

VOL. IV

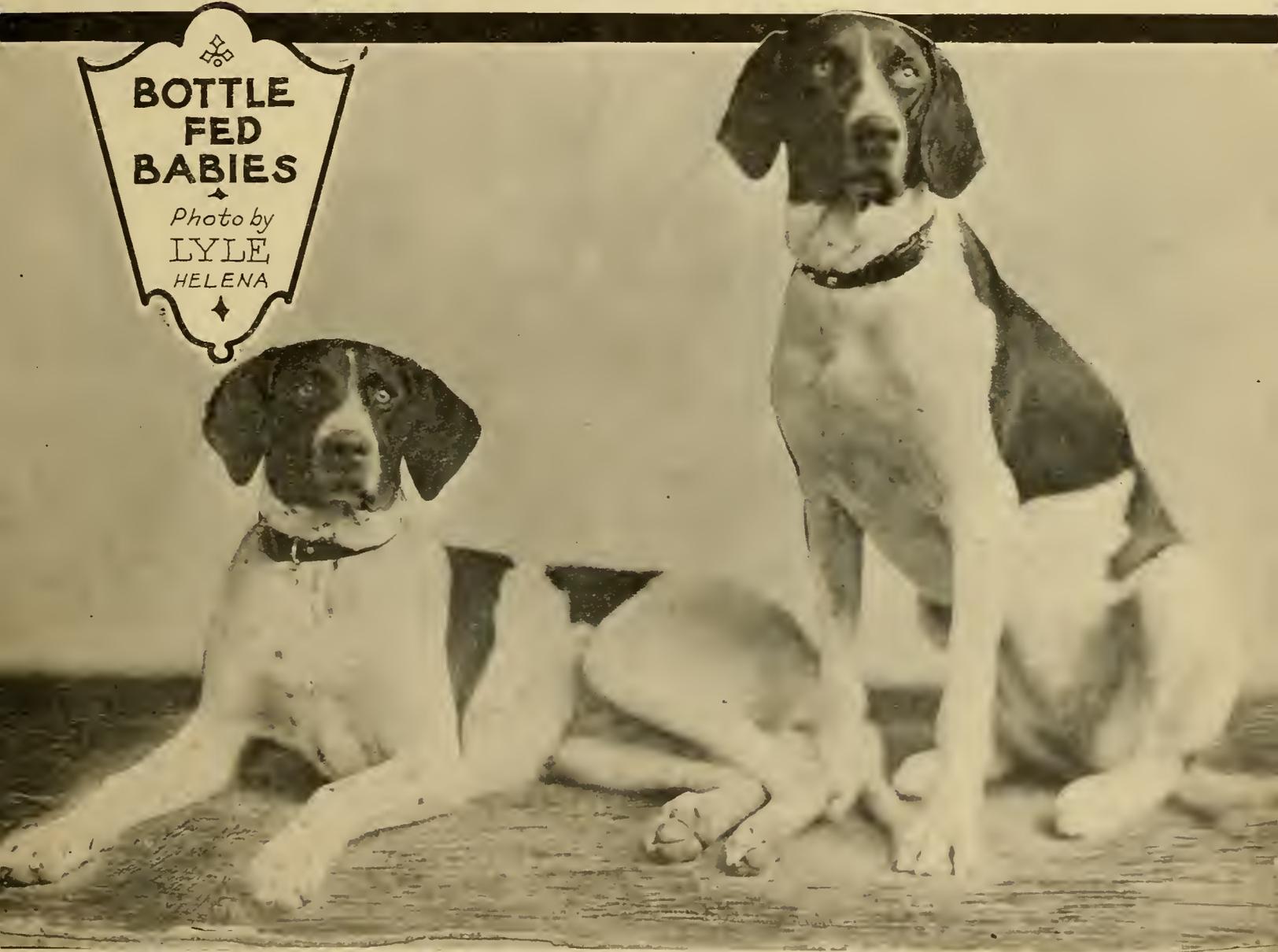
MONTANA

NO. IX

WILD LIFE

FEBRUARY 1932

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**BOTTLE
FED
BABIES**
◆
Photo by
**LYLE
HELENA**
◆



OFFICIAL PUBLICATION OF
MONTANA STATE FISH
AND GAME DEPARTMENT

Out West

By Helen Hardy

WHERE there's no chance for worry and
small chance for grief;
And for every heartache, there is found some
relief
In the depths of the valley and free mountain
air,
That wrap one in kindness and shelter with
care,
There is freedom of action and cleanness of
mind;
With inspiring ambitions of every known
kind,
There's peace and there's comfort, without city's
unrest,
Just in living and loving the wonderful
West!
There's the wide tumbling ocean and tall
mountain peaks,
No matter whatever the traveler seeks,
There is always the newness that never grows
old,
With queer ancient stories that beg to be told,
There's virtue and goodness that crushes all
sin;
Giving those who have fallen a new chance to
begin.
There's everything waiting for those wanting
the best,
In the world's fairest garden—our beautiful
West.



MONTANA WILD LIFE

The Official Publication of The State Fish and Game Commission

VOL. IV.

HELENA, MONTANA, FEBRUARY, 1932

No. 9

Fisheries Offices Move to Anaconda



LOCATION of headquarters of the fisheries division of the State Fish and Game Department has been changed from Helena to Anaconda by order of the commission at the

meeting recently held at Butte. Following presentation of Superintendent Kenneth F. MacDonald of the request for the removal, an order was made permitting the change with the provision that copies of records and reports be retained at Helena headquarters and that duplicates of future reports be filed in Helena so that a complete record may be at all times available. Superintendent MacDonald informed the commission that his work can be more efficiently handled from Anaconda because of being located closer to the center of fish activities, near the great spawn-taking station at Georgetown lake and within short driving distance of the larger hatcheries.

The following motion by Commissioner J. L. Kelly, seconded by Commissioner Moore, prevailed: "I move that Superintendent MacDonald be authorized to move his headquarters to Anaconda, and that he file duplicate records in the game warden's office at Helena." Commissioner Brown voted "no."

The meeting of Montana's State Fish and Game Commission was held at the New Hotel Finlen at Butte, January 19. Those present were: Thomas N. Marlowe, chairman; E. A. Wilson, W. A. Brown, J. L. Kelly, and W. K. Moore, commissioners; Robert H. Hill, secretary; K. F. MacDonald, state superintendent of fisheries; Floyd L. Smith, editor, MONTANA WILD LIFE; and J. F. Hendricks, superintendent of the State Game farm.

Chairman Marlowe presented petitions from residents of Flathead county, requesting that the Flathead river be opened to ice fishing for the remainder of the open season, and also a letter from Deputy O'Claire recommending this action. He advised that he also had a letter from M. L. Matzick, foreman of the Somers hatchery, suggesting that this be allowed.

Motion by Mr. Kelly: "I move that the Flathead river in its entirety be open to ice fishing for all species of fish, with hook, line or pole in hand, until March 15, 1932, and that the secretary publish the proper notices." Seconded by Mr. Wilson. Carried.

The secretary explained that in 1923 an order was made allowing ice fishing during the regular open season in

Bottle-Fed Babies THIS MONTH'S COVER

LADY LUCK frequently has her arms around some of the best of us. The splendid photograph of "Nip" and "Tuck," thoroughbred English pointers owned by Aubrey M. Holter, Helena sportsman, displayed on the cover of this edition of MONTANA WILD LIFE, is rich in dog romance. These pups came into possession of Mr. Holter when they were but a week old, through pure good fortune. While on a fishing trip on the Lemhi river in Idaho, accompanied by Ben Wahle, Jr., Iver Wamben, and Bert C. Nutter, Mr. Holter chanced across a dog fancier who was about to drown the pups. To save them from an untimely end, Mr. Holter claimed them, brought them to Helena, petted and fondled them, and they are now 18 months old. From the time they were saved until maturity they were fed from a bottle through kindly ministrations of Mrs. Holter and the family. Moving pictures have been taken of them since puppy days and are frequently displayed in the Holter home.

Flathead lake, but that no time limit was made in this order, and the question of ice fishing be allowed in Flathead lake is uncertain. Deputy O'Claire recommends that ice fishing be allowed. By previous order of the commission, the lake is open to fishing during the entire year.

Motion by Mr. Kelly: "I move that ice fishing in Flathead lake, for all species of fish, with hook, line or pole in hand, be allowed until further order of the commission." Seconded by Mr. Moore. Carried.

The chairman presented petitions from citizens of Flathead county and a letter from Deputy O'Claire, requesting that McGregor and Loon lakes, in Flathead county, be opened to ice fishing. Inasmuch as the department plans to place fishtraps in Loon lake for the purpose of taking grayling spawn, the following order was made:

Motion by Mr. Moore: "I move that ice fishing for all species of fish, with hook, line or pole in hand, be allowed in McGregor lake, in Flathead county, until March 15, 1932." Seconded by Mr. Kelly. Carried.

A letter was presented from Ed Boyes, president of the Libby Rod and Gun Club, suggesting that LaVone lake, in Lincoln county, be closed to fishing until further order, inasmuch as silver salmon planted therein are now about six inches in length, are biting well, and being taken out by the hundreds.

Motion by Mr. Moore: "I move that

LaVone lake, in Lincoln county, be closed to all fishing until further order of the commission." Seconded by Mr. Wilson. Carried.

The chairman presented a request from the Big Timber Rod and Gun Club for the closing of two small tributaries to the Boulder river, in Sweet Grass county, as the club has been rearing fish in these two streams and have dams therein for this purpose.

Motion by Mr. Kelly: "I move that this request be granted, and that Spring creek, on the east side of the main Boulder river, traversing parts of Sections 23, 26, 33, and 34, in Twp. 1 N., R. 14 E., M.P.M., and the un-named creek, on the west side of the main Boulder river, traversing parts of Sections 26, 27, and 34, Twp. 1 N., R. 14 E., M.P.M., in Sweet Grass county, be closed to fishing until further order of the commission." Seconded by Mr. Wilson. Carried.

The secretary presented petitions from citizens of Wolf Creek, asking the commission to close to fishing Wolf creek, a tributary to the Prickly Pear, above the town of Wolf Creek.

Motion by Mr. Moore: "I move that Wolf creek, above the town of Wolf Creek, Montana, a tributary to the Prickly Pear, in Lewis and Clark county, be closed to all fishing until further order." Seconded by Mr. Kelly. Carried.

The secretary presented a petition from residents of Mineral county, requesting the closing of waters in Mineral county until the open season in 1934, to protect the fish.

Motion by Mr. Kelly: "I move that this petition be granted, and that Pearl lake, Trail lake, Heart lake, Hoodoo lake, and the South Fork of Trout creek, and tributaries of the South Fork, in Mineral county, be closed to all fishing until May 21, 1934." Seconded by Mr. Moore. Carried.

Petitions were presented from residents of Whitefish and vicinity, asking that Whitefish lake, in Flathead county, be opened to ice fishing during the open season this winter.

Motion by Mr. Kelly: "I move that these petitions be granted, and that Whitefish lake, in Flathead county, be opened to ice fishing, with hook, line or pole in hand, for all species of fish, until March 15, 1932." Seconded by Mr. Wilson. Carried.

The secretary reported that five clubs had submitted scores in the Common Enemy Control contest; and that prizes should be awarded as follows, as shown by a tabulation of their scores: First prize, \$150, to the Plentywood Chapter



of the Izaak Walton League; second prize, \$100, to the Dawson County Rod and Gun Club, Glendive; third prize, \$75, to the Northern Lewis and Clark Sportsman Association, Augusta; fourth prize, \$50, to the Big Timber Rod and Gun Club; highest club score on predatory animals, \$40, to the Plentywood Izaak Walton League Chapter; highest club score on predatory birds, \$40, to the Dawson County Rod and Gun Club; highest club score on eggs of predatory birds, \$20, to the Dawson County Rod and Gun Club; and to the individual making the highest score, \$25, to Edwin Cose, Augusta, member of the Northern Lewis and Clark Sportsman Association.

Motion by Mr. Moore: "I move that the secretary be authorized to award the prizes in the Common Enemy Control Contest on behalf of the Commission." Seconded by Mr. Wilson. Carried.

The secretary asked if it was the desire of the commission to hold the contest in 1932.

Motion by Mr. Kelly: "I move that the Common Enemy Control Contest be continued in 1932, on the same basis, and that all clubs be notified as soon as possible." Seconded by Mr. Moore. Carried.

The chairman reported that he had conferred with Glen A. Smith, assistant regional forester, in solving the problem of beaver damaging properties of the forest service. He said that he thought arrangements could be made to remove these beaver and plant them in some other locality when weather conditions permit.

A letter was read from B. L. Kratz, of Beehive, wherein he complains that the Billings Polytechnic has set aside its property as a private preserve for employes, and that as state land, such procedure is not fair. Commissioner Moore advised that he had investigated this complaint and had found that the Polytechnic institute ground is not closed to hunting, except to parties who are not deemed dependable.

A letter was read from K. Wolfe, forest supervisor at Kalispell, asking that the commission grant authority to members of the forest service to kill bear which are reported damaging forest service properties in a game preserve.

Motion by Mr. Kelly: "I move that the secretary advise Mr. Wolfe that the commission regrets this condition, but that we have no authority to grant permits for the killing of game animals within any game preserve." Seconded by Mr. Moore. Carried.

The secretary presented a bill of \$20 for rental from the state land commissioner for lands around Dailey's lake.

Motion by Mr. Wilson: "I move that the claim be allowed." Seconded by Mr. Moore. Carried.

A letter from J. H. Chartrand, former deputy game warden, was read, expressing appreciation to the department for the favors extended him when deputy game warden.

The secretary explained that about two years ago, the Cascade Chapter of

Montana's Beaver Worth Millions

IF BEAVER hides had maintained an average valuation of \$20 each during the last 11 years, the 67,161 skins legally taken under state permits and tagged by the State Fish and Game Department would have had a valuation of \$1,343,220. During the year just closed a total of 7,003 skins was tagged at a fee of 50 cents each, as provided by law. The statutes provide that all beaver taken on trapping permits where the little animals are causing damage to agricultural land, shall be shipped to the department, tagged and recorded. The record of skins tagged since 1921 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	8,154
1930	8,692
1931	7,003
Total	67,161

the Izaak Walton League asked the department to assist in securing elk from Yellowstone park, to be transferred to the range adjacent to Cascade. At that time, conditions in the park were not favorable to the capture of the elk. This year the Park Service advises that shipments could probably be made, and the Cascade league is asking the commission for financial aid in transferring two carloads of elk. The question of financial aid was considered, as was the probability that farmers would complain of elk damage in the future, if range conditions were not good in that vicinity.

Motion by Mr. Kelly: "I move that this matter be referred to Commissioner Brown for investigation." Seconded by Mr. Moore. Carried.

J. H. Melvin, of Opheim, offered to sell to the commission his property at Fox lake. Mr. Moore advised that this property is in the hands of receivers.

The chairman reported that since the last meeting of the commission, he has had correspondence with Henry O'Malley, superintendent of the Bureau of Fisheries, relative to the state department and federal bureau working out an agreement regarding activities of the two departments in the state. He said Mr. O'Malley has assured him that an authorized representative of the bureau will meet with the Montana commission in March, with full power to enter into a written agreement. Mr. O'Malley also assured Mr. Marlowe that the work on the new federal hatchery in the Madison will be started as soon as weather conditions permit.

The secretary read a letter from Waldo F. Smith, superintendent of the Washington State Custodial School, at Medical Lake, asking if the commission could send him a pair or two of California quail to be used at the school for experimental purposes. Mr. Hendricks advised that he has 16 pair of

California quail at the State Game farm.

Motion by Mr. Kelly: "In view of the fact that Mr. Hendricks has more quail at the farm than he can take care of efficiently, I move that he send to the Washington State Custodial School, free of charge, two pair of California quail, as an act of cooperation with the State of Washington." Seconded by Mr. Moore. Carried.

A letter was read from Horace G. Orr, of Pleasant Valley, reporting that the elk which have been planted on the Wolf Creek Game Preserve, in Lincoln county, have been damaging his crops. He asked the commission to furnish him with material so that he may build a fence.

Motion by Mr. Moore: "I move that this matter be referred to the Libby Rod and Gun Club and to Deputy O'Claire." Seconded by Mr. Kelly. Carried.

J. L. Waylett of Camas reported that so many permits have been issued by the forest service to stockmen to graze their sheep and other stock in the national forests that there is insufficient range for wild game. The chairman read a letter from W. E. Kier, president of the Lewistown Rod and Gun Club, giving the same report, and suggested that this department follow the example of the Utah Fish and Game Department—organize a round-table meeting between the forest service, the stockmen, the sportsmen and this department. The chairman advised that he would confer with Glen A. Smith at once in this matter, and if such a round-table is organized, Game Warden Hill should act as representative of the commission in attempting to alleviate serious range conditions in different localities in the state, such as reported by Mr. Kier relative to the Judith river area.

Winton Weydemeyer of Fortine addressed a letter relative to the protection of blacktail deer in Lincoln county.

Motion by Mr. Kelly: "I move that this question be referred to Mr. Marlowe, and that he consult with sportsmen's clubs in Kalispell, Whitefish, Polson, and vicinity." Seconded by Mr. Moore. Carried.

The secretary again presented a letter from the director of the Izaak Walton League, at Chicago, asking the Commission to have a wild life display at the World's fair in 1933.

Motion by Mr. Moore: "I move that this matter be laid on the table." Seconded by Mr. Wilson. Carried.

Mr. Hill reported that he had insured the eight positive motion picture films of fish and game of Montana for \$150 each, through the Board of Examiners. He presented a letter from William A. Rowe, Kitsap County Sportsmen's Association, Bremerton, Wash., relative to their renting the films for showing in their county. Mr. Hill was authorized to send these films to them for showing at a time when there is no call for them in Montana. It was decided to make no rental charge for them.

Commissioner Moore reported that the large well at Porcupine Dome has



become clogged but that there are two smaller wells which are open and flowing. Permission has been received from the federal government to leave these wells open, and if it is decided to use this water for any constructive purpose, the large well can be opened with little trouble and expense to create a lake as a waterfowl refuge. Forsyth sportsmen are working on securing easements for land in this district; and there is a possibility that the water will also be used for agricultural purposes.

A letter from the Fish Pond committee of the Custer Rod and Gun Club was read, outlining the work for building the proposed rearing pond at Miles City. Plats and maps were also presented. The club agreed to do work not to exceed the value of \$2,000 upon a \$2,000 contribution from the Fish and Game fund, which would be a sufficient amount to complete the pond.

Motion by Mr. Kelly: "I move that the secretary acknowledge receipt of the letter from the Custer Rod and Gun Club, and the blue-prints presented, thanking them for their spirit of co-operation, stating that the commission has not at this time funds available for this work, and asking them to renew their request at a later date." Seconded by Mr. Wilson. Carried.

M. M. Atwater of the Black Beaver Fur Farms, Basin, presented a report requested by the commission at their last meeting, suggesting changes in the rules and regulations relative to fur farming. In view of the length of the report the following motion was made by Mr. Kelly: "I move that the secretary furnish a copy of the report made by Mr. Atwater to each member of the commission, the matter to be given consideration at the next meeting." Seconded by Mr. Wilson. Carried.

Kenneth F. MacDonald, superintendent of state fisheries, reported that although the request of Thomas Edwards & Son, of Marion, that the commission take 400,000 brook trout eggs and hatch them at the Somers hatchery, he to pay the commission \$1.50 per thousand for hatching them, had not been accepted at the last meeting; in the meantime the Libby Rod and Gun Club had requested brook trout eggs for streams in that locality in which waters no other fish will live. Mr. MacDonald agreed to take and hatch 400,000 brook trout eggs for Mr. Edwards, 200,000 of them to be returned to Mr. Edwards when hatched, the other 200,000 to be retained by the commission as payment for keeping the eggs and hatching them at the Somers station. One hundred thousand hatched eggs will be delivered to the Libby club for planting, and the other 100,000 will be sent to the Big Timber station for distribution in that locality.

Motion by Mr. Moore: "I move that Mr. MacDonald's action in this matter be ratified." Seconded by Mr. Wilson. Carried.

Superintendent MacDonald reported that J. H. Wetzel of Eureka had asked permission to take native trout eggs for the commission on a percentage basis in waters near the Canadian bor-

Sportsmen Join Predator War

MONTANA'S State Fish and Game Commission has decided to continue the Common Enemy Control Contest during 1932. Prizes of \$500 will be distributed among clubs of sportsmen throughout the state winning high marks in the destruction of predatory birds and animals and the eggs of predatory birds. Results of the 1931 contest will be found announced in the minutes of the last commission meeting in this edition. Clubs should prepare now for the 1932 war against enemies of fish and game, communicate with State Game Warden Robert H. Hill and secure details regarding the contest.

der, but that he had not seen fit to grant this request.

He presented a letter from Fred E. Ripley, private pond owner at St. Ignatius, stating that he has 400,000 rainbow eggs for which he has not found a market. Rather than destroy them, Mr. Ripley asked that the commission take the eggs, at no cost, at this time, and then, if he finds a market later, he would accept similar eggs at that time from the department.

Motion by Mr. Moore: "I move that Mr. MacDonald act in this matter as he sees fit." Seconded by Mr. Wilson. Carried.

Superintendent MacDonald reported that he had had requests from sportsmen that the Tongue river be stocked with loch leven trout as no other fish seem to flourish in these waters, and trout have never been planted there. The river heads in Wyoming, running through that state for about 40 miles, and through Montana for about 80 miles. The Wyoming department has agreed to stock this river in their state with loch leven trout, and Mr. MacDonald reported that a dam in the river would preclude any possibility of the loch leven getting into the Yellowstone.

Motion by Mr. Kelly: "I move that Mr. MacDonald be authorized to stock the Tongue river in Montana with loch leven trout." Seconded by Mr. Moore. Carried.

Mr. MacDonald reported that J. H. Chartrand, who was laid off as a deputy game warden, has been employed by the fisheries department to look after the Miles City Pond Cultural Station, as foreman.

Commissioner Wilson presented petitions from residents of Park and Sweet Grass counties for permission to take whitetfish from the Yellowstone river in these two counties, for the purpose of selling them. The Big Timber club recommended this action, in view of conditions in these two counties. Mr. Kelly went on record as being opposed to the commercialization of any wild life in the state.

Motion by Mr. Moore: "I believe this would establish a difficult precedent, and I move that the petition be denied." Seconded by Mr. Kelly. Carried.

Petitions were presented from residents of Butte, Wise River and vicinity, and letters from Alva A. Simpson,

forest supervisor at Dillon, and Larry Hamilton of Butte, requesting the commission to close to fishing the Wise river and tributaries for two years, at the expiration of which time the river should be opened to fishing only during June and July. The reason stated for this request was that the river has been badly depleted of fish this season, in view of a flood several years ago which destroyed most of the fish food in the river. John L. Boardman, secretary of the Butte Anglers' Club, and William Carpenter, president, appeared on behalf of the Butte Anglers' Club, asking that the commission take no action on this request until the club had had a meeting and formulated an opinion in the matter. Mr. Boardman explained that food conditions in the Wise river are being built up, that the Butte Anglers' Club is planting fish there, and this is one of the few streams close enough to Butte for Butte sportsmen to enjoy. Earlier in the meeting, an order had been made by the commission, closing the Wise river, and in view of protests, the following motion was made by Commissioner Kelly: "I move that the action of the commission, closing Wise river and its tributaries to fishing, be rescinded, upon protest of Mr. Carpenter and Mr. Boardman of the Butte Anglers' Club, and that action in the matter be postponed until the next meeting of the commission." Seconded by Mr. Moore. Carried.

The chairman presented a letter from Robert S. Norton, U. S. Reservation Protector, at Moiese, reporting that there are about 10,000 ducks on the reservation and outside of it, which will have to be fed. He asked the co-operation of the commission in feeding some of the ducks outside the reservation. Deputy O'Claire reported that some of the pheasants will have to be fed in his district, as the snow is too deep for them to find food. Mr. Hendricks asked Mr. Marlowe to furnish the pheasants some grit with this food, so that their feeding conditions will be proper.

Motion by Mr. Moore: "I move that Mr. Marlowe be instructed to look after emergencies in feeding birds, as we have done in the past." Seconded by Mr. Wilson. Carried.

Superintendent Hendricks advised that one of the first pens built at the State Game farm, which was built as an emergency pen to hold brood stock, is useless. He asked permission to employ a helper about two weeks earlier this spring, so that this old pen could be torn down, and the material used in building a pen in which to raise Hungarian partridges. He said no new material would be required, and that this new arrangement will make it possible to raise about one thousand more partridges.

Motion by Mr. Moore: "I move that Mr. Hendrick be authorized to have this pen made, no new material being necessary." Seconded by Mr. Wilson. Carried.

Commissioner Brown presented rec-



MONTANA WILD LIFE



Millions of Fish Liberated in 1931



K. F. MacDonald

MONTANA'S State Fish and Game Department has made possible the hatching, rearing and liberation of 28,222,886 game fish in waters of the state during the year just closed and, according to statistics just completed, there were 5,677,352 eggs on hand in the hatcheries on January 1, 1932. This total has been increased to 7,500,000 eggs by additions during January. Analysis of the year's work in

the battery of 14 hatcheries operated by the state department, shows that the greatest liberation was made possible at the Big Timber hatchery, where a total of 4,446,650 game fish were hatched and then liberated by speedy oxygen-equipped automobile trucks. The Anaconda hatchery was second with 4,142,766 liberated.

Fish liberated in Montana waters by cooperating hatcheries during 1931 total as follows: Butte Anglers' club, 732,900, of which 672,000 were native black spotted and 600,000 rainbow; Federal Bureau of Fisheries, 732,900 black spotted trout and the Yaak pond, operated by S. S. Drew, 20,000 rainbow.

During the year just closed, according to Kenneth F. MacDonald, superintendent of state fisheries, a total of 224,482 large mouth bass were liberated, 61 small mouth bass, 402,475 sunfish, 27,825 crappies, 7,325 catfish, 50,155 perch, 17,183,344 native black spotted trout, 4,498,209 rainbow trout, 1,115,290 grayling, 870,222 Eastern Brook trout, 676,583 Chinook and Sockeye salmon, 1,680,215 loch leven, 875,000 whitefish and 25,700 California golden trout.

Future

By Edgar A. Guest

I CAN tell you what the future has in store for you, but I can't tell you what you're going to be, however, I may try. The future has a job for you, just what I cannot say; But there's something more important to be thinking of today. The thing to be concerned with now is not what you will do; A more important matter is the man that's known as "you." Will you be ready for the task, and fit for any test? Will you go at it with the will and wish to do your best? Will you be cheerful when you work, courageous when you fail? Will you stand fast at duty's post whatever foes assail? Will you think less of pleasure's lure and more of serving well, And measure time by tasks complete and not the quitting bell? The sort of man you're going to be is up to you to say. Some make the most of every chance; some toss the chance away. But let the job be what it may, if well with it you do, Don't fret about the future—it will have a place for you.

The summary of eggs on hand at the start of 1932 shows 738,062 native black spotted, 558,492 rainbow, 35,478 Eastern brook trout, 3,845,320 loch leven, and 500,000 Lake Superior whitefish. The whitefish eggs, which were secured from Michigan through an exchange of eggs, are at the Polson hatchery. These fish will be liberated in Flathead lake.

The annual liberation report shows that the Miles City pond cultural sta-

tion, located at old Fort Keogh, and operated in cooperation with the federal bureau of fisheries, has made possible the liberation of the following number of warm water fish during the year: Large mouth bass, 30,450; sunfish, 402,475; crappies, 27,825; catfish, 7,325; perch, 41,755; unsorted sunfish and crappies, 15,000. In addition to the Fort Keogh pond harvest, 8,400 perch taken from Jones lake, 2,032 large mouth bass were seined from the Nine Pipe reservoir and distributed, and 192,000 large mouth bass with 61 adult small mouth bass were taken at Somers and placed in desired streams and reservoirs in the state. The total distribution of warm water fish for the year then reaches the total figures:

Large mouth bass, 224,482; small mouth bass, 61; sunfish, 402,475; crappies, 27,825; catfish, 7,325; perch, 50,155; unsorted sunfish and crappies, 15,000.

Figures showing the total number of eggs on hand at the start of the new year, reaching 5,677,352, are as follows:

Anaconda—Native black spotted trout, 274,000; Eastern Brook, 35,478; Loch Leven, 1,853,280. Total—2,163,758.

Big Timber—Native black spotted, 200,600; rainbow trout, 459,640; Loch Leven, 1,508,375. Total—2,168,615.

Great Falls—Loch Leven, 483,665.

Libby—Native black spotted, 263,462; rainbow trout, 98,852. Total—362,314.

Polson—Lake Superior whitefish, 500,000.

Grand totals of game fish eggs on hand at the hatcheries show: Native black spotted, 738,062; rainbow, 558,492; Eastern Brook, 35,478; Loch Leven, 3,845,320; Lake Superior whitefish, 500,000.

WILD LIFE VALUABLE

The Bureau of Biological Survey at Washington, D. C., has credited the country's wild life with supplying meat and fur each year to the value of \$150,000,000.

DISTRIBUTION OF GAME FISH IN MONTANA WATERS IN 1931

	Black Spotted	Rainbow	Grayling	Brook	Salmon	Loch Leven	White-fish	Golden Trout	TOTALS
Anaconda	2,516,560	130,820	1,115,290	190,022	186,474(1)			3,600	4,142,766
Big Timber	1,718,170	820,000		398,800	98,735(1)	1,410,945			4,446,650
Emigrant	1,634,306								1,634,306
Great Falls	812,500	860,110		281,400	46,374(1)	269,270			2,269,654
Hamilton	2,156,000	250,000			50,000(1)				2,456,000
Lewistown	920,955	429,105						22,100	1,072,200
Libby	695,600	354,500					875,000		524,830
Miles City									2,750,000
Missoula	1,609,000	266,000							983,036
Ovando	983,036								974,917
Phillipsburg	974,917								790,644
Polson	490,970	299,674							343,430
Red Lodge	543,430								2,057,000
Somers	1,294,000	468,000							
	16,349,444	3,878,209	1,115,290	870,222	676,583	1,680,215	875,000	25,700	25,995,493
Cooperative Hatcheries:									
Butte Anglers	672,000	600,000							1,272,000
Bureau of Fisheries	732,900								732,900
Drew (Yaak Pond)		20,000							20,000
	17,183,344	4,498,209	1,113,290	870,222	676,583	1,680,215	875,000	25,700	28,222,886

(1) Chinook Salmon

(2) Sockeye Salmon



Montana Automobile Association is Active

By D. C. Salyerds, Secretary.



MONTANA'S Automobile Association has commenced another year of constructive activity. At the sixth annual meeting held at Helena, every highway district in the state was represented. Attendance alone indicates a keen interest in achievements and the 1932 program of the organization that presages its continued activity and service to Montana motorists and the highway program of the state.

The following resolution, introduced by George W. Lanstrum of Kalispell, director of the association, was unanimously adopted:

"BE IT RESOLVED, that Montana is justified in anticipating from her expenditures for highway development and construction an adequate return. That this remuneration in great part must come from business to be derived from the use of these highways by citizens of other states. That Montana's climate, scenery, accommodations, and improved highways should attract thousands of visitors yearly; that Montana's returns from the expenditures for her highways should be for the benefit of all citizens and that every honorable effort should be made to secure this business.

"Be it further resolved, that the Montana Automobile Association by education, by legislation, or through the assistance of any and all county, state, and government agencies, labor to advance the interests and welfare of Montana by inducing and welcoming tourist travel. That the Executive committee of the association be instructed to consider and formulate means of obtaining necessary funds therefore; that the active assistance of various chambers of commerce and civic organizations be interested and that the State Publicity Department, the State Forestry Department, the State Fish and Game Commission, the State Department of Health, the State Historian, and the State Highway Commission be requested to so coordinate their functions as to cooperate intelligently to develop for Montana a reputation for scenic beauty, historical interest, fishing and hunting opportunities, safety of travel, and hospitality, that will recommend this as the outstanding recreational region of the nation."

Work outlined for the association for the coming year includes the promotion of tourist travel and advocacy of the scenic and recreational advantages of the northern transcontinental routes. The tourist travel to the coast during 1932 promises to be the heaviest ever experienced. There are more national events, organization meetings and conventions to be held in coast cities this summer than ever before. The Olympic games at Los Angeles will last a month.

Auto Association Elects Officers for 1932

THE following officers were elected to serve the Montana Automobile Association at the annual meeting held January 21 at Helena: President, Sid J. Coffee of Missoula; first vice-president, J. W. Speer of Great Falls; second vice-president, Fred E. Kessler of Helena; secretary-treasurer, David C. Salyerds of Helena. The board of managers is made up of Harry O. Bell of Missoula, Arthur Perham of Butte, C. B. Power of Helena, W. H. George of Great Falls, George Y. Patten of Bozeman, and A. J. Breitenstein of Havre. The directors include Sid J. Coffee, president of the Missoula Drug Co. of Missoula; Andrew J. Davis, president of the First National Bank of Butte; E. O. Haglund, secretary-treasurer of the Fergus Motor Co. of Lewistown; Attorney J. W. Speer of Great Falls; Charles Vandenhook, president of the Commercial National bank of Bozeman; E. J. Bowman, president of the Daly Bank & Trust Co. of Anaconda; George Shea, manager of the Northern hotel at Billings; George W. Lanstrum of the Kalispell hotel at Kalispell; W. L. Young, merchant of Wolf Point; Joseph D. Scanlan, editor of the Miles City Star of Miles City; R. S. Nutt of Sidney, and James G. Holland, Jr., of Havre.

From average attendance, over a period of years, it is estimated that some three million people will participate in these west coast gatherings in 1932. The association, as a central agency for Montana, will cooperate with organizations of neighboring northwestern states in an attempt to draw much of this travel via the northern routes.

Resolutions were introduced and adopted covering phases of association work within the state and recommending needed action by congress in furthering the protection of funds for federal aid and forest highways. Plans were outlined for furthering publicity and for more advantageous cooperation between the northwestern states in tourist travel development.

Appreciation was expressed for the assistance rendered the association by newspapers, radio stations, civic clubs, chambers of commerce and interested citizens during the year. The board reaffirmed its belief in coming prosperity for Montana and requested of auto owners and business men of Montana such support for the future as past accomplishments would indicate are deserved.

The report of the secretary-treasurer, though indicating a falling off in memberships and operating funds due to conditions, recounted generous support from various sources and an indication of the appreciation with which Mon-

tan's view the accomplishments of the association.

The election of directors by the association membership of the 12 highway districts of the state, was reviewed in a report by Fred E. Kessler of Helena, chairman of the election committee. The only change in the personnel of the directorate was the selection of R. S. Nutt of Sidney in place of Frank L. Patterson of Terry from District No. 4. Mr. Nutt has always been active in highway development in eastern Montana and western North Dakota. He will be a valuable addition to this representative group of men, all of whom have been selected by their communities for outstanding efforts for road development. At the election, all officers were reelected with the exception of Norman B. Holter of Helena, second vice-president. At the request of Mr. Holter, Fred E. Kessler was elected to that position. David C. Salyerds of Lewistown, former director, was again made secretary-treasurer.

Speed of Ducks Brings Debate

THE alibi of the hunter who said that the ducks he missed went by him at 180 miles an hour has been "shot to pieces" with statistics on speed of birds compiled by a worker in the U. S. Biological Survey. Earlier estimates on the speed of ducks credited these birds with phenomenal speeds, but automobiles and airplanes have made more accurate timing of their flying speed. The most accurate checks thus far made show that ducks and geese do not ordinarily go more than 40 miles an hour, although they are capable of increasing their speed if frightened. They cannot, however, maintain the higher speed for a long time. The fastest bird timed was a duck hawk in California, which flew at a speed of 165 to 180 miles an hour while chasing its prey. Mallards timed in France and England flew 50 to 53 miles an hour, and a flock at top speed in California when timed with an airplane went only 55 miles an hour. Pintails chased by an airplane in California flew 55 to 65 miles an hour, and a canvas-back made 72 miles an hour. Canada geese timed in Massachusetts flew 44 miles an hour and a brant in Scotland flew 45 miles an hour.

QUAIL IS STATE BIRD

A law effected June 12, 1931, designated the California Valley quail as the state bird.

Montana Fish and

W. A. BROWN, Great Falls...Commissioner

JOS. L. KELLY, Anaconda...Commissioner



Game Commission

W. K. MOORE, Billings...Commissioner

E. A. WILSON, Livingston...Commissioner

T. N. MARLOWE, Missoula, *Chairman*

R. H. HILL, Helena, *State Fish and Game Warden, Secretary*

MONTANA WILD LIFE

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VOL. IV

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MONTANA'S BIG GAME KILL IN 1931.

WHEN Montana sportsmen carefully study the compilation of figures denoting the kill of deer and elk within the state during the season just closed, they will find statistical evidence that is startling. For the first time in the history of the State Fish and Game Department, this tabulation has been made possible through act of the last legislature. The law requires that tags be affixed to deer and elk and that the report card attached to each big game license be returned to the department by January 1, 1932, whether any big game has been killed or not. More than 10,000 sportsmen are dilatory. In failing to mail the cards they have made themselves liable to prosecution. Thus far the tabulation has passed 17,000 cards and they are still rolling in, hence the figures presented in this edition are incomplete for the season.

Lincoln county, in the extreme northwestern part of the state, leads the deer kill with 1,294 bucks and 652 females. This totals 1,946 deer taken from this one county in a single season, and the reports are still coming. Lincoln is one of six Montana counties where deer of either sex may be taken. In Flathead county the kill of does exceeds that of bucks, according to incomplete figures. Thus far there have been 617 bucks and 684 does reported killed there. In Lewis and Clark county, where the buck law prevails, 488 antlered monarchs have already been reported bagged. At the close of the season veteran sportsmen would have wagered that the total count of deer in the state would not reach the total number already reported killed.

Report cards already tabulated show 6,438 bucks and 2,211 does taken or a total of 8,649. The elk kill is likewise amazing with a total of 905 bulls and 757 cows or 1,662 for the season with more to come. Study of the table published in this edition of MONTANA WILD LIFE reveals ever-increasing interest. The statistics will prove of valued guidance for the department as well as other agencies interested in the preservation and conservation of game resources.

Don't forget to put the mothballs you remove from your hunting clothes in your tackle box with your flies.

THERE'S MORE IN HUNTING THAN HUNTING

HUNTING is more than merely bringing down the game. A good sportsman is concerned about the preservation of game. Over-shooting has laid so heavy a tax on game that their numbers no longer suffice to replace the drain on their species. The hunter of today must take the point of view of the field naturalist and manage his shoot with the attention and foresight of a good naturalist. Like the former he learns about the habitat and habits of wild life and like the latter he plans and works for future crops. Merely shooting is not hunting, but killing.

DUCK HUNTERS TO HAVE VOICE IN FIXING SEASON

SIGNS pointing to a difficult situation later on this year when the time comes for the Department of Agriculture to lay down regulations for the 1932 waterfowl shooting season are said to be the inspiration for Secretary Hyde's recent announcement that an advisory board, operating under the Migratory Bird Treaty Act between the United States and Canada, will be reorganized.

This advisory group has in the past consisted of nationally known sportsmen, naturalists, conservationists and state game officials, appointed irrespective of the territory in which they lived. The secretary plans to reorganize the board to represent ten sections of the country, these sections to be defined according to similarity of conditions affecting migratory birds, and their representatives on the board to be selected on recommendation of state conservation officials in the areas. Secretary Hyde will name a number of "members at large."

According to officials of the American Game Association, the move to give the states a closer representation in the forming of the 1932 regulations is desirable, as each area will be better satisfied with the rulings than many of them were after the 1931 emergency short season.

Some northern states resented the federal 30-day season allotted them on the basis that it came too early for any shooting of migratory birds. Illinois and Missouri have led the field in claiming that no waterfowl shortage existed.

Officials of the Biological Survey, basing their views on extensive observation made in Canada and this country both before and since the short season, maintain that a serious shortage of many of the most popular species of wild ducks is a fact. Large numbers of ducks reported in states bordering main watercourses have been forced to concentrate there by lack of water elsewhere, officials hold.

Conservationists are pointing out that such concentrations were proved that sportsmen must work promptly toward restoration of waterfowl nesting, resting and feeding areas.

It might help in keeping the young fellows on the farm if each tractor had a rumble seat.

QUEER AGES IN WILD LIFE

IN NATURE'S school of wisdom, according to accumulated facts in the Library of Congress: The parrot may talk too much, the goose may be a high-flyer, the raven a pessimist and the eider duck a lover of downy comfort, but their normal life is equally as long as that of the poised, slow-moving, silent and hardy giant tortoise—and all live three times as long as a man. Their life span is between 200 and 300 years.

The falcon is a pirate of the air but lives to an old age of 162, while the orthodox dromedary struggles to his limit of years at 50. The swan is the epitome of speed but outlives the slow and thorough yet old-at-40 hippo by more than 60 years.

The worker bee is a marvel of constant application but reaches the end of his career in six weeks while the lazy salamander is only starting on his dozen years of sleepiness. And the fox with all his wily cunning can escape death no longer than the earthworm.

The ant reaches within five years of the tiger's 20. The stern old owl lies down at 70 with the sentimental dove, and the lion, "king of beasts," abdicates his throne at 20—twice as soon as the toad hops from his humble nook.

The carp, that fish scorned for its abundance and bad habits, lives as long as the mighty elephant, more than 150 years, and the vulture outstrips the golden eagle's century-mark by a decade or two. And the canary lives more than twice as long as the cat, reaching 24—unless the cat takes unfair advantage in the race.



WHAT CAUSES MOST HUNTING ACCIDENTS?

HAS the type of gun used anything to do with the number of hunting accidents, or is carelessness the chief factor in all cases? In reports issued almost simultaneously, game officials of Pennsylvania and New Jersey have disagreed on the question of whether high-powered rifles are more dangerous than shotguns in hunting deer.

New Jersey, the only state which has outlawed the rifle in deer shooting, gave this law most of the credit for keeping its accident toll during the recent deer season down to one death and four casualties.

Pennsylvania, where the rifle is the legal weapon for taking big game, blamed its 38 fatal and 69 non-fatal accidents during the deer season on carelessness. Officials defended the rifle as being not only the best big game weapon from the animals' viewpoint, since fewer wounded deer escape to die slowly, but equally as safe.

Officials pointed out that New Jersey's season lasted only four days, and its total legal kill of 1,702 deer was 56 times smaller than the legal kill in Pennsylvania. The number of hunters was said to be proportionately smaller.

After a survey of this season's accident toll and that of other years, Charles G. Stone, executive secretary of the Pennsylvania Game Commission, announced his conclusion that it is not the type of firearm so much as careless handling which caused accidents. He said that according to figures the longer shooting range of rifles has not been responsible for any casualty. The majority of injuries have been self-inflicted or inflicted upon companions, as a result of carelessness.

While the complete record of all hunting accidents in Pennsylvania has not been tabulated, Mr. Stone said that usually small game hunting, with shotguns, accounts for six times as many accidents as big game hunting in that state. Shooting a person in mistake for game is punishable there by fine and suspension of license.

Judge Leon McCord of Montgomery, Alabama: "I have sentenced one thousand men, women and boys to prison, and I have yet to find one real criminal who was taught in his youth to love the outdoors and to protect and defend wild life. Teach the boy to love the outdoors, to row a boat, to swim, to fish and hunt, and when he comes to manhood, he will be found on the jury and not before it."

BIRDS MENTIONED IN SCRIPTURE

THERE are at least 290 references to birds in the Bible, say ornithologists. Of the birds mentioned, 113 are general in the sense that they refer simply to birds and not directly to any certain species. However, 31 species are mentioned by name. The dove holds first place, being alluded to 35 times. The eagle is mentioned 32 times, the raven, cock and hen 12 times each. Reference is made 11 times to the owl, 10 to the pigeon, 7 to the sparrow, 6 to the stork, and 5 to the pelican. Four passages refer to the quail, swallow and vulture, 3 to the ostrich, bittern, peacock and cormorant. The crane, partridge, osprey, kite, cuckoo, hawk, heron, nighthawk, and lapwing are mentioned twice each and the swan and gier eagle once each.—American Field.

Sportsmen's clubs desiring to enter the common enemy control contest conducted by the department should communicate with the state game warden for regulations and information regarding the \$500 cash prizes in 1932.

FISHES NEED PASSPORTS

IT IS dangerous for fishes to travel without an official escort, and all fishes should be armed with passports before entering a different state or even a different lake, according to John L. Farley, executive officer of the division of fish and game of California. The rule likewise applies to Montana.

"Havoc has been played with many waters in California by fishermen who take it upon themselves to import their favorite species of fishes, from outside the state or from other lakes, into their favorite fishing grounds," warns Mr. Farley. "Often species have been introduced which are harmful to other fish life already established. California regulations require that any importation or transplanting of fish or fish eggs must be done through the bureau of fish culture."

HUNTING AND FISHING MOST POPULAR

HUNTING and fishing remain the favorite outdoor sports of America, in spite of the apparent popularity of golf, tennis, baseball and football. In fact, according to statistics presented to the United States senate, the number of hunters and fishers alone equal the combined strength of the adherents of the other four above-mentioned sports.

Senator Hawes of Missouri, in discussing his bill for correlating the fish and game conservation activities of the federal government and the states, said:

"I do not believe the importance of this subject and the interest which people have in it, are sufficiently realized. Some time ago the Southern Newspaper Publishers association conducted an investigation solely for the purpose of ascertaining the relative advertising advantages of different sports. They caused an estimate to be made in 14 of the southern states, in the radius of their publications.

"Taking the total of these 14 states, we find that there are 4,420,876 men and women who hunt and fish; 2,426,000 who may be termed baseball fans; 1,218,000 football fans; 900,000 golf players, and 363,000 tennis players. So taking the total of all the sports put together, the hunters and fishers in those 14 states numbered 4,420,876, and the total of those who are interested in the other four forms of outdoor recreation amounts to 4,916,652."

An opportunist is the man who passes up turkey for the holidays, kills the wolf camping on his doorstep and turns his hide into fur coats for the family.

SEND IN YOUR REPORT CARD

MORE than 10,000 Montana big game hunters who purchased licenses during the 1931 season, have failed to return the report card attached to the license, as provided by law. The statutes require that the postcard be returned to the State Fish and Game Department prior to January 1, 1932, whether any big game has been killed or not. Failure to comply with the law makes the act a misdemeanor punishable by a fine or imprisonment.

In order that an accurate check of the deer and elk killed in the state last season may be obtained, it is mandatory that all cards be returned. The new law makes failure to return the card punishable, yet every effort will be made by the department to secure these reports before ultimate steps are taken.

If licenses have been lost or misplaced, the purchaser is required to make a report by letter. The postcards returned are being checked against the license stubs returned by the dealer and the names and addresses of every negligent sportsman listed. Ample notice has been given through departmental publications, letters and newspaper publicity.

"Interest in outdoor sport with the recreation to be had in its pursuit has become a necessity for the man who desires to preserve his health and vigor."—Bobby Jones, internationally famous golfer.

STUDY STOMACHS OF COYOTES

BILL RUSH, who is in charge of the elk study in Yellowstone National Park, asserts that a project has been initiated to determine the seasonal food habits of the coyote. It is planned to make stomach content analyses of three or four coyotes each month of this year. Data on three analyses made in October showed a variation in contents from 4 to 13½ ounces, average approximately 8 ounces. The stomachs varied from 3 to 6 ounces, average about 4 ounces. The stomach contents consisted, in various combinations, of mice, squirrel and bird meat, grass and other vegetation, hair of brown bear, fish, chicken and pork bones, pine needles, feathers, rubber from a hot water bottle, and miscellaneous bits of garbage.

STATE IS BLAMELESS FOR DAMAGE

ALL wild animals belong to the state, but a Kansas land owner recently discovered that this did not do him any good when he tried to collect from the state for 120 trees on his property which beavers had gnawed down. The attorney general informed him not only that the state could not be sued for the acts of wild animals, but that if the owner should trap the beavers the pelts still would belong to the state.



New Game Birds for Montana Sportsmen

By Floyd L. Smith



MONTANA sportsmen who have watched the performing of modern miracles at the State Game farm at Warm Springs, where the liberation of 6,146 Chinese pheasants was made possible

by the State Fish and Game Department in 1930, less than a year after the farm was established, with 8,720 liberated in 1931, are keenly interested in experiments being conducted by Superintendent J. F. Hendricks which indicate that within a short time the Chukar partridge and the Melanistic Mutant will be made available for fields of the Treasure State.

California Valley quail have already demonstrated their ability to become acclimated and these prolific producers promise results in 1932. Thirty Golden pheasants were reared in captivity during 1931 as foundation stock, as were 10 Melanistic Mutants, 15 Lady Amherst pheasants, four Silvers and six Reeves pheasants. Thirty Hungarian partridges are being retained for the 1932 breeding season, in addition to 260 Mongolian hens and 50 cocks, 120 Chinese hens, and 22 cocks.

One of the most interesting game birds with which Superintendent Hendricks is experimenting is the hardy Melanistic Mutant. Foresighted sportsmen predict that within a few years the Mutant will displace the wary old Ringneck in the hearts and bags of lovers of the blooded dog and the scattergun.

Professor H. M. Lackie, expert on game birds, recently prepared an informative article regarding the Melanistic Mutant, which was published in Modern Game Breeding and Hunting Club News. He says of the Mutant:

Our friend, the Ringneck, must look

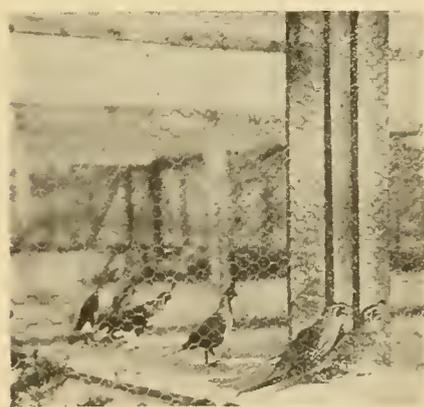
to his laurels. Since his introduction here in 1880 he has held undisputed sway of the fields and coverts. Whether his true nationality is Chinese, Mongolian, or English most sportsmen know not, nor care a lot. They call him "Old Ringneck" and have him mounted for their dens, proud that so beautiful a bird has fallen to their trusty "twelve." But a newcomer has entered the field. Visitors to England saw on some of the large estates there beautiful dark greenish purple cocks and demure brown mottled hens, resembling somewhat the English grouse. Inquiry revealed that they were known as "Dark Pheasants" and were such exceptionally good game birds that some estates were raising and stocking them exclusively. It seems that they had appeared first on Lord Rothchild's estate in 1888 and were thought to have originated from cross breeding and perhaps were a cross. Their actual origin, however, is not known and the preponderance of evidence seems to indicate that they are not hybrids but are true mutations or sports. They may be sports from a cross of several varieties as mutations are apt to occur when such crosses are made. In fact it is a common practice in plant and animal breeding to make many crosses of unrelated varieties or breeds in the hope that mutations may occur, and they often do. For example: All the different varieties of domestic turkeys are probably mutations from crosses of the several varieties of wild stock native to the North Americas. It is certain that both the black and white are, and there is no authentic record of the origin of the other varieties by selective breeding. That they are mutations or sports from crosses is the most logical conclusion. The turkey has been bred in domestication not over three hundred years and in that time at least eight different varieties have been segregated which breed true to type and color. In the long period in which pheasants have been semi-domesticated in England during which cross breeding and blood blending has been practiced, it would not be unusual if new varieties did appear. In fact it would be unusual if such a program failed to produce mutations, as change is the order of the universe and evolution is a constant factor.

A statement often met with is that the Dark Pheasant is a cross of Versicolor and Blackneck stock. It is true that such a cross will give a dark bird which to the casual observer resembles somewhat the Melanistic Mutant. In fact many breeders call it by that name and sell it as such. A careful examination of these crosses will reveal differences in plumage which distinguish them from the true Mutant. The olive gray or slate color on the wing which is a characteristic mark of the Versi-

color usually shows up in the cross-bred cocks. Reddish brown also may show on the shoulders and a break of color occurs along the edges of the tail feathers. Any bird showing such characteristics should not be used in the breeding pen of Dark Pheasants. The hens also are different. The crossed birds are usually lighter and lack the uniform coloring of the pure Mutants. There is more of the reddish brown in the body color and less of the soft dark seal brown which makes the dark hen so attractive. When these Black-neck Versicolor crosses are bred in succeeding generations a wide variety of types are produced ranging from one parent to the other. In other words, the type is not fixed. The crosses behave as mongrels. It may be possible by selective breeding eventually to fix the type of these crosses but the birds produced from them up to the present would indicate that it has been poorly done and mostly not at all.

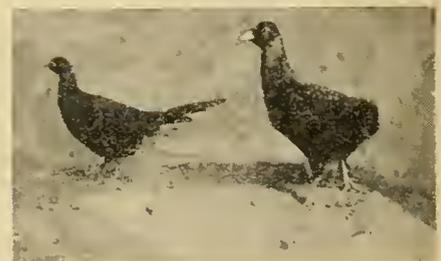
In some strains of birds sold as Dark Pheasants there evidently is a cross of ringneck blood. Many crossed cocks show a few white tipped feathers around the neck and strangely enough some hens show this also. In the true Mutant cock there is no break of color on the neck, no suggestion of ring. The neck color blends perfectly with the breast and back and the greenish purple sheen of iridescence is continuous. These mixtures may also show brownish red feathers in the breast and a reddish purple or magenta sheen back and there is a noticeable number of feathers with marginal markings of lighter brown color similar to ringnecks. The fluff of the crosses is a brownish red and the wing bows and shoulders may show many laced and shafted feathers. These are all serious defects and evidence of poor quality and mixed blood. Breeders of Melanistic Mutants should eliminate all such birds from their breeding pens.

What then is the proper color for a true Melanistic Mutant? The bird is easier to look at than to describe. First



CALIFORNIA QUAIL

The photograph of this pen of California Valley quail, which are thriving in Montana, was taken at the State Game Farm by Dr. J. A. Donovan of Butte. It is expected that many of them will be liberated in 1932.



MELANISTIC MUTANTS

This picture was taken at the State Game farm by Dr. J. A. Donovan of Butte while the birds were moulting. The male was a little shy on tail feathers and was therefore somewhat ashamed of himself.



of all the cock is mostly shades of green and blue. The head, neck, back and breast are rich dark bottle green with a bluish purple luster which shines and shimmers in the sunlight. The feathers are even in color and show no distinct pattern in these sections. The shoulders and wing bows are a lighter shade of green matching the rump. The feathers in these sections are lightly laced or pencilled, but should not contain any red or brown. The body and fluff is greenish black. Indication of brown in these parts is a defect. The tail is grayish green barred with blackish bars. The legs and toes are black and the feet are white underneath. The face is brilliant red and the eyes are dark brown. Light eyes are an almost certain mark of impure blood.

The hen is a uniform dark brown over the entire body, the feathers irregularly pencilled or barred with mahogany. The feathers should show a greenish luster especially on the back and breast. The face and head are a two-tone effect of dark seal brown and a lighter shade. The dark should extend well down the neck. The whole combination should give a dusky brown effect with perfect blending of the various colors and a minimum of contrasting shades. Together the cock and hen present a beautiful and harmonious picture, each a fitting complement to the beauty of the other.

A study of these birds will convince anyone that this Melanistic Mutant is not a cross variety nor a variety of any existing species. To some he appears to be a dark type of Versi-color but the color, size and characteristics of the hen should set anyone's mind at rest on this score. A prominent Japanese scientist who is familiar with all Green or Japanese pheasants, after a careful study of the Mutant pronounced it to be a new species and gave it the specific name of Phasianus Tenebrosus. By this name it is now known in England.

Among the hundreds of visitors who viewed our birds last year not one failed to admire this newcomer and sportsmen were loud in their praise of him. Many of them went home and wrote their state conservation department asking that stocking the new bird be attempted. This suggestion is being followed in some states this year. This is a wise and popular move. What a thrill the hunter will experience if instead of "Old Ringneck" a beautiful blue green cock bird hurls himself from the thicket. And with what pride he will exhibit his prize to admiring friends if he is fortunate enough to bring it down. And how he will hasten to have it mounted and preserved as a fitting companion to his other trophies of the field. With both ringnecks and dark pheasants in the same cover, pheasant hunting will take on a new zest and enjoyment. If two cocks per day were the limit more hunters will try for one of each and perhaps the second ringneck may be allowed to fly away without a shot on the chance of a dark pheasant being put up later.

Buck Law Brings Increase in Deer

HUNDREDS of letters have reached the State Fish and Game Department during the last month, accompanying the return of report cards attached to big game licenses, and outstanding among these communications is the following significant statement from G. Fred Roper, of Anaconda: "Here endeth the hunting season, as far as I am concerned. In turning in my report attached to my license, AAA 7441, you will note that there were no deer or elk killed. That is my fault. They were there in plenty, especially the deer, thanks to the buck law.

"This is my 36th year of deer hunting and I saw more deer than I did during the season within that time. I remember when deer were hunted for the market. Ten years ago it was not unusual to hunt during the entire season over the same country that was hunted this season and see only four or five deer. This season I made a memorandum of deer seen. By actual count they numbered 96 does and 22 bucks. The preponderance of does can be accounted for by the fact that I hunted early in the season when the does were banded in the lowlands. The

bucks were not running and were up higher. Hunters who do not understand this situation will report to the department they "saw nothing but does."

"I have heard the remark made by hunters all season and have argued and, I hope, convinced them of the whyfore. I was prevented from killing my one allotted buck because does interfered with getting a shot and by not being able to recognize or distinguish the horns until too late to get a shot.

"If a man is a real sportsman he will agree that it makes a more sporting proposition. I enjoyed my days in the hills this season—enjoyed them immensely, although I did not bag a deer or elk. I believe there is not a man in Montana who hunted harder or covered more ground and killed less game. It was my first year to be skunked, yet I had more fun than in the last 20 years.

"More power to Montana's State Fish and Game Commission. Give us a conservative administration. Use what knowledge you have gained through the big game license reports and dole out to hunters of the state a continued fair and square deal."

Vandals Loot Montana Streams of Game Fish



MONTANA'S State Fish and Game Department has taken a determined stand against commercializing of its game and fish, yet the condemned practice of market fishing continues. Market shooting of ducks for dollars and cents once threatened to ruin the sport. The sale of wild meat of any sort is now forbidden, yet fish are being bootlegged in several communities. Poachers are robbing Montana sportsmen of their rightful heritage. The picture shown above was taken by

Kenneth F. Roahen, U. S. Game Protector, stationed at Billings, after he had arrested C. A. Larabee and John Branstetter of Billings. The 119 Rocky Mountain whitefish shown above were found in their possession. They were caught in the vicinity of Livingston in the Yellowstone river, then packed to Billings and placed on the market at 20 cents a pound. Larabee was fined \$50 and sentenced to serve 30 days in jail. Branstetter was dismissed.



MONTANA WILD LIFE



State Game Law Violations Slump in 1931



MONTANA saw a falling off in violations of state fish and game laws in 1931, according to the annual tabulation completed in State Fish and Game headquarters for the

year just closed. During 1930 the number of violations reached the peak with a total of 514 while in 1931 the number fell away to 461. Compilation of statistics shows that during 1930 the total fines assessed reached \$16,293.15 while in 1931 that amount reached only \$9,097.25. In 1930 there were 404 fines levied, 45 jail sentences, 37 cases were dismissed and 39 fines suspended. The total for the past year shows that 461 arrests were made, 98 cases were dismissed or suspended and 61 jail sentences were imposed. Thirteen cases

are pending. In many instances where fines were assessed, the violators elected to serve out their fine in jail.

Fishing without proper license proved the favored law violation during 1931, there being 80 arrests on this charge. Killing deer out of season caused trouble for 44 violators. Under the laws passed by the last legislature making tagging of deer and elk mandatory and forbidding shooting from a public highway at game birds or game animals, several violators were brought

into court. Twelve were arrested for possession of untagged deer meat while six were charged with shooting from a highway.

Beaverhead county leads the

list of violations in the 1931 tabulation with a total of 34, with Sanders second with 32, and Yellowstone third with 30.

Education has played a prominent part in reducing law violations. Efforts are being put forth by the department to educate anglers and hunters along lines of better sportsmanship.

Included in the list of violations for 1931 are two unusual cases, the charges being fishing with pitchforks and killing blue birds and destroying their nests.

VIOLATIONS BY COUNTIES

	1929	1930	1931
Beaverhead	10	28	34
Big Horn	5	15	1
Blaine	2	5	1
Broadwater	4	5	5
Carbon	11	8	16
Carter	9	4	1
Cascade	7	13	11
Chouteau	9	13	2
Custer	4	4	1
Daniels	2	2	1
Dawson	9	6	1
Deer Lodge	31	47	25
Fallon	8	8	...
Fergus	7	10	...
Flathead	17	32	26
Gallatin	16	23	22
Garfield	2	2	...
Glacier	4	6	5
Golden Valley	1	2	...
Granite	3	11	13
Hill	5	5	8
Jefferson	7	4	3
Judith Basin	21	3	10
Lake	17	15	20
Lewis and Clark	5	16	17
Liberty	1	1	2
Lincoln	33	26	26
Madison	14	23	15
McCone	1	8	...
Meagher	8	4	2
Mineral	6	1	11
Missoula	8	19	11
Musselshell	2	2	9
Park	18	10	8
Petroleum	3	1	1
Phillips	14	5	8
Pondera	2	3	4
Powder River	1	1	2
Powell	11	4	9
Prairie	3	3	...
Ravalli	2	16	1
Richland	1	8	9
Roosevelt	1	7	3
Rosebud	3	9	2
Sanders	9	9	32
Sheridan	10	3	2
Silver Bow	26	19	17
Stillwater	17	18	26
Sweet Grass	1	4	5
Teton	3	1	...
Toole	5	6	...
Treasure	...	...	...
Valley	10	1	3
Wheatland	2	4	...
Wibaux	...	...	...
Yellowstone	21	21	30
Totals	431	511	461

FISH AND GAME LAW VIOLATIONS

	1929	1930	1931
Alien in possession of firearms without license	13	8	8
Catching over the limit of game fish	2	5	2
Catching more than 5 fish under 7 inches	10	9	27
Dumping refuse in streams	3	...	...
Fishing without a license	67	54	80
Fishing through the ice illegally	2	3	8
Fishing in closed waters	19	47	25
Fishing during closed season	5	15	8
Fishing with more than one pole, or using set line	4	3	10
Hunting without a license	9	11	23
Hunting on game preserve	4	18	12
Illegal possession of beaver hides	13	5	4
Hunting deer with dogs	2	2	2
Killing moose	2	2	3
Killing elk out of season	1	12	6
Killing deer out of season	30	42	45
Killing game birds out of season	11	14	23
Killing doe deer	8	6	5
Killing deer with horns less than 4 inches	2	1	1
Killing more than one deer	2	5	4
Killing elk in closed area	...	...	7
Killing antelope	...	6	5
Killing wild geese out of season	2	1	...
Killing swan	...	3	...
Killing Chinese pheasants out of season	15	10	4
Killing elk before legal hour in Park county	4	...	...
Killing grebe and golden plover	1	...	...
Making false statement in application for license	25	31	32
Opening muskrat houses	3	...	1
Possession of a seine without license	4	1	1
Seining fish without a license	5	6	1
Using salmon eggs for bait	7	7	6
Possession of salmon eggs	...	...	6
Snagging fish	4	...	...
Selling game fish	1	...	...
Shipping furs from the state without permit	86	86	11
Shooting ducks after sunset	5	10	4
Shooting ducks out of season	6	3	8
Selling elk meat	...	1	...
Selling bear hides	1	6	...
Trapping fur-bearing animals out of season	11	11	4
Trapping fur-bearing animals without license	19	23	28
Trapping beaver without permit	9	21	14
Trapping bear	1	...	...
Selling furs without a license	...	2	1
Shooting from a public highway	...	...	6
Shooting from an automobile	...	...	2
Using explosives to kill fish	...	...	3
Killing blue birds and destroying nests	...	...	1
Using artificial light for hunting	...	...	1
Killing more than one elk or deer	4	1	...
Possession of untagged deer meat	...	...	12
Shooting ducks from a motor boat	2	5	...
Buying furs without a license	3	4	...
Selling deer meat	1	2	...
Fishing in Georgetown lake after 9:30 p. m.	...	12	...
Fishing with pitchforks	...	...	2
Unlawful possession of deer hides	...	...	1
Waterfowl in possession after close of season	...	...	3
Possession of game animals without a fur farm license	2	1	...
Buying elk meat	...	1	...
Totals	431	514	461



Moose Battles Cars on Montana Highway



SPORTSMEN throughout the state and nation have become interested in the spectacular battle staged on the Butte-Helena highway and the thrilling antics of a crazed yearling bull moose. Columns of newspaper and magazine articles have been written and the lucky snapshots secured by eastern visitors are in demand. The balance of nature was again upset by man, and after vainly fighting cars, ramming them with his head and jabbing at them with his front feet, the moose moved into the king row and succumbed in a farmer's corral amid domestic surroundings which were strange to him. Investigation by the State Fish and Game Department disclosed that the animal had been shot in the abdomen. While suffering from internal hemorrhages, he drifted onto the main highway, resented the intrusion of automobiles, held up traffic for several hours and finally lost his battle. The young monarch of the woods was monarch of the highways for a fleeting moment. The Dan Parani ranch near

Trask was the scene of his demise. The moose wandered on the highway Sunday afternoon, Jan. 24, and became infuriated at strange vehicles speeding along the road. One car came too close for comfort and the bull charged. He first broke the windshield, backed off and charged a second time to break the windows on the side of the machine.

In its effort to get away from the enemy which did not fight back, the moose cut its fore legs in several long deep gashes. In the meantime several other cars gathered at the scene but remained at a safe distance. The moose took up a station in the center of the road and dared any motorist to drive past that particular point.

Branson Stevenson, salesman for the Eagle Gas company, and Richard Rice, a New York attorney who happened on the scene, "took a chance" and drove their car within shooting range. They used a camera, however, for their shots and succeeded in getting two good pictures before accepting the animal's challenge to drive by the stronghold.

For more than an hour the animal, infuriated at the strange new enemy

which stood by and refused battle, delayed traffic. It was not until it had become weakened from loss of blood through its wounds that it gave up the point of vantage on the roadway. Fred Pilling, game warden, and Sheriff Larry Weir herded it to the nearby corral. Traffic proceeded.

Moose are protected in Montana and despite its wounded condition the officers could not put it to death. They managed to herd it into the corral, where it could be nursed back to strength before being turned into the hills again. More than 100 Butte motorists drove to the ranch to see the moose, the first seen in that region in many years.

TEN BIRD REFUGES

The Migratory Bird Conservation Commission, recently authorized acquisition of lands by the biological survey for 10 migratory game-bird refuges in New York, Maryland, North Carolina, South Carolina, Florida, Nebraska, North Dakota, Wyoming, and Nevada. The area amounts to 43,227 acres. The cost to the government will average \$5.74 an acre.

Yearling Moose Resents Automobile Intrusion In Montana Domain



—Photo by courtesy of The Montana Standard, Butte.

A yearling moose quit his domain as monarch of the hills to establish himself as ruler, for a time at least, of Montana's roads. Taking up his position on the Butte-Helena highway, less than 10 miles from Butte, the yearling animal, still without horns, blocked traffic for a time. He snorted and flung his head belligerently, even attacking one of the cars and breaking the side door glass. Branson Stevenson, who with Richard Rice, New York attorney, happened to be in the first auto, got a picture of the animal as he stood guard.



Sportsmen Feed Montana Birds



HE duck supply was short during the 30-day open season provided for Montana in the revision announced by the federal department of biological survey, yet thousands of ducks are congregating in the area surrounding the bison range near Moiese, according to reports made to the commission at the last regular meeting.

Gallant Gunners Protect Hens

MONTANA'S law forbids the shooting of female Chinese pheasants and permits the taking of oriental roosters. Many other states, however, have an open season on both sexes of the imported game birds. Iowa is one of these states.

Gallantry among sportsmen was one of the disclosures brought to light by a hunting survey conducted by Aldo Leopold, game investigator, as part of Iowa's preparation for a statewide experiment in restoring the out-of-doors.

After weighing detailed reports of the pheasant hunting season obtained from 645 hunters, Mr. Leopold announced that many sportsmen refused to shoot hen birds. For this reason, he said, there were 10 cocks taken for every seven hens.

Mr. Leopold found that for every three birds placed in a hunting bag, at least one bird was wounded but lost in the field. Although one-third of the hunters had dogs to find the birds, their percentage of unrecovered cripples remained about the same.

The survey indicated that approximately 5 per cent of Iowa hunters pay farmers for the privilege of hunting on their land, while another 3 per cent compensate the farmers for board and in other ways. The hunting privilege rates from 50 cents to \$1 a day for each man, or 50 cents for each bird taken.

"While the percentage of hunters compensating farmers for hunting privileges is still low, it is evidently increasing as compared with former years," Mr. Leopold stated. "The farmers' reports, which have not yet been analyzed, indicate that many farmers who did not charge this year intend to do so next year."

A complete investigation of the game situation in Iowa is being made by the investigator. On his findings and those of other experts in every branch of conservation and outdoor recreation, Iowa plans to base a comprehensive program to restore the state's natural resources.

After extended discussion regarding the necessity for saving these birds and inducing them to remain for the nesting season in the spring, Chairman Marlowe was instructed to proceed with negotiations looking toward feeding them. The bureau of biological survey will be expected to feed the ducks on the federal reserve. The state department will scatter food in sheltered places and distribute grit and charcoal. Former years have made feeding necessary in these areas.

Falling snow put more men to work, but throws wild birds out of "jobs." Winter feeding activities in practically every northern state were prepared to get under way with the approach of the snowy season, when the birds' work of foraging for food may be brought to a standstill in heavily blanketed countrysides.

State game officials have organized bird feeding programs, which they say is necessary under modern conditions to keep many species of birds, and especially quail and other ground-feeding varieties, from being depleted because of insufficient nourishment during periods of snow and ice.

The practice of cutting away brush and weed patches, grazing woodlots and replacing hedgerows with modern fencing has reduced the natural winter food supply.

The Wisconsin conservation department, in addition to providing 80 central food stations for prairie chickens, grouse, quail, pheasants, partridges and wild turkeys in concentration and experimental areas, has recruited nearly 200 sportsmen's clubs in a feeding program. The state is contributing \$11.50 to each club that furnishes a like amount for establishing and operating feeding stations in its territory.

Missouri officials have enlisted the aid of Boy Scouts, rural postmen, railroads and organizations in feeding the birds. Other states are prepared to carry on programs through field men. Many clubs have employed jobless men to gather wild seeds during the abnormally warm weather for distribu-

tion later, and many have taken advantage of the low price of wheat to obtain a supply for the birds.

Game experts are suggesting wheat, buckwheat, millet, kaffir corn and cracked corn for game birds. One of the most effective feeding stations for game birds is said to be shocks of unhusked corn left near brush patches. Every feeding shelter should be arranged so that the birds may escape in any direction if attacked by enemies.

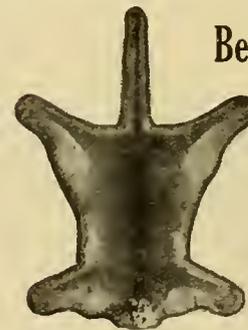
CHAMPIONSHIP

Down in a small southwestern town, where men are men and no foolin' about it, either, a jury had been impaneled to sit on a case in which a man was charged with assault with intent to kill.

For a time things were sailing along nicely for the prosecution. The state's lawyers produced the weapons that had been used—a pistol, saw, hatchet and rifle.

Then came the turn of the defense and they exhibited the other man's weapons—an ax, pitchfork, scythe, iron bar and bulldog. The twelve good men and true retired to deliberate. On their return the foreman rose and announced:

"Our verdict is that it was probably a tie, so it don't really matter. Our further verdict is that we would have given a dollar to have seen the fight."



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Fisheries Offices Move to Anaconda

(Continued from Page 5)

ommendations as to his ideas in effecting economies in the fish and game fund.

Motion by Mr. Brown: "I move that these recommendations be entered in the minutes of the meeting, and be adopted by the commission." Seconded by Mr. Wilson. A discussion of his suggestions followed. Mr. Wilson offered an amendment to Mr. Brown's motion that a reduction be made in salaries of all employees of the department, including officials.

Motion by Mr. Kelly: "As a substitute motion, I move that the secretary furnish each member of the commission with a copy of Mr. Brown's recommendations, and that action on these recommendations be taken at a later date." Seconded by Mr. Moore. Mr. Brown and Mr. Wilson voted "no." Mr. Kelly, Mr. Moore and the chairman voted "yes." Motion carried.

The secretary presented a tabulation of big game kill report cards completed to January 15.

Ernest Miller, dude rancher, reported that he was in attendance at the meeting as a representative of the Montana Sportsmen's Association, to work out with the commission a plan to increase the circulation of MONTANA WILD LIFE, but that inasmuch as the other two representatives were not there, he would not care to take action.

Warden Hill reported the cash balance in the fish and game fund Dec. 31, 1931, as being over \$39,000.

Commissioner Moore reported that the stream running through Pioneer park, at Billings, is being polluted by a dairy, and that he has reported the matter to the Billings board of health. He also stated that if the condition was not corrected at once, he would report to the State Board of Health.

Larry Hamilton presented John Berkin of Butte as "The Father of Montana's Game Laws." Mr. Berkin, as a legislator, as early as 1905, introduced and fostered the first bills with a view to preserving the wild life of the state. Mr. Berkin was applauded.

RATTLE SCARES ELK

The old Dutch windmill will be put to new use near Seaside, Ore., as the farmers battle to keep invading elk from their ranches. The Seaside Chamber of Commerce has authorized the building of an experimental "elk chasing" windmill in a pasture frequented by the animals. To the axle of this mill will be attached a kerosene can containing pebbles. When the wind blows the pebbles beat noisily against the sides of the tin can, and the noise is supposed to drive the elk away.

COPS GOT THE BREAKS

"Now, Jimmy, can you give me a sentence using the word 'avail'?"

"Sure, the cops pinched the stag party because the dancer was dancing without a veil."

Trapper's Licenses Reach 587 Total

MONTANA'S State Fish and Game Department has issued trapping licenses to 587 residents during the season thus far. The fee is \$10. Despite the fact that fur prices have slumped to new low marks, trappers are following the precedent established in formative days of the Treasure State when pioneers depended on their winter catch of furs to pay expenses during the remainder of the year. In 1930 licenses were issued to 868 trappers. Montana has an area of more than 90,000,000 acres or 140,997 square miles and is the third largest state in the Union. The official population given by the 1930 census was 537,606 or about four people to the square mile. Hence there still remains ample room for successful operations of trappers in mountains and valleys.

KEEP YOUR SHELLS DRY

That modern ammunition can be kept a long time and still be used with safety, if not subjected to too much moisture or too much heat, was recently proved when shells 16 years old were tested by engineers. A shell with 3¼ drams of powder developed a mean velocity of 892 f. s. and a mean pressure of 10,000 pounds. These results compare favorably with present day ammunition. However, sportsmen will do well to keep this advice in mind when they store shotgun shells: Protect them from rain, sun, a hot, dry atmosphere, and excessive moisture, or the shells may develop too much power for a gun.

EMPTY SHELLS CLEAR PONDS

Empty rifle shells placed in a fish pond will clear it of the unlovely coating of algae that forms the scum or slime in the water. The amount of copper in the water due to the slow corrosion of empty cartridge shells lasts indefinitely and does not harm the fish and larger plants in the pool.—Boston Evening Transcript.

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MONTANA WILD LIFE

Montana's Big Game Kill During 1931

STATISTICS compiled at headquarters of the State Fish and Game Department from report cards returned in compliance with law by big game hunters of Montana, show that 8,649 deer and 1,662 elk were killed in 1931—and there are more than 10,000 delinquent sportsmen yet to be heard from. The law requires that the report card attached to big game licenses be returned to the department by January 1, 1932, whether or not any game has been bagged. Failure to do so makes the license holder guilty of a misdemeanor and punishable in court. Statistics published on this page are incomplete for the season because of failure of hunters to return the report cards. They are complete, however, for all cards received by the department up to January 25. The entire headquarters staff has been engaged for a month in sorting, filing and tabulating more than 17,000 cards received.

Figures showing the amazing kill thus far in 1931 show

that approximately 800 tons of deer and elk meat has been bagged to feed Montana families. Considering that an average deer weighs 125 pounds and an average elk 300 pounds, the total means 1,081,125 pounds of venison and 498,600 pounds of elk or a total of 1,579,725 pounds. At an average price of a dime a pound this meat has a value of \$157,972.

Range conditions shown in the following tabulation were taken only from the cards where a kill was reported. In many cases hunters were doubtful regarding the location of their kill on a forest reserve, while in other cases all the blanks carried on the cards were not properly filled out. This is the first year in the history of the department when an official count has been made possible and information contained in this vast census is highly informative. Thus far, 7,340 hunters have reported no kills as against a total of 10,311 carcasses of deer and elk taken from the woods.

	DEER		ELK		RANGE				FOREST	
	Bucks	Does	Bulls	Cows	Good	Fair	Poor	Sheeped Off	On	Off
Beaverhead	105	.....	.....	.....	60	30	7	5	81	18
Big Horn	8	.....	.....	.....	3	2	3	.....	1	8
Broadwater	154	.....	.....	.....	69	26	21	3	124	27
Cascade	168	.....	.....	.....	59	35	38	10	96	52
Deer Lodge	64	.....	.....	.....	22	17	10	1	47	7
Flathead	617	684	215	75	1,458	358	154	42	1,137	781
Gallatin	174	.....	125	75	226	52	41	7	297	24
Granite	210	.....	31	42	134	71	44	8	208	192
Jefferson	145	.....	.....	.....	55	44	32	5	99	31
Judith Basin	237	.....	.....	.....	89	70	48	24	194	22
Lake	199	142	.....	.....	220	62	20	5	158	125
Lewis and Clark..	488	.....	133	96	242	189	166	60	431	173
Lincoln	1,294	652	.....	.....	1,146	353	137	52	1,134	506
Madison	131	.....	9	14	82	33	21	9	113	26
Meagher	319	.....	3	13	140	92	50	35	261	31
Mineral	426	361	8	10	423	147	45	30	325	132
Missoula	471	.....	19	19	302	123	45	18	265	160
Park	148	.....	160	124	227	95	43	12	291	74
Powell	211	.....	62	50	170	58	50	20	208	76
Ravalli	223	125	66	51	175	127	73	56	354	62
Sanders	447	247	36	43	385	166	99	70	515	137
Silver Bow	36	.....	.....	.....	22	9	8	.....	29	3
Stillwater	47	.....	.....	.....	35	11	3	5	46	5
Sweet Grass	71	.....	.....	.....	39	12	11	2	53	11
Teton .....	.....	.....	38	42	15	19	37	9	72	3
Wheatland	29	.....	.....	.....	14	8	1	2	27	1
Glacier	3	.....	.....	.....	4	1	1	.....	3	2
Golden Valley	3	.....	.....	.....	3	.....	8	.....	.....	1
Total No. Killed....	6,438	2,211	905	757	5,819	2,210	1,221	490	6,569	2,690