

IOWA CONSERVATIONIST

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ALLEE SAMEE CHINESE PHEASANTS

BLACKHAWK LAKE STATE PARK

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Blackhawk Lake State Park and Reserve are located on the shores of the lake of that name at Lake View in southeastern Sac County. The lake, as is the case with most other Iowa lakes, has several interesting geological features. For one thing, it is on the border of the drift sheet laid down by the last glacier to invade Iowa. It is among the hills of the terminal or end moraine of the Wisconsin glacier. The moraine extends in an approximate north-south line through the center of the county.

The country to the west is in an area of older drift, that of the Kansan glacier. It is a maze of hills, valleys, and ridges, the result of erosion by running water working on this older drift sheet. East of Blackhawk Lake, in the area of the younger drift, the land is more gently rolling and poorly drained. Not enough time has elapsed for it to be affected by stream erosion.

Along with the location of the park among the hills of the terminal moraine go the prominent gravel deposits of the vicinity. These were laid down by the water from the melting ice. After the glacier reached the limit of its westward advance it remained in that position for many years. The ice was continually crowding forward, and at the same time was melting. Thus the drift was deposited in a helter-skelter fashion, and became the terminal moraine. The meltwater carried great quantities of debris in the form of clay, silt, sand, and boulders. The clay and silt being finer were carried on downstream, but the sand and gravel accumulated close to the margin of the ice.

The sand and gravel deposits have been worked for many years and are an important natural resource of the area. After the clay

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At noon on November 11, some 200,000 Iowa hunters will find that the ringnecked pheasant has retained some of the mystery of the Orient. One of his best feats of magic is disappearing completely from a clump of grass.

THOSE NORTHERN DUCKS AGAIN

"I'm going to wait for the northern flights to come through before I go after ducks." Familiar words to waterfowl hunters? But the sportsman that depends on the northern flights is likely to get left at the end of the season without any waterfowling.

In the first place what is a northern duck? For a person living on the Gulf of Mexico, probably most ducks are northern ducks. The North Dakotan presumably thinks of birds reared in Canada. But ducks in the north

central portion of the state are still northern ducks to someone living in the southern part of the state. Doubtless if one get very far north in Canada, there is no such animal. So the term northern duck is quite an indefinite one and mostly a matter of location.

In the second place unless a hunter has bagged a banded bird, he is unable to tell whether his bird was raised locally, a duck that had moved north or one migrating south. Biologists believe that after

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By John Madson
Education Assistant

John Chinaman is now a native Iowan. Yet on November 11, some 200,000 Iowa hunters will find that he has retained some of the mysteries of the Orient.

Hardly a phase of the pheasant's life in these United States has been left unexplored. So let's explore his ancestry, and trace him back to China.

In his old home, the ringneck is widely distributed through eastern China. He is found in three general cover types: thick reed beds along rivers, low, rolling hills, and flat paddy fields.

The reed beds are very dense and extensive, similar to patches of greater ragweed in this state. Shooting in these "reed forests" is almost impossible. However, by the end of January the reeds are being harvested for fuel and thatch, and the "jungles" have been reduced to workable dimensions. Harvesting has also concentrated the birds. Beaters and drivers are used to flush the pheasants, which may get up in flocks of 40 and 50 birds, even as in some choice fields in northern Iowa.

According to William Beebe, author of "Pheasants, Their Lives and Homes," the best shooting is found in the hills. These rolling hills, two to three hundred feet high, are either close to the rivers or back beyond the paddy fields. Their slopes are thoroughly terraced, and most of the shooting is high, crossing shots.

Although the paddy flats are picked cleaner than any Iowa cornfield, the dividing ridges are grass-covered. This is all the cover the ringneck needs, and shooting with a dog is often good.

Beebe's accounts were made some years ago, before the Communist China of today. It is difficult to say what the modern picture is. But in China of the 1920's, deforestation and the increase of rice paddies encouraged the pheasant. Evidently, native Chinese did not seriously decrease pheasant populations, being occupied with

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CHRISTMAS EVERY MORNING

By John Madson
Education Assistant

Books and movies give us a trapper dressed in fur parka, snowshoes, and whiskers. With his male-mute team, he wrests a fortune from the wilderness, fighting Crees, wolves, and assorted wildlife in the process. This all takes place somewhere north of here, where fur swarms in primitive abundance and an all-wool man can make a mint.

There are some such men, it is true, but their operations are rather penny-ante. In the first place, the wild north does not swarm with fur. Iowa has had years when the annual fur income was greater than Alaska's. Harvesting the bulk of North America's furs is the typical farm boy trapper in muddy hip boots, working the rivers and sloughs while most of us are still in bed.

All over Iowa this fall and winter, teen-aged boys will be sent home from school after an early morning argument with a skunk. Everyone laughs and forgets it; just a kid playing around on the river. But these boys are the back-

bone of a hundred million dollar industry. Constituting 75 per cent of all trappers, they bring in nearly a million dollars in Iowa furs each year. But do they trap because of money alone? We doubt it.

For one thing, it's a matter of pride. Trapping, no matter where, will put gristle in a person. Even here in the heart of the corn belt, a river can be a primitive wilderness in a winter dawn. It is usually cold, hard work; a contest with animal instinct, and success gives a deep feeling of pride.

But more than this is the fact that every morning may be Christmas. The trap in the drift around the bend is a surprise package. It may be empty or it may contain a \$20 mink. There is suspense and anticipation and even if you have trapped for 50 years you will still feel the thrill.

The bulk of our trapping is carried on, not by whiskery professionals, but by men and boys who do it for fun. When you pocket the season's check, there is a feeling that the money is gravy. You are being paid for a hobby. A bitter, uncomfortable hobby, perhaps, but recreation nevertheless.

It is also a way to earn the rifle you have been wanting, or the boots. When you are 15 there is something very appropriate about buying a gun and ammunition with pelts you have trapped. My first fur check went for a pair of shoe pacs, a case of shells, and some genuine leather-faced shooting mittens with a shooting slot in the palm. It was quite a deal. I was the John Jacob Astor of Washington Township, and I let everyone know it.

And last of all, there is no approach to nature like trapping. Things are learned which can never be learned from hunting and fishing. A boy who traps successfully for several seasons can tell his father things about wildlife that the old man never dreamed. It is a trite thing to say, but trapping is good for a boy. It does not, as is sometimes claimed, teach him

cruelty. A good trapper avoids cruelty, and learns something of compassion.

Astor, Pribilov, and Bridger are names of the past. The empires built on fur have disappeared with the men who built them. But the old profession lives on in the boys who are sent home from school smelling of skunk. And if the fur is moving, there is Christmas every morning.

GROUND HOGS FATTEN ON ACORNS

As I have mentioned before, we have a pair of woodchucks, or ground hogs, under the old garage at the rear end of the lot. For years

were all gone he started looking the ground over. Finally he straightened up with something in one paw and proceeded to husk an acorn.

After the husk had been "spit" out he very leisurely started to nibble at that acorn, still holding it in one paw. The reason I say that he was eating an acorn is because the Gier kids were over at our home last Sunday asking if we had any acorns under our trees. I assured them there were bushels of them this year and they were welcome to all they wanted. The kids picked up about a peck of those acorns from the large "jack oaks." Then I asked them what they were going to do with them and was told they wanted them to feed the ground hogs.



"After the husk had been 'spit' out he very leisurely started to nibble at that acorn, still holding it in one paw."

I have known more or less of the habits and haunts of the ground hog. But I just spent the past 20 minutes watching the antics of the beast.

Since learning that we have as our nearest neighbors a pair of woodchucks I have glanced out the rear windows of the shop to see if they were out. This morning one of the animals was just sticking his nose from their hole under the garage. I decided to see just how it acted.

After taking a thorough survey to see if there was no activity in the neighborhood he came out into full view. He sneaked over under the apple tree on the Gier lot, ate a little grass, or weeds, looked around a while to see if there were any apples on the ground, then he sat down on his haunches and surveyed that tree very carefully. Evidently satisfied those wealthies

From a distance and looking through glass at a distance of perhaps 20 feet I would say the animals resembled a nice fat corn fed hog. Even if they had been living on windfall apples, acorns, over-ripe cucumbers and potatoes that I have thrown out to them. Guess I'll have to hunt up a cabbage. They tell me that they are very fond of cabbage—no mayonnaise, thank you.

Now why would an old man stand and watch the antics of a pair of ground hogs for 20 minutes? Or is it because if he was younger, he would have rushed at them with a club or shot at them with a gun? Just got to live and learn if you want to learn things in this life. Observation is a great teacher and now I know how the woodchuck peels and eats his acorns and how cute he looks doing it.—*Waverly Republican.*



Jim Sherman Photo.

Every morning holds the anticipation of Christmas for the youthful trapper, for during the night a twenty-dollar bill in the shape of a mink may have stepped on his trap pan.

THE MEN BEHIND THE LAWS

By John Madson
Education Assistant

Of the men who work on this business of setting waterfowl regulations, none are more important than the Fish and Wildlife Service waterfowl biologists. While state biologists keep a close check on the ducks and geese in their territories, it is up to the federal boys to follow the migrations from north to south and back again. And, while they ride herd on the vast flocks, they make population estimates which are vital in making the laws we shoot by.

One of these men, Robert Smith, was born and grew up in Mason City. He is a flying biologist, following waterfowl migrations in a twin-engined amphibian. It was during a spring flight that he threw light on an age-old riddle; the nesting grounds of the whooping crane. Near Great Slave Lake, in the Canadian Barrens, Smith and his observer spotted a pair of the huge cranes; two birds, of which there are only 30 in existence. That was the first time the great birds had been found so far north, and helped pinpoint their unknown nesting grounds. This strengthens a weak link in the whooping crane's life cycle, and may save them from extinction.

This was just a routine flight. Yet it points out the perils of the business; in addition to dodging eagles and man-of-war birds from Alaska to Mexico, these biologists chance forced landings in the most desolate areas on the continent.

It should never be thought that these men, as well as biologists of other agencies, pretend to know exactly how many ducks there are. Rather, they are concerned with trends. From their observations, they estimate whether populations are up or down, and make recom-

OPEN HUNTING AND FISHING SEASONS

Catfish and Trout, open through Nov. 30, 1952. Wall-eyes, perch, silver bass, yellow bass, northern pike, smallmouth and largemouth bass, warmouth bass, sunfish, bluegills, and rock bass open through Feb. 15, 1953.

Pheasants, long zone, noon Nov. 11 through Dec. 5, 1952. Short zone, Nov. 11 through Nov. 22, 1952.

Quail, long zone, Nov. 1 through Dec. 15, 1952. Short zone, Nov. 1 through Nov. 15, 1952.

Ducks and Geese, from noon Oct. 8 through Dec. 1, 1952.

Rabbits, open through Jan. 31, 1953.

Squirrels, open through Nov. 15, 1952.

mendations accordingly. The overall result is amazingly accurate.

It is the efforts of these and a few other men that have brought the ducks back from the dark days of the 1930's when it seemed that duck hunting was doomed. Populations were almost at that critical low from which some biologists believe a species cannot recover. Without laws, the sport would have been lost. For while ducks are sensitive to other factors as well, uncontrolled shooting offers pressure they cannot bear.

Sound, adequate regulations, based on the field studies of men like Bob Smith, are relieving these pressures. Some of us may chafe under the laws. But without them, we might go out and shoot a hundred mallards in a day, and then hang up our guns forever.



October brings to Pike's Peak State Park overlooking the Mississippi River at McGregor, a gorgeous patchwork of colors.

ANTHOCYANINS, CAROTINOIDS, and PICNICS

By John Madson
Education Assistant

For most of us, it is enough that autumn is red and gold. We accept the colors of maples and oaks without question, and don't much care how they came about. However, there are those among us of a scientific bent, and this is for them.

According to the men who know of such things, leaves are green because of chlorophyll-bearing cells near their surfaces. Certain yellow pigments are hidden by this chlorophyll.

When fall comes around, the chlorophyll begins to disappear and the residual plastid pigments, carotene and xanthophyll, become apparent. In other words, the leaves turn yellow. The best examples of this are sycamore and birch.

Some trees, including red maple, many oaks, sumac, and dogwood, shade toward red and purple. It is due to synthesis in the leaf cells of red and purple pigments called anthocyanins. But in order to turn color, these leaves must be alive to form their pigments. That's why

reds and purples are brought about by bright, clear weather which is cold but not freezing.

Contrary to common belief, a hard, early frost will kill or severely injure leaves before many of the pigments reach their greatest beauty.

Every species of hardwood tree has its characteristic color. We're lucky in having so many species of hardwoods in Iowa. As a result, our state becomes a patchwork of color in October, and if you're ever going on a picnic, go now.

CAR KILLS DEER

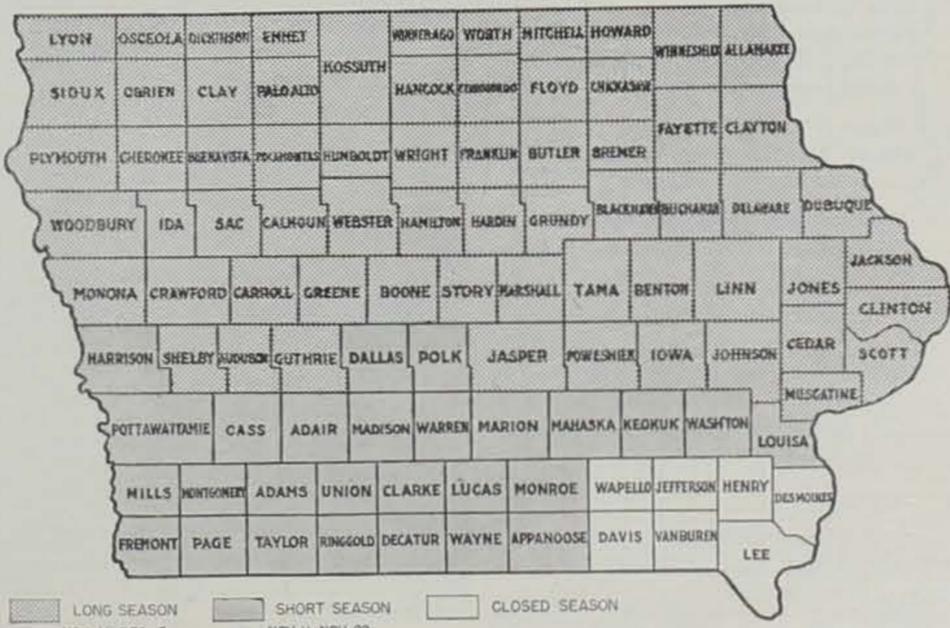
Two Nora Springs men, Jack Rodamaker and John Cagley, struck and killed a deer two miles west of Bassett Tuesday evening. The accident occurred near a bridge on the highway, and the impact ditched Mr. Rodamaker's car, which went over a 12-foot bank into a river.

Damages to the car were estimated in excess of \$500, and there were minor injuries to the occupants.—Nora Springs Advertiser.



State Conservation Officer Jack Stevens and Federal Fish and Wildlife Service Biologist Bob Smith, discuss the duck season prospects from the wing walk of the federal survey plane.

PHEASANT AREAS-1952





"One is more or less appalled by the huge supply of wildlife that succumbs on the highways via automobiles." Jim Sherman Photo.

NATURE NOTES

Nature seems to have its own way of making the growth of her children develop her own way. Seems like the pheasant chicks can stay rather small for weeks on end and then all at once simply shoot up like a shadow. All the young you see now are getting their plumage and can very easily be told apart, that is the hens and roosters. And gradually they are spreading out more and more. The old roosters are getting to strut more and really get sassy. By all indications the crop is big—I believe possibly right through here there are more than there have been for several seasons.

One is more or less appalled by the huge supply of wildlife that succumbs on the highways via automobiles. One can make any sort of a drive and will always see a rabbit, pheasant, 'possum, raccoon or song birds on the highways that have been traffic victims. In some cases it is hard to miss running over or hitting one of those but in most cases a little judgment can help in keeping the fatalities down.

And some of these can present a hazard and do damage to the car. A flying pheasant that goes right on through your windshield could easily do damage and possibly cause a car accident. Why not keep an eye open and avoid, if possible, the killing of wildlife via automobiles.—Charles City Press.

All mammals possess two features which distinguish them from other animals. These are the presence of hair in some form and the possession by the female of mammary glands which secrete milk for the young.—G. S.

Ambergris is a whale product used chiefly in the manufacture of perfumes. It is a waxy substance whose only known source is the digestive tract of the sperm whale.—G. S.

The bite of the short tailed shrew is poisonous. The saliva of this species apparently helps it to overcome mice and other small rodents upon which it feeds. This species is common throughout Iowa.—G. S.

ON OWNER'S SIDE OF THE NO TRESPASS SIGN

Thursday afternoon I had a long talk with a lady who gave me the property owners' side of the argument dealing with "no trespass" signs posted at various spots along the Maquoketa river in those locations where the angling public seems to want most to do its fishing.

Somebody has said, "There are two sides to every argument—my side and the wrong side." As a fisherman who tries diligently to be lawful and orderly for the most part, I must admit that I've been considerably prejudiced on the part of fishermen, who, as a class, I've found generally to be nice folk. However, just as there are rascals in the communion of bankers, editors, doctors and barbers, so there are rascals among fishermen. I don't enjoy admitting this truth, but in good conscience I must do so.

Now, this lady with whom I conversed is a wonderful lady—courteous, gracious, even-tempered and so tolerant and so liberal I just know she isn't high-hatty nor selfish. With never a break she listened, as I unfolded my argument on behalf of fishermen, and she agreed with practically everything I offered in my argument.

When I told her of our affection for this great recreational sport, she smiled knowingly, and remarked, "I understand fully. I love to fish, too."

After I concluded my speech, she thanked me for all I had said on your and my behalf as fishermen. Then she told her story. It goes, generally, like this—

About three years ago my husband and I purchased these few acres because we had a great affection for the spot, and because we wanted a recreational home away from home, and because we wanted to enjoy the fishing and resting privileges afforded by the Maquoketa at this location. At no little expense we cleared the land of the

undergrowth, weeds and debris—we sowed grass seed on bare spots—we built our permanent cabin, put down a well, and provided for essential utilities. All of this cost us a lot of labor and considerable money.

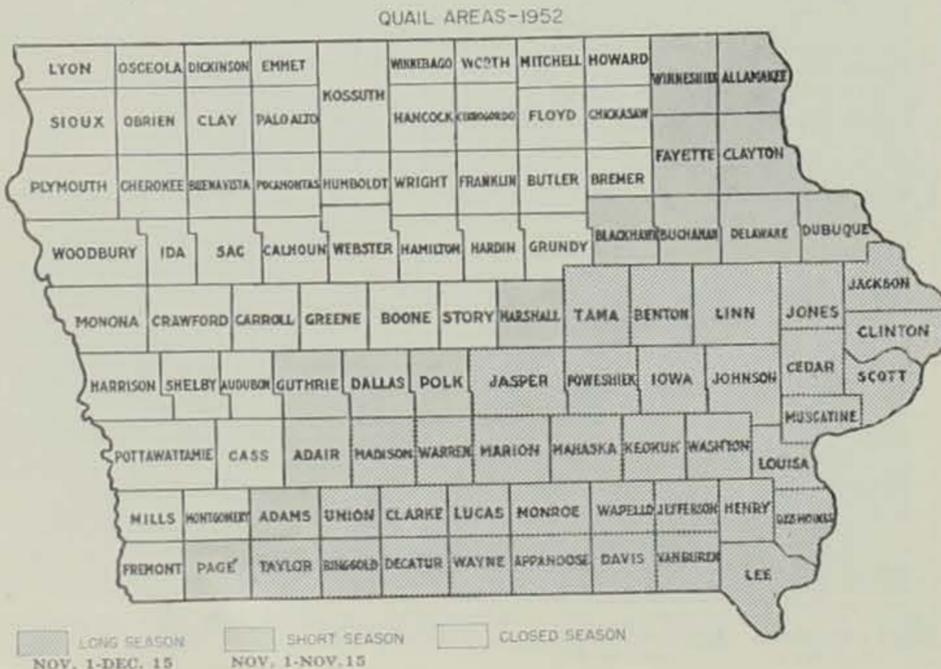
The first two years we did not one little thing to exclude the public from our little domain. Fishermen, hunters, picnic parties, drinking parties—just about everybody—came and went as they jolly well pleased. Our river frontage was despoiled with tin cans, waste paper, garbage, and the other refuse picnickers throw about. What little semblance of fence we had was utterly destroyed. We had gotten up a small supply of firewood for our own use—the picnickers took it and made fires along the river. They made free use of our toilet facilities and made it so utterly filthy we couldn't use it.

Even then we made no formal protest. But last year in the autumn somebody started a grass fire along the river that almost reached our cabin. Then we knew we just had to put a stop to such goings-on. That was when we put up the new fence and posted the premises.

The lady went on: We are not mad at anybody. Really, we wish folk would act in such a manner that we could tear down the fence and destroy the "no trespass" signs. But folk simply will not give us, as owners, any consideration. It is as though all the rights belong to the public and be damned to us. Surely you can understand how we feel and why we have done as we have, can't you?

Yes, ma'am, I think I know exactly how you feel, lady, and I'm red in the face for insisting that the public has rights. After I listened to your side of the story, dear lady, I've a notion too many

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"I must admit that I've been considerably prejudiced on the part of fishermen, who, as a class, I've found to be nice folk." Jim Sherman Photo.



In China waste rice, in Iowa waste corn, provides the staff of life for the ringnecked pheasant. Jim Sherman Photo.

Allee Samee . . .

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increasing their own. They had few firearms, and trapping was not widespread. However, foreign hunters from the larger cities killed great numbers of birds, cocks and hens alike. In recent years, Japanese and Macao-Portugese market hunters have taken a heavy toll, supplying the large city markets.

An American hunter named Wade described a kill of 1,801 pheasants, shot over dogs in fields at Ewo in 23 days. Another hunter named Lanning reported killing 23 birds in a couple of hours just before sunset.

The best shooting in eastern China is said to be around Christmas time, depending on the general condition of the crops. The staple food of the birds is rice, the Oriental equivalent of Iowa corn. Aside from this, their diet is much the same as in Iowa: insects, grubs, greens, grains, and seeds.

Neither Beebe nor Lanning has much to say about predators. Lanning, however, mentions kites, a predatory bird, in an interesting connection. Several times, after he had crippled a pheasant, he had kites "point" the cripple as they dived at the wounded, running bird.

As in Iowa, the pheasants feed mainly in the early morning and evening. In the middle of the day they lie low, and the cocks are usually found, separate from the hens, in small clumps of bamboo. Dogs are used, giving good shooting restricted almost entirely to cocks.

There has been a lot of controversy as to how old John Ringneck arrived on our shores. Most writers agree that he was sent here by Judge O. N. Denny, United States Consul at Shanghai, in 1880. Denny sent a shipment of the birds to his farm near Patterson's Butte, Oregon, where they thrived from the start. They were introduced in

Iowa near Cedar Rapids in 1900, and the rest is history.

According to most authorities, an old cock is equally wary near the Yangtze or Mason City. On either continent, cock pheasants often run, are hard to flush, and equally hard to kill stone dead. It would seem that no matter where you hunt them, pheasants are allee same pheasants.

FISHIN' AND FACTS

September is the "in between month"—to late fur summer, to early for autumn—it's the month Mother Nature rests and sorter looks over her summer work. Many still hot days when scarcely a breath of air stirs the trees—cool nights promising frost soon and the big yellow Harvest moon—maybe yer to old fur a lot of moonshines—but if you look long enough at the big yellow full moon in September you'll emagine yer a kid again but you gotter watch it as it comes over the horizon—like it did last



"How beautiful it is to do nothing and then rest afterwards." Jim Sherman Photo.

week maybe you didnt see it—to bad if you didnt as it war the biggest, yellowest, and best harvest moon we have seen since last year.

We our selves are also sorter resting up as we have had a very buisy summer fishing every day & exploring along the rivers, etc. Standing in the swift Rapids, hook-in catfish fur hours—waiding through quick sand, beating our way through willows and weeds, traveling on foot fur miles— Oh its hard work this fishin if you want catch fish.

So we tuck off a cupple of days this week and drested up, made us think of how Our Grate Grampa uster quote an ole Indian Proverb he learnt from Chief Blackbottom. It went like this—"How Beautiful it is to do nothing and then rest afterwards."

A lot of fellers tell me they like to go fishing but they never have time, we are sorry fur anybody who dont have time to do some of the things they water—cause you can allus work. Theres always plenty of good working days, but theres Just the nice summer days to go fishing and if you dont go yer missing some of the real enjoyment of being alive.

We think this er ole world is workin crazy, er maby its dollar crazy. If it wasent everybody cud go fishin more than they do.

Fact is we think ited be just as good er maby better if we sent our boys off on fishing trips sted of over to places like Korea fur "Poleice actions" and setch where they learn to kill other boys and git killed. Ited make more sence to us. But we never cud understand a lot of things other folks do and fur that matter some of the things we do ourselves. We guess theres a lot of things nobody understands about human behavior.

We know fur sure that you get out of life just the things you expect, if you expect to never have time to get all yer work did you never do and we know that a lot of folks get more pleasure out of makin dollars than anything elee.

They may complain about all the work they have to do, but deep down they love to work most as much as they love the dollars their either that way er trained themselves to it. "The Great American Way of Life"—Work, work, work—Hurry, hurry, hurry—War, war, war.

An nobody is ever satisfied, like the old feller down in Texas sed, "I spent thousands of dollars drill-in fur good drinkin water, and what come up—no good water, just Oil and More Oil.

Now we claim that bein happy is bein able to adjust yerself to circumstances. We read in Readers dijest about a Famious electronics engineer who was given the job of attending a series of dull hearings of the Federal Communications Commission—the lawyers wrangled etc everybody fidged and squirmed, but this enjimeer just adjusted his hearing ade and set quietly with a smile on his lips; no budy knew it but he had perfected a small radio set that fit in his pocket and attached it to the hearing ade and he listed to the world series ball games while the hearing was going on.

Theres a lot of Truth in the statement an Ole Colored mamy made. She sed "yer luck depends on how you treat other people including yourself."

These warm days jist past woke up the catfish and they bit pretty good, last week we went down on the wapsy with Floyd Davis and Ray Lux. It was hot and the fish bit good, was late aftornoon when we arrived at the fishing place below Waubeek—wide river bottom land, river divided into several Channels, lots of ponds, bayous, etc.

We plan on going back later when the water and weather and miskeeters cooled off and realy trying fur the northerns. We think there must be some big ones in the many deep holes around drift piles, trees, etc., down there.

Maby you don't know it but we—think—northerns hit Dead chubs and small suckers jist as good and perhaps better than they do live ones we have caught several on em haere lately. Also dead frogs with the legs skinned is a bait few northerns will pass up.—By J. Curtis Grigg, *Hopkinton Leader.*

The ordinary wild thrush, blue jay or brown thrasher live only three to four years on an average, while it is doubtful if the small, fragile varieties of birds such as the warblers can stick it out for even that length of time. B.C.

An extreme example of fertility among fishes is the case of the ling, an ocean species, which was found to contain over 28,000,000 eggs. B.C.

More than half of all the species of vertebrates (animals with backbones) are fish. B.C.



Worked out gravel pits in the Blackhawk Lake area have been cleaned up and are now used as fish rearing ponds. Jim Sherman Photo.

Blackhawk Lake . . .

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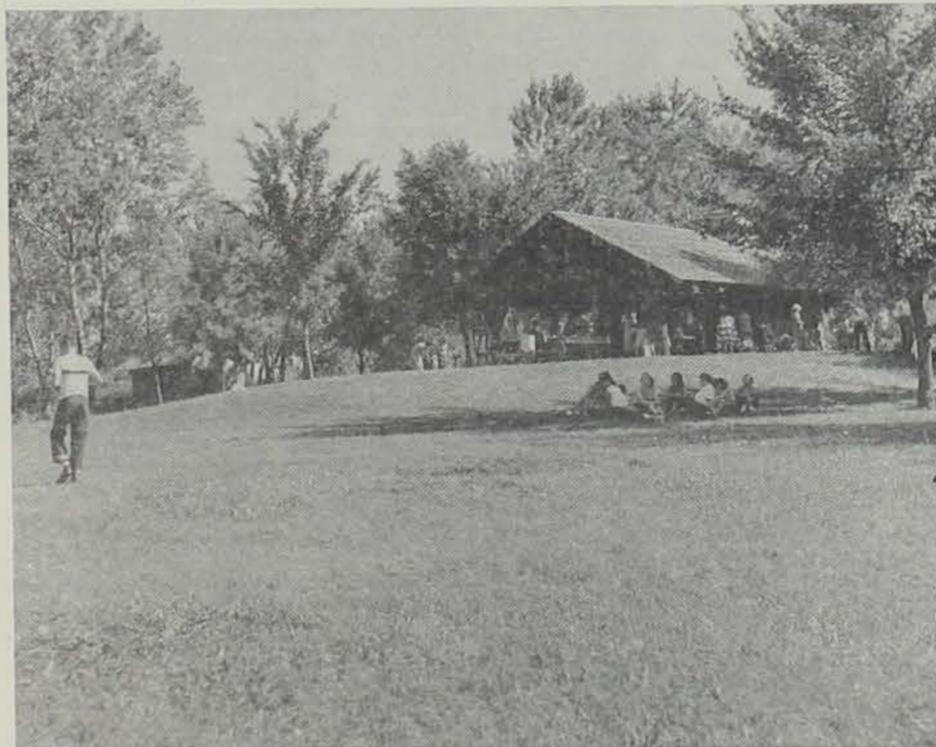
has been washed out the materials are used as aggregate in bituminous and portland cement concrete. The old gravel pits of the area have been cleaned up and are now used as fish ponds.

Blackhawk Lake, like other lakes of northern Iowa, was once a "walled" lake. In fact it was called Wall Lake at one time, and was probably the most famous of all the "walled" lakes. The early settlers found the shores lined with boulders, dragged up from the bottom and pushed shoreward by the winter's ice. Because of the lack of timber the pioneers put them to good use. Foundations and buildings were made of them, and the walls along the lake were destroyed. Now many of these rocks are back on the lake shore, put there as rip-rap to halt erosion of the lake shore by waves. Even at that the lake is slowly encroaching on the land here and there, while

at the same time, it is being gradually filled in. It will have to be dredged in order to keep it from becoming too shallow. In fact, much dredging has already been done. The sediment is pumped from the bottom and deposited on the adjacent shore, thus building out the land. Thirty acres were added to the park lands in 1939 by this means. The park and reserve areas total between 400 and 500 acres.

The level of the lake is maintained by a dam at the north end. When the lake overflows the water goes into Outlet Creek, a tributary of the Raccoon River to the east. Inlet Creek, a small stream, flows into the south end of the lake. Lake waters also come partly from underground sources, in the form of springs and seeps.

The depression in which the lake lies is continuous for about five miles to the southwest, to a bend in the Boyer River. Geologists have believed that an ancestral Boyer



In some of the rocks in Blackhawk Lake shelterhouse may be found garnets easily recognizable because of their purplish red color. Jim Sherman Photo.



"Very few gunners like to hunt alone, and most of them welcome congenial shooting partners who speak the same language." Jim Sherman Photo.

DO YOU HAVE TO HUNT ALONE?

The problem of securing a good place to hunt is one which confronts many novice hunters each season. Experienced hunters, too, have difficulty in this respect when they move into unfamiliar territories.

"For the individual who practices all the simple, yet important rules of sportsmanship, these problems become almost self-effacing

River once flowed northeastward through this depression and connected with a stream in the valley of the Raccoon River. That was before the last glacier re-arranged the drainage.

The boulders making up the "walls" are of many kinds, and will repay careful examination and study. They are the familiar glacial erratics, known to all Iowans. The glaciers carried them down from the north, and they are called erratic because they are so different from the sedimentary rock which makes up our bedrock.

Several park buildings are made of these glacial erratics taken from the "wall" of the lake or elsewhere. Examination shows them to be almost entirely of igneous or metamorphic origin. Igneous rocks are those formed from molten material called magma. Metamorphic rocks were once either sedimentary or igneous. They have been changed in structure and mineral content by great heat and pressure.

The writer noticed a couple of interesting rocks on the rear of the shelter on the west-side picnic area. Two of them contained garnets, easily recognizable because of their purplish red color and their difference from the surrounding rock. Another, nearby, had a layer of epidote on the surface. Epidote is a rather uncommon mineral, green in color. The reader is encouraged to find these interesting rocks.

when the word gets around that he is 'the right sort of guy,'" says Gail Evans, manager of the advertising, shooting promotion and public relations division of Remington Arms Co., Inc.

"Very few gunners like to hunt alone, and most of them welcome congenial shooting partners who speak the same language. They are, however, somewhat reluctant to run the risk of getting stuck for a day afield with some thoughtless or careless chap who ignores the niceties of field etiquette or violates the unwritten laws of sportsmanship. They make that mistake with the same individual only once.

"If you are fortunate enough this season to be invited to go hunting with an experienced gunner who knows how and where to take game, watch your step carefully," advises Evans. "You can rest assured that your every action is being observed and while your friend will probably make every effort to give you the best of everything, you can just bet your bottom dollar that you're on probation with him just the same.

"There are a few little courtesies which make up proper hunting demeanor and which, if observed, will put you in solid with your hunting companion. They'll come natural after awhile, even if the importance of them is not immediately obvious. And your observance of them will make the day far more pleasant, not only for your host, but for you, too.

"Above all things, never take a chance. Observe all the rules of safety even though your companion doesn't. You'll impress him with your caution.

"Give your companion all the breaks. The accepted practice is to alternate on single shots. The easiest way to make your host mad is to try to 'wipe his eye.'

"Find out which side your companion shoots from . . . and then take the other side. Never shoot at birds flying your companion's

(Continued on page 80)



Jim Sherman Photo.

Duck movement and weather go pretty much hand in hand. Nice weather and ducks are likely to stay put. When weather is rainy and stormy there is considerable movement among waterfowl.

Northern Ducks . . .

(Continued from page 73)

the nesting season is over ducks may wander north as well as south for good.

Of course, during the fall months a large number of ducks will move south through North Dakota, but hunters should not rely on big northern flights. Duck movement and weather go pretty much hand in hand. When the weather is nice, the ducks are likely to stay put, providing food and water conditions are right. On the other hand, as duck hunters well know, when the weather is rainy and stormy there is considerable movement and waterfowling greatly improves.

Occasionally there is a long stretch of clear, beautiful weather which may be followed by a cold snap or a period of abrupt stormy weather. As a result there may be a great migration of ducks as they rush south and hunters get their northern flights. But this is the exception to the rule and something that will not hold true every season.

Duck migration is more likely to be a gradual process. Some ducks move in, others move out. North Dakota ducks don't put their heads together some fall evening and say, "Well, fellows, it's time we were headin' south." Then within a day or so all the North Dakota ducks are gone and a flight from Canada come in shortly afterwards to fill the gap. Which in turn would be followed by another flight and so forth. Instead of such a picture there is more likely to be a gradual shifting of duck populations. Some ducks leave early, others hang on till late in the season. And the whole movement hinges pretty much on the weather. For example, last fall a couple of heavy migrations occurred after spells of bad weather. In some areas ducks were entirely gone. Then warm periods followed and the ducks came back again.

Some species of ducks leave

earlier than others. Blue-winged teal get out early in the fall. Probably most of the teal are out of North Dakota before the hunting season opens. Mallards are at the other end of the scale. In fact, flocks of mallards may hang around if weather conditions remain favorable long after fellow mallards have headed south. Some may even spend the winter in North Dakota. Migration of other species fall in between the early blue-wings and the late mallards.

How about the palatability of our ducks? Grain-fed mallards of North Dakota and neighboring Canadian provinces are without doubt some of the best table ducks in the world. Mallards have been feeding on grain some time before the season opened and should be in top condition, particularly those found in the grain-raising areas of the state. Pintails likewise feed on grain to quite an extent and should furnish good eating.

The Game and Fish Department's



Jim Sherman Photo.

Duck movement, barring storms, is generally a gradual process, some ducks moving in, others moving out.

EACH GOT HIS BIRD

By CHARLES BROOKS, JR.

*Eight strong men, afire with passion,
Let loose their dogs, from setter to daschund.
With eyes aglow and hearts a pounding,
Men and dogs go gayly bounding.
Thru mucky fields and swampy sloughs,
The most rugged terrain these eight men choose.
A rooster flies, a shot resounds,
In rapid succession go six more rounds.
Each takes his turn, except for one
(He'd forgotten to load his gun!)
The dogs all yelp, and bound astray,
While the pheasant glides, three fields away.
A whirl of wings once more is heard,
Each man hoping that this is his bird.
They raise their guns now once again,
Each man cries "Don't shoot! A hen!"
Through rain and snow they tramp for miles,
Each new field renews their smiles.
Until at last all hope is gone,
They stumble and stagger, with guns un-drawn.
Back toward their cars they struggle now,
Both dogs and men, with heads abow.
Until at last, just one more field,
Welcome sight, after a fruitless yield.
Then of a sudden, up they jump,
A dozen cocks, in one big lump!
Simple shots, with no exceptions,
This way and that, in all directions!
With weary limbs, and lifeless eyes,
Slow and unsteady, eight guns rise.
An eight shot volley, in rapid succession,
Then all is still, in silent depression.
For, from the eight, they must choose,
Which gets the bird, half pellet and bruise.
Eight weary men, each had his fun,
Each shot a bird, yet they got only one.*

ment's advice to waterfowlers is to go out and do your hunting when you can. Don't sit around waiting for a northern flight for the chances are you will lose out on waterfowl altogether if you do. Also late season shooting is primarily made up of scaup (blue-gills) and mallards. Hunters that want other species should get out early in the season. Northern

flights occur during September and early October as far as some species are concerned.

Northern ducks may sound good but the facts stack up that the greenest pastures are most likely to be found in the wildfowler's own back yard.—*North Dakota Outdoors.*

The males of some marine species of catfish and others found in South America, carry the eggs in their mouths until they hatch. Apparently the males take no food at all during this period.—G. S.

The snake's tongue is a highly developed sense organ used principally in touching and as an aid in smelling. It is quite soft and incapable of inflicting an injury so snakes do not bite with their tongues as is sometimes believed.—G. S.

Snakes are immune to their own poison, however, there have been instances where the teeth of a snake have penetrated its heart or other important organ and the snake has died.—G. S.

From 70 to 80 per cent of wall-eye eggs hatch in the hatchery, while only about 5 to 10 per cent hatch that are naturally spawned in lakes. E.R.

OUR STATE-OWNED HUNTING GROUNDS

Iowa has been slowly acquiring submarginal lands and waters for public shooting and game production. Over the years the program has continually expanded, until today there are 129 areas containing over 65,000 acres of public hunting lands where any licensed hunter may shoot during open seasons. Many new tracts have been purchased outright in the last 10 years and marginal lands around the lakes and sloughs which are public property by right of sovereignty have been improved for increased game production.

Depending on the location, each of Iowa's five major game species may be found on these shooting grounds: rabbits, squirrels, quail, pheasant, and waterfowl. Of the public areas, those developed for waterfowl are perhaps the most important. While rabbit, squirrel, quail and pheasant habitat is maintained on private land, duck habitat is something else. With many of the original ponds and sloughs drained or leased, public hunting grounds offer the only duck shooting available in some areas.

Establishment of public shooting grounds is only one answer to the problem of where to hunt. The other answers lie in the hands of the sportsmen. Sportsmanship and consideration for the landowner are the keys to continued hunting on private property, which constitutes 97 per cent of all Iowa lands.

County	Name of Area	Acres	Type	Direction from Nearest Town to Area
Allamakee	New Albin Big Lake	200	marsh	2 m. S., 2 m. E. New Albin
Allamakee	Kain's Lake	200	marsh	6 m. N. Lansing
Allamakee	Lansing Big Lake	679	marsh	2 1/2 m. N. Lansing
Allamakee	Mudhen Lake	164	marsh	1 m. S. Harpers Ferry
Allamakee	Yellow River Forest	4,206	forest	4 1/2 m. N. McGregor
Benton	Dudgeon Lake	709	marsh and upland	1 1/2 m. N. Vinton
Boone	Holt Forest	334	forest	2 m. N., 1 m. E. Ogden
Boone	Pilot Mound	33	upland	Pilot Mound, Iowa
Bremer	Sweet's Marsh	1,200	marsh	1 m. E. Tripoli
Buena Vista	*Storm Lake	3,341	lake	Storm Lake
Buena Vista	Little Storm Lake	276	marsh	South end of Storm Lake
Buena Vista	Pickeral Lake	176	marsh	3 m. E., 4 m. N. Marathon
Calhoun	North Twin Lake	573	lake	5 m. N. Rockwell City
Calhoun	*South Twin Lake	400	marsh-lake	4 m. N., 1/2 m. W. Rockwell City
Calhoun	Rainbow Bend	19	forest	2 m. S. Lake City
Calhoun	Tow Head Lake	194	upland	1 m. S., 7 m. W. Pomeroy
Carroll	Artesian Lake	42	lake	3 m. S. Lanesboro
Cerro Gordo	*Clear Lake	3,643	lake	Clear Lake, Iowa
Cerro Gordo	Ventura Marsh	630	marsh	1/2 m. S. Ventura
Cerro Gordo	Clear Lake Pond	40	marsh	1 m. N. Clear Lake
Chickasaw	Chickasaw Mill	16	forest	5 1/2 m. N., 1 1/2 m. E. Nashua
Clay	Barringer Slough	1,054	marsh	2 m. W., 4 m. N. Ruthven
Clay	Dewey's Pasture	402	upland-marsh	2 m. W., 4 m. N. Ruthven
Clay	Trumbull Lake	1,229	lake	3 m. W., 4 m. N. Ruthven
Clay	Dan Green Slough	340	marsh	4 m. E. Langdon
Clay	Elk Lake	261	lake	3 m. S., 6 m. E. Dickens
Clay	Ocheyedan Game Area	100	upland	5 m. W. Spencer
Clinton	Goose Lake	433	marsh	1/2 m. W. Goose Lake
Davis	Eldon Game Area	623	upland	8 m. E., 10 m. N. Bloomfield
Delaware	Backbone State Forest	120	forest	9 m. N., 5 m. W. Manchester
Des Moines	Tama Beach	3	fish access	1 m. N. Burlington on Mississippi
Des Moines	Skunk River Access	63	upland	Augusta, Iowa
Dickinson	Trapper's Bay	57	marsh	N. end of Lake Okoboji
Dickinson	Jimmerson Slough	88, 13	marsh	1 m. W. Spirit Lake
Dickinson	Prairie Lake	109	marsh-lake	3 m. E. Arnold's Park
Dickinson	Pleasant Lake	84	marsh-lake	4 m. E., 2 m. S. Spirit Lake
Dickinson	*Silver Lake	1,103	lake	Lake Park
Dickinson	Minnewashta	1,876	lake	Arnold's Park
Dickinson	Marble Beach	63	forest	West side Spirit Lake
Dickinson	Sunken Lake	62	lake	West side Spirit Lake
Dickinson	*Swan Lake	371	lake	2 m. S. Superior
Dickinson	Christopherson's Slough	196	marsh	3 m. N., 1 m. E. Superior
Dickinson	*Spirit Lake	329	lake	Spirit Lake
Dickinson	Center Lake	329	marsh-lake	1 m. W. Spirit Lake
Dickinson	*West Okoboji	75	lake	Arnold's Park
Dickinson	Welch Lake	214	marsh-lake	3 m. W., 3 1/2 m. N. Spirit Lake
Dickinson	Little Spirit Lake	184	lake	Spirit Lake
Dickinson	Marble Lake	184	marsh-lake	1 m. W., 3 m. N. Spirit Lake
Dickinson	*East Okoboji, Minnewashta and Upper and Lower Gar Lakes	1,975	lake	Arnold's Park
Emmet	Birge Lake	137	upland	1 m. N., 3 m. W. Dolliver
Emmet	Ryan Lake	366	upland	5 m. E., 3 m. S. Estherville
Emmet	East Swan Lake	788	upland	1/2 m. W., 1 m. S. Maple Hill
Emmet	Grass Lake	171	upland	1 m. N., 1 m. W. Dolliver
Emmet	*Ingham-High Area	1,367	marsh-lake-upland	5 m. E. Wallingford
Emmet	*Tuttle Lake	981	marsh	1 m. N., 2 m. E. Dolliver
Emmet	*West Swan Lake	1,046	marsh-lake	2 m. E., 2 1/2 m. S. Graver
Emmet	Eagle Lake	261	marsh	1 1/2 m. W. Huntington
Emmet	Cheever Lake	343	marsh	1 m. W., 2 m. S. Estherville
Emmet	Iowa Lake	308	lake	7 m. N., 1 m. E. Armstrong
Emmet	Twelve Mile Lake	290	marsh	2 m. S., 4 m. W. Wallingford
Emmet	Four Mile Lake	242	marsh	2 1/2 m. W. Estherville
Fremont	Nishnabotna (Riverton Area)	721	marsh	1 m. W. Riverton
Fremont	Forney's Lake	485	marsh	2 m. N.W. Thurman
Fremont	Goose Lake	456	upland	2 m. W. Dana
Greene	Dunbar Slough	371	marsh	1/2 m. S., 3 m. W. Scranton
Guthrie	Lakin Slough	182	marsh	2 m. E. Yale
Hamilton	Little Wall Lake	275	marsh-lake	1 1/2 m. S. Jewell
Hancock	Eagle Lake	935	marsh-lake	3 m. E., 2 1/2 m. N. Britt
Hancock	Crystal Lake	238	marsh-lake	9 m. N. Britt
Hancock	East Twin Lake	193	marsh	3 m. E. Kanawha
Hancock	West Twin Lake	109	lake	2 m. E. Kanawha
Harrison	Noble's Lake	166	marsh	3 m. S., 5 m. W. Missouri Valley
Henry	Oakland Mills Access	27	fishing access	1 1/2 m. E., 1/2 m. S. Oakland Mills
Howard	Turkey River Access	87	fishing access	1 m. S. Cresco
Howard	Havden Prairie Preserve	240	upland	3 m. S., 1/2 m. W. Chester
Humboldt	Dakota City Fishing Access	6	fishing access	1/2 m. S. Dakota City
Humboldt	Bradgate Area	109	marsh and fishing access	1 m. E., 1 1/2 m. S. Bradgate
Jackson	Dalton Lake	5	lake	2 1/2 m. W. Miles
Jasper	Rock Creek Game Area	65	marsh and upland	5 m. N.E. Kellogg
Jefferson	Sugar Maple Grove (MacCooon Area)	71	forest	4 m. N. Lockridge
Johnson	Swan Lake	164	marsh	1 m. N., 2 m. W. North Liberty
Jones	Muskat Slough	251	marsh	1 m. S., 3 m. W. Olin
Jones	Picture Rock Area	302	forest	3 m. E., 1/2 m. S. Monticello
Kossuth	Burt Lake	46	marsh	8 m. N., 4 m. W. Swea City
Kossuth	Goose Lake	224	marsh	5 m. W., 7 m. N. Swea City
Lec	Green Bay	229	marsh	1 m. N., 3 m. E. Fort Madison
Lec	Shinck Area	2,502	forest	
Louisia	*Odessa Lake Access	46	forest	3 m. E., 1 m. N. Wapello
Louisia	Klum Lake	1,076	marsh and upland	2 1/2 m. E., 1 m. S. Grandview
Louisia	Muscatine Slough	1,514	marsh	2 m. E. Grandview
Lucas	Stephen's Forest	4,214	forest	10 m. N.E. Chariton, 1 m. S.W. Lucas
Monona	Blue Lake	983	marsh	2 m. W. Onawa
Monroe	Chariton Forest	804	forest	2 m. S., 9 m. W. Lovilia
Muscatine	Kookuk Lake	429	marsh	2 m. S., 3 1/2 m. W. Muscatine
Muscatine	Weise Slough	423	marsh	8 1/2 m. N., 3 m. W. Muscatine
Osceola	Rush Lake	314	marsh	1 m. N., 1/2 m. E. Ocheyedan
Osceola	Iowa Lake	116	marsh	3 1/2 m. N., 1 m. W. Iowa Lake
Palo Alto	*Lost Island Lake	1,292	lake	2 m. N. Ruthven
Palo Alto	Mud Lake	115	upland	5 m. N. Ruthven
Palo Alto	Rush Lake	522	marsh	6 m. N. Laurens
Palo Alto	*Five Island Lake	1,111	marsh-lake	Emmetsburg
Palo Alto	*Virgin Lake	200	marsh-lake	1 1/2 m. S. Ruthven
Palo Alto	*Silver Lake	638	marsh-lake	2 1/2 m. W. Ayrshire
Pocahontas	Opedahl Lake	115	marsh	5 m. N. Ruthven
Pocahontas	Clear Lake	187	marsh	10 m. W. Pocahontas
Pocahontas	Lizard Lake	268	lake	2 1/2 m. W., 4 m. S. Gilmore City
Pocahontas	Sunken Grove	251	marsh and upland	2 m. S. Varina
Polk	Del Rio Fishing Access	22	forest	2 m. W. Polk City
Pottawattamie	*Lake Manawa	919	lake	1 1/2 m. S. Council Bluffs
Pottawattamie	Petrus Memorial Forest	98	forest	4 m. N. Council Bluffs
Ringgold	Mount Ayr Game Area	1,118	upland	4 m. W., 1 m. S. Mount Ayr
Sac	Blackhawk Lake	957	lake	Lake View
Story	Soper's Mill	18	forest	4 m. N., 2 m. W. Ames
Warren	Hooper Area	323	upland	6 m. S., 1 m. W. Indianola
Webster	LeHigh Area	40	forest	1 1/2 m. S., 2 m. E. Lehigh
Winnebago	Harmon Lake	483	marsh	4 m. W., 1/2 m. S. Scarville
Winnebago	Myre Slough	430	marsh	5 m. S. Thompson
Winnebago	Rice Lake Game Area	1,294	marsh-upland	1 1/2 m. S., 1 m. E. Lake Mills
Winneschick	Malanaphy Springs	61	forest	2 m. N., 2 m. W. Decorah
Winneschick	Coldwater Springs	61	forest	8 1/2 m. N., 1 1/2 m. E. Ridgeway
Winneschick	Cancee Creek Area	224	forest	8 m. E., 4 1/2 m. N. Decorah
Winneschick	Bluffton Area	74	forest	Bluffton, Iowa
Woodbury	Brown's Lake	605	marsh-lake-upland	10 m. S. Sioux City
Worth	Silver Lake	318	marsh	3 m. N., 9 m. W. Northwood
Worth	Bright's Lake	122	upland	1 m. S. Emmons
Wright	Elm Lake	469	marsh	2 m. N., 3 m. E. Clarion
Wright	Cornelia Lake	290	lake	2 m. N., 2 1/2 m. E. Clarion
Wright	Morse Lake	108	marsh	3 1/2 m. W. Belmont
Wright	Big Wall Lake	951	marsh	6 m. S., 4 m. E. Clarion

*Open water refuge, which no hunting permitted 50 yds. beyond farthest emergent vegetation. **Access to Odessa Lake and 2,500 acres public shooting ground.

Owners Side . . .

(Continued from page 76)

of us humans are more like marauding baboons than people.

And if you get to read this I trust you will read from it my humble apology on behalf of us fishermen who have caused any portion of your humiliation for the bad manners of those folk who have so debauched your property.

I don't believe, and neither did the lady allege, that all picnickers commit these uncivil offenses. But it doesn't take a handful of flies in your soup to spoil the broth—one is enough. So the small group of supposedly civilized human beings who act so meanly spoil the picture for everybody.

Summing up, after I've looked at the other side of the argument, I'm minded that fishermen, picnickers and all who betake themselves to the outdoors for recreation better learn good manners, else one of these days we will find the whole outdoors barred from us. I'm mighty sorry to lose the happy privilege of enjoying myself at this spot on the Maquoketa—but because certain folk have vacuums where they ought to have brains, I and others who observe the rules of friendly decency are to lose privileges that money can't buy. —Fins, Furs and Feathers, *Manchester Democrat-Radio*.

Hunt Alone . . .

(Continued from page 78)

way. It is an act of discourtesy to shoot across a gunner's front unless you know his gun is empty. Then explain your action to him.

"Don't claim birds you are not absolutely sure you killed. If there's the slightest doubt, don't run the risk of being branded a 'claimer.' If your companion is 'built that way,' you'll soon find it out.

"Don't try to handle your companion's dogs. And never criticize the dog's faults. Praise his good work and ignore the bad. Give the dog a chance to retrieve your birds. Look for it yourself only if absolutely necessary.

"And never hunt in your friend's favorite spot which he has shown you, unless he is along or you have his consent. Violation of this courtesy has led to the ending of many fine friendships.

"There is an old saying to the effect that 'if you want to find out about a man, get him in a poker game or take him hunting.' Remember it when you accept that invitation and see that you so conduct yourself as to warrant a repeat engagement. It's a safe bet that the word will get around and you won't be long lacking for gunning partners." —*Remington News Letter*.

Man must know and respect nature.

There are over 40 kinds of sparrows in the United States.

Red or gray foxes seldom weigh over 12 pounds.