IOWA CONSERVATIONIST

Volume 14 December, 1955 Number 12

HOW ABOUT FARM POND ICEFISHING ?

WILD GAME GASTRONOMY

By Frank Ashbrook
U. S. Fish and Wildlife Service

There's no accounting for tastes, so it is said. There is even less accounting for the average man's timidity, or lack of imagination—call it what you will—when it comes to gastronomical adventure. Day after day, year after year, he will tread the tiresome trail of meat, gravy and potatoes, little dreaming of the appetizing side trails and never knowing the challenge of wild foods offered by bounteous Nature.

"I am amazed," observed J. N. (Ding) Darling, "how many people will not eat, or at least have not eaten, mouth-watering pot-roasted muskrat or smoking-hot broiled sand shark. The same men will instead stuff themselves daily with lumpy, soggy mashed potatoes."

Those who still believe that the basis for a perfect meal is meat, potatoes and gravy should read a menu of the 1890's, when wild game was a food for epicures. The pioneers of our country had a high regard for game because they had to depend upon wild animals for their meat supply. They knew how to prepare game; either by cooking the fresh meat for immediate consumption or curing it by pickling, smoking or drying.

Those who live on the land have the greatest opportunity to obtain meat from forest, field and stream. They, above all, should use all wild game taken in season. Wild game is entitled to high rank in our present culinary setup. It is well for all of us to learn that the wild birds and animals that live in our fields, streams and forests can provide good, wholesome food which is easily prepared and digested.

According to data from state game departments and other sources, all game yielded 127,000 tons of dressed meat in 1942. This is a lot of meat, particularly when one remembers that this amount of top-quality protein is raising itself each year on American lands.

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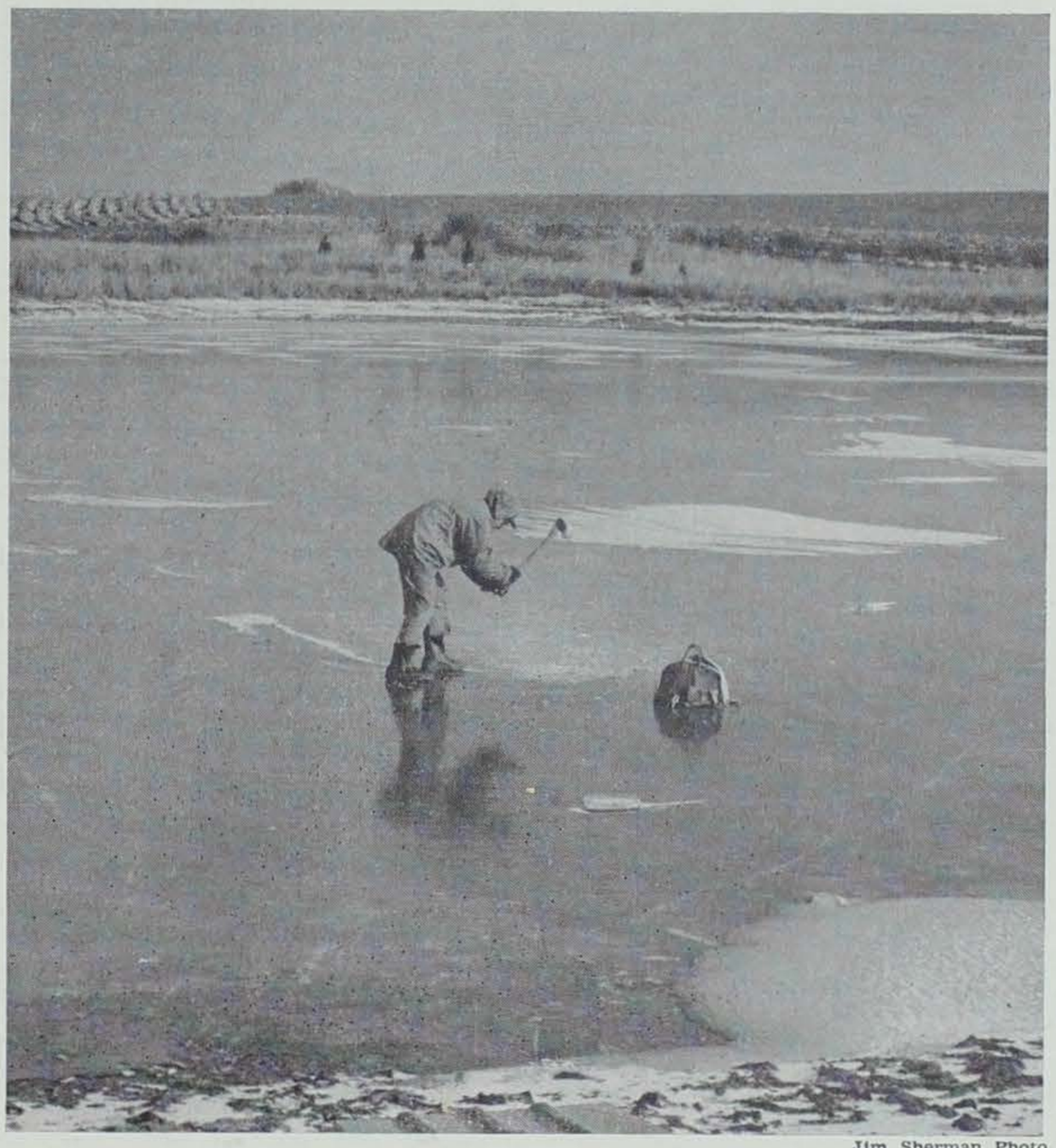

Jim Sherman Photo.

Ice-fishing in small ponds is a possibility being overlooked by many Iowans. Panfish can be caught under ice once they're located, and a pond this size could be easily "prospected" for schools of fish.

Multiflora Rose—The New Enclosure

By Thomas J. Talbert
Professor Emeritus of Horticulture
University of Missouri

(Editor's Note: This is a chapter excerpt from Professor Talbert's book, *Growing Fruit and Vegetable Crops*, and is reprinted here by permission of the publishers, Lea and Febriger of Philadelphia.)

The multiflora rose now seems to offer a solution for the high cost of farm fencing. This living hedge fence may serve effectively as both a barrier and low windbreak. Also, its use does away with the fence maintenance problem.

In general, the plant is considered new to most sections of the country. However, it is the hardy understock upon which many of the garden roses have been grafted or budded for many years. Originally the plant came from Asia. The name "multiflora" means **many-flowered,** referring to the many white flower clusters that resemble the flowers of blackberries.

The thorny shrub is comparatively easy to establish. Yet it is not difficult to eradicate should the need arise. The hedge does not spread from the planting site by roots or suckers. Birds may carry the seeds and in some instances a

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By John Madson
Education Assistant

Iowa ice-fishing has boomed in the past five years, but it's not fairly distributed. The bulk of our winter fishing for perch, walleyes and northern pike is in the big northern waters: the Okobojis, Spirit, Storm and Clear lakes. In these areas it has become a colorful tradition. But unless the southern Iowa fishermen travels a long way, he can not share in it.

Farm ponds and artificial lakes of central and southern Iowa can never offer good winter fishing for walleyes and northerns; they just aren't pike habitat. However, they can offer winter fishing for other species.

Mississippi Methods

Nearly all of our ponds are heavily stocked with sunfish, bluegills and crappies. Bluegills can be caught — and caught easily — through the ice, once you find them. Anglers along the Mississippi often ice fish in the shallow backwaters behind the big channel dams. They usually fish in water no more than two or three feet deep, using small angleworms or grubs for bait. These fishermen may choose a likely-looking bayou and cut a circle of about 20 holes some 30 yards in diameter in an area known to contain bluegills. They move from hole to hole, changing positions as fishing slows down.

Experienced rivermen (driving on marked courses across the treacherous river ice) may use old cars on their fishing grounds. At fishing slacks off they may drive around the circle of holes to drive fish back into the area. They claim this works, and in some Mississippi backwaters large numbers of panfish are taken each winter.

Ponds and Corn Borers

Ice-fishing in farm ponds and artificial lakes is a little-known technique. Few anglers seem to be doing it, and a great source of recreation is being passed up. It's something we'd all like to know more about.

Several Ames fishermen last winter had excellent fishing in a small

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IOWA'S WILDLIFE ISLANDS

In the past five years, scattered thinly through Iowa's sea of corn, there have emerged small islands of wildlife habitat. They aren't big—seldom more than five or six acres—and are generally unknown except to the farmers and wild creatures who own them.

Each of these islands of game cover is a small solution to Iowa's number one wildlife problem. Most of our state, particularly in northern Iowa, is premium land. Almost every available acre is farmed and in whole counties the only wildlife cover is the prairie remnant along railroads. Except for these, wildlife is at the tender mercies of modern power farming and must adjust their lives accordingly.

Using Wastelands

Yet, even on intensively cultivated farms, there may be odd parcels of land—small waste corners, eroding gullies and cutting stream beds. Of little value to the farmer, such parcels are the spice of wildlife. Their values have long been recognized by game technicians and in 1950 an Iowa program was set up to preserve and expand them.

This project was called the Farm-Game Habitat Planting Program, and was financed from state and federal funds as part of the federal aid program. A four-man crew was assigned by the Conservation Commission to help turn farm liabilities into wildlife assets.

These wildlife technicians usually line up prospective farm-game habitat areas by contacting the county soil conservation service. Here they learn the names of the most progressive farmers in the county; men who would be interested in holding both land and wildlife on their farms.

Areas are chosen carefully, for they are the "display cases" of land and wildlife conservation. It is impossible to set up area projects on each of Iowa's 198,000 farms so strategic areas are chosen, located where other farmers can study them. There are seldom more than 10 or 11 habitat areas set up in a single county.

Jim Sherman Photo.

Farm-game habitat areas offer vital game cover in Iowa's bleak winter countryside. These young pines and other plantings beautify a once-raw gulley and shelter rabbits, quail and pheasants.

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Ideal areas are ones that take no land out of use, that are located near the center of a section, and that are near water or cultivated fields. Once the area is chosen and the agreement is made with the farmer it is planted with dogwood, evergreens, snowberry, wild grape, wild plum and other wildlife food and cover plantings. All plants, fencing and labor are furnished free of charge by the Conservation Commission. In turn, the farmer agrees to lease the area to the state for ten years, keep fire and livestock out, and permit hunting. The planting crew may even help maintain fencing and furnishes plant replacements as they are needed.

No Stocking Needed

The areas begin paying off the first winter if there has been a good growing season, and game animals and birds set up housekeeping. Such areas need not be stocked with wildlife; if there is cover and food, wildlife will stock itself. Some farmers and sportsmen, considering stocking as the panacea for all fish and game ills, stock game in areas completely naked of proper habitat, and then shout loud and long when the game does not flourish.

A farmer in central Iowa, hoping to bolster a waning pheasant population on his farm, recently raised and released 250 pheasants. Within a month after their release there wasn't a pheasant on the place. The owner realized, too late, that there was no reason for them to remain. There was no cover.

On the other hand, while working on this story, we stopped by a six-acre farm-game habitat planting in northwest Iowa. It was located in a section with practically no other game cover. There were a few small trees in the area, and a creek. The cover patch wasn't large, but it was heavy with prime wildlife cover. It only took five minutes to walk through it but in that time we finished 19 pheasants and a dozen rabbits. We don't know how many were not kicked out.

Saves Hens

Now and then this habitat planting is expanded to include an entire farm, when miles of multiflora rose hedge may be planted on fencelines and contours. A northern Iowa farmer who planted his contours to multiflora rose noticed that by the second year he was killing fewer hen pheasants while mowing hay. He found that hens were leaving their nests and seeking cover in the rose field borders, living to lay another day. Before the rose plantings there had been no place to go after leaving the nests, and the birds had remained in the hayfields to die.

Since 1950, 248 farm-game plantings have been established, totaling 657 acres. It hasn't been long enough to see the full effect of these food and cover areas on game populations, but although the trees and shrubs are still young their value to wildlife is already apparent.

One four-man planting crew can't whip Iowa's wildlife problems single-handed. Nor are they trying to. They're just trying to point the way, one that must be followed before we can expect more of our game bird and animal population.
—*J.M.*

IS YOUR PET GUN HOUSEBROKE?

By Bill Clede
National Rifle Association

In the fall of the year a young man's fancy turns to thoughts of hunting in the great outdoors. Out comes the rifles and shotguns to be cleaned, inspected, and fondled in anticipation of the coming season. A few weeks of the year the gun is foremost in your mind. But what about the rest of the year when it is left at home?

A great deal has been done in the field of hunter safety. Eleven States have adopted legislation concerned with the education of new hunters and this is effectively reducing the firearms accident rate. As a part of the NRA Hunter Safety Course the proper care and storage of firearms in the home is discussed.

At least 1,000 persons died in homes of firearms accidents during 1953. This is actually a small percentage with a population death rate of only 0.6. However, any accident involving a firearm naturally draws publicity. It is by nature tragic because it is so easily prevented. Ninety of these deaths occurred to persons four years old or under.

Just as we have rules for safe hunting, so are there rules for guns

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SIGNS OF BAD SPORTSMANSHIP

There's a breed of hunter who leaves a trail of havoc wherever he goes—shattered telephone pole insulators, shotup mail boxes, and riddled hunting and property signs. No one's sure why he does it. Probably just likes to see things bust.

Conservation Commission game men know this shooter well; he's the man who keeps them busy replacing signs on public areas.

In the course of a year, hundreds of dollars are spent posting public shooting grounds and game management areas. This is required because they are public property, and can't be recognized and used by the public unless they're posted. The Game Section of the Conservation Commission spends an annual average of about $360 on signs alone. This does not include labor and mileage costs.

In one 9-month period the Federal Aid Section of the Commission spent another $375 on signs for farm-game habitat areas and game management units, including labor and mileage. One game technician estimates that over 10 per cent of the signs he posts are shot up each year and must be replaced. Heads of game management units estimate that 20 per cent of their signs are destroyed.

Such re-posting dips directly into the hunter's pocket. The twisted metal sign pictured above represents the revenue of one hunting

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Weasels are rough on cats, but skunks are worse. Please forgive the blurred picture. Cat, camera and skunk were all in rapid motion.

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GOBLINS, GOPHERS AND IRISH CATS

By John Madson
Education Assistant

Wild animals are more than just soft, fluffy little critters. During the day they may doze in peaceful woodlots, but at sundown they begin prowling the dark forest mazes of the occult. They become consorts of witches and goblins, with lairs in the dream thickets of magic.

You can sneer. But once—in a dim, forgotten chamber of an old library—we found a yellowed tome called the *Encyclopedia of Superstitions and Occult Sciences of the World.* It gave all the low-down on our little neighbors of field and fen, and we'll never trust a gopher again.

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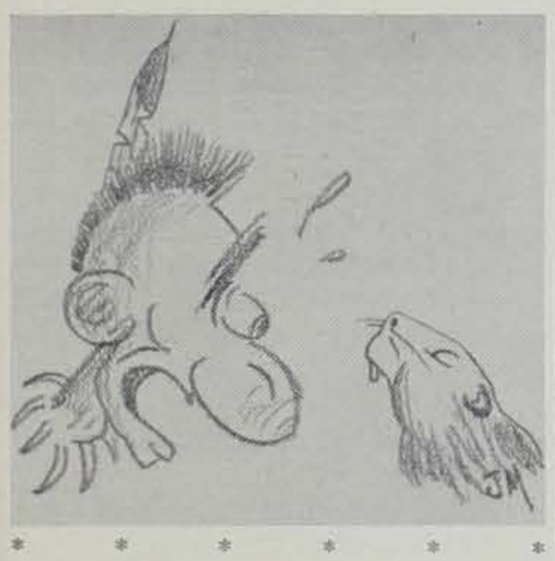

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Now, not *every* gopher swings a magic haymaker, but you can't be too careful. The old Cheyennes knew that some gophers used the tips of certain grasses to shoot magic at Indian hunters, causing sores on the neck and under the chin. The hunter wouldn't know it at the time, for the painful lesions developed some time later. Indians usually walked around gopher hills with hands shielding their faces, and only mysterious, magical persons were immune.

Deer—usually shy and gentle enough—can also be potent. For example, to see a deer running on the surface of water is a bad omen. Also, deer weep every year over the loss of their antlers, and if you come upon a mourning buck you'd better not laugh at him. Join him in his sorrow, or you'll really have something to cry about. On the other hand, if a deer being chased by dogs comes to you for protection, particularly if it comes close enough to touch, it's the best of medicine. Or so the Sioux claimed.

It's also bad medicine to handle wild duck eggs—a sure sign of death. If you see two wild ducks flying overhead in different directions, you've had it. The Abbyssinians consider it very bad luck to kill and eat duck anytime but in winter. (So does the Conservation Commission.)

One of the worst outdoor omens is to see a fox howling and crying along a road. He is a harbinger of death. When a fox shrieks and howls it is a warning of danger and should never be ignored. A case in Maine is recorded of a fox thus wailing near a woodsman cutting down a tree. The man laughed it off and a few minutes later he was caught in a cleft of the falling tree and died a terrible death. Documentary evidence.

Although you may kill a magic animal, take certain precautions. The Chippewas knew that they would meet animals in the next world, and whenever they killed a creature they begged its forgiveness so there would be no grudge. And if you shoot and mortally wound an animal, it's bad luck to let it die in your hand. (Particularly true of bobcats.)

Skunks are bad almost anytime. If you smell a skunk it's usually a sign of bad weather, and if a skunk comes up on the porch of a house containing a sick person, that person is doomed. In Mexico it is a bad omen for a skunk to enter a house but it is fatal only when a female skunk has a litter of skunklets in the corner of a room.

But skunks have their good side. A skunk coming around the house regularly foretells a new courtship, and to smell a skunk on a cold winter day is a sign of a thaw.

Even a weasel can be as good as gold, if you'll pardon a clever play on words. A purse made of weasel skin will always have money in it, but this purse must be found by the owner. If you buy such a purse from anyone, it'll always be empty. Weasels, by the way, can be rough on cats. Any cat killing a weasel will in turn be killed by weasels, and some cats may be killed just out of spite. Naturally, the Irish have an explanation. When the Danes first invaded Ireland centuries ago, many of their cats escaped to the woods. The Danes were later driven out and their cats turned into weasels and began killing Irish cats to avenge their defeated masters. At least that's the Irish version, and they've been blaming us Scandinavians ever since.

The do-it-yourself craze has been extended to animal magic. When guest hunters are leaving a farm, the farmer should throw a bucket of water after every dead animal being removed from his property. This makes the barley grow, or something.

If you have a lazy wife, go catch a beaver. It isn't hard, for when closely pursued the beaver will naturally think the hunter is after its prized castor glands. The beaver will cut off these glands with its teeth and then stand erect to show the hunter that further pursuit is useless. That's when you grab him. You've really outfoxed him, because you're not after his castor glands but his teeth. A necklace of beaver teeth, worn about the neck of a lazy woman, will make her as industrious as the beaver.

If your hunting dog is always running off, his straying can be cured if you wear a piece of cheese in the heel of your boot. To forestall trouble with wolves, carry a wolf's heart in your pocket.

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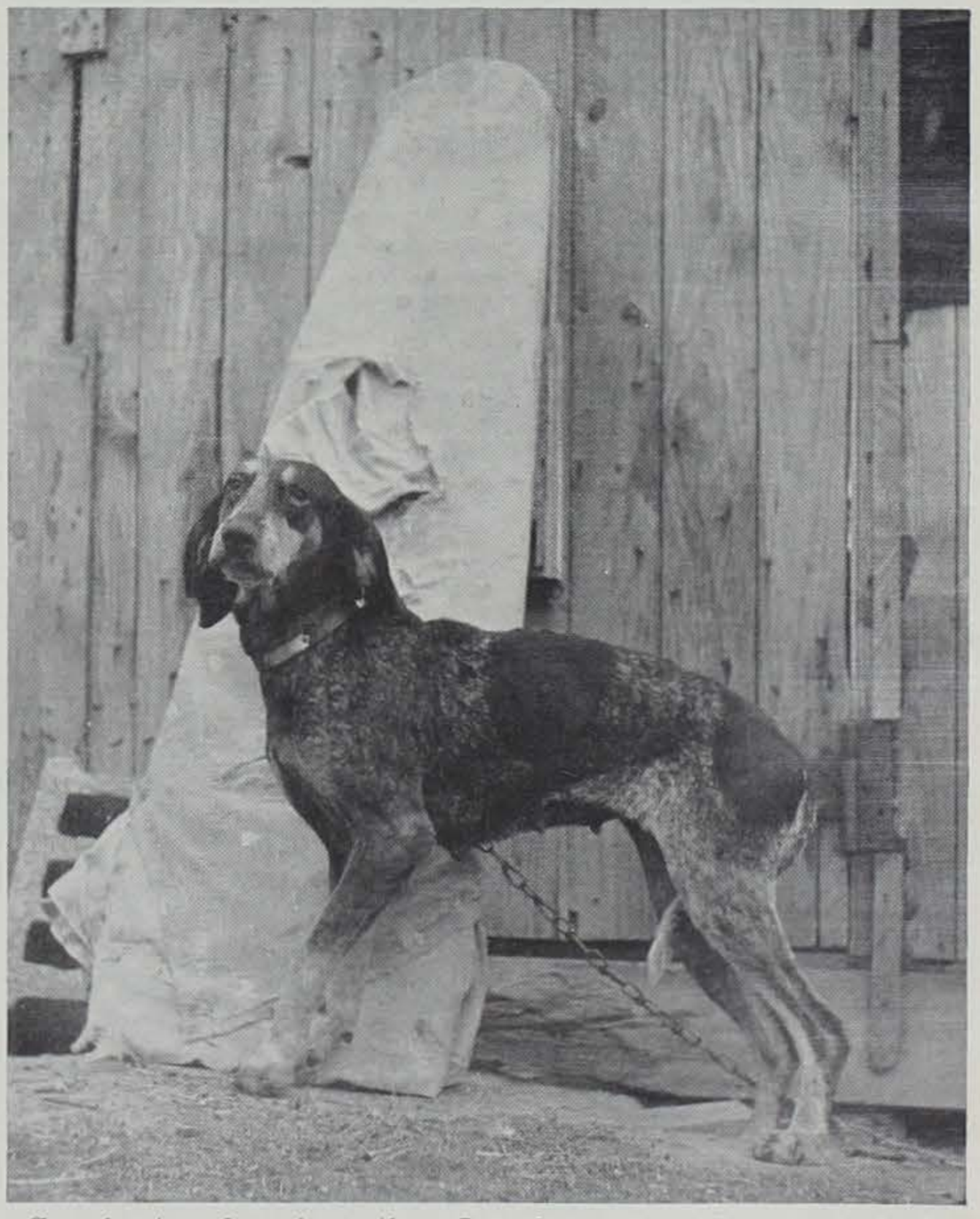
There's wildlife magic for everyone, even wallflowers. Long before Sadie Hawkins Day, mountain gals pinned their hopes on turkey buzzards. As a vulture sailed overhead in motionless, soaring flight, a hill girl would recite "Flop wings, buzzard, flop—I hope I see my lover before 9 o'clock."

If the buzzard didn't flop, the courtship did.

LOST: A LIVING LEGEND



Coon-hunters down in southern Iowa have a new champion and a legend—a little bluetick hound that caught coons to order.

All her owner had to do was show her a wooden pelt-stretcher and the dog would take off on a solo hunt. She always returned with a 'coon of just the right size, whose pelt fit the stretcher exactly. As her master showed her larger and larger pelt stretchers, she caught bigger and better 'coons.

Everything was fine until last month, when the hunter's wife leaned an old ironing board against the tool shed. The hound measured the ironing board carefully, sang two bars of "Columbia, Gem of the Ocean," put her pups up for adoption, filled a quart water canteen for a long hunt, and took off.

She hasn't been seen since.

Jim Sherman Photo.

The birds wised up fast this year, and hunting became tough for boys and dogs. But there were plenty of pheasants and most hunters scored. (Note the casual straw in the mouth. Obviously an old-timer.)

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SEVERAL SEASONS ENDED: TERMED "GOOD"

Several good hunting seasons drew to a close in December with the endings of the pheasant, quail, waterfowl and deer seasons.

Ringnecks

Pheasant hunters went afield with their ears ringing with optimistic reports of one of the biggest fall pheasant populations in a number of years. After the opening day, most hunters agreed. Several Conservation officers referred to a strong increase in out-of-state gunners, and most officers reported large numbers of birds in the primary pheasant range.

Opening day saw some hot shooting, but it cooled down overnight. By the second day the birds had become wary and from then on hunters reported pheasants flushing wildly and running far ahead, even more gun shy than usual. For the rest of the season it was largely a matter of just grinding out pheasants the hard way, sometimes walking all afternoon for two or three shots. It was thought by many that lack of cover, early cold weather and the army of hunters combined to make birds unusually wild. The long zone of pheasant season closed December 5.

Quail

It was an up and down quail season—a letdown for some hunters and great for others. The bird was often where he wasn't expected and many gunners complained of birds taking to the timber and dense wedges along streams. Dogs were generally hampered by dry conditions and found scent hard to pick up. Biologists believed that this year's quail crop was at least as good as in 1954, but hunting conditions were another story. However, many hunters saw huge coveys—some of almost record size—but for the most part the birds were difficult to work and shooting was often tough. Long zone quail season ended December 15.

Waterfowl

Duck season began slow, with great masses of birds reluctant to leave Canada's prairie provinces. A few geese were killed early, but subsequent bluebird weather failed to produce many ducks. Most hunters were caught by surprise by the foul weather of November 2, when ducks began pouring into Iowa. Hunters on the border rivers and in inland Iowa had tremendous shooting for several days before the migrant birds settled down and grew wise.

Good numbers of ducks remained in the state until the closing, working between cornfields and open water refuges. Some good field shooting was had by the experts but the highlight of the season was that early November flight, which some old-timers termed as even greater than the now legendary flight of Armistice Day, 1940. The waterfowl season ended December 16.

Deer

This is being written on November 30, with the gun season for deer still ahead. Bow and arrow hunting for deer ended November 20, and by late November the Commission had received reports from 39 bowhunters who had killed deer. *This is not a final figure on the bow and arrow kill.* A full report on deer season results, both for bow and gun seasons, will be published in a future CONSERVATIONIST.

Rabbit season is now in progress, with good prospects. Hunters are cautioned not to wait too long. Now's the time for rabbit hunting, before Mother Nature and her weather weapons decimate rabbit numbers.

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Frank Starr Photo.

Phil Vanderpool of Storm Lake killed one of the first deer of the 1955 bow season. The buck dressed out at 140 pounds; was killed at 40 yards with a single arrow.

Jim Sherman Photo.

Light, modern canoes are a far cry from the heavy freight canoes of the *couriers du bois*. But small canoes can be unstable, and Conservation Director Bruce Stiles lashes his duffel to prevent loss.

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CANOES

By David H. Thompson and Roberts Mann

On May 19, 1859, young Robert Kennicott, the famous Cook County naturalist, left Fort William, on the north shore of Lake Superior, with a "brigade" of three canoes of the Hudson's Bay Company to explore Arctic North America. The following is condensed from his fascinating journal.

"The three canoes were each about 36 feet long, 4 in width, and 2½ deep in the middle. The outer shell is formed entirely of birch bark, placed with the inside outward. The seams are stitched with split larch (tamarack) roots, and gummed with resin from the spruce. The outer shell is strengthened by a lining of thin strips of larch laid longitudinally, and light ribs of the same within these. The gunwales are formed by light bars of larch, about two inches square, into which the ribs enter and to which the edges of the bark are lashed by larch roots."

"One of these canoes weighs, after some use, about 300 pounds

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Jim Sherman Photo.

The long canes of multiflora rose interlock, weaving a dense, thorny wall that will control livestock and harsh prairie winds.

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Multiflora Rose . . .

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few plants have appeared in the vicinity of the rose fences. The oldest hedge fences, however, supply no evidence that the rose may become a pest. Planting of fruits and vegetables may be made right up to the hedge as it does not offer objectionable competition. The roots tend to grow downward instead of spreading laterally. In fact, rows of crops adjacent to the hedge may show greater vigor and yields, due perhaps to the lessening of evaporation and stunting effects of fairly strong winds. Studies have shown that the rose fences do not harbor as many field mice, chinch bugs and other insects injurious to crops, as do weed and grass fence rows and ravines. This is possibly due to the excellent cover given wildlife insect predators such as quail, other birds, skunks, foxes and the like.

High, Wide and Handsome

The multiflora rose hedge grows to a height of about seven to nine feet and to a spread of seven or eight feet in about five to six years. In later years these dimensions in growth do not appear to change materially. New canes grow up and the old ones die. The mass of canes with thorns, therefore, tends to increase in density and become more inpenetrable each year without growth extension in spread or height. The multiflora does not require clipping, pruning, training or other support maintenance costs. The length of life is long, as specimen plantings of more than 75 years are still in excellent condition and capable of serving as effective barriers.

This Asiatic rose has been employed as a low windbreak with good results. It may prevent soil erosion, soil blowing, snow drifting and wind damage. The plant is used alongside or across gullies, irregular soil surfaces and for fencing terraces and water outlets. The washing away and erosion of ditch and pond banks may be prevented through its proper use. The fibrous root system of the plant tends to make it valuable for erosion control and especially so when used as a contour fence. Close spacing of the plants in setting usually increases the effectiveness for such purposes and as a barrier against livestock for the first four to six years after planting.

Other Uses

As a cover for quail and other forms of wildlife it is of great value. This is especially true in prairie regions, on bottom lands, and where there are little or no permanent winter harbors. It may also serve to an advantage as an enclosure for wildlife areas. The rose is colorful in flower, foliage and fruit, and its shape and form renders it valuable for use in beautifying both the home grounds and the farmstead. The bountiful seed crops of a reddish orange color supply a dependable source of food for many different kinds of birds during the winter season.

The time required for the rose to make a satisfactory barrier will vary with the soil fertility, planting care, culture and site. On the experimental grounds of the University of Missouri under conditions of fairly good soil and culture, a barrier effective against horses and cattle was developed after two years of good growth. Farm plantings in other sections have also formed effective barriers at the beginning of the third year. On tight, poor or droughty soils and where little care is given the plantings, a longer period may be required to produce hedge fences as satisfactory barriers against livestock and especially for hogs, sheep and goats. Under good growing conditions, however, year-old seedlings spaced six inches apart and with a satisfactory stand of plants should produce effective fences against all types of livestock in three to four years.

Unlike Osage Orange

The rose is a shrub and not a tree; hence it will occupy much less ground than the osage orange. It has the signal advantage of requiring no trimming to keep it in bounds. Its initial vigor, particularly on the poorer soils, will greatly surpass that of the osage orange. For barrier effect, especially in separating cultivated fields from pastures, orchards, or in fencing out terrace outlets and the like, the plants in becoming established should be given good culture. This may consist of cultivation or mulching; and fertilization may be necessary for the first two or three years in order to grow a uniformly vigorous and dense barrier.

Experimental and demonstration plantings show that the dense shade produced by the hedge tends to prevent the growth and spread of grasses and weeds that are extended in or above the soil through the development of stolons or runners. Bermuda grass is a good example. Stopping or checking Bermuda and similar plants is important because they may spread rapidly from pastures, terrace outlets, uncultivated areas, and roadsides to cultivated fields.

Livestock may browse upon the tips of the tender rose branches and trample them down while they are young. This is likely when the plants are from one to two years old. Well established barriers have not been damaged materially by the feeding of livestock on leaves and branches, or by trampling and attempts to push through the hedge. The plants are also resistant to the attacks of fungus diseases and foliage-eating insects. Thus far, therefore, spraying for pest control has not been needed.

An Effective, Harmless Barrier

Livestock of the various kinds are often injured seriously through contact with wire fences particularly. Inasmuch as the living fence establishes a dense barrier, it excludes the view to a height of about eight or ten feet when in full foliage. Even in winter or during the dormant season the screen is almost perfect. There is less tendency, therefore, for livestock to attempt to penetrate the barrier. Also, there is no likelihood of serious injury through contact with the thorny plant.

The height, spread and thorny mass is about as difficult to scale or penetrate by man or beast as the most substantial structures used around various kinds of institutions including athletic grounds. The great number of uses to which the multiflora rose fence may be put makes it almost a so-called "natural" for use as an enclosure for tree, small fruit and vegetable plantations.

Canoe . . .

(Continued from page 188)

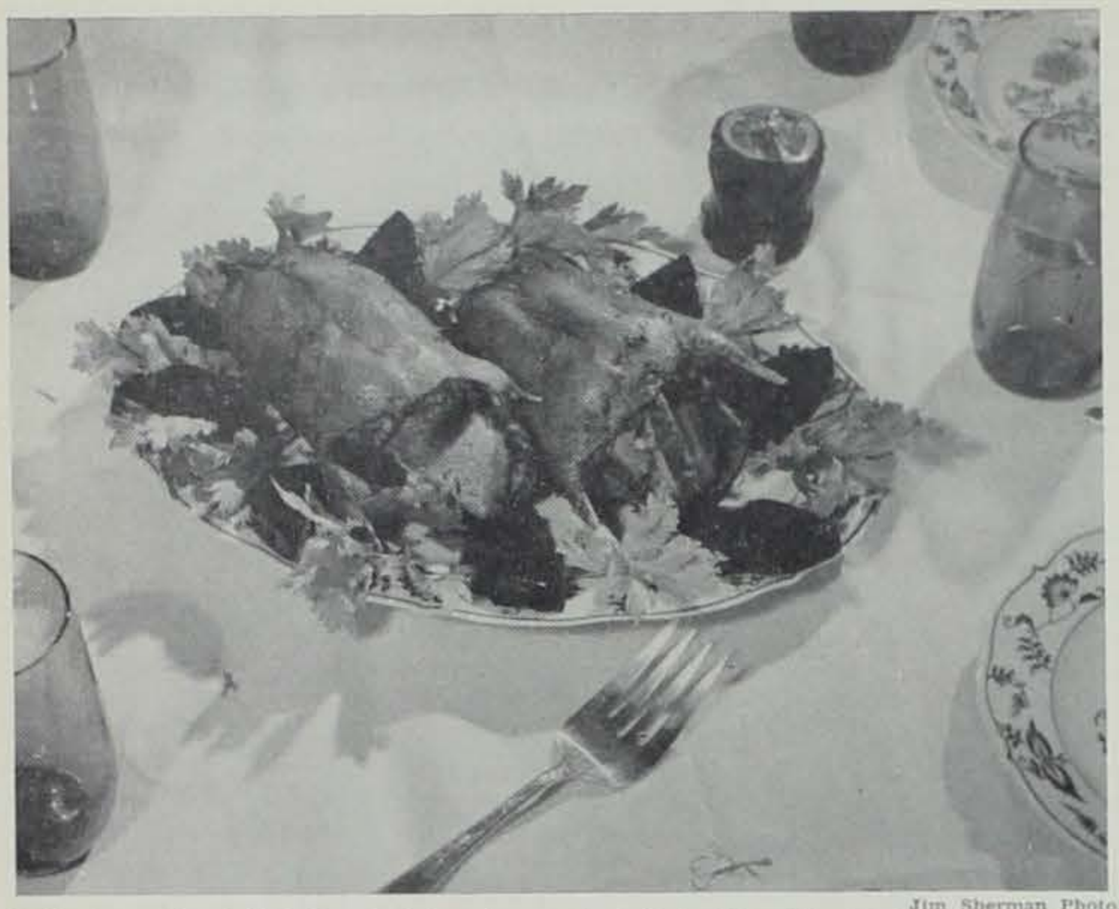
and it will carry nearly 3,000 pounds besides the crew. A block is placed in the bottom behind one of the thwarts to receive the foot of a mast. This is not usually carried but whenever there is a favorable wind, a suitable pole, with a fork at the top, is cut and up this is drawn a pole used as a yard for the square sail which is trimmed by means of lines at the corners."

"The larger canoes, described above, are called *north canoes*. Another size, about 20 feet in length, are known as *half* canoes; while the small ones, ordinarily used by the Indians and only ten or fifteen feet long, are called *light canoes*. A still larger size than the north canoes were formerly used on the voyages up the St. Lawrence and across the lakes to Fort William. These were designated as "Montreal" or *lake canoes*, capable of carrying 4,000 pounds of freight and weathering hard storms. But for inland navigation, where portages are so frequent, the lighter "north" canoes are found preferable."

"The proper crew of such a canoe is eight men: a bowsman, steersman, and six middlemen. The bowsman, who is the guide, sits alone; the six middlemen occupy three seats placed about five feet apart; and the steersman stands in the stern, never sitting down while the canoe is in motion. The latter uses a paddle with a much longer handle and broader blade than the rest; he paddles as well as the others, rarely using his paddle as a rudder, but only makes a little over half as many strokes as the others. As the steersman's post is much the hardest, all of the *good* middlemen take the post by turns. In good water the guide uses an ordinary paddle but on rapids, or in turning sharp corners, he takes one larger than that of the steersman. All keep perfect time, and, when the three crews came abreast, as they sometimes did, all singing and keeping stroke together, the effect was very exhilarating."

"In ascending some parts of the stream, where the current was too strong for paddling, the canoe was propelled by poles. On stronger rapids the men were often forced to pull the canoe with lines, walking in the ice-cold water or along the shore where its nature permitted, to avoid a laborious portage."

"Each day we started about 3 a.m., stopped at about 8 a.m. for breakfast, and camped at about 8 p.m., or later when the arctic days were longer. They paddle with great rapidity, making about 40 strokes per minute. When it is considered that this is kept up, exclusive for several "smokes" of about 15 minutes each, and of the stops for breakfast and dinner, from twelve to fifteen hours per day, some idea may be formed of the extreme powers of these French-Canadian and Iroquois voyageurs."



Jim Sherman Photo.

Mallards on the table! Roasted to a turn and stuffed with wild rice, this is one of the finest items on Mother Nature's menu. Many hunters scoff at eaters who prefer domestic fowl.

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Wild Game . . .

(Continued from page 185)

People eating game for the first time usually compare it with beef, pork and other domestic meats, but it should be remembered that game has a distinctive flavor which, for the most part, is not comparable with the meat of any other animals. The flesh of game birds, when young, is generally tender and contains less fat than poultry, is of a fine, though strong flavor, and is easy to digest. Game meat is usually of a dark color (ruffed grouse and quail being exceptions) and is usually cooked rare.

Age affects the flavor and texture of the meat from wild animals and birds. It is impossible to state the age at which an animal will be best for meat, but everyone knows that meat from old animals is tougher than from young ones. The flesh of very young animals frequently lacks flavor and is watery. An old animal, if fat and healthy, is better than a young one in poor condition.

Venison has the same chemical composition as beef but is not nearly so fat as meat from well-fed cattle. A lean venison roast before cooking contains, on the average, 75 per cent water, 20 per cent protein and 2 per cent fat. A lean beef rump may contain 65 per cent to 70 per cent water, 20 per cent to 23 per cent protein and 5 per cent to 14 per cent fat. Venison, like beef and other common meats, is thoroughly digestible whatever the method of cooking.

On the average, game birds furnish a little more protein than the so-called red meats, but the two classes—red and white meats—are equally nourishing. It is probable that the method of cooking, as well as differences in the composition or texture, has an effect on the ease with which both white and red meat is digested.

Game nowadays is hunted primarily for sport, with the emphasis on recreation rather than on a need for food; therefore, little time has been devoted to the preparation and cooking of wild meat.

To preserve game meat, the animal must be bled, dressed and cooled properly. As soon as possible after the animal is killed it should be field-dressed and the viscera, lungs, heart and liver removed. Bacteria in the abdominal cavity can soon cause spoilage and the contents of the abdomen should be emptied quickly. This is particularly true of deer and other big game animals that may be killed some distance from home.

Small game animals are much easier to eviscerate and skin while they are still warm than after the carcass becomes cold. Scent and other glands found in some small game should be removed at once; if they are left in the meat may become tainted. Those glands are under the forelegs and along the spine in the small of the back near the rump. They are generally pear-shaped waxy or reddish kernels. The glands should not be cut or brought in contact with the meat.

Upland game birds and waterfowl should be drawn as soon as possible—that is, the internal organs should be removed. Viscera decomposes more rapidly than other parts of the carcass, and if left in are likely to affect the rest of the bird.

All game must be hung in a cool place for a time in order that it may become more tender and palatable. As the meat begins to age its flavor improves; this process enhances the culinary value. To season venison, for example, the entire carcass should be hung up for 10 days at least; two weeks is better. Generally speaking, the length of time depends largely on individual taste. Whatever the opinion or prejudice on seasoning game, one thing is certain—the meat of freshly-killed game is totally different from that of seasoned game. When fresh, meat lacks taste; when it is reasonably seasoned it is tender and full of flavor. It's all a matter of taste, so store your game to give the taste you like the best.

No matter how much hunting and fishing the outdoorsman does, he generally keeps in the back of his mind a picture of the campfire, steaming coffee and broiled venison or fried fish. Nothing stimulates the lagging appetite so much as a day in the woods and along streams followed by a sizzling meal of venison, wild fowl or fish with potatoes and coffee.

When the vagrant cow bird tries to take advantage of the little yellow warbler by laying an egg in its nest, the warbler generally refuses to co-operate. It simply roofs over the whole nest, eggs and all, builds a second nest on top of the first one and starts all over again.

Land turtles, or the Terrapene, drown easily if thrown into the water.—*H.H.*

Pet Gun . . .

(Continued from page 186)

at home. *Treat every gun as if it were loaded.* Since "unloaded" guns have caused injury, consider them all loaded and treat them with the respect due a loaded firearm.

When taking a gun home you want to protect it as well as carry it safely, so *carry it in a case.* A good gun is worth the few extra dollars to buy a good gun case. It will keep inquiring hands away and prevent the fine stock from being scratched. Naturally, carry it unloaded and uncocked. If possible, take the bolt out and carry it separately.

We take pride in the ownership of a fine hunting rifle or shotgun. It should be displayed to best advantage. An attractive gun rack will lend to the rifle's appearance and, when equipped with a lock and key, it will keep it safe.

Before storing your gun, clean it thoroughly. Use a good solvent in the bore until the patch comes out clean, then dry thoroughly and put in a light film of oil. Too much oil can be as dangerous as an obstruction in the bore. Excessive oil or grease in the chamber or bore can create pressures greater than the safe maximum. Clean all metal parts and wipe on a light film of oil. Stock waxes and preservatives will keep the wood in good condition.

When cleaning your gun, be by yourself. The only time you need ammunition is in the hunting field or on the range so leave it locked away separately from the firearms. Check for mechanical defects and always make sure the bore is clear before using the gun. Now that the gun is clean, lock it in the rack.

Friends will probably want to see your guns when they come to call. Naturally you want to show your pride and joy. *Open the action.* The first thing to do is to open the action and make sure there are no cartridges in the chamber or magazine. An open action is the most dependable safety because the firing pin cannot reach the cartridge. All safeties are mechanical and thus subject to malfunction. Use them supplementary to good gun handling.

Even with an open action—or if it must be closed to get the right "feel"—*point the muzzle in a safe direction.* An expert is easily recognized by the way he handles a firearm. He never allows it to point at anything he does not intend to shoot.

You can also recognize the person ignorant of the safety rules by the carelessness and disregard with which he handles a gun. Always insist that everyone near you obey these common sense rules of safe gun handling.

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N.R.A. Photo

While the hunter knows his guns, his family may not. A few minutes of family instruction can prevent a tragedy. The best safeguard is to keep your pet gun housebroke

Icefishing . . .

(Continued from page 185)

Story County pond, often taking big bluegills as fast as they could be hauled out. Corn borers were used exclusively, and according to Ed Kozicky and George Clark of Ames the best fishing was in 14 feet of water—the deepest part of the pond.

Kozicky told us that in recent years Iowa State College entomologists have received numerous requests for corn borers from Michigan anglers, where winter bluegill fishing is important winter sport. Apparently corn borer grubs rank high as a bluegill bait.

These larvae may be obtained in winter from cornstalks that have not been cut up by choppers. Some anglers gather bundles of the cornstalks and take them home to their basements, where they can cut them up in comfort. The corn stalks are split with a knife, and the corn borer larvae may be found lying dormant in the pith of the stalk. The larvae may be held by placing them in a jar filled with corn frass and pith and storing in a refrigerator. The larvae will remain dormant, and be used as needed.

Crappies and Tackle

Lloyd Huff, Conservation Officer for Polk County, also reports that anglers last winter had some good crappie fishing in some gravel pits around Des Moines. Minnows were used; the smaller the better. However, crappies do not feed heavily in winter and must be sought out by the fishermen. Crappies digest hardly any food in cold water, and a minnow may pass through a crappie's digestive tract almost unchanged.

As in ice-fishing anywhere, light tackle must be used for panfish. Successful winter bluegill fishermen use small hooks (about size 8 or 10) and use a 4-pound leader for a line. A single light split shot serves as a sinker and a small bobber must be used since panfish bite lightly in winter water. Most fishermen test the lake's depth with a snap-on sinker and then set their little bobbers so that they fish about six inches above the bottom. Fish for bluegills through small holes, no more than 10 inches in diameter. Many veteran ice fishermen maintain that small holes are best for ice-fishing.

The Big Problem

The big drawback in ice-fishing farm ponds and artificial lakes seems to be in finding the fish. Bluegills and sunfish evidently move very little in cold water. We have no suggestions on how to find them. It does seem, however, that a farm pond or small lake could be successfully "prospected" by an angler spudding a number of holes in different locations and then trying his luck in each until he finds where the fish are schooled. Several anglers last winter fished Lake Ahquabi around sunken brush piles. It was a good idea, but it failed to produce. Perhaps fishing in the deepest part of the lake or pond is the answer, as it was in the Story County pond mentioned earlier.

If any readers have methods or suggestions on winter fishing in farm ponds and artificial lakes, the CONSERVATIONIST would greatly appreciate hearing about them. Icefishing in such waters could furnish important winter recreation if more was known about it, and southern Iowa anglers might even join their northern brethren in setting a tradition.

WHEN DOES HOTFOOT "HOLE UP"?

In a recent biology seminar, Iowa Game Biologist Glen Sanderson, now with the Illinois Natural History Survey, mentioned specific temperatures at which cottontail rabbits "hole up" for shelter.

When questioned about conditions that send Hotfoot underground, Glen wrote "A general statement does not tell the whole story; however, here are three references to rabbits and their 'holing up' temperatures. The last one listed is the one I referred to at our Des Moines seminar."

"In *Mammals of North America*, Victor Cahalane says 'All together, winter is an uncomfortable season for the cottontail. The female is especially likely to stay huddled in her burrow or form during storms and does not seek any food until they are over. To some extent this is also true of the male. As a result, Michigan cottontails have been found to weigh one to four ounces less in late winter than in the early part of that season. Females lose more than twice as much weight as males, presumably because they are more easily scared into shelter by bad weather'".

"J. P. Linduska, in the *Journal of Wildlife Management*, reported: 'Of the various factors which might influence den use by rabbits, air temperature in itself appeared to be highly important. Although these studies showed that rabbits made some use of dens at temperatures above freezing, the most productive test hunting with ferrets was done on the coldest days.

'Under a range of temperatures of 32°F. to 12°F., a total of 64 ground dens was explored with a ferret and 14 per cent were found to be occupied. With temperatures from 12°F. to —8°F. burrow occupancy by rabbits was three times as great, since 49 of 117 burrows (42 per cent) contained rabbits. Considering all attempts to start rabbits from the several types of cover worked (dens, brush piles, building foundations, etc.), days with minimum readings of 12°F. to —8°F. proved nearly twice as successful as did days falling in the 32°F. to 12°F. range. Under the first conditions mentioned, 139 situations were "ferreted" and 95 rabbits were started, whereas only 43 individuals were found in 112 attempts at temperatures of 32°F. to 12°F.' ".

"In *Ecology*, Linduska also discussed temperature effects on rabbits and difference in denning activities of the two sexes. He showed that rabbits taken during the 'pheasant season' (October 15 to November 15) were about half males and half females, while rabbits taken during the 'rabbit season' (November 6 to December 31) were largely male rabbits."

The material in Sanderson's letter seems to indicate that in cold climates, female cottontails are more sensitive to cold than the males. It also indicates that it might be wise to hunt rabbits "by the thermometer", and that during zero or sub-zero temperatures most rabbits may be securely holed-up and hard to flush.

Jim Sherman Photo.

Now's the time for a little rabbit hunting, but scientists have found that if it's below zero the bunnies will likely be holed up.

Jim Sherman Photo.

Hotfoot is a hardy little cuss, with soft, warm fur. His habit of holing up in bitter weather isn't a stamp of weakness, but a tribute to good sense.

Bad Sportsmanship . . .

(Continued from page 186)

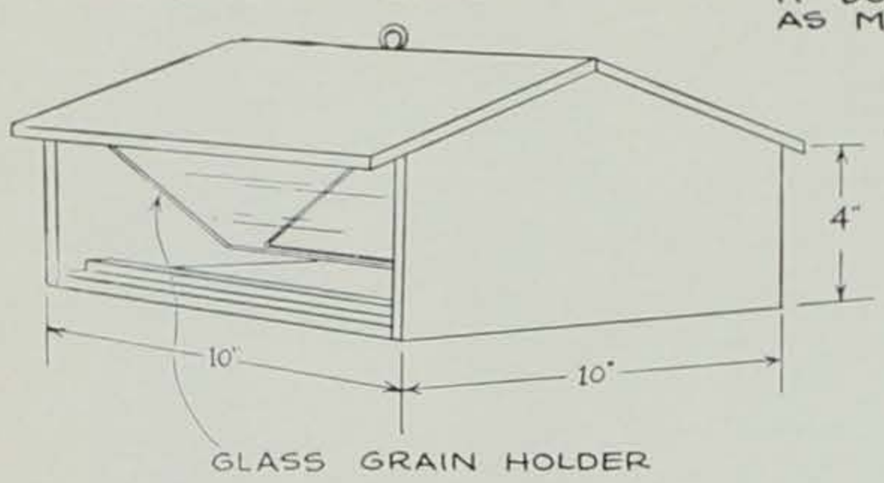
license that can never be spent directly on fish and game conservation—it must buy a new sign.

The ironic angle is that the majority of signs destroyed are ones which say, in effect: "Come on in. This is a public hunting grounds."

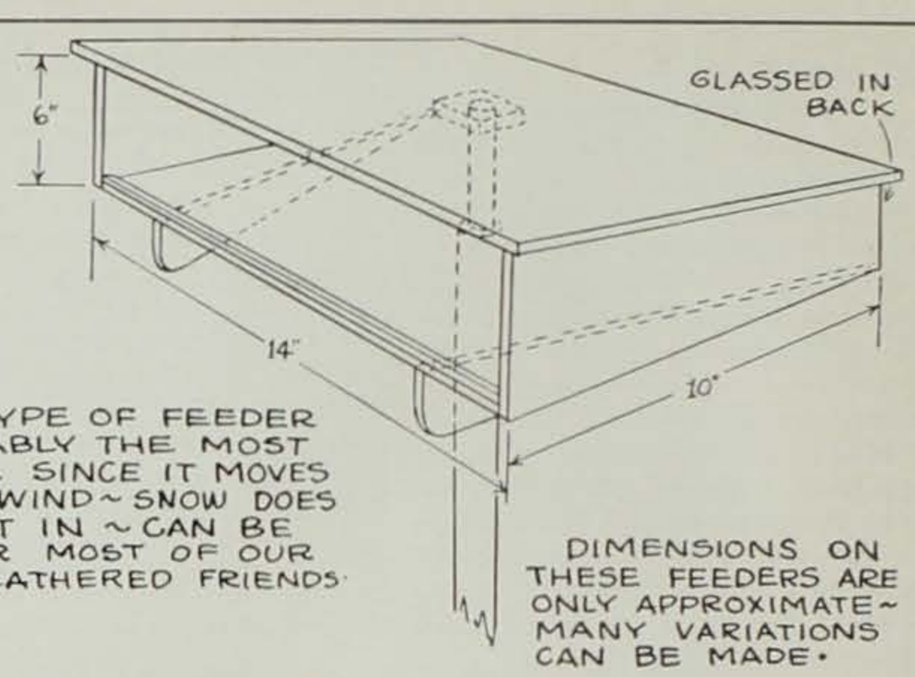
—*J.M.*

Jim Sherman Photo.

This sign was an invitation to hunt on public property, but a shotgun blast ruined it. Replacing it will cost about $1.50, and the revenue of one hunting license will be lost to Iowa sportsmen.



THIS IS A LARGE CAPACITY FEEDER AND IS VERY HANDY SINCE IT DOESN'T REQUIRE AS MUCH ATTENTION.

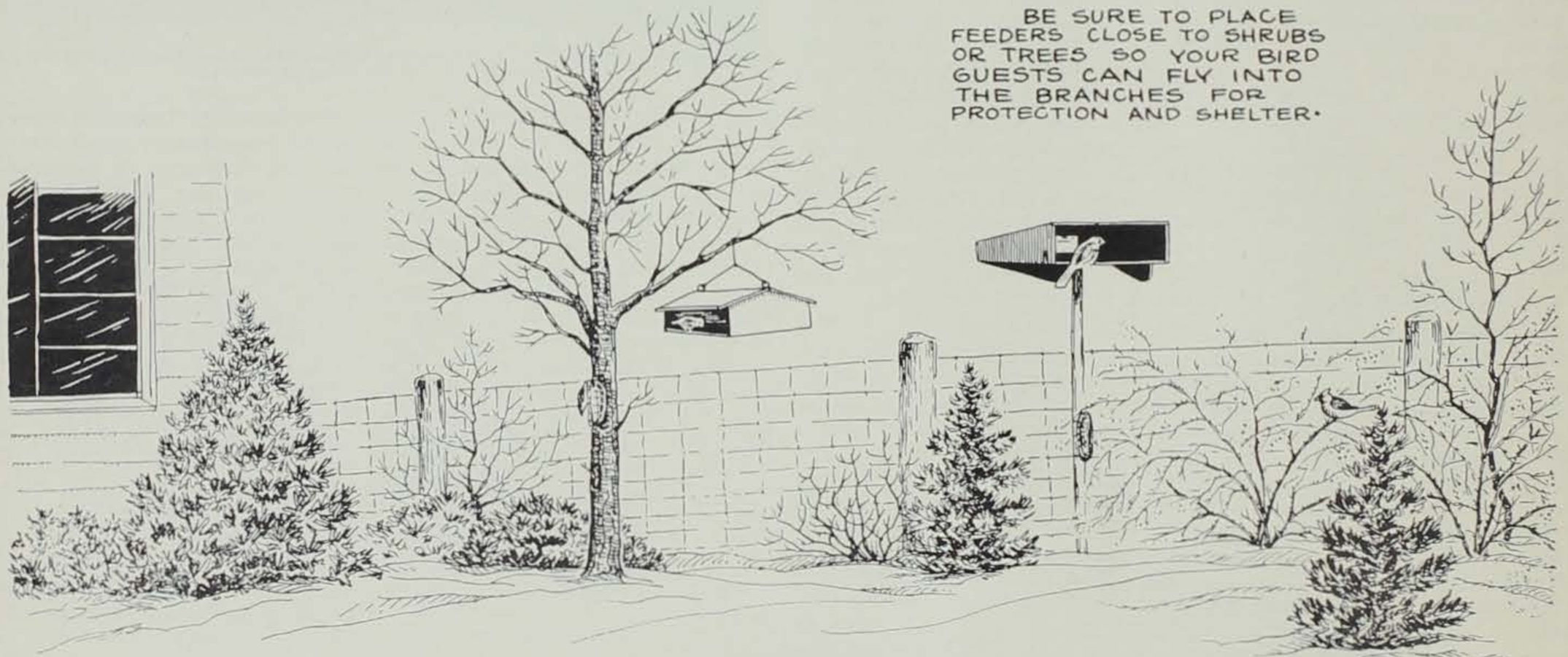


THIS TYPE OF FEEDER IS PROBABLY THE MOST PRACTICAL SINCE IT MOVES WITH THE WIND ~ SNOW DOES NOT DRIFT IN ~ CAN BE USED FOR MOST OF OUR SMALL FEATHERED FRIENDS.

DIMENSIONS ON THESE FEEDERS ARE ONLY APPROXIMATE ~ MANY VARIATIONS CAN BE MADE.

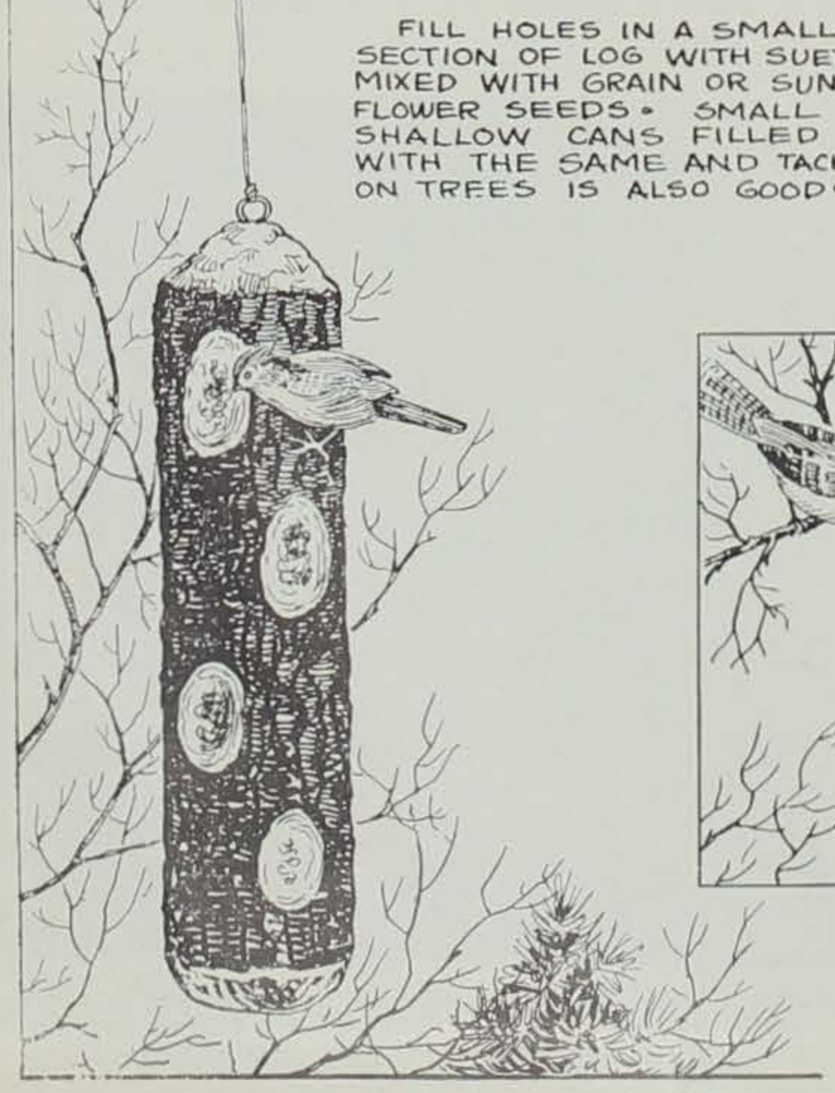
OPERATION TID-BITS

BE SURE TO PLACE FEEDERS CLOSE TO SHRUBS OR TREES SO YOUR BIRD GUESTS CAN FLY INTO THE BRANCHES FOR PROTECTION AND SHELTER.



FILL HOLES IN A SMALL SECTION OF LOG WITH SUET MIXED WITH GRAIN OR SUNFLOWER SEEDS. SMALL SHALLOW CANS FILLED WITH THE SAME AND TACKED ON TREES IS ALSO GOOD.

A PIECE OF SUET ~ AN EAR OF CORN WILL ATTRACT THE BLUE JAY AND WOODPECKERS.



FOR THE SEED EATERS A MIXTURE OF SUNFLOWER SEEDS ~ CRACKED CORN AND PEANUT HEARTS IS VERY GOOD.

Ohio Conservation Bulletin.