginning at a point one-half mile east of the mouth of the irrigation canal and extending west to the end of the reservoir.

Deputy Cosner stated it is his belief that all the carp in Bowdoin Lake have been frozen out this winter.

John Schofield, hatchery expert, advised that he has from time to time been authorized to build rearing ponds for the Department this spring, and that he has between twelve and fourteen to construct. This work will necessitate the employment of two extra laborers for the next three or four months and the Commission approved.

Commissioner G. T. Boyd advised that Great Falls sportsmen favor an aquarium built at Big Springs at the place made for it when the Great Falls hatchery was built. It is also the desire of the Great Falls sportsmen to have the grounds around the Great Falls hatchery beautified. Mr. Boyd's motion carried as follows:

"I move that the Department proceed to find estimates, through Mr. Schofield, for putting in an aquarium in the fish hatchery at Great Falls at the place originally designed for the aquarium." Seconded by Mr. Wilson. The vote disclosed four "ayes" and one "no," the negative vote being Mr. Moore's.

Mr. Boyd then made this motion: "I move that the Commission put in a lawn, fix up the water front and clean the yard at the Great Falls hatchery." Motion failed for want of a second.

Mr. Hill brought up the matter of conditions at the Miles City pond cultural station, investigated by Mr. Thompson of the U. S. Bureau of Fisheries, and Field Assistant Schofield. Mr. Schofield advised that due to the thickness of ice and snow on the pond this winter and the fact that the artesian pipe had been below the water surface, the water in the pond had become air tight and the fish had died in large



numbers. He suggested that the Commission extend and raise the pipe which carries the water to the pond from the artesian well. He also reported that there is need for a new loading platform at the station. Mr. Schofield was authorized to make the necessary purchases to extend this artesian pipe about twenty feet and raise it above water level. On motion of Commissioner W. K. Moore, Chairman Marlowe was authorized to correspond with the U. S. Bureau of Fisheries to arrange for the tank platform needed there.

The matter of a wild life exhibit at the Western Montana Fair this fall, September 17 to 20, in Missoula, was again brought up and the request referred to Mr. Marlowe for further investigation.

Mr. Hill asked the Commission for an opinion as to whether licenses should be issued for commercial seining in Flathead Lake. Dr. Treece advised that it is his belief that the lake, if left alone, will restock itself, and that because it is hard to get whitefish eggs for planting if commercial licenses are not issued the lake will be in better condition. Mr. Marlowe was authorized to investigate and report at the next meeting.

Mr. Hill brought up the matter of having a joint meeting with the advisory board of the Montana Sportsmen's Association and the Secretary was authorized to notify Glen A. Smith, chairman of the Montana Sportsmen's Association, of the next meeting of the Commission.

The Commission authorized payment of the hospital bill of a man employed by the Department in taking elk from the Bison Range at Moiese who had been kicked by a horse and quite seriously injured. Mr. Marlowe had authorized taking him to a hospital at Missoula for necessary treatment.

The opening of Cooper's Lake in Powell county to fishing through the ice, which Senator Keeley and Representative Pauly had requested, was deferred at the last meeting of the Commission in order to not interfere with the spawning season and it was ordered that for the winter of 1929-30 Cooper's Lake be opened for ice fishing during the regular open fishing period.

Chairman Marlowe reported on investigations pertaining to the establishment of a state game farm. He advised that the expert he had had in mind for superintendent of the farm had asked too high a salary and that Mr. Benson of the Benson pheasant farm had told him it is too late in the season to start raising birds for this year. Earl A. Fry offered to keep the proposition in mind and to try to locate a man for superintendent. It was decided that Mr. Marlowe should go ahead with his investigation.

Mr. Marlowe advised that the Nebraska Fish and Game Commission had written that they would be well satisfied with Montana loch leven eggs in exchange for Nebraska Chinese pheasants. Mr. Fry suggested that such an exchange might also be made with Oregon.

The Commission directed that the predatory animal contest be continued this year under the same rules and regulations.

Mr. Marlowe stated that there are several fruit farmers in the Bitter Root complaining of the action taken by the Commission at the last meeting relative to giving permission to destroy robins which are damaging fruit and berry crops. The motion by Mr. Marlowe carried as follows: "I move that in the future whenever the State Game Warden receives a complaint that any birds are doing damage to crops such as cherries, berries, etc., he immediately cause an investigation to be made of the damage, and if, after making this investigation, he finds that damage is being done, that he be authorized to issue a permit to the complainant to destroy the birds doing the damage." Seconded by Mr. Moore. The vote disclosed four "ayes" and one "no," the negative vote being Mr. Boyd's.

The American Fisheries Society asked the Montana Fish and Game Commission to join their society, which has for its aim the perpetuation of all species of fish and the study of scientific and practical problems affecting the same, and approval was granted.

The Commission ordered salt distributed on the South Fork of the Flathead National Forest, in the Sun River district, for the elk. The forest supervisor of the forest, Mr. Hornby, at Kalispell, offered to distribute the salt.

Mr. Marlowe advised that the president of the Montana Fur Breeders had called on him relative to drawing up a more comprehensive set of rules and regulations governing permits for fur and game farms, and Mr. Marlowe and

Mr. Hill were authorized to arrange for an appointment with fur breeders to draw up rules that will cover the situation.

Chancellor M. A. Brannon of the University of Montana discussed the biological research work being done for the Department. He expressed appreciation of scientists of the action of the Commissioners in cooperating with the university in research work at Flathead Lake last summer, which was done with the primary objective of discovering what might be done to increase commercial fishing in those waters. He suggested that the manuscript of the work done there is evidence of interesting work done by the Commission and should be published in bulletin form. He also stated that this is the only Fish and Game Commission that he knows of that has articulated with scientific workers. It is the desire of the biological department to again cooperate with the Department, and Mr. Brannon suggested that it might be well to finish the chemical work at Flathead Lake and then go into other waters in the state. The Commissioners expressed their interest in the scientists doing some work at Georgetown Lake this summer. The Commission directed that the cooperative research be continued under the same conditions of last year.

It was decided that, inasmuch as the work had been done at Flathead during the summer months, it should be completed there at the same season this year. Work was also authorized at Georgetown Lake in the line of chemistry, physics, food material and a study as to whether or not there are any diseases in this water. Chancellor Brannon expressed his appreciation of this fine cooperation and after discussion with the Commission it was voted to publish the scientific manuscript in the June edition of MONTANA WILD LIFE.

A Ford Model A truck with a stake body was purchased for the Somers hatchery.

Mr. Moore asked the Commission if it would give help to the Red Lodge Rod and Gun Club in paying a \$50 deficit for express on elk, and the club was authorized to put in a claim for the sum.

Mr. Moore advised that he and Deputy Holmes had found that fishermen are catching trout as well as ling with set lines in the Yellowstone River. Mr. Hill read Section 3694 of the Game Laws which authorizes the use of set lines for ling in this river. The following motion of Mr. Marlowe was carried: "It appearing to the Fish and Game Commission that game fish are being caught by the use of set lines in that portion of the Yellowstone River above the Huntley Bridge, I move that from and after May 1, 1929, the use of set lines in that portion of the Yellowstone River above the Huntley bridge be discontinued, and that it be a misdemeanor to fish therein with the use of set lines and that all fishing in that portion of the Yellowstone River be confined to angling, that is, with hook and line or rod in hand." Seconded by Mr. Kelly. Carried.

## They Rope 'Em Alive

**B**OB BAKKER and Harry Silver of Libby, Mont., have captured one dozen mountain lions alive this winter with hand snares which they arranged on a pole. They operated in the forest on the western boundary of Glacier National Park where the lions prey upon the deer that range in the valleys of the Glacier Park preserve during the cold months. The live trophies are sold to circuses and menageries. Photograph shows the lion catchers bringing in a live lion from the woods, muzzled and strapped to a litter.



Bob Bakker and Harry Silver of Libby, Mont., bringing in a live mountain lion on a litter, tied and muzzled.

# State Deputies at Conference



W. K. Moore

**M**ONTANA'S State Fish and Game Commission, which has established an enviable reputation throughout the nation for setting progressive precedents, has just concluded one of the most interesting sessions of deputy state game wardens held in the history of Treasure state sportidom. Every member of the Montana staff was called from his territory for the first time in 15 years to attend the conference at Helena with the Commission, and other authorities on conservation of wild life. They are to meet their fellowmen. All were engaged in the great work of saving creatures of field, stream and forest for posterity. Of the 30 deputies few were acquainted with each other. Their problems were mutual, they had discussed them through correspondence. Some had never enjoyed personal contact with members of the State Commission.

Hence, during the two days they were in Helena they acquired lasting friendships, a knowledge of workings of the Commission from the interior of the Department to the forest trails, hills and dales.

The result of the conference, which was inspired largely through efforts of Commissioner W. K. Moore of Billings, was apparent. Every man went back to the territory which he patrols better equipped for his work. He returned with the inspiration that he was an integral part of an organization that is accomplishing results which have won merited esteem among sportsmen of the state and nation.

The deputy wardens were greeted at an informal reception on the mezzanine floor of the Placer hotel on the evening of April 16, preceding the annual meeting of the Commission. They hobnobbed and discussed their daily work. They gained the friendship of their fellow workers. They swapped stories of occurrences afield. By the time the next afternoon arrived they were all members of the same brotherhood.

Thomas N. Marlowe, who has served as chairman of the Commission for the last eight years, and who was reappointed for another four years, presided at the afternoon conference. At the banquet in the Placer Grill in the evening, attended by Governor J. E. Erickson and other notable guests, Chairman Marlowe yielded the gavel to Commissioner William K. Moore of Billings as toastmaster.

Inspiring addresses were made to the deputies by all the members of the Commission, State Game Warden Robert

H. Hill, Earl A. Fry of Seattle, and then the meeting was thrown open for general discussion, with all deputies taking part. Chairman Marlowe first called upon Pete Nelson, the oldest deputy in years of service now associated with the Department. Then he called on H. C. Sailor of Absarokee, the youngest. Then everybody took a hand. They told of their methods of handling violators and offenders. They reviewed knotty situations. The high point of the discussion centered upon obedience of instructions of the Commission to observe courtesy, friendliness, kindness and the spirit of education while firmly and fearlessly enforcing Montana's fish and game laws.

One of the excellent points of the conference was the explanation of the manner in which he is educating boys and girls to respect and revere birds and fish, by E. M. Krost of Plentywood. He told of gaining permission of parents to take youngsters, six or eight at a trip, into the woods on picnics so that they might study wild life and its natural surroundings. Others told of activities in the public schools, in encouraging Young America to study the habits and habitat of fish and game.

Questions regarding the interpretation of state and federal laws were asked and answered.

Mr. Fry, former president of the Washington Sportsmen's Association, and now affiliated with the duPont Powder company, told of plans of ammunition manufacturers to carry out a census of game in every state. He urged each deputy warden to work out a chart covering his district and indicating thereon the presence of game during certain seasons and the shortage. He suggested that outline maps of the groups of counties patrolled by

deputies be used for the purpose of marking in the whereabouts of grouse, prairie chickens, deer, elk and other wild life and that these maps then be grouped for a comprehensive survey.

At the banquet in the evening Governor Erickson paid a glowing compliment to the work of the Commission, the efficiency of its men in the field and the necessity of the effort to maintain Montana's prestige as a land of fish and game. Floyd L. Smith outlined the scope of MONTANA WILD LIFE and its purpose of disseminating authoritative information, of education and conservation.

Toastmaster Moore called upon Thomas Danaher of West Yellowstone, J. F. Goldsby of Polson, W. A. Hill of Missoula, Fred E. Pilling of Butte, Dr. I. H. Treece of Anaconda, Thomas O. Peasley, deputy game warden at large, and others, and then asked Chairman Marlowe to close the conference. And the chairman did the closing stunt in a manner that will be long remembered by deputies attending. After a brief talk that was a masterpiece, he summed up events and then reached his peroration with:

"I'm mighty glad to have met you, and you, and you, and you.

I hope next year I'll have the privilege of meeting you, and you, and you, and you.

When I go to heaven I hope I'll meet you, and you, and you, and you.

And if you're not there, then I'll go to hell to be with you, and you, and you, and you."

Those who attended the conference included:

Commissioners—Thomas N. Marlowe, chairman, Missoula; E. A. Wilson, Livingston; G. T. Boyd, Great Falls; J. L. Kelly, Anaconda; W. K. Moore, Billings.

Game Warden and Office Staff—Robert H. Hill, State Game Warden, Helena; J. W. Carney, Assistant Game Warden; Thomas O. Peasley, Deputy Game Warden at Large; A. G. Clarke, Cashier; Floyd L. Smith, Editor, MONTANA WILD LIFE.

Hatchery Superintendents—Dr. I. H. Treece, Anaconda, Field Assistant, Western Division of Hatcheries; J. W. Schofield, Big Timber, Field Assistant, Eastern Division of Hatcheries.

Deputy Game Wardens—L. S. Butler, Roundup; L. C. Clark, Havre; Harry Cosner, Malta; Wm. J. Dorrington, Libby; W. A. Hill, Missoula; Allen T. Holmes, Billings; Wm. Ray Kohls, Ennis; E. M. Krost, Plentywood; J. P. McCaffery, Anaconda; J. J. Meany, Plains; Harry Morgan, Ovando; P. W. Nelson, Livingston; A. A. O'Claire, Kalispell; Fred E. Pilling, Butte; Chas. R. Price, Dillon; A. D. Roushar, Great Falls; Frank M. Snider, Choteau; J. A. Weaver, Lewistown; Frank R. Marshall, Bozeman; J. H. Chartrand, Miles City; H. C. Sailor, Absarokee; Frank Beller, Gardiner; J. F. Goldsby, Polson; Thos. Danaher, West Yellowstone.

## WISHIN'

Tom said he'd fish for a fortune,  
'Bout seven figures or so.  
Sez, you all can say what you  
wanter,  
But the thing that counts is the  
dough.  
Jim said he would build him a garden  
Where he could spend all of his  
hours,  
With the time on hand  
To do what he planned,  
And putter around with the flow-  
ers.  
Fred said he would wish for a man-  
sion  
With pictures and rugs galore,  
With servants and things  
Which the push button brings,  
And four or five autos or more.  
Jim said, "Rave on you fellers,  
Those things don't gimme no  
thrills,  
Gosh darn my hide, I'd be satisfied  
Ef I could pay up my bills."  
Then Ole Bill, he, sorta drawlingly,  
Sez, "Say while you fellers'r  
wishin'  
Ask fer something fine, say a hook  
and line—  
All I wanter do is go fishin'.

# The Handwriting on The Wall

WHILE Montana's State Fish and Game Commission has been laboring diligently and persistently in a conscientious endeavor to restock streams of the Treasure State, transplant elk, import desirable game birds, acquire shooting grounds for posterity—for your son and mine—operate state hatcheries to the point of maximum production to keep pace with tourist inroads, with countless similar activities, it is constantly confronted with new problems. They necessitate research work. Through establishing a precedent in the nation by taking over the biological station on the shore of Flathead Lake, employing of university scientists and providing them with equipment, results are being achieved.

It's a far cry from the days of modern Montana sportsman to those of Belshazzar, the chap who saw "the handwriting on the wall." Yet the question simmers down to this situation: "What will become of Montana's fish and game should Montana's Commission let up one iota in this constant vigilance, this day-in-and-day-out business of pressing its program of intensive conservation?"

"The Handwriting on the Wall" with regard to Montana's fish and game is readily legible.

In browsing through an old issue of "Industrial and Engineering Chemistry" one comes on an article by Arthur D. Little. The opening paragraphs arrest attention:

"There is an intimate relationship between science and business. Only the other day I heard a man ask, 'Where would the suspender business be without the law of gravitation?' There is also some appreciation of the fact that we are living in a period of change, in which only the resourceful can hope to maintain themselves in the face of the new conditions. Barber shops were once a haven of refuge for masculine humanity, but since they have become bobber shops so conservative a publication as the Police Gazette is reported to be printing two pages of Embroidery Notes.

"There is a tremendously dramatic element in the Biblical story of Belshazzar's feast. The mighty king was the central figure of a great spectacle, which included his lords to the number of a thousand and his wives and concubines. They were feasting and making merry in the vast hall of the palace, and power and dominion seemed secure. Suddenly, against the wall, appeared the fingers of a hand, which wrote upon the wall above the great candlestick the momentous legend in which Daniel read Belshazzar's doom after soothsayers and astrologers had failed to make interpretation. Belshazzar had been weighed in the balance and had been found wanting, and that night the business of governing Babylon passed into other hands."

## BEAVER PERMITS ISSUED IN MONTANA

INTERESTING official figures compiled by Jack W. Carney, Assistant State Fish and Game Warden, on tagging of beaver skins tend to show the gradual rise and fall of the annual catch through strict enforcement of Montana's laws. For purposes of comparison the search of records has been carried back to 1915. From that time to 1921 there is no record of beaver tagging because the law did not require it. In 1921 by order of the Commission every beaver hide taken in the state was directed tagged. In 1923 the order of the Commission became a state law. The peak was reached in 1926. Concessions have been reduced to protect the animals. Since 1921 the data shows that 42,168 beaver skins have been tagged by the State Department. If these hides had an average value of \$20 their worth would reach \$843,360. The number tagged each year follows:

1921	479
1922	2,430
1923	2,339
1924	3,184
1925	6,190
1926	9,714
1927	9,227
1928	5,749
1929	*2,856

\*Incomplete.

There is a strange periodicity in the recurrence of this handwriting and a still more curious inability to perceive it on the part of those who sit down to feasts. The handwriting confronts wild life. It reads—the price of progress is research which alone assures the security of dividends.

"The handwriting" is on our wall and all who run may read. Mr. Little may be a modern Daniel—let us sincerely hope we may not be one of the modern Belshazzars.

Sportsmen, and conservationists who are not sportsmen, desire one thing—perpetuation and increase of wild life. This then is the "progress" we are after, and its price is unquestionably "research which alone assures the security of" hunting—the "dividends" of the interpretation.

Example after example of the necessity of research in conservation matters could be piled up.

A few plantings of foreign bird species in areas unfitted for their welfare with consequent loss of time, money and enthusiasm, yet who can say what the requirements of such areas are?

Loss of literally millions of wildfowl from "duck sickness"—why?

Loss of millions of wildfowl in their breeding areas. What can we do about it?

Steady decrease in native game, such as quail, in areas of intensive farming as overgrazed cattle areas. Can we bring these back by scientific planting?

Loss of quail, grouse and rabbits from disease—why?

Such examples could be prolonged, but to what avail? We either see and can read the "handwriting on the wall" or we do not, and it is to be feared too many of us are modern Belshazzars. Millions of ducks and tons of game are dying or not reaching maturity every year, which could be saved, while we haggle over relatively minor questions such as seasons, bag limits or whether the game commission is democratic or republican.

We can not legislate "game on the hoof." We have demonstrated the failure of restrictive legislation; which, if it can not save game, surely can not restore it. Restricted legislation is necessary; bag limits and seasons are essential, both if anything more exciting, and all certainly more rigidly enforced, but we can not rest there. The big thing is scientific research, adequately planned, painstakingly carried out and the findings made use of by federal, state and sportsmen's organizations to insure the "dividends" we want in the form of a continuing yearly game crop adequate to meet the needs within reason of the sportsmen of this country.

The Sporting Arms and Ammunition Manufacturers' Institute has read correctly the "handwriting" and is meeting the situation by a game survey.

A few — very few — states maintain their own research departments, such as does Montana, and fewer sportsmen or organizations of sportsmen. Those organizations which do not conduct research work blindly, take actions which are far from doing good, and may even be a menace to conservation.

It is often well to analyze carefully the source or authenticity of any piece of information on which action is contemplated. You may have "known" something for years—is it true?

Not many years ago it was thought that migratory birds in Europe went below the waters of the Mediterranean sea to winter there. We know that is not true but to have said so then would have doubtless provoked much mirth from the "old time" hunters of the day.

We still do not know why birds migrate—that is, none of the biologists do, although the cause of the phenomenon is doubtless well known to the average city sportsman and he can expound the real causes at great length.

Let us carefully consider the "handwriting" in conservation and put our shoulders to the wheel, giving all aid in our power to organization engaged in research. When this is done, the proper method of procedure to put back more game in our covers will be pointed out just as surely and plainly as our national automobile roads are marked today, and game as an annual crop will be determined quite largely by factors accurately and scientifically acting according to rule, and not left to chance as it is now.

# MONTANA STATE FISH AND GAME COMMISSION

## COMMISSIONERS.

Thomas N. Marlowe, Missoula, Chairman.  
 G. T. Boyd, Great Falls.  
 Joseph L. Kelly, Anaconda.  
 W. K. Moore, Billings.  
 E. A. Wilson, Livingston.



ROBERT H. HILL, Helena  
 State Fish and Game Warden  
 Secretary.

## MONTANA WILD LIFE

The Official Publication of the State  
 Fish and Game Department.  
 Published Monthly at Helena, Montana.

FLOYD L. SMITH, Editor.

Introductory Subscription Rates  
 15 Cents per Copy—50 Cents per Year.  
 Advertising Rates on Application.



Copy for advertisements subject to approval of State Commission and must be in the hands of the editor at the State Capitol building, Helena, on the 15th of the month preceding publication date.

VOLUME I APRIL, 1929 NUMBER 11

### EDUCATION AND WILD LIFE

**W**HEN Montana's Fish and Game Department set forth in its campaign of education as well as constructive action along conservation lines, doubters questioned the advisability and the possibility of results. Today the soundness of the theory of education along lines of fish and game protection has spread throughout the nation. Paul G. Redington, chief of the Bureau of Biological Survey, stressed this fact in his address before the national convention of the Izaak Walton League at Chicago April 20 when he reviewed efforts to provide sanctuaries for birds.

He declared it to be of equal importance to protect wild creatures by means of sensible and reasonable game laws, fully enforced and generally respected.

"There is abundant evidence," he continued, "of an increasing determination on the part of those who shoot and fish to abide by the reasonable restrictions so necessary to govern and control the annual take of wild life for food and sport. Yet in spite of marked progress in this direction we can not anticipate that the time will ever come when it will no longer be necessary to employ police powers to compel the poacher to adhere to those ethical restrictions which the true sportsman, in the absence of such authority, himself imposes voluntarily upon his own acts."

Commenting on present-day sane attitudes toward wild life protection, Mr. Redington declared that the future welfare of the migratory waterfowl of the country lies in the hands of the hunters. He commended the attitude of the hunter who can see more than a mere bag limit in a day's sport, and made the plea "for the general acceptance of that attitude of mind that does not contemplate, when one goes afield, primarily a killing process, but rather an appreciation of the good things that nature has donated to man for his delectation and health. A philosophy of this nature, if generally ingrained, will so put to shame the game hog and the poacher that his tribe will diminish, and the future of the wild creatures of the marsh will be made more secure."

Eight thousand loaves of bread and a large quantity of grain were distributed in the Chicago forest preserve one Sunday, to keep the 4,000,000 birds of the preserve from starving. Let us give a great white mark, despite the many black ones it has received, to a citizenship that can thus look after its little feathered friends.

### CONSERVATION IN MONTANA

**R**EMEDIES for decreasing fish and game that have been printed would stock a library. The magazines are full of them. We speak about conservation, we urge law after law for this purpose. We want bag limits, we want game farms and fish hatcheries. But most of all we want laws. What good will laws do us? Not one bit of good. The salvation of game and fish in this country rests squarely on the sportsman. If the sportsmen do not want conservation, will not practice conservation, then all of the laws in Christendom would do not one bit of good. We can not legislate game back, nor can we legislate more fish. But if the sportsmen want conservation, they can have it, and they can have it even if there is not one law on the statute books of their states. Conservation is a matter of public sentiment. If public sentiment is for it, it will become a fact. If public sentiment is opposed to it, all the king's horses and all the king's men can't haul it into actual existence. Public sentiment is swinging to conservation of our outdoors. Of that there is no doubt. It means the salvation of our game birds and animals while there yet is time to save them. It means that we will do more for those that come after us than those who preceded us did for us. Which, after all, is largely the fundamental law of civilization.

The "frailty of woman" allows her to be satisfied with the shortcomings of man.

### FREE SHOOTING AND THE FARMER

**I**N AMERICA, where the wild game is the property of all the people, the theory that the privilege of taking game should be enjoyed equally by all has become firmly established. Free shooting, however, is by no means general and fully enjoyed because it frequently comes in conflict with the rights of land owners.

The development of shooting clubs in this country has in many places given rise to extreme resentment and prejudice. This is evidenced very strongly in the northwestern states, particularly the Dakotas and Minnesota. Laws have been passed in the Dakotas discriminating against shooting clubs and for the purpose of giving the public access to desirable shooting places.

In the recent session of the Minnesota legislature, this feeling was expressed in a bill intended to do away with all monopoly or special privilege in shooting by a provision prohibiting any owner of land from shooting on his own property unless he permitted the public the same privilege. Such an act would destroy private shooting clubs. It would prevent the farmer from shooting on his own ground unless he permitted others to do the same. Naturally, the bill attracted both strong support and violent opposition and did not become a law.

Such measures indicate a problem which exists and which must be solved. Some advocate abandoning the theory of free shooting in America and reversion to the European theory that the game goes with the land. It is believed, however, by advocates of the democratic idea that a system can be devised whereby the land owner can be protected from invasion of his rights and at the same time a monopoly of sport can be prevented. It is to be desired that the health-giving recreational privilege of field sports shall not be confined to the privileged few.

Safety that lasts is more important than safety first.



## ALL CREDIT TO JOE HALM

**T**HOUSANDS of readers of MONTANA WILD LIFE who have enjoyed the splendid illustrations of migratory waterfowl taken on the Nine Pipe reservoir and at the banding station on the national bison range at Moiese, owe a debt of gratitude to Joe B. Halm of Missoula, the photographer who took these remarkable pictures of ducks, grebes, avocets, gees and other waterfowl. Mr. Halm's photographs are works of natural art. He devotes hours and days at times just to take a single picture, stationing himself in a point of vantage and awaiting the proper moment. The full page layout of migratory waterfowl nesting at Nine Pipe reservoir included the last group taken by Mr. Halm. Scores of letters have been received from readers for more of these illustrations taken by the man who does his hunting with his camera.

Human life is absolutely dependent upon wild life and forests. Without these things we would become extinct as a race.

## PHEASANTS LOST IN STORMS

**N**OTWITHSTANDING well organized efforts to provide food and care for game birds during the past winter, Director O. H. Johnson of the game and fish department of South Dakota declares that losses of pheasants from exposure to storms has been considerable.

"Apparently, ringnecked pheasants are not so capable of standing the rigors of our winters as are our native upland game birds," he said. "Reports received thus far indicate that many of the birds found dead perished from causes other than starvation, as in most cases they appeared to have been well fed and were in good state of flesh.

"In conducting their investigation, the field men were authorized to kill a few birds in areas remote from farm buildings or feed lots, where it appeared they were existing wholly upon a natural food supply, and this method of investigation also revealed that the pheasants apparently were not suffering from lack of food."

It is a characteristic of the pheasant, which operates to his disadvantage in sections where severe and cold wind storms prevail, that the bird, though hardy and capable of withstanding severe cold, is frequently disinclined to seek such shelter as it might be able to obtain during storms. On one occasion in western Minnesota following a severe northwest blow with low temperature many pheasants, particularly cock birds, were found in the plowed fields dead from exposure. The birds had apparently stood in the wind until their feathers were completely filled with snow and dirt blown from the fields, which eventually caused their deaths.

As time goes on the pheasant will learn from experience to seek shelter in case of blizzards just as the prairie chicken does when it burrows under the snow drifts.

Some men never feel their oats until they feel their rye.

## SPRING FIRE TIME IS NEARING

**W**ESTERN sportsmen must aid in preserving the forests, as such is a prime essential in game and fish conservation. No end of legislative acts regulating and prohibiting hunting of game will preserve the birds and beasts unless reforestation is practiced. It is necessary to restore refuge, plant food supplies and have more rigid enforcement of the game laws, if we are to prevent annihilation of game. In this work the prime thing is to reforest the denuded land. The cutting of timber has destroyed the protective cover of game and has forced it into the open to become the prey of natural enemies. Due to the deleting of the forests and the undergrowth it is now important that berry-bearing trees and shrubs be planted in the forests, and streams and lakes supplied with suitable food.

No wonder the coffee is like mud, it was ground yesterday.

## WORTH TEN MILLION A YEAR

**K**ANSAS gets at least \$10,000,000 worth of good out of its game, fish and birds every year, according to a statement by J. B. Doze, former warden. This is the way he computes it, and the figures look reasonable:

"Ducks, gees and other migratory birds shot every year would sell on the market for \$1,000,000, and quail for \$50,000. The 60,000 rabbits sent away every year bring around \$50,000, counting jack rabbits. The prairie chicken bag will sell for \$25,000. All other game, including rabbits shot for eating purposes, doves, etc., will bring \$20,000. The actual business done by Kansas fur dealers exceeds \$1,250,000 a year. A million dollars' worth of fish is eaten every year. The birds which are not shot but are protected by the hunters are worth five or six million dollars every year in taking care of noxious weeds and harmful insects, as it is estimated by the Biological Survey at Washington, D. C., that each bird is worth a dime a year to agriculture and that the average bird population is two to the acre. This estimate is probably too low."

It truly pays to advertise only what you can advertise truly.

## GIVING AWAY SURPLUS ELK

**S**URPLUS elk from the National Bison Range in Montana are being offered by the Biological Survey of the United States Department of Agriculture to any one who will remove them without cost to the government. The range is in western Montana near Moiese and Dixon. Because it is asserted the elk there have increased beyond the carrying capacity of the range, it is necessary further to reduce their numbers, even though some of the surplus animals have already been disposed of by sale.

The National Bison Range is administered primarily for the maintenance of a fair-sized herd of buffalo, the original stock of which was supplied by the American Bison Society. It is the desire of the Biological Survey to make immediate reduction in the numbers of the elk to avoid feeding them hay, which would otherwise be necessary, as well as to preserve as much forage as possible for the buffalo. The elk at this time are mainly valuable for exhibition purposes at zoos and for stocking game parks and farms. It is now too late in the season for the elk meat to be good. Frank H. Rose is protector of the National Bison Range.

Yes, seven days without food makes one weak.

## INTRODUCING WILD TURKEYS

**G**AME authorities of the State of Washington are on the alert for new species which may be added to their hunting fields and recently a consignment of wild turkeys was received in Thurston county by State Game and Fish Supervisor S. F. Rathbun. These birds are being cared for on the game farm and may be retained for breeding purposes, the progeny to be liberated in the hunting fields. Wild turkeys have been reared recently on several of the state game farms of Washington and released in various parts of the state. A total of 12,645 ringneck pheasants were distributed from the Steilacoom game farm in Washington last season, a record production.

Some Montana folks use a fork in the road for a spoon.

**W**HERE you are is of no moment, but only what you are doing here. It is not the place that ennobles you, but you the place; and this only by doing that which is great and noble.—Petrarch.

Keep that school-girl complexion but not on your coat lapel.

Don't have it said of you: "When money came in, sense went out."

The rich too often keep happiness out by fencing their lives in.

# On Speaking Terms With Magpies

By A. G. GILLESPIE, Grass Range, Mont.

**M**ONTANA'S magpie, although perhaps the most despised bird in the state, has at least one point in his favor. He makes a most intelligent pet. While in the wild state they are as wary as crows and more destructive in many ways, killing young chicks, eating eggs, picking sores on branded cattle and even picking the eyes out of the range cattle in severe winters when cattle are poor and unable to protect themselves.

Magpies are like pack rats and squirrels in a way, too, as they have a habit of carrying off odd things from the yard that may suit their fancy. They hide these souvenirs in some secluded spot and go back occasionally to inspect their loot.

Four years ago I had a pet magpie which I secured when about three or four weeks old from a nest and raised it in the house. When about two months old it began to say words like "Maggie," "hello," "hurry up," "come quick," etc. I was amazed at his intelligence. I had heard that they sometimes could be taught to talk. I was not aware of training this one as I was not trying to teach it anything.

When I began figuring out how it happened to say "Maggie," "hello," "come quick" and "hurry up," I remembered that we called this magpie Maggie. I used to take the magpie out on the lawn and play with him in the grass. When I found a grasshopper, I said, "Come, Maggie, hurry up, come quick," and if the bird didn't come I brought him the grasshopper and fed it to him.

Soon he learned that as soon as I called to him to come quick he would come hopping to me to get his grasshopper. So I was teaching him in the



Some folks say that it's impossible to teach a seagull—particularly an inland gull—anything. But here's a picture of Mr. Gillespie hobnobbing with a trained gull in his collection of pets at Grass Range, Montana.

most up-to-date manner and didn't know it.

This no doubt would teach some of us to come quick if there was anything in sight to eat, but this was how I taught the first one to talk.

Some little children shot it in the lot one day with a new air rifle. There were tears in our family that day. My little girls were heartbroken over the death of our little pet. I was inclined to share the grief with my children too, as he was just one of the family. We let him out in the morning and he would go as far as two blocks from home and when my wife called him he would answer and start for home, which he did every time he was called.

I have a daughter named Ruth and he learned to call her when he wanted to come in from the porch. If she did

not come and get him right away he would call louder—"Ruthie." "Come on quick." Then Ruth would usually come and take him in the house. When he was outside and wanted to get in he would rap on the door and if nobody came he would fly on the window sill, pick on the screen and peek in through the window.

Now I have another magpie I got last spring and cut some of his wing feathers. This one talks plainly, in fact as perfectly as a human can talk. He has become tame and likes to play with us. Magpies have a parrot beat seven ways for talking as you can make them talk any time and you can't do that with a parrot.

I have been asked many times if it is necessary to split the tongue to make them talk. It is not. They seem to have no difficulty in talking, but it seems they are capable of saying only one or two dozen words.

After magpies are a year old they do not seem to try to learn more words, although I think if a person had time to work with them each day they might learn more words. Their accent on words is perfect.

The strange thing is that magpies do not all talk. I have been trying for four years to get one that would talk like the first one I had, but it required four years to get one that I could teach to talk. I gave away the mate of the one I have to Mr. Holmes, station agent at Grass Range. He can also talk, laugh and cough as naturally as a human.



Here's Mr. Gillespie with two of his trained pets, the magpie and a chipmunk.

## HE MAKES BIRDS TALK

**M**ONTANA has a sportsman who makes birds talk. A. G. Gillespie, graduate pharmacist, who operates a drug store at Grass Range, has for years made the study of birds a hobby and his home is a haven for many varieties of feathered friends that have apparently acquired the knowledge that Mr. Gillespie is their counsellor and adviser. He has of late acquired an albino porcupine. Among his pets are an albino crow, magpies, seagulls, chipmunks, owls, an albino magpie and other boarders. In the accompanying article Mr. Gillespie tells the readers of MONTANA WILD LIFE just what he has learned of the chattering magpie.



This wee canary is another of the trained feathered friends of the Grass Range druggist who teaches birds to understand and visit with him.

Another strange thing about a magpie that talks is that they talk best when they are teased. When they get excited and angered they talk so fast one can hardly tell what they are trying to say. If they could express themselves they would probably tell us bird opinions in a short time, without getting tongue-tied.

I still have this bird and we would not part with it for a good sum. Magpies are real pals and one never tires of playing with them.

One day we were planting sunflower seeds near the garage. Maggie was with us but we paid no attention to her. We placed a sunflower seed in a hole, buried it and proceeded to another until we got to the end of the row. When we looked back to see if the row



The scope of understanding of bird lore possessed by Mr. Gillespie of Grass Range extends even to the owls—"da big eyed chicks" as the beet workers call 'em. This denizen of the night is perched on the druggist's hand in perfectly peaceful mien.

was straight we found Maggie had dug every one of the seeds out and completed her job as soon as we did ours.

She hides pieces of meat and bread and anything she likes in our pockets. She hides spoons, nails and anything she can find under the carpet. When we lose anything in the house one of the family will say: "Just look under the carpet and maybe you will find it."

The magpie is a handy thing around the house, for she takes the blame for everything lost and saves many a family row over lost articles.

I believe if the preachers would throw in a magpie with every marriage certificate there would be fewer divorces. After the first few days the magpie would do the talking for the bride, and save all arguments.

### NOTHING BUT THE TRUTH

The prosecuting attorney had encountered a rather difficult witness. At length, exasperated by the man's evasive answers, he asked him whether he was acquainted with any of the jury.

"Yes, sir," replied the witness, "more than half of them."

"Are you willing to swear that you know more than half of them?" demanded the man of law.

The other thought quickly.

"If it comes to that," he replied, "I am willing to swear that I know more than all of 'em put together!"

## It Won't Be Long Now

**M**ONTANA'S fishing season opens May 21. It's less than a month to wait, but it's gonna be a mighty long month. The fly rods need looking over. The tackle box needs replenishing. There's still some sand in the reel acquired when you took that last bath up the creek. That leaky boot needs a patch—and there's not a thing in the world you can do for that fishin' fever but wait a few weeks and then take this prescription:

Feeling stale? Liver out of sorts? Tired when you get out of bed? Coffee tasteless, toast half cold, eggs off color? Scold the kids? Snap at your stenographer and threaten to fire the office boy?

Don't consult a doctor or a psychoanalyst. There is a surer cure. Let old Doc Nature prescribe for you. Go home earlier. Rummage the attic for your oldest clothes and your wading-boots, your fishing-rod and tackle-box. Oil the ferrule and the reel. Draw the line across a piece of paraffin. Look over your fly-book. Loosen up your wrist by a few casts. Spin the reel and listen to its whir.

The dinner gong will surprise you, and you'll go downstairs humming. The dinner will taste better. Go to bed early. Instead of worrying about your health or your business you'll fall asleep to dream of a slowly swirling, foam-flecked pool, a mottled fly, a flash of silver, the thrill of whirring reel and tautening line.

Don't set the alarm clock. You'll wake at daybreak without it, and leap from bed wide awake, with more pep than you've had in months. For heaven's sake, don't shave! Merely neglecting to shave will help start the day right. The coffee will be delicious, the toast hot and crisp, and you'll take three eggs.

Try to reach the stream by seven o'clock. Select your first fly by holding it up to the sunlight, imagining how it will look to a trout. Fish alone. Half the joy of fishing is in being alone. Then the river, the sunlight filtering through new leaves, the wild flowers, the scent of growing things, the notes of the song sparrow, the scream of the jay, the chatter of the squirrel, are your own property.

Fish upstream, slowly, casting ahead. The murmur of water against stones, the drone of insects as the sun's power increases, the odor of damp earth soothe the sick nerves.

Try a cast into that slow swirl below the big boulder. Flick the Parmachene Belle to the edge of the foam. There! A bulldog rush, a whirring reel, a singing line; an electric thrill to every nerve end; a sharp strangle; a living streak of silver in the landing-net! Wet your hand before drawing out the bar. That one must weigh a pound!

On upstream. The shadows still slant, but it is noon by your stomach. You listen and doubt your watch because it says ten-thirty. Stand it fifteen minutes longer. One more trout—and then lunch.

That grassy spot in the shade of the ghostly birch—just the place! Sandwiches and hard-boiled eggs. Um-m-m—delicious! Tea from the vacuum bottle! Ah-h-h! Nectar! Bury the paper and the eggshells. Lie on your stomach and drink deep from the spring branch. Pluck a sprig of leaf and chew it. Watch the minnows playing in the shallows.

Spread your slicker on the grass. Lie on your back, hands under your head. Stare up through the trees, watching the sunlight and the leaves painting slowly changing arabesques against the blue and the shifting silver of the sky. Your eyes will close gently. Two hours later you will wake with a guilty start as you hear again the call of the stream.

At dusk you will be deliciously weary. At night you will sink softly into slumber, filled with the peace of woods and trees and sunlit flowing water. R: One dose a month. Repeat until cured.

## Ranger Rescues Elk

**W**HILE on his winter patrol through one of the deep snow-covered valleys of Glacier National Park, United States Ranger J. R. Hutchinson recently came upon a young elk calf stuck fast in a huge drift. Only the animal's head showed and it was bellowing loudly for help. The



J. R. Hutchinson, Glacier Park ranger, finds an elk calf floundering in the snow.

ranger took off one of his snow shoes and, using it as a shovel, succeeded in extricating the elk. It was so hungry that it quickly gulped down a whole chocolate bar which the ranger offered. The young elk then scampered away, following the well-treaded trail of the rest of the herd which had found shelter higher up the valley. "It was fortunate the coyotes didn't get this fellow," Ranger Hutchinson gratefully noted in his report to Superintendent Eakin.

### SAME THING

"Will you have pie, sir?"  
"Is it customary?"  
"No, it's apple."

# Bird Refuges In Montana

**M**ONTANA has attained unusual distinction among the states of the Union by being one of two states which have anticipated passage of the Norbeck-Andresen Migratory Bird Conservation bill and whose legislatures adopted measures assuring the federal government of state cooperation. Kansas and Montana are the only two states reported which, since the bill was signed by the president February 18, 1929, have given consent to the acquisition by the federal government of lands for bird refuge purposes under the new law. This is the word received from the U. S. Department of Agriculture, which will administer the act. The Montana bill was fostered in the state senate by Senator F. T. McCormick of Musselshell county and the senate fish and game committee and by Representative Ben Nelson of Phillips county, chairman, and members of the house fish and game committee. It passed both houses without a dissenting vote.

Section 7 of the Migratory Bird Conservation Act provides that no deed shall be accepted by the Secretary of Agriculture unless the state in which the refuge area lies shall have consented by law to the acquisition by the United States of lands in that state. The Kansas enabling act was approved on February 26 and the one in Montana on March 1.

These two states are the first to take special action in the matter, although it has been determined that existing legislation in Arizona, Colorado, Connecticut, Georgia, Illinois, Iowa, Louisiana, Maine, Maryland, Michigan, Minnesota, Nevada, New Mexico, North Carolina, Ohio, Oklahoma, South Carolina, South Dakota, West Virginia, and Wyoming is sufficient for the federal government to proceed with the acquisition of areas for refuge purposes. State enabling legislation, however, will be necessary in all other states. In those states where legislation in harmony with the federal act is required, a draft of a suitable measure has been prepared for consideration by the state legislatures holding sessions this year.

Secretary Jardine of the United States Department of Agriculture considers that the Migratory Bird Refuge bill is one of the most important wild life conservation measures that have been written on the statute books of any nation. The outstanding exception is the related Migratory Bird Treaty Act of 1918, which the present law is designed to supplement. Both laws were passed to carry out the obligations of the United States under the treaty with Great Britain to protect the wild birds that fly back and forth each year from Canada, and both will be administered by the Bureau of Biological Survey of the Department of Agriculture.

"The new law," explained the secretary, "gives additional force and effect

to the earlier measure by providing federal funds for the survey, purchase, and establishment of large areas throughout the entire country to be maintained as inviolate sanctuaries—feeding, nesting, and resting grounds where forever the migrating species of birds may enjoy complete protection.

"The measure as passed is a national acknowledgment of the tremendous importance of the birds of America as aids in the development of agriculture. It acknowledges also the will of the American people to give adequate protection to the beautiful and harmless creatures that are heard in season from every forest, copse, and hedgerow in the land. And it further recognizes the importance of the migratory game birds as a food supply and primarily as an incentive to the healthful sport, outdoor study, and recreational activity so essential to the development of a sturdy American manhood.

"The act definitely strengthens the arm of the federal government in its sound, constructive, and progressive policy of bird protection. Civilization and the advance of industry, which have often been ruthless in their disregard of the needs of the wild creatures, are influences that from year to year have decreased the water and marsh areas of the country by many

thousands of square miles in the aggregate. It is evident that closed seasons, bag limits, and restrictions imposed upon the gunners of America by the game laws will all prove ultimately ineffectual to perpetuate our birds if the destruction of their habitat is allowed to continue unchecked.

"Far-sighted sportsmen, conservationists, and nature lovers throughout the country have long recognized the major elements of the problem and have endeavored to arouse the public to a realization of the impending disaster that must surely have befallen the migratory birds but for the timely passage of this act. The idea in some form or other has been before congress for six years, but the various bills introduced from time to time and intended to provide relief have failed of passage in one or both houses because certain provisions have lacked the approval of the combined groups that were demanding adequate and comprehensive legislation well supported with necessary funds.

"The National Committee on Wild Life Legislation, an influential group of men representing practically every national conservation organization in America; the National Federation of Women's Clubs, and other bodies, as well as an uncounted number of individuals, gave full and effective support to the measure. Thus, with champions of the cause in all parts of the country and in both houses of congress, to press the matter, the perfected bill received unanimous approval.

"The Biological Survey, the bureau of the Department of Agriculture that administers the federal activities relative to migratory birds, estimates that 100 to 125 refuges will eventually be needed. These will be located in suitable areas in all parts of the country. The exact locations of the great system of refuges will closely follow the main migratory flight lines and concentration areas. These matters will be finally determined after a thorough survey has been carried out by the experts of the department as provided for in the act.

"Authorization is made for \$75,000, which if appropriated, is to become available on July 1, 1929, for use in preliminary surveys. In 1930 the amount authorized to be available will be \$200,000, and in 1931, \$600,000, for surveys and the acquisition of lands for refuges. For six years following 1931 an annual appropriation of \$1,000,000 is authorized. At the close of this period it is anticipated that sufficient areas will have been procured to care for the more pressing and essential needs of the birds. Annual appropriations of \$200,000 are authorized thereafter to pay the costs of maintaining and patrolling the established refuges, to protect the birds from poachers and predatory creatures, to control disease when possible, and to encourage the production of natural foods.

## White Porcupine



**N**ATURAL scientists have various theories regarding the albino species or freak, but one of the latest discoveries of the white creature that occasionally breaks out like the black sheep, is that of the white porcupine recently captured by A. G. Gillespie, the bird man of Grass Range, Mont. Its white quills, pink eyes and snowy white paws caused Mr. Gillespie to take several pictures, submit them to the State Department and ask for identification. When kept in captivity too long, however, the gaze of too many pairs of eyes and the poking of too many sticks caused its untimely end. This picture was taken while the albino was bristling his quills while placed on top of the wire cage in which he was confined. It is the first known albino porcupine found in Montana.

## Transplant Elk With Tractor

**M**ONTANA sportsmen who have requested cooperation of the State Fish and Game Department in defraying half the expense in securing carloads of elk from the National Bison Range at Moiese for distribution in suitable areas, have been extending every assistance to make "the plant" successfully. While many states are crying for Montana elk for transplanting, many of these monarchs of the forest have been sold to be butchered for meat and sold to eastern corporations or given to Indians. Those which have been requested by state clubs of sportsmen have been moved in the dead of one of the hardest winters in the history of the state. Sportsmen have demonstrated their sportsmanship.

One of the most interesting incidents of the transfer of a shipment of these elk is explained in the weekly report of Allen T. Holmes, deputy state game warden stationed at Billings, who assisted in unloading and liberating the consignment for the Red Lodge club. They constructed a huge sled, hauled it into the hills with the aid of a caterpillar engine and only three elk were lost.

But let Deputy Holmes tell the story in his own words:

"John L. Corey furnished the sled and caterpillar to haul the elk. The crate was built on a sled, and was made of poles about eight inches at butt, about six inches at top, and eighteen feet long. It was six feet wide and about seven feet deep, with poles beveled off for the floor. Then they had about a foot and one-half of hay in the bottom. The upright pieces were pine and about twelve to fifteen inches through. There were four of these. The poles were spiked at ends and to the upright pieces and the rear end was fixed so that poles could go through when the elk were loaded. We used one-by-twelve-inch boards, eighteen feet long, and nailed them to the poles on the inside so that the elk could not get their feet through the cracks between the poles, four feet high. One cow elk was down in the car when we opened it and she had been tramped quite a bit. The hair on her left side was about half off, and left her skin bare. They showed fight from the start.

"It was four and one-half miles from Red Lodge to the mouth of Nickles creek where we turned the elk loose, and the Red Lodge Rod and Gun Club had 15 bales of timothy hay scattered there but the elk did not stop to look at the hay. They went up on the side of the mountain and stopped and looked around. Then some of them started to brouse and didn't seem to be afraid.

"When we got up with the last load two stood around close to the back end of the sleigh. Then we went up the creek to where one cow was in the snow up to her belly. We got her out

on bare ground. The cow that had the hair off her left side was in the creek dead. We pulled her out of the creek and out of the way. Then we put some hay where this other cow could eat it. Another cow in the first load looked as though she had the distemper.

"When we came back to the sleigh one bull was still there, so we threw out the hay in the bottom of the sleigh. He started to eat some of the hay and was standing there when we went out of sight. Outside of the three I have mentioned I think the others will make it all right, after a few days of sunshine and a little rest. They will get over their soreness and excitement from being penned up. The elk did well for wild animals not used to being handled by man, penned up and shipped by rail, then unloaded from the car into a crate on a sleigh, and hauled four and one-half miles by a caterpillar tractor over a snow road one to six feet deep."

## MONTANA BEAVER WORTH FORTUNE

**O**FFICIAL records of the State Department showing the number of beaver trapping permits issued at \$10 each, where farmers and stockmen complain of beaver damaging irrigation ditches or flooding meadows, make an interesting tabulation. Before a permit is issued, the Commission insists that the premises be inspected by a game warden. During 1915 and 1916 there are no permits of record as none was required by law. Then during 1919-1920 the fee was waived by law. In 1927 the largest number of permits, 641, was issued. During 1929 the total reached 582. The following table shows the number of permits issued since 1915:

1915	.....	*
1916	.....	*
1917	.....	213
1918	.....	100
1919	.....	*
1920	.....	*
1921	.....	242
1922	.....	244
1923	.....	259
1924	.....	139
1925	.....	562
1926	.....	607
1927	.....	641
1928	.....	613
1929	.....	582

## Sportsmen War on Cats

**M**EMBERS of the Lewis and Clark County Rod and Gun Club, gathered in annual session, have declared war on cats. Alley cats, field cats, farm wanderers, deserted tabbies in town and all other varieties of bird devouring felines are in for a tough time if plans of the Helena organization are worked out. President Cecil V. Wilson has named a committee made up of Shirley Ashby, one of the most enthusiastic sportsmen of the state, as chairman; Dr. Thomas L. Hawkins, and L. B. Tipling, to call on the Helena city council with a view to drawing up an ordinance opening the season on city cats. They will later see the county commissioners and take care of the country cats. This action is in line with national condemnation of the feline enemies of song birds, ground-nesting birds on farms and in the woods, and the club merits the commendation of Montana sportsmen.

The New York City division of the American Society for the Prevention of Cruelty to Animals reports the elimination of 322,279 cats in a period of eighteen months. It would appear that this society is alive to the importance of radically reducing the number of domestic cats in the interest of increasing the bird population.

James Sheldon, writing in this report, says that along the beaches near New York last year a multitude of cats were left behind by vacationists. They became ravenous and actually fought with the fishermen for the fish they brought ashore. They climbed porches at night and entered homes in search of food.

It is the unwanted, homeless, hungry cat that is the menace of bird life in Montana as well as New York. What is true in the environs of Greater New York is equally true in every part of the inhabited United States. The number of birds devoured by the stray and homeless cat is beyond computation. The house cat gone wild and foraging in the country for its own living is by no means a helpless puny animal. Its extraordinary growth and strength indicate an abundant food supply, a great part of which is birds.

One who is keenly interested in the conservation of useful wild life writes the American Game Protective Association urging that cats should be licensed as dogs usually are and the money so obtained should go into the conservation funds for the maintenance of game farms, fish hatcheries and game patrol. He also discounts the claim that a large cat population is necessary to control the increase of rats and mice and he urges that the proper care and storing of foods which are attractive to rodents and the avoidance of scattering loose food around stock or poultry will do more to discourage the breeding of undesirable rodents than can be accomplished by any number of cats.

Systematic and persistent cat elimination campaigns might well be a part of the program of every sportsmen's organization.

### OH, SAY, CAN YOU SEE—?

She: "So you kissed that painted creature?"

He: "Yes, I saluted the colors."



## Montana Leads the Way

**F**OLLOWING the precedent established by Montana's State Fish and Game Commission in seeking scientific cooperation of scientists of its state university in solving fish and game problems, authorities of Wisconsin's conservation commission have adopted the plan in attempting to fight the carp. In addition to putting the problem up to Montana scientists the Montana Commission has for several years been experimenting with seining and trapping the hogs of the lakes. This work is under way at Lake Helena, Nelson reservoir, Swan Lake and other bodies of water.

The department of fisheries of the Wisconsin commission has certain beliefs on the subject of the effect of the seining of lakes, as has practically everyone who is concerned at all with this industry, but to date there has been little done anywhere in the United States except Montana to procure precise scientific data.

The first step in the Wisconsin commission's program was to break the carp monopoly in the four Madison lakes by granting contracts covering one lake only to four different fishermen. Each of these four fishermen will have a supervising fish warden with his crew, who will make detailed reports each day on fishing operations. In addition to these, there has been a special man thoroughly experienced in carp seining who has been hired by the commission to make investigations into the work and results of these four carp seining groups. This man will also make detailed reports.

A scientist from the University of Wisconsin, working in cooperation with the commission, will make a detailed study of the effect of seining on lake vegetation. This will be done by studies of areas over which seines are dragged in each of the lakes, and comparing them with similar areas in each of the lakes which do not have seines dragged.

Besides learning something about the effect of seining on vegetation, it is expected that this year's study will yield valuable information on the effect of spring seining on the spawning of fish, and on the migration and food habits of carp, as well as their schooling habit.

Different kinds of seining apparatus will also be experimented with. The size and length of nets, the depth of drag, the size of mesh, the kinds of ponds and cribs will all be studied to find out which is best adapted to the commission's program of carp eradication in Wisconsin lakes.

## Better DUCK Shooting



Order Wild Rice Seed Now For Spring Planting. Thousands of ducks will come to an established rice field. We also have wild celery, Sago Pond plant, Wapato duck potato and other attractions for waterfowl and fur bearers. Also parched wild rice for table use.

GEO. D. HAMILTON'S AQUATIC FARMS  
Box 16 Detroit, Minnesota

## Subscription Price Is \$1 On June 1

**O**N JUNE 1 the subscription price of *MONTANA WILD LIFE* will be increased from 50 cents to \$1 per year. Because of the increasing demand throughout the nation for the official publication of the State Fish and Game Department, and in justice to the great number who have already paid the subscription, the price will be advanced and names on the complimentary roll dropped from the mailing list. Checks and money orders received up to June 1 will be entered at the introductory price of 50 cents per year. This action is taken by direction of the State Commission.

### WHAT HE WAS

A man who went to register just before election was asked his trade. "Mason and builder," he replied.

The next man in line was an old Irishman. When the question was put to him he said, "Knight o' Columbus and bricklayer."



### "COLLY" Strain Silver Black Foxes

Large, Healthy, Prolific Foxes Born and Raised in Montana for Many Generations

Our Booklet, "Silver Fox Farming,"

Will Be Mailed to You on Request

Write for It

Beartooth Silver Fox & Fur Farms

Breeders of Better Fur

Red Lodge, Mont.

## Kill Elk Out of Season

**D**ESPITE vigilance of upstanding men who protect Montana's fish and game, the putrid work of the poacher continues. R. E. Dickinson, forest ranger on the Jefferson forest with headquarters at Neihart, has addressed the following interesting letter to the editor of *MONTANA WILD LIFE*:

"All game birds and animals have wintered in fair condition in the Little Belt mountains. Deer are somewhat weak at this time, owing to the late spring and unusual snow depths in the lower elevations where they winter. I happened to come close to 21 head recently and started after them on a saddle horse, but noticed they labored while crossing snow banks. Strong animals would have bucked through on high.

"In the November issue of *WILD LIFE* there was an article and picture covering the unlawful killing and taking the hind quarters of an elk. During the winter of 1927-28 several rod and gun clubs of the Judith Basin country got together and raised money and loan of equipment to ship and deliver approximately 100 head of elk into the Jefferson national forest at the headwaters of the Judith river. During the summer following these elk scattered over considerable country and some drifted into the headwaters of Belt creek. A four-point bull and two cows were seen several times by myself as well as other persons during late summer in the same locality. One of my men while repairing telephone lines saw the two cows and going over near them found what was left of the bull (horns and head).

## Northern Fur Company

Buyers of

## RAW FURS

Missoula, Montana.

○○○○○○○○

Members of Montana Raw Fur Dealers' Association

### Cut The Duck Limit

**L**EE H. KIMMEL of Kalispell, one of the best known sportsmen of the state, who takes a keen interest in giving fish and game a fair chance, favors the reduction of the bag limit on ducks to 15 per day, regardless of the fact that the federal law differs from that of the state. He writes as follows:

In the January number of MONTANA WILD LIFE I found a sight to behold, six men and three women posing with 35 deer killed in 1914, only 15 years ago, when the bag limit was only two deer. They had just 17 deer more than they were allowed according to law. This must have been a grand and glorious hunting trip.

On the left of the picture of the game hogs one of the party is kneeling with a dog. I presume the dog took a big part in the killing.

The limit of deer in 1914 is somewhat like the limit of ducks today. It seems to me that the duck law is badly in need of an overhauling. Sometimes I think the ducks are traveling the same route as the buffalo, antelope and the prairie chicken.

Twenty-five years ago in the eastern part of the state there were countless thousands of ducks and geese on the lakes and streams. There are no such numbers there today. In fact I have seen more geese in one flock in eastern Montana than you will ducks now in the entire hunting season.

If we permit this to go on it will only be a matter of a short time until collectors of our extinct game birds will be offering \$10,000 for a pair of mallard ducks, dead or alive.

There is only one way to lend a hand to the fast disappearing ducks, and that is to reduce the bag limit, say to 15 per day. That is plenty for any one family at one time. The odds are greatly against the ducks today. If we do not offer them a helping hand they will pass on to the resting place of the buffalo, antelope and prairie chicken.

### WANT MORE DUCKS



More food means more game. Complete line of planting materials suitable for Montana. Planting helps free. Write



TERRELL'S AQUATIC FARM

1072 W BIK.

Oshkosh, Wisconsin

### Ed. Wilson Lands 'Em



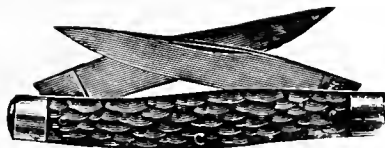
Here's a closeup of E. A. Wilson of Livingston, member of the Montana State Fish and Game Commission, with a nice mess of pan sized native trout hooked with flies in the Yellowstone country. He's an ardent dry fly enthusiast.

### Hunting & Fishing

is a 52-page monthly magazine crammed full of hunting, fishing, camping and trapping stories and pictures, valuable information about guns, rifles, fishing tackle, game law changes, best places to get fish and game, etc. Biggest value ever offered in a sporting magazine. And here's the famous



Remington Sportsman's Knife with a stag handle and two long slender blades especially designed to meet the exacting requirements of skinning and cleaning fish, game birds and fur-bearing animals. Blades are of superior quality steel with



The name "Remington" on the blade is your guarantee of quality.

strong, durable, keen-cutting edges. The points are shaped just right for a good, clean job of slitting and skinning. SPECIAL OFFER—We will send you Hunting and Fishing Magazine for a whole year; 12 big issues and this Remington Sportsman's Knife Both for \$1.

Satisfaction guaranteed or money refunded.

Mail your order today to  
Hunting & Fishing Magazine  
237 Transit Bldg., Boston, Mass.

Attract Wild Ducks, Fish, Muskrats, Upland Game Birds and Animals



Plant Natural Foods that will bring and hold large numbers at your favorite hunting or fishing grounds. Wild Rice, Wild Celery, Duck Potato and 30 others described in free illustrated book. Write, describe grounds, and receive free planting advice and book

Wisconsin Aquatic Nurseries  
Box 331-D Oshkosh, Wis.

### Hercules Alaskan Silver Black Foxes

Write for information and prices.  
Idaho Fox Farm Co., Porthill, Idaho, or  
Hugo Renlund, Red Lodge, Mont.

### THE

### Leo. M. Goldberg

### Fur and Wool House, Inc.

One of the Largest Direct Buyers in the Northwest, of All Kinds of American Raw

### FURS

1040 Helena Avenue

Helena - - Montana

### FOXES

Fur-Raised Alaskan Blues and Pedigreed Silvers. Order Now—Early Delivery means satisfaction. We guarantee, in Your hands or Ours, 100% increase under ranching contract on adult Blues. 6 Bank Ref. for 25 yrs. and Satisfied customers. Breeder-Agents wanted—Your real opportunity, "One of the World's largest"—Free booklet tells all. CLARY BROS., Fox Farms, Empire Bldg., SEATTLE, U.S.A.

U. S. HEADQUARTERS  
Imported Arms, Ammunition & Parts  
Mauser - Luger - Merkel Bros. - Mannlicher - Webley - Scott, etc.  
Full line American Arms & Ammunition  
Springfield's Restocked to Col. Whelen's Revised Specifications  
Largest stock in America of fine new Rifles, Trap, Field Guns, Side Arms, Air Rifles & Pistols. \* Telescopes mounted. \* Expert Repairing. \* Send 25c in stamps for 128 page Arms Catalog

**A.F. STOEGER, INC. NEW YORK, N. Y.**  
509 Fifth Avenue (at 42nd St.)

Sec. 435½, P. L. & R.  
 U. S. POSTAGE  
**PAID**  
 Helena, Montana  
 Permit No. 27

# Sportsmen Feed Montana Birds

**D**ESPITE open air cafes conducted by Montana's State Fish and Game Commission, farmers, sportsmen's clubs and other organizations, where free meals have been served during the severe winter, hundreds of Montana ducks and upland birds are known to have perished. When the heavy snow-fall made it apparent that wild life might suffer, the Commission was quick to authorize deputies throughout the state to work with sportsmen and farmers in the distribution of baled alfalfa for the deer, cracked wheat and corn for the Hungarians and Chinese pheasants and food for the migratory water-fowl. Guardians of game and other deeply interested exponents of conservation have worked diligently. Only in a few localities have heavy losses been reported.

Deputy Game Warden Jack F. Goldsby, stationed at Polson, fed about four tons of wheat to birds in Lake county during the heavy snow. The wheat was distributed in some 30 places and, according to Deputy Goldsby, he was feeding as many as 300 sharp-tailed grouse, Chinese pheasants and Hungarian partridges in each location. They learned to come to lunch and spread the word among their coveys.

An example of the splendid cooperation shown by Montana farmers in feeding game birds is shown in the response of Joe Marion and Mr. Smith, farmers on the Irvine Flats, near Radio postoffice. On instructions of the Commission Deputy Goldsby was sent to these farmers, who each fed about 500 sharp-tailed grouse all winter, to make a financial settlement for wheat and other grain fed to game birds. The farmers declined to accept a dime of the money of Montana sportsmen for their services, declaring that they were glad to have the game birds on their farms and desired to do everything possible to sustain them during winter difficulties. The government weather bureau at Polson reports that about five feet of snow fell in that vicinity during the winter. These farmers scattered grain in the sheaf for the stock and birds while the birds were perched around on trees,



Dead mallards found floating on Spring Creek, near Ronan.

## Subscribe Now!

The subscription price of MONTANA WILD LIFE will be increased from 50 cents to \$1 per year on June 1, the first anniversary of the official publication of the State Fish and Game Department. Checks for subscriptions at the rate of 50 cents per year will be received until that date. The complimentary list will be eliminated. Help the cause. Do it now! Attach your check to the following list of friends and mail it to the editor at Helena:

Name.....

Address.....

Name.....

Address.....

Name.....

Address.....

Name.....

Address.....

buildings and on the ground awaiting their chance at the morsels. Mr. Marion says that the only birds which perished in his vicinity were those killed by Cooper hawks.

Coyotes and wolves also took their toll. Deputy Goldsby shot a timber wolf while making his rounds, on snowshoes, packing grain for birds on his back. The pelt measured five feet six inches. After being hit the third time the wolf traveled a mile before dropping.

In the lower Flathead valley the snow was reported four to 14 feet deep. Two assistants were employed by the Commission to aid Deputy Goldsby. Ranchers in the Valley View region fed large numbers of game birds gathered on hay stacks and sheltered spots.



Mallards starved and found in the snow in western Montana.

On the five miles of open water on Spring Creek, which flows through Ronan, thousands of golden eyes, mallards and native ducks gathered during the bitter weather. Nine Pipe and Pablo reservoirs and pot holes throughout the Polson district were frozen solid. Dr. Bert Koons of Ronan and other sportsmen found dead ducks on the waters of the creek and on snowbanks, death being caused by freezing or starvation. Meanwhile thousands of geese were seen on Flathead Lake.

### SAVING?

"Since I bought my car I don't have to walk to the bank to make my deposits."  
 "Ah, you ride there?"  
 "No. I don't make any."

### BIRD TRAVELS

The birds that live on insects in the east go to Cuba and the West Indies or to Central and South America in the winter. The bobolink at this season will sing in South American fields. Plover and snipe are credited with the most extensive migrations. Some species breed within the Arctic circle and go to the southern end of South America for the winter. The sparrows, robins and bluebirds and many of the berry eaters spend the winter from the Middle states to the Gulf of Mexico. In the west the migratory birds go to Mexico.

### CURED!

He had just hung out his shingle. That morning a stranger entered. The doctor asked to be excused as he hurried to the phone.

Taking down the receiver he said: "Yes, this is Dr. Whoosit. Yes, I will be ready for you at two-ten this afternoon. But please be prompt for I am very busy. Two hundred dollars? Yes, that was the estimate I gave you."

Hanging up the receiver, he turned to the stranger, and, rubbing his hands, asked: "Now, sir, what can I do for you?"

"Nothing," replied the stranger, quietly. "I only came in to connect the telephone."