

IOWA CONSERVATIONIST

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"Quick, Paw, Fetch The Flintlock--- Thar's a Squirrel!"

By L. T. WEISBROD

Meat rationing, the largest inventory of wild game in two generations, and a critical shortage of sporting ammunition are responsible for the resurrection of Pennsylvania squirrel rifles from many Iowa attics. Down from the mantle has come the long-barrelled muzzle-loading rifle that more than 125 years ago drilled neat, round holes in the foreheads of our enemies at New Orleans, and at distances undreamed of except in the forests of the New World. These are the firearms that made American woodsmen masters of the wilderness and the scourge of the professional European soldiers.

Once again the old front-enders are serving the purpose for which they were designed. They are putting wild game on American tables to ease the pressure of the domestic meat supply.

The muzzle-loading guns of our ancestors were loaded from the front end. First a proper charge of powder was poured down the muzzle; next a cloth patch was placed over the hole in the barrel, and the proper size ball or shot charge was rammed down with the rod.

These guns were fired in the earliest days by a flint in the hammer striking fire from the steel frizzen into the powder in the pan. The primer powder in the pan is of a fine texture and ignites quickly, burning progressively through the touch-hole into the barrel, where it ignites the coarse powder charge, the explosion of which propels the ball or shot.

Although this ignition system worked well enough for the old-timers, it is much slower than modern ammunition discharge.

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Beaver, Engineers of Animal World, First to Lure North America Explorers



Live-trapped beaver are planted at the request of the landowner, and to encourage the animals to stay at the stocking site artificial dens are constructed and the animals are released directly into them.

Highly Valued for His Fur, Once Served As Food For Indians

Beaver! The impulse that for more than 250 years drove wave after wave of adventurers into the unmapped North American wilderness. Beaver! The handmaiden of thirst, hunger, lust, and death. Beaver! Magic word that has lost much of its meaning to present-day Americans.

Probably no single influence hastened the exploration of North America more than the beaver, *Castor canadensis*. It was the beaver trapper who first crossed the broad American rivers, who first trod the vast prairies, who first scaled the mighty Rockies. No weather was too cold, no distance too great for these fearless wanderers of the wilderness.

Prior to the development of the fur trade in America, beaver were practically universal in all suitable waters on the continent. They lived far north into Canada and Alaska, south into Mexico, and from coast to coast. They lived comparatively unmolested by the aborigines, not holding the same status in the domestic economy of the Indians as the deer, bison, and bear. They did, however, sometimes serve for food and clothing when the "big three" were scarce.

When the European demand for fine furs first reached America, there was an abundance of easily trapped beaver wearing rich brown coats. There were also those who for gold would brave the unknown and tear the pelts

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Mr. Beaver Built This Dam Almost Overnight



It is a mistaken belief that each dam represents a colony. One family may build half a dozen or more dams, and in the larger streams generally no dams at all are built.

"Waterfowl In Iowa" An Ideal Christmas Present

There is still time to order a copy of the new book "Waterfowl in Iowa" for a Christmas present for your sportsman pal. This fine 130-page duck book will be sent to any address in the United States postpaid for one dollar. Send your order to the State Conservation Commission, 10th & Mulberry, Des Moines 8, Iowa.

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In the flintlock rifles there is considerable "z-z-z-z" before the "bang", and some smoke and fire before the ball is out of the muzzle. The smoke from the flintlock being fired in this picture is from the pan. A fraction of a second later a large cloud of smoke will appear at the end of the barrel.

works that caused flinching was eliminated. The Indians soon learned that it was no longer safe to poke their shaved heads around trees to give the riflemen "the bird" and then duck back at the explosion in the pan. Many of the savages did not learn quickly enough, and to their short-lived surprise many sets of Indian teeth were parted with a 40 or 50 caliber ball unannounced by the long drawn out "z-z-z-z" of the flintlock.

Modern guns are breech-loaders, in which a cartridge contains all the necessary ingredients of shot, powder, and ignition. There are no, or at least very few, cartridges available because of war shortages, and there-by hangs this tale.

No doubt the thought of cleaning up Grandpa's old muzzle-loading shotgun or squirrel rifle has been overlooked by many, but Betsy is still a formidable weapon in the hands of one who knows her whims and how much black powder and shot to feed her safely. The old Kentucky rifle is just as accurate, for one who knows how firmly to set the ball against how much powder, as in the days of Davy Crockett; and many will be surprised to know that increasing numbers of Iowans are taking "smoke poles" to the marshes and woods in serious pursuit of ration-free meat and fun.

Black powder FFFG grade in bulk and in pound cans suitable for the front-enders may be obtained at quite a number of hardware stores. Shot and various

sizes of buckshot balls are also available. Some stores until recently carried percussion caps but have none at this time. Supplying caps for the percussion locks is the big problem. Most of the regular muzzle-loader gun enthusiasts have a supply on hand, but those who do not have have been able to obtain some from the National Muzzle-loading Rifle Association at Portsmouth, Ohio. Their monthly organ, the "Muzzle Blasts", contains much valuable information to shooters, as



The center rifle is a rebuilt flintlock, the other two percussion locks. Above are powder horns and bullet pouch, plus the morning's bag of squirrels.

well as numerous bargains in guns and supplies.

The comparative costs of firing a muzzle-loader 100 times and 100 shots by cartridges of a modern repeating rifle are interesting. 30-20 cartridges, when available in hundred lots, cost 3.2 cents per shot; for 32 caliber muzzle-loaders, a comparable ball size, shot, powder and cap cost 82 cents per hundred, or less than one cent for each shot fired.

To get the most out of the muzzle-loader rifle it must be correctly loaded. It is essential that the balls be properly patched. A ball unevenly patched or set off-side in the patch when fired will go to the side, whichever side the patch is off center. The ball and patch must never be rammed, tamped, or pounded against the powder. If this is done, the powder grains are crushed, causing an uneven discharge of the loads, thereby changing the accuracy of the gun.

All over Iowa individuals and small groups are past the experimental stage and are getting gratifying results with original and rebuilt muzzle-loaders. These men are true sportsmen and adventurers. May their tribe increase.

On a recent squirrel hunt near Waukeee, with two percussion cap enthusiasts and one flintlock shooter, 11 squirrels were taken in a forenoon. One was "barked" in true pioneer fashion by shooting through the bark of the limb on which the animal was lying and killing it by the resulting concussion, without making a mark on the skin. The rest were dispatched with neat head shots that would be to the credit of an expert with any modern rifle.

The old muzzle-loaders, when used as hunting pieces, challenge

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The Old Flintlock

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There is considerable "z-z-z-z" before the "bang", as well as lots of smoke and some fire before the ball is out of the muzzle and on its way to the target. This racket before the gun is actually fired causes most beginners to flinch and has caused modern shooters to call the flintlocks "flinchlocks". These guns are plenty accurate, however, if the shooter holds on the mark and does not let the ignition fireworks upset his aim.

After the Revolutionary War the flintlock was superseded by the percussion lock. This gun was loaded in the same manner as the "flinchlock", but was fired by the hammer striking and firing a cap placed on the nipple, forcing the cap fire through the nipple and tube to explode the propellant charge in the barrel.

The percussion lock was a great improvement over its predecessor. The ignition was much faster, and much of the fire-

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All over Iowa individuals and small groups are past the experimental stage and are getting gratifying results with original and rebuilt muzzle-loaders.

The Old Flintlock

(Continued from Page 90)

one's sportsmanship, ability, woodsmanship, and for the uninitiated sometimes, his patience. It also teaches him much about marksmanship, for he must hold on the target and then hold some more. The ignition is not as fast as with the modern cartridge, but she does go off, and with enthusiasm. Too, squirrels outside of cities have not lost their age-old sagacity, and he who wishes to dine on *Sciurus* must place his first shot well, for he will not get a second with his long gun.

So off to the timber with Grandpa's old faithful. But a few words to all who would be Daniel Boones.

Don't use smokeless powder in a muzzle-loader. The old gans will not stand modern game load powder pressures.

Remove the breach plug and tube. Make sure the threads are good and set tightly.

Start with a light powder load and a snugly fitting ball and patch, increasing the powder charge in rifles until a crisp crack announces discharge.

With the scatter-gun start with light loads and a clean barrel, or be prepared to join the ranks of your ancestors.

Beaver

(Continued from Page 89)

from the animals. There were men available who would steal and murder to supply the insatiable demand for fur.

The rape of the beaver in America preceded the hard, raw march of empire. Like spreading drops of ink from south, north, and east the trappers and traders blanketed the west. Parties ascended practically every tributary of the Mississippi and Missouri rivers, and many years before the settlement of Iowa our streams were scoured by Indian hunters and white trappers for fur, principally beaver. As certainly as the Father of Waters himself, rivers of pelts flowed down from the tributaries and then on to St. Louis and the Old World.

Although the cream of the beaver had been taken before our earliest settlements, remnants of this mighty host were here, and Iowa geography is liberally sprinkled with names alluding to beaver. There are numerous Beaver Creeks, and six counties have Beaver Townships. There are Beaver Forks, Beaver Kiln, Beaver Meadow, and many others, all of which testify to the presence of this king of the fur-

bearers. Many pioneers placed mills at locations selected ages earlier as dam sites by beaver engineers.

Beaver could not stand both persecution and civilization, and sometime after the seventies they were gone. Locking the door after the horse was stolen, the legislature in 1872 placed beaver on the "continuous closed season" list.

Although the broad-tails were definitely and positively gone, the streams still flowed, the cottonwoods and willows still grew in profusion along their margins, and beaver, even if there were not any in the state, were strictly protected by laws with very sharp teeth; and for many years conditions were ideal for the return of the absent fur-bearer.

In the late twenties rumors of beaver along the Missouri in Woodbury County became persistent, and in 1930 the fact of their residence was established. It is believed that this nucleus were migrants from the northwest, possibly from far up in the Missouri River headwaters, but irrespective of their origin, they sired one of the most remarkable recoveries of a mammal population in history.

Soon family groups and individuals from the Missouri began moving up the valleys of the Big and Little Sioux, the Rock, the Floyd and their tributaries. Like our human settlers a hundred years earlier in the southeast, as soon as the beaver found a site to his taste he began building a home and raising a family. The new family in turn in a season or two were busy home-making farther on up the valley.

Beaver, while not as prolific as muskrat and rabbits, for instance, are less subject to predation than most mammals, and consequently increase rather rapidly unless molested.

In Iowa illegal beaver trapping is not a serious limiting factor, because of the extreme difficulty the beaver bootlegger encounters when attempting to dispose of the illegal furs. Both state and federal statutes governing beaver pelts are very strict, and the nature of the skins makes diversion of illegal pelts into legitimate channels almost an impossibility.

Some beaver are trapped and drowned each year when accidentally caught in water sets for raccoon; however, usually they quickly pull out unharmed and trap wise.

Some wandering beaver are killed by cars, and occasionally young are killed by dogs, but calamity strikes quickly the dog incautious enough to attack an adult beaver either on land or water, for when forced by necessity he can use his six-inch long teeth with deadly effect.

There are many other accidents that can and do occasionally happen, but except for "plinkers" all

of these are relatively unimportant.

"Plinkers" are the curse of beaver in Iowa. "Plinkers" are men and boys who carry rifles with them on their strolls along the streams and who shoot at any unusual live target.

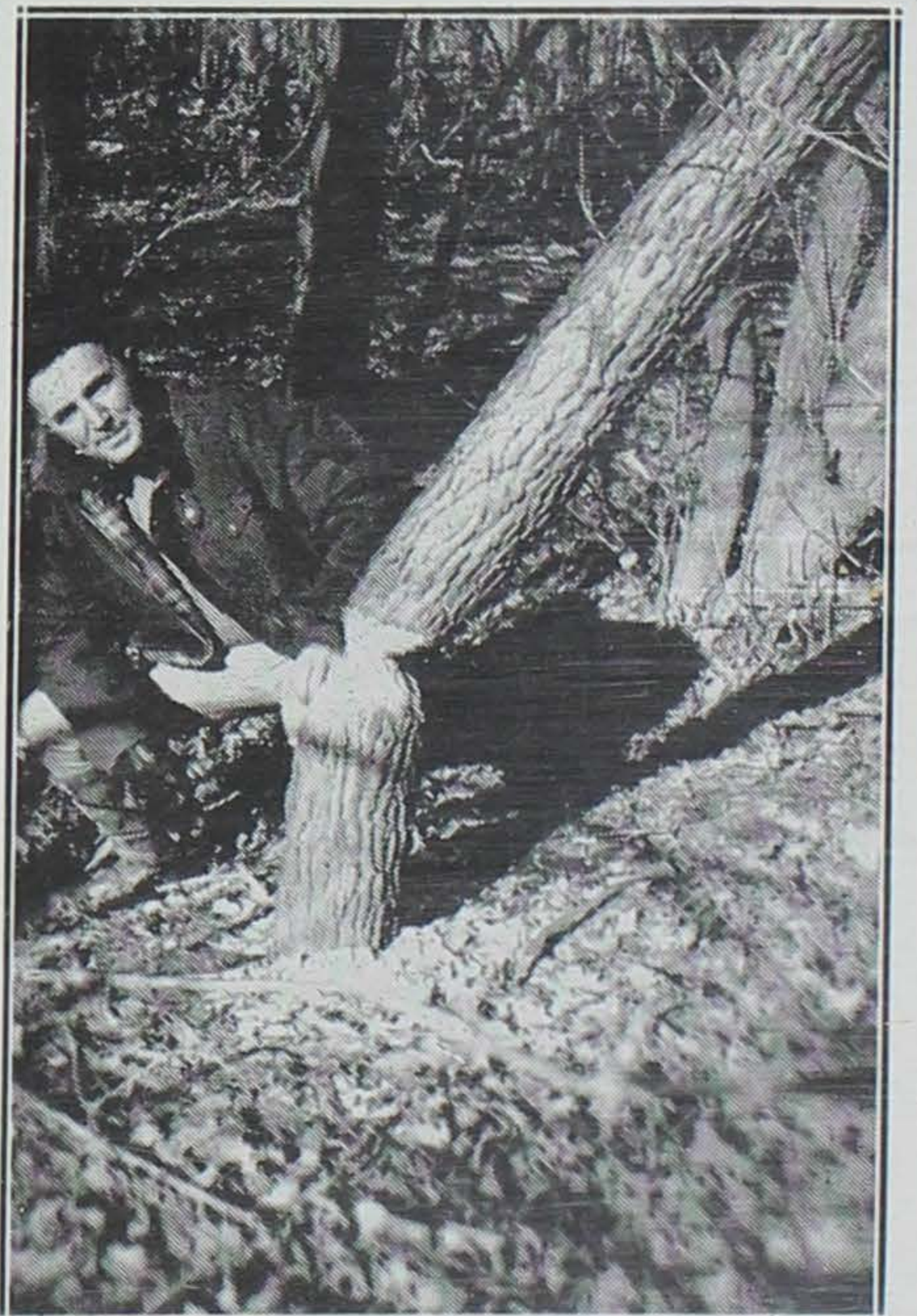
These irresponsible people too often wantonly kill beaver, and although the animals are nocturnal, it is not uncommon to see them during the daylight hours. One of the author's greatest thrills occurred at the Linn Grove Dam on the Little Sioux, when a mother beaver and her two kits entertained a Sunday fishing crowd of more than a hundred men, women, and children all afternoon by disporting and playing in the rushing white-capped water below the dam. What a pity had a "plinker" found this trio downstream away from the crowd.

The author once found a bloated mother beaver with milk, floating and stinking in a drift with big blue flies edging a nasty festering belly wound, the result of a "plinker's" .22. The unknown vandal's punishment should be to hear but once the mewling of the two orphaned young as they despairingly cried in starvation in their nearby den.

In spite of some minor population losses, by 1937 in some localities these valuable fur-bearers had reached the threshold of security, the condition existing when any species reaches the maximum number its environment can contain. During this year, wandering beaver could be found in the most unexpected locations in northwest Iowa, indicating heavy population pressure at home.

As a result, colonies began to appear where they were unwell-

(Continued to Page 93, Column 1)



A typical beaver cutting, this cottonwood was intended to provide winter food for the engineers. They guessed wrong, however, and when the tree fell it lodged in the top of an adjoining cottonwood, and the succulent branches failed to come crashing to the ground.

WARDENS' ❖ TALES ❖

SHOP TALK
FROM THE FIELD

Two young men were shooting ducks during closed season when U. S. Game Management Agent "Flick" Davis spied them and their dog on an earthen dike near the center of Green's Slough below Council Bluffs. The hunters saw Davis about the same time and they lit out across the swamp with Davis after them. Due to the character of the country Davis was unable to see them after setting out, but following their tracks for some distance he came to a place where one of them had fallen down in the mud and water while crossing a drainage ditch. The hunter had apparently thrown his muddy gloves away for one of them lay on the bank of the dike.

There sat the dog. A dirty little yellow nondescript mongrel, flea-bitten and weebegone. He was blind in one eye and his mangy coat was full of beggar's lice and cockleburrs. There was his master's glove and it was up to him to take care of it. The only friend he had ever known had run on and left him and now an ominous stranger was rapidly approaching from down the dike. His master's fear and panic had been contagious. He was more afraid than he had ever before been in his life. He was skinny and forlorn and he shivered in the chill March wind, but he had a job to do and he was doing it.

When danger is faced without fear it may be called bravery, but true courage is that spirit which carries on in spite of fear. The little dog held his ground. Although he trembled, he managed to get out a few weak snarls. In his eye was the light of desperation. He knew men and he had been beaten by them—he expected it now, but here was his master's glove and his duty was as plain to him as the high hills. He never wavered. His was the courageous heart.

"Flick" crossed the ditch and continued through the swamp after the hunters, tracking them to a ramshackle group of farm buildings more than a mile away. Two hours later he retraced his way through the swamp. The dog was still there but now he was busily engaged in trying to get something out of the water. It was the other glove. A thin shelf of ice extended out into the water for eight or 10 inches and the glove had gotten under this. "Flick" retrieved the glove and threw it up on the bank on top of its mate. The dog eyed "Flick" suspiciously for a moment and

Bob Knows His Hunting Dogs--and Bill Should When He Reads This

Selecting a Man's Best Friend Is a Serious Undertaking

Dear Bill: So you're going to buy a hunting dog! And you have decided that I'm the answer to your prayer for the low-down on the kind you'll want here in Michigan! All I can say is that I hope your choice of me as a dog expert isn't typical of your judgment in other matters. It's only because I know that your experience with dogs is nil that I'm going to tell you this, anyway. At one time or another I've advised various former friends in a choice of cars, guns, and wives, but this selection of a dog is a serious matter.

I know you're an angler of convictions, who would never admit to using worms, or even a wet fly, in piscatorial pursuits. There are several castes of hunting-dog fanciers, somewhat like your various degrees of fishermen. And often enough the unorthodox dog, like the barefoot boy with the big fish, is the one that gets results.

Creme de la creme of the bird-hunting dog—in their owners' opinions, anyhow—are the pointing dogs: setters and pointers. Setters have long hair; pointers have short, smooth coats; and there are some other differences to me that mightn't be apparent to you. You have maybe read stories of these noble dogs that work in advance of the hunter, running gracefully to and fro with heads held high, until they scent game. Then they freeze to living statues, heads pointing to the quarry, each with one foot out-



The pointing dogs, when they scent game, freeze like living statues, heads pointing to the quarry, tails rigid.

then taking the gloves in his mouth he trotted on up the dike.

Bench shows and field trials bring out breeding that is recognized by sportsmen and rewarded by blue ribbons but this dog had those inherent qualities of courage and faithfulness that transcend all pedigrees. This, my friend, was a thoroughbred.—Bruce F. Stiles.



Only at command do these perfect animals break point, recover the dead birds, and return them to the master's hand for a rewarding pat on the head.

stretched, tail rigid. Permissibly, the dog may steal in slowly, particularly if the birds are not too close. A second dog is expected to "back" the one that first locates game, never going in ahead.

The next move is up to the hunter, who walks in, flushes the birds, fires right and left barrels for a neat double, and says "Fetch!" to the quivering dogs. Only then do these perfect animals break point, recover the dead birds, and return them to the master's hand for a rewarding pat on the head.

Now this is the scenario as it should be, and as I have seen it in movies. The dogs I actually know are evidently of a different strain. Most of 'em are enthusiastic enough, galloping back and forth in high glee a half mile or so ahead. These are known as "medium wide rangers", allegedly just the thing for prairie chickens and sharp-tailed grouse. When one disappears for a half hour or more, he is "just over the hill on point." I borrowed one once, and lost him promptly in spite of my yelling every 20 seconds to let him know where I was. After considerable search, I wandered back to the car, and there he was, snoozing in the shade. This got to be a regular habit—after a half hour's run, he'd get tired and go back to the car; so I stopped worrying about him.

Pointing dogs, even the best of

them, are handicapped by heavy cover, such as ruffed grouse and woodcock lurk in. In the brush the medium wide ranger is a downright liability. Some dogs have the sense to adjust their range to the cover and pretty well keep in sight. Sometimes a small bell or a set of sleighbells attached to the collar is a good idea in the thick stuff, because if the dog stays reasonably close he can be heard till he stops; whereupon the hunter heads for the place he last heard the bell in the fond hope that Pluto's on point again.

There are various styles in pointing, by the way. There was one pointer, highly rated for his work on quail, that proved to be a good dog on pats and sharp-tails. But his style sure lacked finesse! He'd come to point flat on his belly, or in a semi-squat reminiscent of Bronko Nagurski burlesquing a ballet gal. Even though you didn't care much about the fine points, you had to admit that Jupiter was mighty hard to see when he lay down in a furrow.

This business of retrieving is tricky in pointing dogs, so much so that some trainers won't let their charges do it at all. I recall a setter that often pointed respectably enough. But at the flash of a gun, dog and owner both charged forward in a desperate dash for the unlucky bird.

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The cottonwoods and willows the beaver takes for food are of almost no value. They grow up and for the most part in a few years die or wash out. They appear to be designed by Mother Nature for the principal purpose of providing food for these historic fur bearers. Here a colony has been busy cutting and carrying away their winter food supply.

Beaver

(Continued from Page 91)

come. They dammed drainage ditches and tile outlets, backed up sewer outlets, and on one occasion backed the city sewage into the city water reservoir, necessitating condemnation of the water supply for several months.

To ease population pressure, to prevent damage, and at the same time to aid in state-wide dispersal of this valuable fur-bearer, the Conservation Commission inaugurated the live trapping-stocking program that has proved so successful.

Beaver are live-trapped in early spring, before the female are too heavy with young to transport safely, and in late summer and fall after the young are weaned.

When investigation shows necessity for removal, a state conservation officer and a helper take over. Equipped with Bailey live traps, cages and camping outfit, these modern beaver trappers stay with the job day and night until it is completed.

The beaver live trap operates on the same plan as the common steel trap. It is much larger, heavier, and is designed to take an animal unharmed in its heavy wire meshes rather than by holding it in steel jaws. The trap when set is open like a flat pocketbook and when sprung has the appearance of the same pocketbook when closed. As the animal steps on the pan, the trap springs and the prisoner is held safely above the water level.

The trapped beaver, after a very short period of fright, settles down to stoically await release. The trappers open the trap, pick the beaver up by the tail, and place it in one of the transportation cages, to wait, with other members of the colony, shipment to a new Iowa home perhaps 300 miles away.

Live-trapped beaver are transplanted only at the request of the landowner, and then only after investigation proves the new habitat to be suitable. To encourage the animals to stay at the stocking site, artificial dens are constructed and the animals released directly into them. Often

the newcomers move in a day or two and construct their own homes, but more often they accept the man-made habitation.

After a colony has been established three years, it usually contains eight to 10 individuals. The maximum limit in Iowa is believed to be about 14. The family members include two adults, their two to six yearlings, born the previous spring, and two to six kits born the current spring, usually in May. About the time the kits are born in the spring, the young approaching the two-year age are forced out of the colony and establish themselves elsewhere. They mate and begin to have kits the following spring. It can be easily seen that these conditions definitely limit the size of family groups.

It is a mistaken belief that each dam represents a colony. One family may build half a dozen or more dams, and in the larger streams generally no dams at all are built, the beaver merely picking a deep place to start their under-water burrow.

The family may operate up and down the stream for half a mile or more, but they seldom leave the river bank more than 30 or 40 yards, except under unusual circumstances.

The food of beaver is principally bark of trees, with cottonwood and willows making up the bulk of their diet. Other bark is sometimes used, however, and in summer some grass, bulbs, and roots are eaten. The animals do not eat fish, and they live in complete, sometimes playful, harmony with muskrats.

At the present time a careful estimate indicates the number of Iowa beaver to exceed 5,000. Beaver are distributed in some numbers in almost every county of the state. There are hundreds of miles of streams, however, with suitable habitat which as yet are uninhabited and which beaver may be expected to reoccupy.

It has been established in Wyoming that, with a beaver population of 30,000 individuals, proper management would allow a sustained annual yield of 9,000. If Iowa streams will support 30,000 beaver, the annual crop after

SHALL WE PRINT AN INDEX TO The "Iowa Conservationist"?

During the past year the Conservation Commission has received a number of queries as to whether there would be an index printed for the "Iowa Conservationist". Many sportsmen, schools, and libraries plan to bind this bulletin for permanent reference and feel that its use would be facilitated by indexing.

In order to determine whether the demand would warrant the time and expense involved, the Commission is asking anyone wishing to obtain an index to address a card to the Conservation Commission, 10th and Mulberry, Des Moines, 8, making a request for it.

If the index is printed, it will cover Volume 1 and Volume 2 and will be distributed about February 15 without cost to those making a written request.

The Commission has available back numbers of this bulletin for the following issues: December, 1942, January, February, March, April, July, September, October, and November, 1943. These issues are free upon request.

Many libraries are anxious to secure a copy of No. 1 Vol. 1, the February 15, 1942, issue, and anyone having an extra copy of this number who would care to mail it to the Conservation Commission will be aiding some public library to secure a complete file.

What Goes On Up There?

Sportsmen who have shot at ducks traveling at from 40 to 80 miles an hour will appreciate the high degree of marksmanship required to wage war effectively in the air.

When two diving planes pass each other at 600 miles an hour, tail gunners are offered marks moving at 1,200 miles per hour. Machine gun bullets, with muzzle velocities of 2,800 feet per second, move only 1,800 miles per hour.

Does the bullet travel fast enough? How can it be made more accurate and more effective, to meet the ever increasing demands of combat? What goes on up there when a gunner presses

his firing button with the air outside his turrent at 70 degrees below? How does the thin air of the stratosphere affect velocity, striking power, trajectory, the ignition of powder and the power it develops in burning.

Physicists, chemists and ballisticians at the Remington Arms laboratories are rapidly finding many answers and translating their findings into better ammunition. American aces of science are trumping the enemy's best cards every day, and scoring the result in history. What goes on up there? A bigger big-game hunt than ever before known in the history of the world—Remington News.

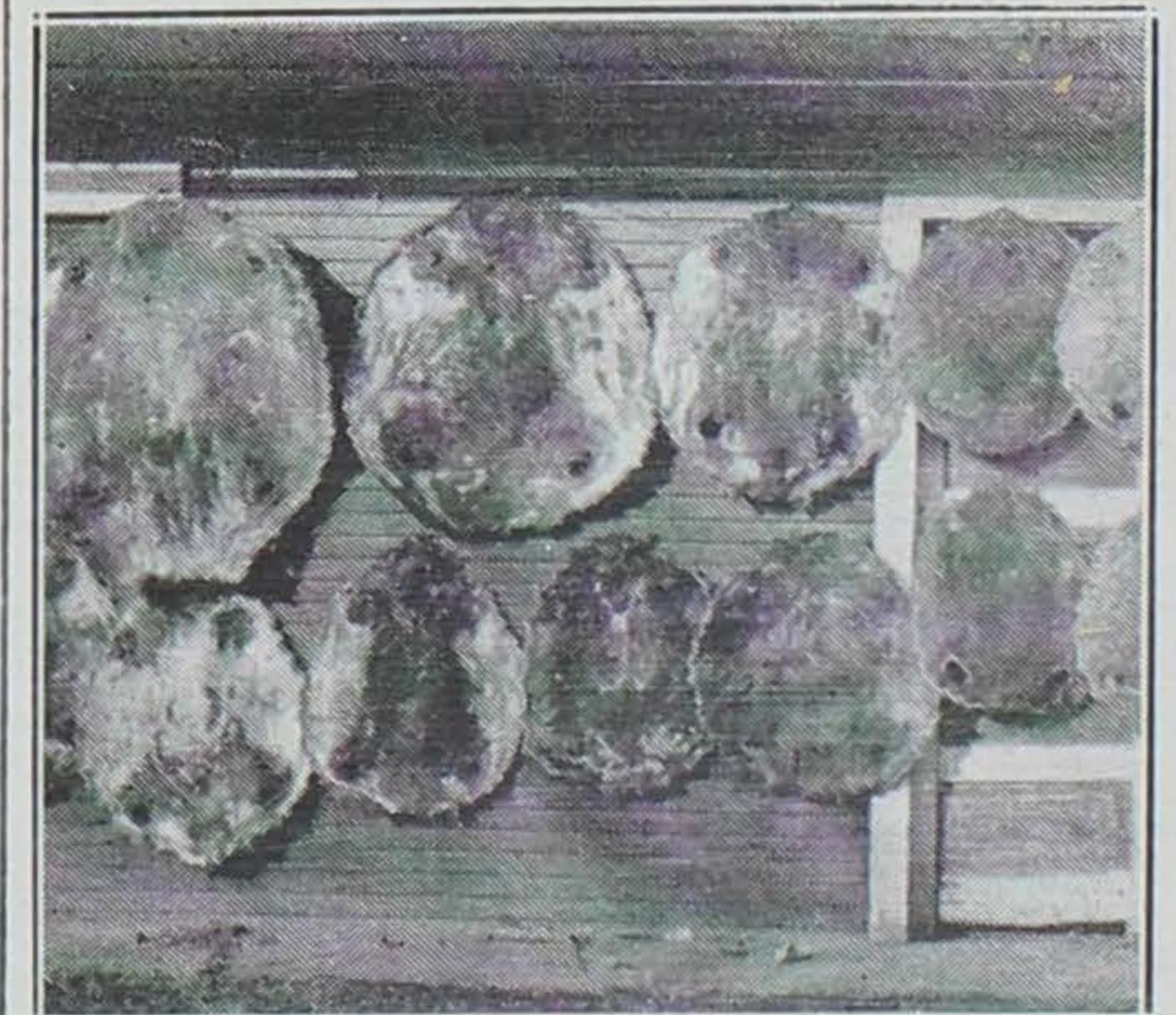
establishment would at present values add \$450,000 each year to the farm boy trappers' cash assets. Beaver are potentially big business.

Beaver activities may be an asset in some places and a liability in others. They are definitely an asset when they dam an intermittent stream through a pasture and provide permanent livestock water. They are a definite liability when they dam drainage systems. In between these two extremes there is room for argument aplenty.

The cottonwoods and willows the beaver takes for food are of almost no value. They grow up and for the most part in a few years die or wash out. They appear to be designed by Mother Nature for the principal purpose of providing food for "old Castor".

When beaver cut a few rows of corn adjoining the stream

bank, a cry is often raised, "I am being ruined!" It is well to remember, however, that the colony that used these few hills of corn for bedding are worth some \$500 in coin of the realm.



A beaver population of 30,000 individuals properly managed would allow a sustained annual yield of 9,000 pelts, which at present value would add \$450,000 each year to the farm boys' cash assets. Beaver in Iowa are potentially big business.

Why Should I "Give"?



The spaniel is more of a Jack-of-all-trades than the pointer or setter, and when game is dropped, the spaniel is expected to retrieve it.

Hunting Dogs

(Continued from Page 92)

If old Spot won the race, he plucked feathers furiously till the owner arrived. Then there was another setter, not soon to be forgotten, so help me, that retrieved a grouse from the trunk of the car and vanished into the brush with it. He did a good job of catching it, too, for a lengthy search with other dogs never revealed the hiding place.

Pointing dogs need birds that "lie well", as quail and partridge generally do, as sharptails and prairie chickens often do when they're not in flocks. Pheasants are another story. Pheasants put just about as much reliance on their legs as on their wings and often don't play fair with the dogs. It's disconcerting to a refined pointing dog to strike a hot scent of pheasant and come smartly to attention, only to find that the blasted bird is doing a sneak. This sometimes leads to a series of short runs and "flash points" as the dog tries to do two things at once. Next step in the degeneration of "a good grouse dog" is the "running point", and finally the last pretense of pointing may be lost in an effort to catch the bird before it takes to wing. This generally occurs anywhere from a hundred yards to a mile from the hunter, unless he's an experienced track man. Consequently some owners prefer not to risk exposing the delicate nervous system of an educated pointer or setter to the

shocks of pheasant hunting. Nevertheless, a lot of pointing dogs do a pretty good job on any kind of bird—pheasant, woodcock, grouse, or prairie chicken.

One thing about setters and pointers, however, that may make you think twice about getting one: They're a bit large for housedogs. Some fellows consider that a bird-dog's place is in a kennel, and that petting and indoor life makes 'em soft. My idea is that those fellows may get more birds, while the man whose dog is a household pet gets more fun out of his dog, on a year-round basis.

Your combination hunter and pet is likely to be a spaniel, a type which comes in assorted sizes, styles, and colors. The spaniel is more of a Jack-of-all-trades than the pointer or setter. It isn't supposed to point (except the Brittany spaniel), and has more of a tendency to hunt anything — especially rabbits, which no proper pointing dog would notice socially. Spaniels are expected to flush birds, not to chase them after they fly, but most spaniels I've seen don't make the distinction. When game is dropped, a spaniel is certainly supposed to retrieve, but it's more a matter of training than instinct, I'm afraid. Mine retrieves, you might say, but won't "give" till I pry his jaws apart. Given a chance, I think he'd eat the bird. A capable retrieving spaniel that hunts close to the gunner is a useful critter; one that works very wide

It Seems To Us . . .

It may be of interest to some readers to learn that the beavers have now started on another huge cottonwood tree which is fully, in our estimation, 48 inches in diameter. That makes four cottonwood trees they are working on, in addition to one willow tree about a foot across which they gnawed well over half way through.

This willow is rather puzzling. We aren't aware that beavers cared for willow bark, and we think it must be going to serve another purpose, although we are stumped as to what it would be unless they plan to use it somewhere down the creek in a dam.

Apparently, the colony is doing well, for they seem to work nightly on the big cottonwoods.

will flush game so far out of range that it's worse than useless.

When all's said and done, any kind of a dog may be a good hunter, and individuals of quite a few breeds may show the pointing instinct. A lot of farmers do all right on pheasants, squirrels, and rabbits just using old Rover, who may be a collie, a German shepherd, a beagle, or any other kind or mixture of breeds.

The trouble with a lot of dogs (including mine) is the guy that owns 'em. There was the case of the otherwise expert field man who walked up to his dog, on point, and gave it a hefty kick. A startled companion wanted to know what was up. "Aw, he's too lazy to get out there and hunt," was the reply. "The bird flew and he just stands there gawkin'." The next moment, of course, another bird went up. No wonder dogs get confused.

Excuse these ramblings, Bill. There's no good advice about dogs—you've got to make your own choice. But if you happen to fancy my kind, just say the word and I'll bring down one of Sally's pups. He'd be just about right in 1945, if you bring him up right. So long,

BOB.

—From Michigan Conservation.



If you happen to fancy my kind, just say the word and I'll bring down one of Sally's pups. He'd be just about right in 1945.

At the rate they are going they should have one or more of them down well before the river freezes over. They have cut through several rings of the smallest cottonwood clear around the tree, and it is apparent that a heavy wind would now cause the spreading poplar to crash.

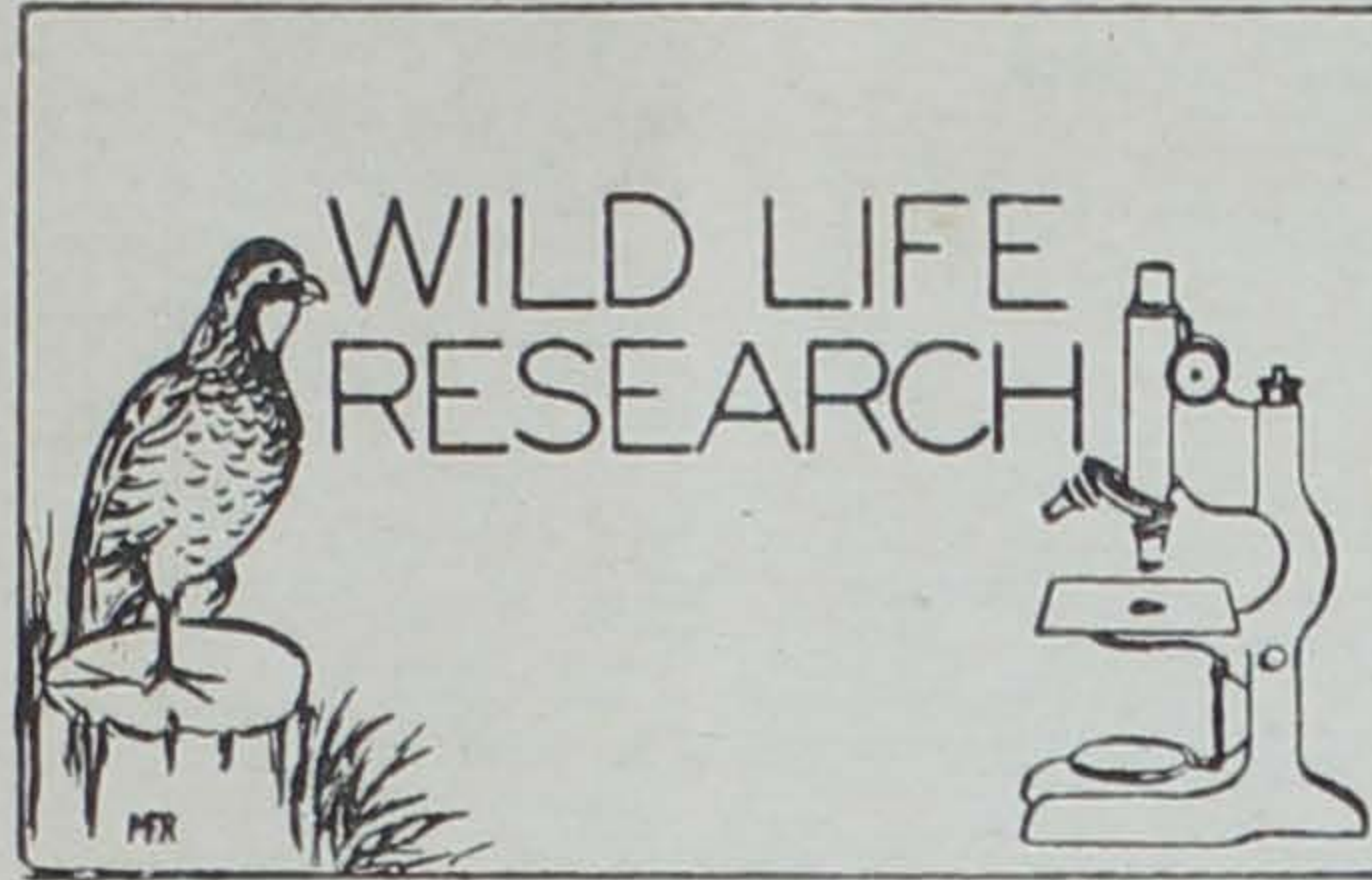
It also appears that they prefer trees with wide spreading branches, for they have passed up, thus far, a number of smaller cottonwoods that more or less grow straight up without sending out many large limbs, although the latter would be much easier to fell. We judge that what they want are the big branches with their "luscious" bark for their winter's eating.

Although unable to give them oral assurance that they are welcome to the giant cottonwoods, we are glad to put it in writing here. These cottonwoods are "volunteers"—having sprung up from seeds carried by the wind to this location near the river bank. It is sandy clay soil, but the roots of the trees are evidently well irrigated by the river for they have made prodigious growth in the past 10 years and have multiplied considerably. They should support the beaver colony for a year or two if they can manage to get them cut down.

The writer's father would have been tremendously interested in this colony of beavers located on his home place. While managing a sheep ranch along the Teton river near Choteau, Montana, 30 years ago, he would study the beavers on moonlight nights while they were at work. At that time he was writing a series of articles for the Sioux City Sunday Journal called "Little Tales of the Rockies", which reflected many of the traditional tales of that interesting region of northwestern Montana with its fast flowing mountain streams and Blackfoot Indians. Several times he wrote about the work being done by the beavers and the remarkable organization with which they conducted the constructions of their dams and houses.

In Montana at that time, as here in Iowa now, it was necessary to get a permit to trap beaver on your own premises and to show that they were causing damage. He obtained such a permit, and an expert trapper took out 40 beaver one winter from that one large colony. We hated to see them go, but it seemed necessary at the time.

This colony here on the Floyd is no doubt rather small at present. They work less than 200 feet from a paved state highway that is heavily traveled and no doubt would accomplish more if there weren't so much traffic nearby and fewer fishermen along the banks of the stream.—Geo. E. Bowers, Alton Democrat.



WILD LIFE RESEARCH

By DR. GEORGE O. HENDRICKSON

Leader, Project No. 566, Ecology and Management of the Raccoon.

Food Habits of the Raccoon

For the purpose of determining the food habits of the eastern raccoon in Dubuque County, Iowa, 363 scats and two stomachs were collected in spring, summer, and fall of 1938 and analyzed by LeRoy W. Giles. The scats were found, for the most part, on the rims and ledges of limestone bluffs. To a lesser extent they were picked up along the streams, in the woods and pastures, and in tunnels of abandoned lead mines.

The food habits data are treated by four periods, each characterized by one or more distinctive foods. During the first period corn ranked first in consumption and was highly important as a post-winter staple. When other foods became abundant, it dropped considerably in preference, though it was still available and was eaten to a minor extent throughout the early summer. Again, in the middle of August, when the field corn matured, it became the chief food and so continued. Following the first period grass was eaten in large quantities, probably serving as roughage and as a tonic food. When wild raspberries became available, their seeds replaced the grass as a predominating fecal inclusion. Along with the grass the fragments of large numbers of beetles and cutworms appeared. The cutworms were found in only the grass-containing scats; beetles, however, remained an outstanding food until the middle of July. For a time then insects appeared only as traces until about the last of September, when grasshoppers became abundant in the feces, so to remain until the middle of October. Vertebrate food remains were present only in small quantities, though the frequency indices give them a somewhat greater significance. A wide variety of vertebrates was eaten with no particular group suffering very serious predation.

The aggregates of plant and animal materials recovered from all of the scats and the contents of the two stomachs indicate that the raccoons had definitely vegetarian tendencies. Fully 77.73 per cent of the bulk of the feces was of plant origin, whereas only 22.27 per cent was of animal derivation.

Pigments and Public; Or When Should the Muskrat Season Open?

Question Has No Nice, Convenient Answer, Says Author

By DR. PAUL L. ERRINGTON

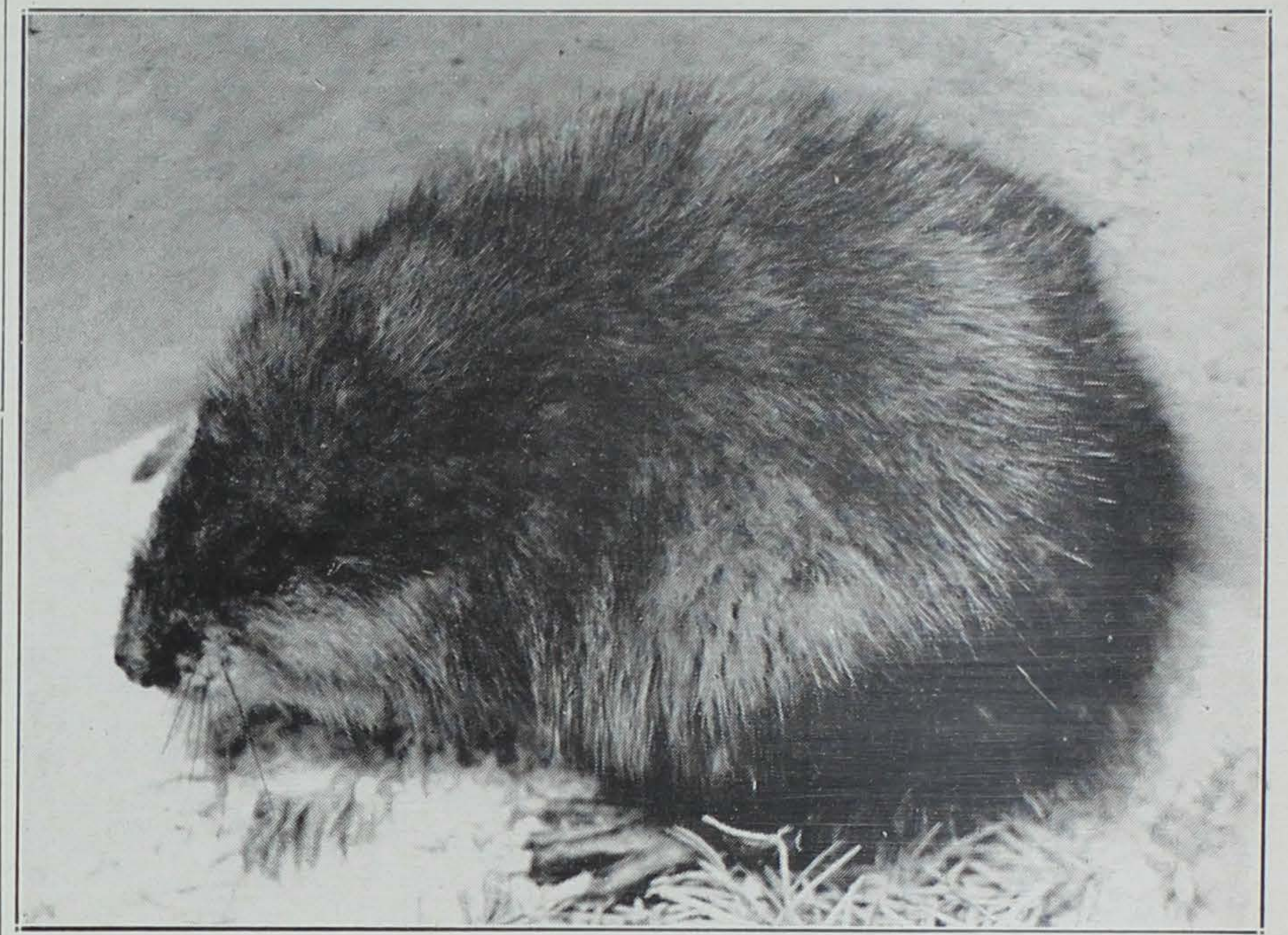
Controversies centering about the proper time for lawfully permitting muskrats to be skinned out of their private possessions may have started with some tribal chieftain finding himself in a progressive (or dictatorial, or perhaps merely grumpy) mood and passing out edicts that failed to meet with the enthusiastic approval of his constituents.

At any rate, the question remains one of the choice array that may be counted upon to promote ulcers for fur administrators and doesn't become noticeably more restful as fur prices rise. It has, in fact, no nice, convenient, final answer.

A major share of the trouble must be charged directly to the muskrats for failing to be correctly clad at the time of year when they are easiest to catch on a grand scale, namely, in fall. The general run of November 10th muskrats in a given Iowa locality are simply not the equal of December 1 muskrats so far as quality is concerned. Furthermore, the pelts gain in primeness as winter progresses, reaching full prime in the spring. (Anyone wishing to delve into the technical literature on phenomena of priming should consult papers by C. K. Gunn, pp. 387-397 of Vol. 6, 1932, of the Canadian Journal of Research and pp. 546-559 of Vol. 66, 1932, of the American Naturalist, both of which journals are accessible at the Iowa State College Library.)

We have been informed by prominent Iowa and Minnesota fur-buyers, however, that, for most commercial uses, winter muskrat pelts are as satisfactory as those from spring, so in the north-central region the main issue appears to be between late fall and early winter trapping.

The next subdivision of the question, illegal early trapping, also relates to quality of fur, but needs to be approached with a certain diffidence and circumspection. We will not argue the point that some of the conservation officers (call them game wardens, if you prefer) have an aptitude for suddenly materializing in many different and strategic places at once, in apparent nullification of principles of phys-



Controversies centering about the proper time for lawfully permitting muskrats to be skinned out of their private possessions must be charged directly to the muskrats for failing to be correctly clad at the time of year when they are easiest to catch on a grand scale, namely in the fall.

ics and to the embarrassment of early trappers. Nor shall we belittle the support of the populace to whom grateful or hopeful reference is made as the "better element". For all of that, harvesting of muskrat pelts before season can and does occur; and, when done with ingenuity and diligence, may result in more of an area's muskrats being taken illegally than legally.

Without condoning violations of the fur laws (which, after all, may be said to exist for worthy purposes), we must recognize that trapping before season is economically less wasteful in middle and late November than in late October and early November. As a rule, no experienced trapper in his right mind will take muskrat pelts more than two weeks ahead of the date of legal possession; this, for a December first season in Iowa, means essentially marketable mid-November pelts, whereas rats "soonered" much before a November 10th season are trashy enough to be a public loss, irrespective of whether or not anyone may get any money out of them.

On the other hand, it may be countered that a December 1 season is a standing invitation for pre-season fur-grabbing — and, unfortunately, that is not without truth. Even where a trapper may have no fear of competition with his fellows, good trapping weather in November offers a mighty temptation, especially when prices are as downright alluring as they have been in re-

cent years and wavering mortals have no assurance that December conditions may not spoil their chances of making a good catch. At freezing temperatures, rising and falling water may be more of a problem to the trapper, as likewise may storms, deep snow, and and thick ice—all maybe getting worse along with family colds and receding coal piles. Then, too, well-fed animals often do less moving around during the colder months and are accordingly less obliging about getting caught. Of course, trapping may turn out to be easier in December than in November, but, despite the classic vagaries of Iowa weather, it makes more sense to plan on having winter in the wintertime.

In terms of ease of trapping, few, if any, muskrat sets compare with those made in ice-free water at the base of landings. This represents a method favored by novice and veteran alike, school-boy and professional. Muskrats may thus be caught by hundreds or thousands in neighborhoods where abundant. But to assume, as many people do, that effective muskrat trapping cannot be done after freeze-up is ignoring the demonstrations that expert trappers repeatedly make of their ability to trap profitably in nearly any weather. There are, in short, ways and means of mid-winter trapping that are practical, and at least some do not involve much more personal hardship than working out-of-doors

(Continued to page 96, Column 1)

Muskrat Question

(Continued from Page 95)

or more strenuous effort than chopping holes in the ice.

Among the under-ice sets to be listed from the repertoire of north-central trappers are those made in the entrances of burrows (plain or with devices to induce intimacy between 'rat and trap) and vegetable-bait and slanting board arrangements in feeding waters or passageways. Some of these sets can be put out and taken up without wetting the hands, a feature of no trifling merit on the kind of day a trapper naturally enjoys keeping sleeves down and hands in dry mittens. Since they drown their catches if well placed and properly made, they need not be visited as frequently as do the non-drowning sets. They require that the trapper know what he is doing and are not tricks that all persons readily figure out by themselves; but, for one who is familiar with or can learn the "lay of the land", water trapping beneath the ice may be only routine procedure.

Exceptions should be mentioned, for suitable places to set are often hard to find in very shallow water and amid the layers of ice that multiply notably in tile-fed or spring-fed small streams. Moreover, veteran trappers themselves may not enjoy spectacular success in trying to conspire against muskrats that eat and doze away the winter in moist burrows packed so full of Iowa's celebrated corn that they need not so much as poke out their plump and indolent noses for days or weeks at a stretch. Cornland ditch populations may indeed thrive underground without necessarily any betrayal by external "sign" other than an occasional "push-up" or bank plug of mud and food debris.

In ordinary years, when a passably adequate carry-over of breeding stock may be an administrative ideal instead of a probability (yes, we have had overtrapping, and of the if-I-don't-get-them-somebody-else-will, let-the-other-guy-leave-the-

seed, clean-sweep, none-left, and all standard variations thereof), a winter open season automatically works in the right direction by imposing added handicaps upon the trappers. In those now exceptional years when muskrats really are, or promise soon to become, too plentiful for the common good—as, for example, in 1943 — and the problem revolves itself into giving trappers instead of muskrats increased advantage, a logical defense may be made of fall trapping, if only on grounds of population control.

The matter of "kid" trapping carries its own cerebral twinges for people who have to make official decisions. It is perfectly true that the wild fur crop as a source of income to a youngster who wants to earn a pair of skates, a basketball outfit, or the like, has sociological as well as economic aspects. Much healthful and gratifying personal interest in outdoor life has its inception in boyhood trapping experiences. A December 1 season makes all but hopeless the unguided efforts of most Iowa boys to catch muskrats, and this can stir up plenty of agitation. On the opposite side of the picture, we see that some of the worst abuses in trapping originate in youthful irresponsibility. Professional fur trappers cannot always be said to display the greatest solicitude for the creatures they catch, and now and then their steel-trap victims mess themselves up with a thoroughness that is highly unpleasant to think about; nevertheless, such professionals know how good business it is to use quick-killing "drown sets" for muskrats where possible or, where not possible, to visit set traps at frequent and regular intervals.

Just in case the reader may have residual suspicion that the difficulties of wisely determining the muskrat season are a lot of the meat-scrap commodity that, whichever way sliced, manages so famously to retain its identity, let us toss in a couple more paragraphs.

The usual trend of fur prices is upward during early winter,



Muskrats may be caught by hundreds and thousands in neighborhoods where abundant, and expert trappers repeatedly demonstrate their ability to trap profitably in nearly any weather.

"The Pheasant . . . part of the Iowa game picture."

Our ballot for the number one game bird will be cast for the ring-necked pheasant.



Our Vote Is For the Pheasant

Our ballot for Iowa's number one game bird will be cast for the ringneck pheasant. There are those, of course, who will vote otherwise, but it will take a lot of argument to swing us from our position.

which would fit in all right with a December 1 season, but sometimes market gluts or other factors bring about price declines. In 1941, trappers in a neighboring state cashed in on a two-dollar November market, but in Iowa, where the season opened on December 1, trappers felt lucky to get much more than a dollar following one of Tojo's incidents. Yet, a later and shorter season in Iowa was in keeping with knowledge that the muskrat population, by and large, was only in fair shape and needed more encouragement than that supplied by condolences. The next year a similarly late season was amply justified because of excessive proportions of late-born animals—great numbers of which had not grown to desirable pelting sizes even by the middle of December and New Year's.

Not long ago, Minnesota's legally protected muskrats were slipped south across the boundary to sell during the Iowa fall season, after which the poachers impartially cleaned out much of Iowa's legally protected breeding stock to sell in Minnesota during that state's spring season. Such turn-about not being the fairest play, states could well get together and try to draw a uniform code of fur laws. If this were accomplished, a December 1 opening date for muskrat trapping would seem to be as mutually advantageous on a nation-wide basis—Gulf coast to Canadian border—as any that might be suggested. Interstate coordination in this respect still lacks complete smoothness, and until it improves, the various sovereign units presumably will establish what trapping seasons they independently conceive to be to their own welfare.

This article could continue in its exploration of the dim corners of conservation thought, but the editor probably wouldn't stand for a longer one, and, besides, I am growing tired of writing it. If the reader can bring to mind ramifications of the sub-

The range of the pheasant is extensive. He is hardy and prolific. After a few days of gunning he is pretty smart. Pheasant shooting requires little, if any, advance preparation. Any one-gallus hunter with a single-barreled weapon of ancient vintage can sally forth and bag a pheasant. When he bags him there is meat on the table. A limit of pheasants makes a sizeable banquet for a big family. There is no investment in pheasant shooting except your hunting license, shells, and time. Compared to duck hunting, it is a mighty cheap form of sport.

Make no mistake about it. The pheasant has become a permanent part of the Iowa upland game picture. Take him out of it and you would reduce hunting to rabbits and a few quail, with squirrels thrown in for those that like to hunt them. As long as we can tote a shotgun we hope there will be pheasants in Iowa. May his tribe increase.—The Nomad, Davenport Democrat.

After bragging about the hunting and fishing in the area, the Burlington Hawkeye sums up the situation thusly: "You can't catch fish or kill ducks, or shoot squirrels, or find quail, if you don't expose yourself to the opportunity."

"Please send me one of your 'Waterfowl in Iowa' books. I am sure pleased with the 'Iowa Conservationist', too." — Knoxville, Iowa.

ject not here covered (or utterly unknown to us), we shouldn't be a bit surprised.