

IOWA CONSERVATIONIST



MISS BLANCHE SMITH
IOWA STATE TRAVELING LIBRARY
DES MOINES IOWA
OCT 12 1961

Volume 20

October, 1961

Number 10

HUNTING OUTLOOK FOR 1961

HARVESTING IOWA'S WILD FOODS

Charles (Butch) Olofson
Conservation Officer

At the beginning of time, man and animals began early in autumn and speed their activities in preparation for the cold winter months to come.

For example, the bears who have been feeding all summer long on Des Moines rodents, grubs and insects now and come to feed on the wild blueberries and blackberries. He must build up that layer of fat which will get him through the long winter hibernation.

Squirrels, muskrats and beaver have hurried collections of seeds, roots and bark for their winter food caches since Mother Nature does not furnish any natural weather food for them.

Man may have learned to prepare for the productless months in advance by watching the animals will never know. We do know did practice the harvest of wild foods to survive during cold periods of want and starvation. He had to know what animals could depend on during the winter. At the same time, man could not live on meat alone. He had to supplement his diet with grains, dried roots, fruit and other plant life.

Again man had to learn what to harvest and how to preserve

food so it would be edible during the long periods of storage.

A good example of this was the Indians use of "Pemmican", made by drying thin strips of deer or buffalo meat into "jerky" (a method of preserving meat). After the meat is made into jerky it is pulverized by pounding. Then bear or buffalo tallow is melted and poured over this meat. Blueberries, blackberries or any berries of their choice were added. This was mixed together and put into skin bags made from buffalo stomachs or thin deer skin. These bags became hard and could be stored all winter and even into the warm summer months. This provided a very nutritional diet during the winter months easily transported long distances without spoilage.

As the white man progressed west, he had to adapt himself to this climate, conditions of the forest, the plains and the mountain areas. He was quick to see the American Indian was good at this, and the first pioneers patterned their life after them. They learned from the Indians that many of the wild plants were used for food; and many are used today.

Here are some examples of wild edible plants:

Wild onion, wild leek, dandelion and water cress: Used for flavoring, seasoning or as greens.

Common milkweed: Young shoots used and cooked like asparagus or soups. Indians made a crude sugar from the flowers.

Chicory: Young roots and leaves are cooked or used raw for salad and greens. The root can be dried, ground and used as coffee substitute.

Stinging nettle: (Wear gloves while gathering them). Boil to remove the sting and cook like spinach.

Cattail: Flowering ends while still partly covered by sheaths from upper leaves are eaten raw, stewed, steamed, roasted or put into soup. Young shoots are peeled and cooked raw like asparagus.



Birds like this Mallard duck and Blue Goose will be the targets of Iowa hunters when the duck and goose season gets underway this fall.

E. T. Rose

Chief, Fish and Game

Hunting prospects are good in Iowa for upland game in 1961. Quail, pheasant and squirrel populations are up, deer have increased at least 8% over 1960, and the rabbit population is average.

A quick look at the general picture follows:

PHEASANT: The prospects for pheasant hunting this season are very favorable. Good populations are present in the pheasant range with the highest levels in the north west, north central and west central portions of the state.

The nesting season this year was two weeks later than preceding years in most areas. Many late broods were observed by conservation officers and biologists in August brood counts. Highway right-of-ways, pastures and other permanent cover was very heavy this year.

Favorable nesting weather, the new A.S.C. diverted acres program (nearly three million acres of nearly ideal pheasant nesting habitat) and the delayed mowing of highway right-of-ways, all contributed toward the good pheasant production.

The November 11 opening date which has been accepted for many previous years as about the best date was again selected since it is late enough to give farmers time to harvest their corn. It also gives time for young cocks to mature sufficiently to be distinguished from hens.

DEER: The deer population is the highest in Iowa since 1947 with a 25% increase over the past five years average and 8% over last year. The population is anticipated to be 23,000 deer this fall; the winter population was 14,155. Twinning is very common this year for Iowa deer.

DUCKS: The local duck population is good due to plentiful rainfall enabling water levels in Iowa marshes, sloughs and potholes to hold up well. Unfortunately, the big duck factories in the Dakotas, Northern Minnesota and much of Canada suffered from extreme drought conditions gravely affecting the major production. Consequently, the production is poor in these areas.

The hunting outlook appears good for locally produced ducks. It's difficult to tell at this time what shooting can be had from the



Hickory Nuts

(Continued on page 171)

(Continued on page 176)

Iowa Conservationist

Vol. 20

October 1961

No. 10

Published monthly by the State Conservation Commission, East 7th and Court, Des Moines, Iowa. Address all mail (subscriptions, change of address, Form 3579, manuscripts, mail items) to street address above.

Subscription price: two years at \$1.00

Second class postage paid at

Des Moines, Iowa

(No Rights Reserved)

NORMAN A. ERBE, Governor
GLEN G. POWERS, Director
JAMES R. SHERMAN, Editor
DENNIS L. REHDER, Managing Editor
ROGER FLIGER, CAROL BUCKMAN,
STAN WIDNEY, Contributing Editors

MEMBERS OF THE COMMISSION

CLYDE M. FRUDDEN, Chairman.....Greene
A. N. HUMISTON, Vice Chairman.....
.....Cedar Rapids
SHERRY R. FISHER.....Des Moines
EARL E. JARVIS.....Wilton Junction
GEORGE H. MEYER.....Elkader
ROBERT E. BEEBE.....Sioux City
ED WEINHEIMER.....Fontanelle

CIRCULATION THIS ISSUE.....50,000

COMMISSION MINUTES**General**

Travel authority was granted Joe Brill, Prison Labor Supervisor, to attend the 91st Annual Congress of Corrections at Columbus, Ohio, September 24 through 29.

Glen Powers, Director; Robert Buckley, Engineer in Charge of Waters; Wm. Rush, Coordinator of County Conservation, were given travel authority to represent the State of Iowa at the National Boating Administrator's meeting in San Francisco, October 28 through November 1.

County Conservation Boards

Butler County received permission to purchase from the town of Greene, a park area one block long, one-half block wide bordering the Shell Rock River downstream from the dam and bridge at Greene.

Fayette County: Approval was granted for the acquisition of 8.19 acres as an addition to Twin Bridges Park on the Volga River in the center of the county.

Cherokee County: Approval for general development plans of Larson Pit Area, 11½ acre park with 9-acre pond, northeast of Aurelia.

Jones County: Approval for general development plan for the development of Pictured Rocks Area.

Story County: Approval for development plan for Caviness Roadside Park.

These projects are county conservation projects financed with county funds.

The Commission approved a 25-year agreement for maintenance and management of Pictured Rocks Area, a fishing access area with 60 acres for park purposes.

Approval was given for the acquisition by Clay County Conservation Board of Oneota Park; 8 acres donated to them by the Clay County Garden Club. Park with log cabin.

Linn County was given approval to purchase 100.54 acres as part of Wickup Hill Conservation Area of which 77 acres are now owned.

Clayton County received approval to acquire 14½ acres by 25-year license from the U. S. Corps of Engineers to be called Willie Landing bordering the Mississippi.

Greene County was given approval to accept, as a gift, 80 acres from Miss Burdena Drulias to be known as Allen Forest Area.

Keokuk County: 1.31 acres adjacent to Manhattan Bridge on the bank of the Skunk River were approved by agreement with the Board of Supervisors for a fishing and boating access.

Sioux County was given approval for a roadside park on an 11 acre area at the junction of Highway 10 and 33, 1 mile north of Alton.

Dubuque County: Permission was granted for acquisition, by 25-year license, from the Corps of Engineers, of a 14-acre area, Massey Landing above lock and dam 12 of the Mississippi.

Franklin County was given approval to accept, as a gift, a 6-acre park area from Richard Galvin of Sheffield. The area to be called Galvin Community Park.

Story County received approval to establish a roadside park on Highway 30, 3½ miles east of Nevada, to be known as the Caviness Roadside Park.

Fish and Game

Approval of an option to purchase 28 acres of land to be included as part of Elk Creek Marsh Development in Worth County.

Approval of an option to purchase 41 acres of marshy land adjoining Sweet Marsh Area in Bremer County for wildlife cover and fencing purposes.

Approval to carry out proceedings with Federal Aid appraisals of land for the proposed small lake construction near Diagonal in Ringgold County.

Approval of a request for completing engineering studies for a proposed new small lake in Monroe County. Preliminary topography data showed an excessive ratio of watershed to impoundment area.

Parks

Louis Neuhring is being transferred from District Unit 2, Parks, to Administrative Assistant of Parks in the Central Office in Des Moines.

Joe Brill is being transferred from Supervisor of Prison Labor to Supervisor of District 2.

Next Commission meeting will be October 4 at Lansing.

The horns of the male buffalo appear within two months after birth as twin bumps on the forehead.

Badgers, like some other wild animals, sometimes kill more than they can eat at once. They bury the surplus food and return to it later when other food is scarce or impossible to catch.

THE IOWA CO-OPERATIVE HUNTER SAFETY PROGRAM

Paul Leaverton

Supt. Land Management

Realizing that Hunter Safety could play an important part in making hunting recreation much more safe and enjoyable, the Iowa Conservation Commission adopted a Co-operative Hunter Safety training program in November 1960, in co-operation with the National Rifle Association of America, volunteer organizations, and public spirited individuals in the State.

The purpose was to make Hunter Safety training available to anyone ten years of age or over.

To accomplish this without adding any additional personnel, the program was integrated into the present Conservation Commission organization.

The Superintendent of the Land Management Section was designated to act as Hunter Safety co-ordinator for the state to head up the program in addition to his regular duties.

An Executive Committee was formed from members of sixteen state and national organizations, including the Conservation Commission and the National Rifle Association of America, to help formulate the policies for carrying out the Hunter Safety program in the state.

The Conservation Officers have always conducted Hunter Safety training as part of their public relations program. Also, many NRA Rifle Clubs and Sportsman Clubs were holding regular Hunter Safety classes, but the progress was slow, the training was limited, and no records were kept.

In order to make the training available to everyone, it was necessary to enlist volunteers and the support and co-operation of many organizations. To do this, the Conservation Officer was made the key man in his territory for the responsibility of a Hunter Safety training program in his respective territory.

The Conservation Officers were called in for a two day training course, conducted by representatives from the National Rifle Association of America. Each Conservation Officer was now qualified to train volunteer instructors for Hunter Safety training.

After their initial training, they went back to their respective territories and with the aid of NRA Hunter Safety films and posters presented the program to service clubs and other groups emphasizing the need for Hunter Safety training and telling how anyone could obtain this training.

Many local and state newspapers responded to this appeal, and the public response has been gratifying.

The program was under way by November 1, 1960 and with the help of many organized NRA Rifle Clubs, it got off to a running start even though it was during the off-hunting season.

By June 1, 1961, active training classes were started in thirty-one counties; 33 volunteer instructors had been trained and certified, and 2,140 students had graduated from the Hunter Safety training course.

The public response to the need of gun safety training has been wonderful. Service clubs, sportsman clubs, schools, scouts, farm organizations, and many others have co-operated in furnishing places to meet and transportation.

Each student upon graduation from the Hunter Safety training course is presented with an NRA Hunter Safety billfold-size card and a certificate of graduation from the Conservation Commission.

We are pleased to see that many schools are including Hunter Safety training as part of their school program. Most of these will be in Junior High as an extra curriculum.

It is planned to send a quarterly report of the instructor's activities to each instructor and the Executive Committee of the Iowa Hunter Safety Program.

We feel that after this program is under way, it will improve public relations, relieve the Conservation Officers of some of their difficulties in law enforcement, as well as reduce the possibilities of hunter casualties.

The public appears to be pleased with this much needed safety program which is an indication that it will continue to play an important part in the Conservation program in Iowa.

At the time the white man set foot on the eastern shores of what is now the United States, the buffalo, perhaps more than 60 million head, roamed over the country.

The original range of the buffalo was from western Pennsylvania to southern Idaho, from the Pecos River to the Blue Mountains of Oregon and on north to Great

Slave Lake in Northwest Canada. He was also found in smaller numbers in central Georgia and northern Florida.

The buffalo is the most gregarious of all the wild cattle. Cow and bulls graze together throughout the year. Bands vary in size from small groups of six and eight to herds of a hundred or more.



Jack Kirstein Photo

Black Walnut

NATIVE IOWA TREES - THE BLACK WALNUT

Professor George B. Hartman

School of Forestry
Iowa State University

native American hardwoods have played a greater part in the development of central United States than the black walnut (*Juglans nigra* Linn.) Six species of walnut are native to the United States, but only two of them, the black walnut and the butternut, are of much importance as producers of lumber. Both of these species are native to Iowa. Of the two, black walnut far outshines its sister tree, the butternut.

When the settlers moved westward in the early and middle 1800's they found black walnut trees growing abundantly. Because of its strength, durability, and beautiful grain wood from this tree was used for log cabin construction, framing timbers for homes and barns, interior finish for homes, and for furniture. Much antique furniture on the market today is made from black walnut lumber.

Black walnut is a large straight tree with an open crown who found growing mixed with other trees in the woodlands of Iowa. When grown outside the forest or in openings it has a short trunk, branches low and has a spreading crown. Height varies from 40 to 75 feet. It prefers rich, moist but well-drained soil and is found growing along river banks, in coves and on the lower parts of slopes.

The tree has large compound leaves, that is, there are leaflets growing at right angles to the main leaf stem. The leaves are 12 to 24 inches long and have 13 to 23 leaflets each 2½ to

Harvesting Wild Foods—

(Continued from page 169)

The pollen is used for flour in pancake batter.

May apple: Good raw for preserves or jelly only when the apple is fully ripe.

Ground cherry: Eat raw or cook with lemon.

Service berry or Sad bush: Use like blueberries.

Mulberry and Choke Cherry: Use raw or cooked.

Wild blackberry: Use raw or cooked into jam and jelly. It is also used in wines.

Nannyberry: Use this berry raw.

Hawthorne: Use raw. The juiciest haws make good jelly.

Pawpaw: Use raw, it's best when frost bitten.

Beechnut, hazelnut, chestnut, butternut, walnut, hickory nut: These nuts are used in various ways; raw, boiled and roasted, while some are dried and crushed to make meal for bread, cakes or mush.

Staghorn sumac: When the red berries are crushed and mixed with water, the sumac makes a lemonade substitute.

New Jersey tea, oswego tea, black birch, spearmint, wild straw-

berry, sassafras; Used as a substitute for tea. Some of these plants are used as medicinal teas.

Kentucky coffee tree: When the seed is roasted and ground, it's used as a coffee substitute.

There are many other plants that are edible; such as many types of mushrooms, eaten by early man. If a person knows the mushrooms in his area, he may eat them eight months during the year. Again a word of caution, there are some deadly poisonous mushrooms that can be confused with the edible ones.

A person must remember when gathering plants or mushrooms for food, he must have a workable knowledge of them so as not to cause harm to himself. Every year there are some deaths or sickness caused by accidental eating of the wrong plants, especially among children.

A good example of this is the Jimson weed. The whole plant is poisonous. Attracted to the pretty flowers and the spiny thorn apple seed, children often suck on the trumpet shaped flower or the seeds. Jimson weed is found all over Iowa in fields and vacant lots so they

are readily available to the untrained.

Horse chestnut or buckeye: Children should never bite into them, they cause vertigo and coma.

Castor bean: Seeds are poisonous and have been known to cause death.

Cherry-plum and peach leaves: No one should attempt to make tea out of the leaves of these trees. As soon as the leaves wilt they develop hydrocyanic acid.

Another that should be avoided is any plant belonging to the wild carrot family. They have dissected lacy leaves and small white or yellow flowers in umbrella-like clusters. A good example of this family is Queen Anne's lace. Two members of this family are deadly poison—poison hemlock and water hemlock.

It may seem that the fall food harvest is not much fun due to all the words of caution. You can still go out and find pumpkin, watermelons, butternuts, walnuts and hickory nuts. Above all just be sure and use any excuse for getting out in our fall timbers and river bottoms to enjoy Iowa's wonderful autumn.

CORRECTION

The coot limit this season is a bag of six and a possession limit of six. The Jack Snipe season will run from October 15 to November 13, both dates inclusive. These points were incorrectly stated in some issues of last month's CONSERVATIONIST.

3 inches long. Leaflets are yellowish green, tapered at the end and have edges which are toothed.

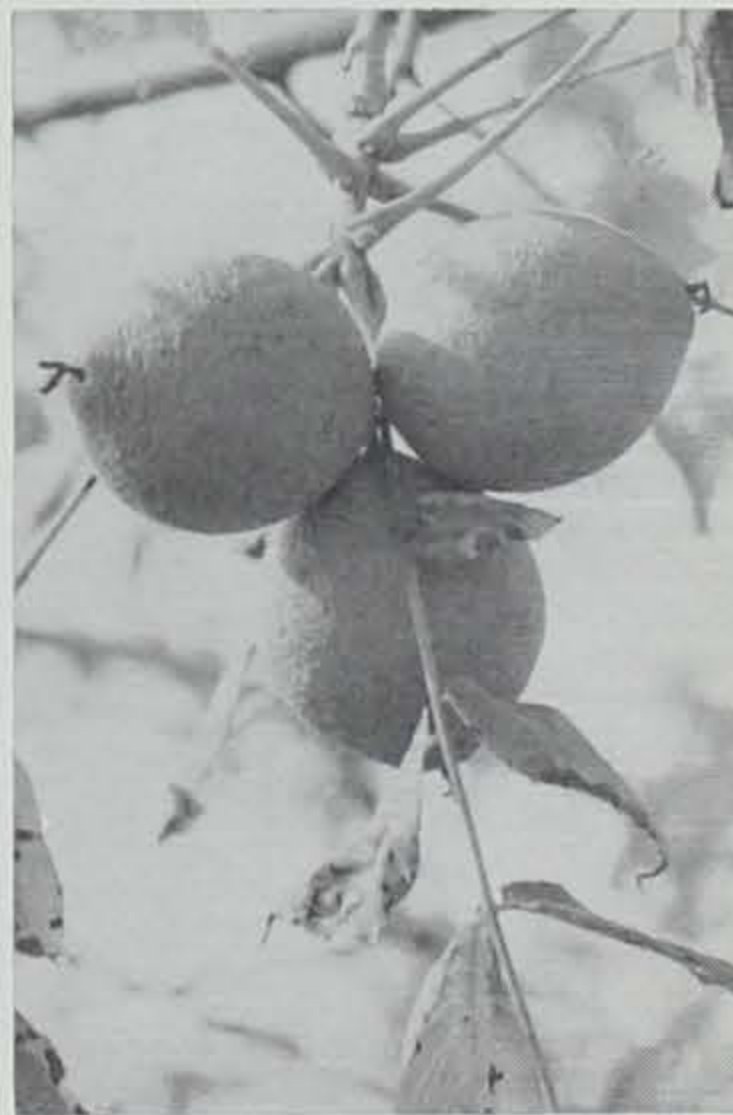
The fruit is familiar to most Iowans for there are few who have not spent time during childhood hunting walnuts. It is a large, rounded, brownish-to-black nut with a thick, hard, finely ridged shell containing an oily kernel which is rich and edible. The nut itself is encased in a solid, semi-fleshy, yellowish-green husk.

The bark is dark brown to grayish black, divided by rather deep furrows into thin ridges which are so shaped as to give a diamond-shaped pattern to the trunk bark.

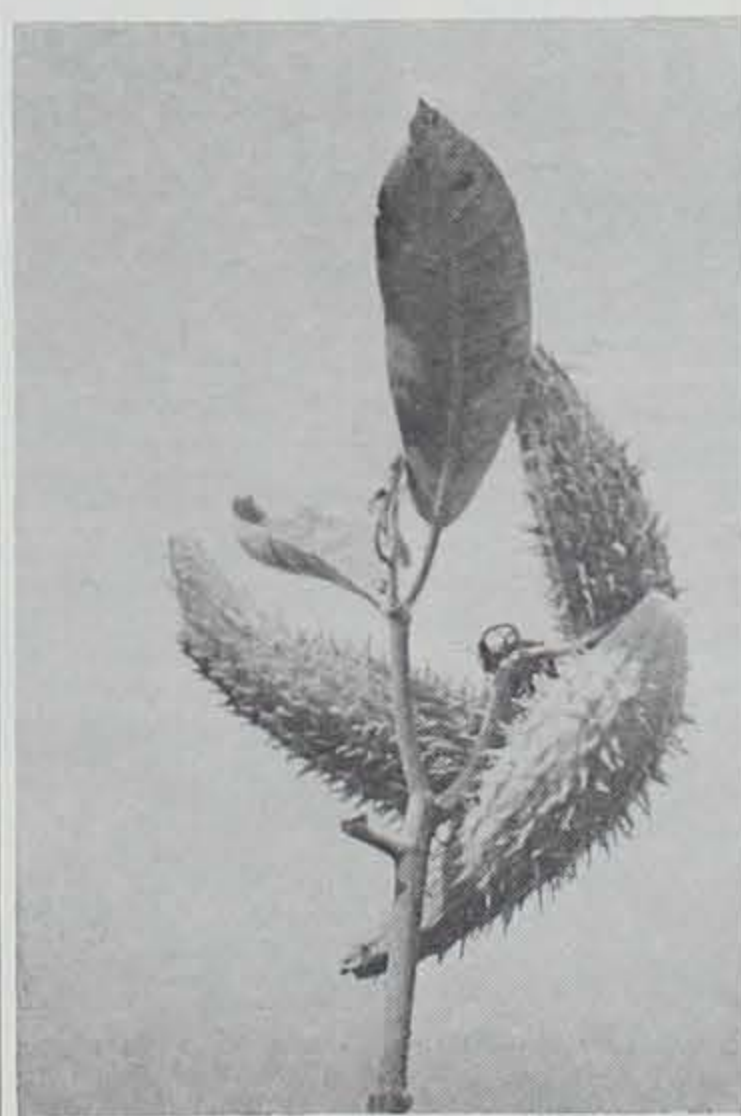
Iowa black walnut is in high demand because of its exceptionally high quality. It is generally agreed that the corn belt of the central states produces the highest quality walnut in the country. Both veneer and lumber manufacturers have scouting crews and buyers scouring the state for walnut trees. The heartwood of the black walnut is a chocolate brown in color while the sapwood is a creamy white. It is used extensively for gunstocks, furniture, face veneer, cabinet work and finish lumber. From the standpoint of monetary value, black walnut probably is the state's number one forest tree.



Hazelnut



Black Walnut



Milkweed



Elderberry

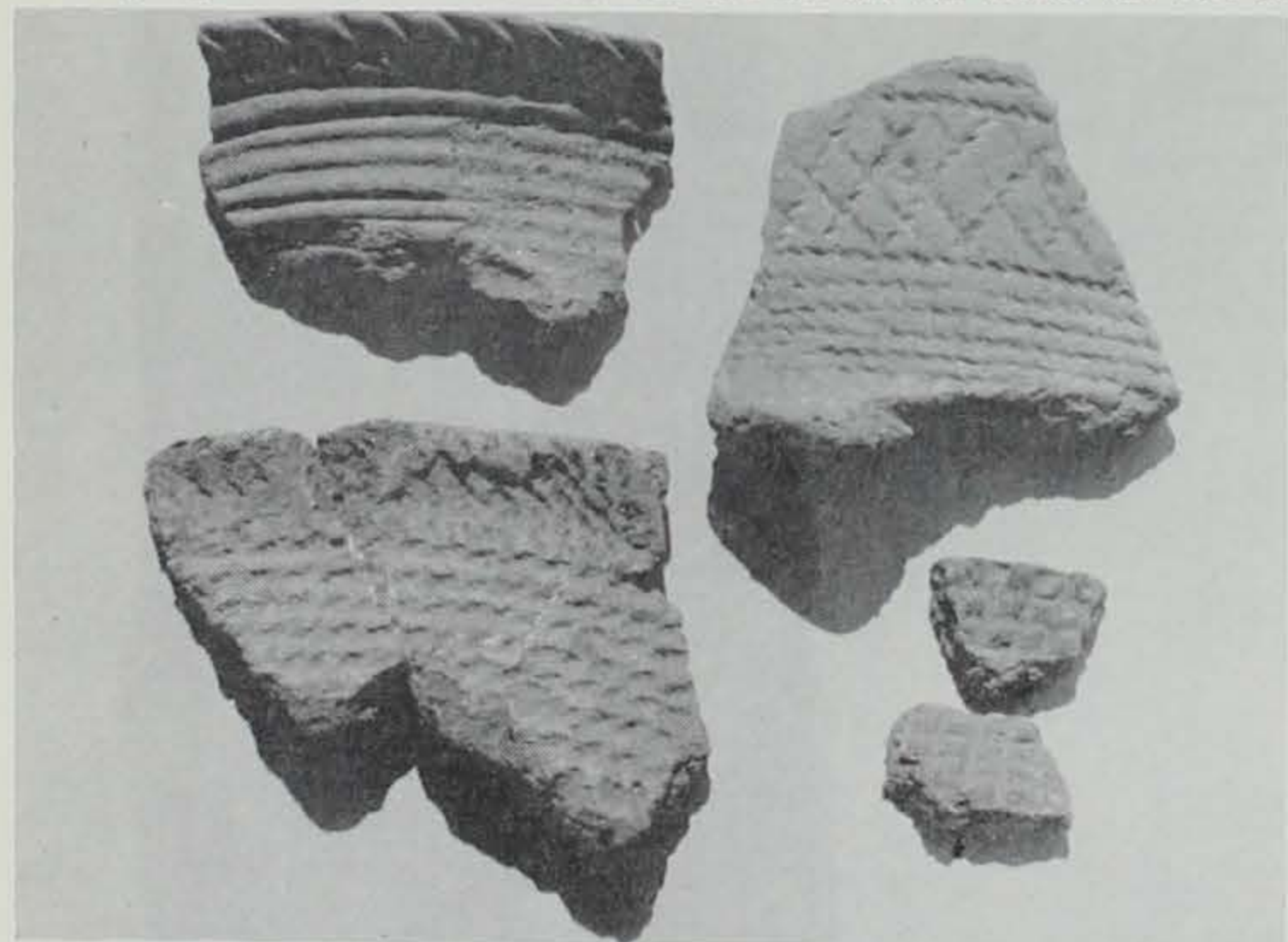
Jack Kirstein Photos



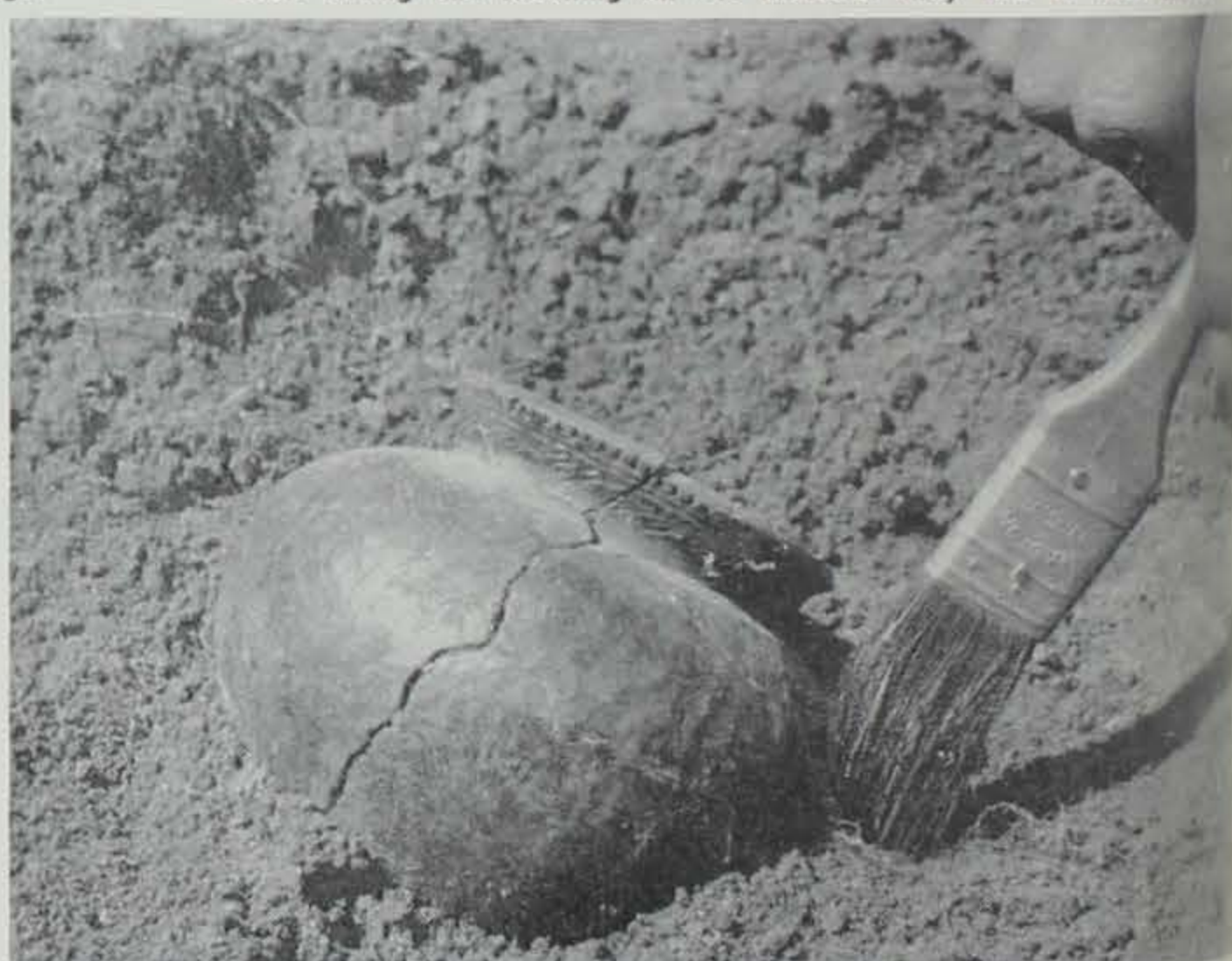
Notice the different levels as the archaeologists carefully work their way across the campsite before they begin to study certain sections. This is a site that was located near Fort Dodge.



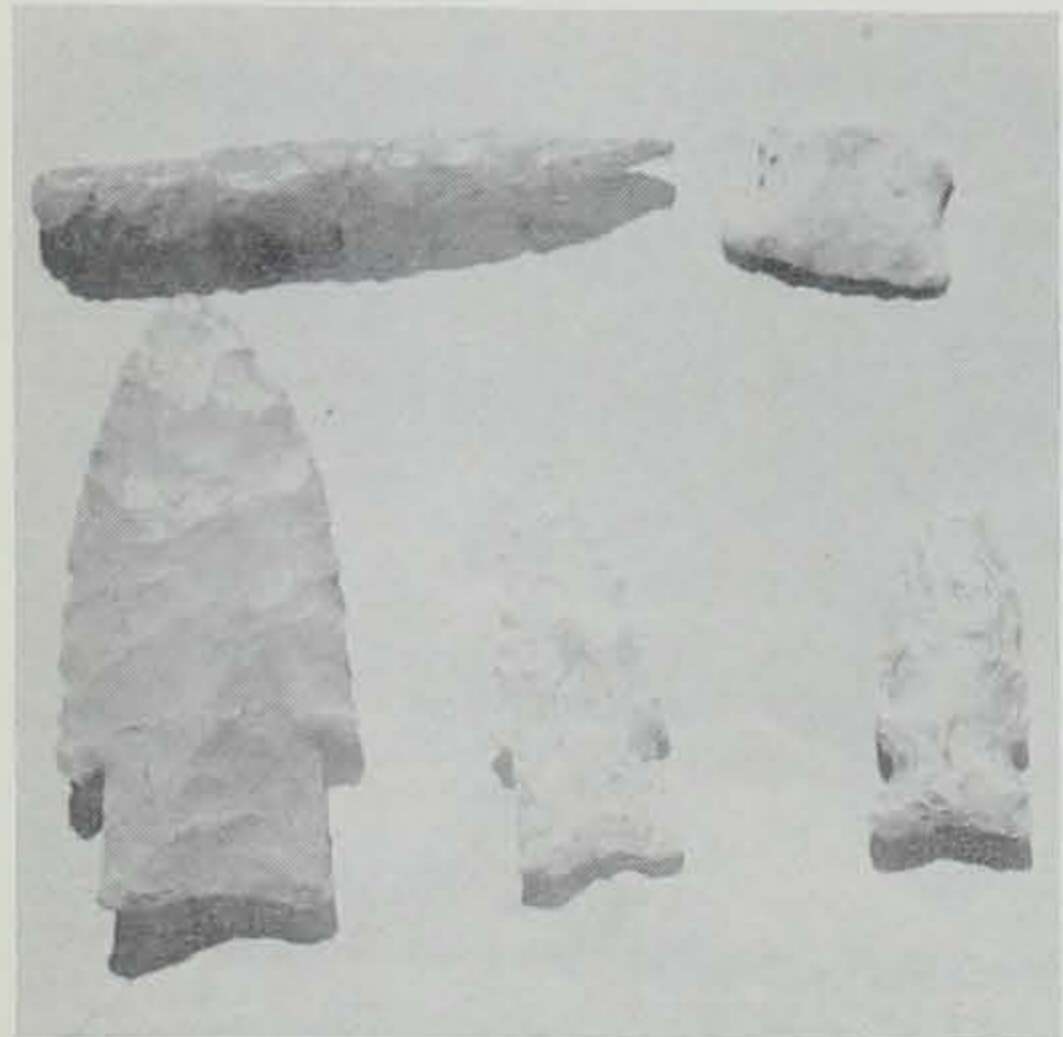
Here the work is more advanced as they carefully work at different levels sifting and labelling all the material they find in this area.



Some of the ancient pottery that was found. The Humboldt site mentioned in the story contained no pottery.



The soft brush is used to brush away debris without scraping or breaking the facts as might be the case if a shovel or trowel were used.

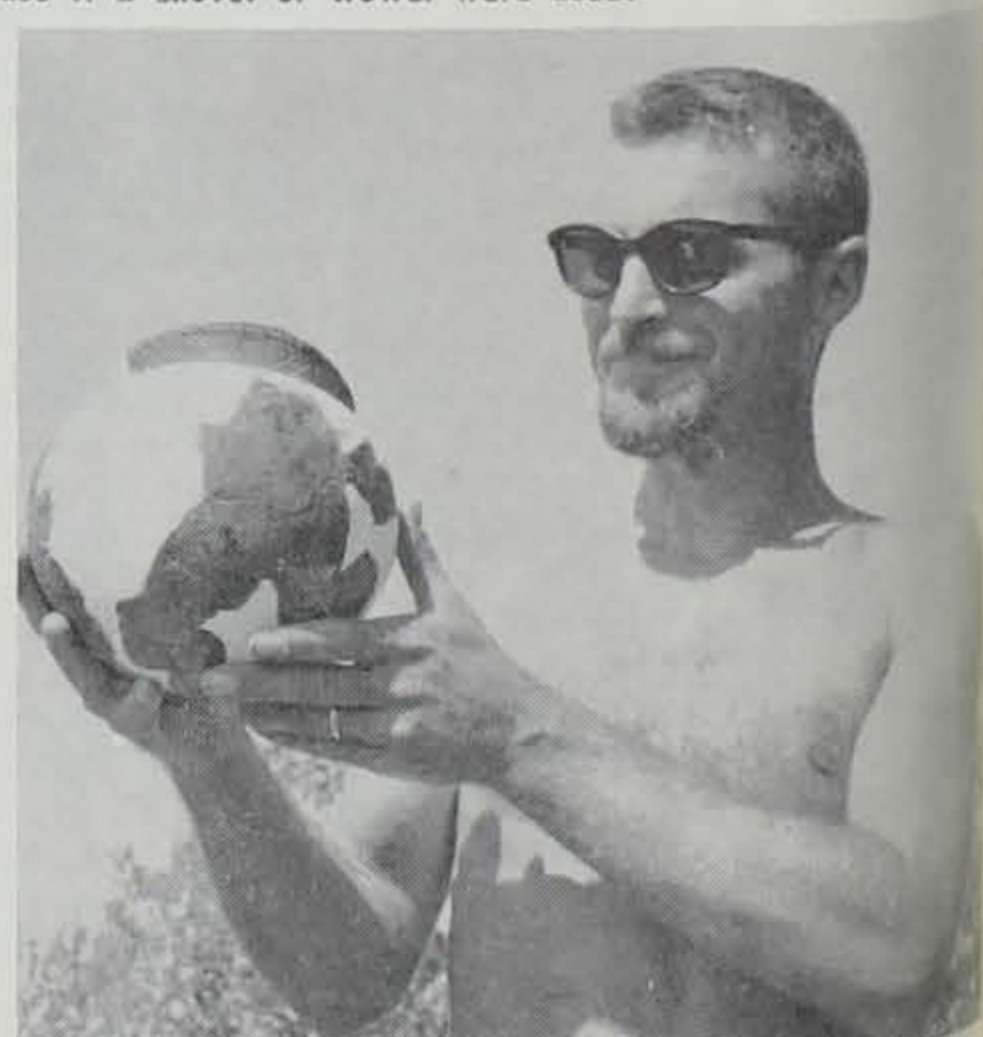


Some of the artifacts found were: Top row, awl and scraper; bottom row, spear-head, and two arrowheads.

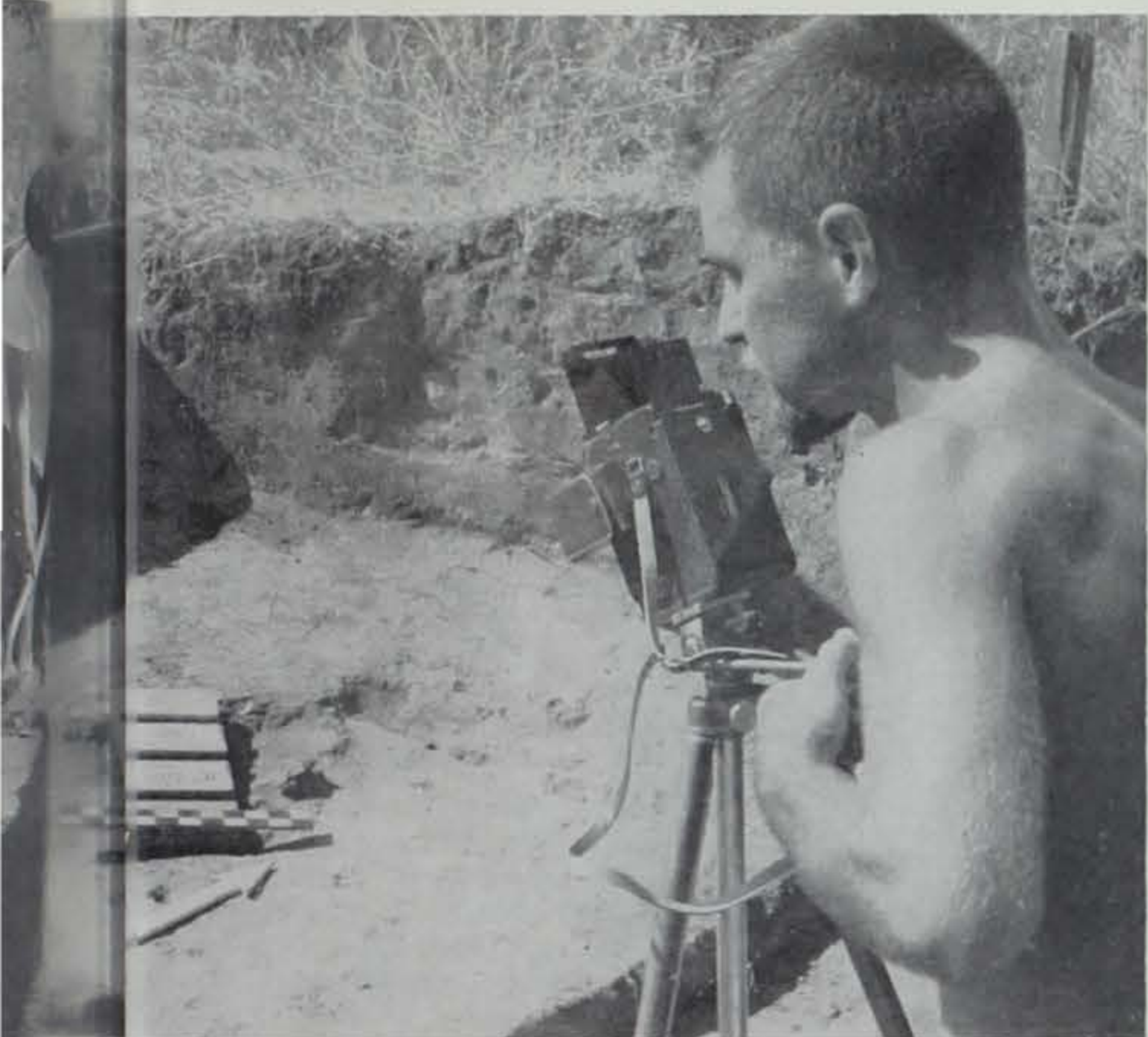
PHOTO FEATURE BY JIM SHERMAN



Signs of an ancient hunt are the bison tooth and knife found at the campsite. The bison was one of the chief sources of food, implements, clothing and shelter for the early Indian.



A finished product! The pieces of this vessel were fitted together like a jigsaw puzzle. The white area is plaster used to fill the area left by missing pieces.



The painstaking work is exemplified by this photographer as he records the location with his camera, showing the direction, and labelling that particular section of the dig.

Jim Sherman Photo

IOWA'S ANCIENT HUNTERS

Roger Fliger

Exploring ancient Indian camp sites is unique among the many projects undertaken by county conservation boards. Under the supervision of the Iowa Archeological Society, the State University of Iowa, and the Humboldt County Conservation Board, a highly trained team of archeologists have located over 120 sites in Humboldt and Webster Counties. These sites range from a few flint (shrub) chips to spectacular mounds. One of these is over 800 feet long.

Two areas are being excavated by the State University of Iowa crew. One "dig" or excavation site is located near Humboldt on the East Des Moines River. This camp site belongs to the Archaic Pony Creek complex (a specific age and people that lived in this area between 5,500 and 3000 B. C.).

This dig has not been spectacular in number of artifacts discovered, but it has been extremely valuable in establishing the particular age of the people that lived there. Many camp sites used by Indians are difficult to date because of the mixed assortment of cultures.

Working The Site

The excavation site is marked out in sections and a careful record is kept of the area and depth of every load of dirt that is sifted. The catalogued earth is shoveled into a wheelbarrow and transported to a large screen sieve. Water is pumped to the sieve from the river and washes the dirt away, leaving arrow heads, chips, grinding stones and other artifacts.

What can we learn from the remnants of these early crafts-men? The crude implements reveal that these people lived in this area not long after the last glacier re-

ceded from the state. The camp location is on an alluvial or flood plain, in soil that was laid down by the East Des Moines River. This soil covers the glacier carried rocks that are found in the creek beds and along the top of the ridge to the north. The many small broken stones in the field tell us that they were carried by these people to line their campfires, lodges and perhaps to grind vegetable materials.

Life Of The Pony Creeks

Early Archaic people lived by hunting, but they added fishing and plant gathering to insure a better living standard. These people were nomadic travelers although they were beginning to have a sense of territory which led them towards settling down and defending hunting grounds.

The lack of pottery at the site indicates that bark vessels were used. Pottery making for these people had to wait for over 1000 years.

Two important gains were made by people of this Archaic period; the domestication of the dog and use of plants to supplement their diet. The main item of food was still meat. Chief game animals were members of the bison family which were plentiful in this area. It is hoped that further work will reveal more information of how these people lived.

Not Open To Public

The location of many sites will not be made known until work is completed. In the past, amateur and untrained people have often destroyed valuable archeological sites by digging up mounds and spreading their contents to be scattered by the four winds. Almost without exception the arti-

PICNIC? ANY TIME!!

Stan Widney

When it comes to throwing a picnic or weiner roast my cousin Newt's wife, Rebecca, just can't be beat. Whether it's a family reunion or her Sunday school class she's always ready to go in an hour's time and she can get ready just as quick for a two week's camping trip.

Take last Sunday morning for instance. It turned off mild and clear by the time church was out and my wife said, "O dear, it's too nice to go home and cook a Sunday dinner."

That was all it took. Becky fairly beamed. "You're tellin' me!" she said. "I'll have Newt load the box in the station wagon while I'm throwing some things in the kettle."

"Now Becky," said my wife, like she always does, "You're not going to do it all again."

Becky shook her head and waved both hands in front of her. "Land sakes! No trouble at all. If you want you can chip in and pay for the chicken and such, but I want to get going. This air is ambrosia, pure ambrosia!" Becky always says that and my wife replies, "Well, if you're sure you won't go to any extra bother—" "Oh phooey," says Becky, "You know me. But you can make some of the wonderful potato salad if you want, Dear."

That's the way it starts, most every time. We agree on the picnic ground—usually the nearest state park with a lake or stream. "No fishing before we eat!" Becky says.

This time, since it was the middle of October and the first frost had hit our area a couple of nights before, we chose the Ledges State Park. We arrived at our favorite "nook" just north of the boat ramp by 2:30 and found Newt and Becky already there. Our kids joined theirs in the investigation of a few trails they intended to roam after lunch while my wife spread the table.

Newt already had the "box" set up so we just sat around smoking and admiring the blaze of glory that frost had painted on the leaves of the oaks, maples and all the other plant life.

Squirrels were everywhere, so tame in this refuge that they didn't

facts are lost, traded or mixed with other artifacts and end up in Auntie's attic—worthless to the educator or historian.

An Ancient Urge

Man has always been a fisherman and hunter. Perhaps the love of the chase that makes us take to the fields also motivated the early Iowans to tackle mastodons and giant bison. It is encouraging that state and county agencies can coordinate to learn and preserve our rich hunting heritage by this valuable archeological work.

mind a bit when Newt pointed a stick at them and made sounds like a rifle shot.

Now and then I watched Becky at the "box" as she transferred partially cooked frying chicken from a big kettle to a huge frying pan on the camp stove which was already giving off crackles and odors that made my mouth water.

That box! Newt had spent a whole winter building it according to Becky's specifications. It was three feet high, four feet wide and 18 inches deep with a front panel that let down to form a table. It fit just right on the tailgate of the wagon, or could be lifted off and placed on a picnic table. When necessary, legs could be bolted on in a jiffy.

It was filled with drawers and compartments that contained everything from a first aid kit to all the condiments a good cook could ever use. Becky always says, "Pandora never had it so good." She says that box holds enough to feed a family of four two days on a camping trip.

In no time at all we were sitting down to a meal that left us too full to do anything but toss a line out into the Des Moines River and lie down on the bank and let one of the kids watch it.

The shadows lengthened and the chill of October crept into our bones. Becky whistled the kids in while Newt and I loaded the "box" back into his wagon—a surprisingly easy task even when full, it was so well organized.

On the way home my wife said, as she always does, "That Becky! You just can't beat her for knowing how to spend a perfect Sunday afternoon!"

I thought of all the other "Beckys" we had seen that day at the Ledges, and all of those who had been enjoying picnics in that wonderful weather in other Iowa State Parks, and said, "Yes sir, they sure do!"

THINGS YOU MAY NOT KNOW

The grizzly bear is the only bear with a hump on its shoulders.

* * *

No other duck has so wide a distribution as the Gadwall. Of the larger regions of the world, it is missing only from South America and Australia.

* * *

Bats utter high-pitched squeaks, sometimes fifty per second, which are inaudible to man.

* * *

Treefrogs or treetoads have sticky pads on the tips of their digits which enable them to cling to smooth surfaces upright or even upside down.

* * *

Salamanders are distinguished from other amphibians by the possession of a tail throughout their lives. Frogs and toads only have a tail during the tadpole stage.

THE BLACK POWDER GANG

M. E. Stempel
Quail Biologist

Hanging low beyond a bare hedge row, a bright November sun silhouettes a quail shooter. He advances slowly toward the motionless tan and white pointing dog. One, two, three steps the man takes. The dog stands tense and quivering. Just an ordinary quail hunting scene.

The gun the man holds is a double barreled fowling piece that has damascus barrels and a ramrod. The drawn hammers are long eared, and they are cocked over bright copper caps! This could be a scene from 1861 hardly ordinary today.

It is 1961 when many men and some women will be hunting with muzzle loading guns. These hunters thrill to the smoke and flame of the old end-loaders.

Gaining Popularity

Hunting and target shooting with muzzle loading rifles has been a hobby since the day these guns were invented. Collectors pick them up whenever they can. Dealers have sold to all classes of customers in both the foreign and domestic markets. You can get any type of gun in any condition and these may be classed: mint (like new), good, fair, and rough. Collectors and dealers have shows, meetings and their own publications. Also there are charter clubs for shooting enthusiasts in 42 states including Iowa. Not only can you get most types of pistols, rifles and shotguns, and combinations, but you can get repair parts, most of which are standardized. These include nipples, hammers and screws. You can obtain an old gun, a new one, or you can get the part and make the gun. A few handy individuals make barrels also.

Gun prices are highest for those with a pedigree. As an example, matched pistols belonging at one time to European royalty will bring as much as \$1200 a pair. Clean American made rifles bring \$350.00 and more.

Scatterguns

To bird shooters the shotguns are favorites. Some of these are available in fair condition for \$20.00 to \$60.00 if in good shape and shootable. There are sources for foreign shotguns, a century old or older with polished bores and in A-1 mechanical condition. They sell for \$100.00 to \$180.00. Often all accessories are with the gun. This includes powder measure, cap box, cleaning equipment, shot container, wad cutter, and the gun case. These guns range in size from 10 to 28 gauge. If you want a new gun, these are available at about the same price as a modern breech-loader of similar make and grade.

There is much satisfaction in owning one of the fine old fowling



How's this for sport? A Manton Flintlock Double (12 ga.) built in 1750 by the gunsmith to the King of England.

pieces. Perhaps you have one that came from a family who knew the history of the gun. It is a pleasure to disassemble the old black powder shooter, inspect the bores, and take the tubes to a good gunsmith who will tell you if you have one to shoot or junk. On the barrels you will find the proofing marks, and from these you can learn the country origin.

Sometimes the wood of an old timer is in good condition. In such case you have only to sand and re-varnish the stock. Others may require a new stock to look sharp. Hammers may be complete, but often careless hands have snapped the hammers and ruined both hammers and nipples. Fortunately either can be replaced.

Safety First

The gun you buy may be loaded. To determine this, shine a light down the bores to see if it is plugged. If no light comes through the flash holes in the breech, take the gun to a gun mechanic and have the charges removed. While in the shop have him check the bores for excessive pitting.

Do It Yourself

Some gunsmiths will refinish old end-loading guns if asked, but there is much enjoyment in doing this yourself. With the bore and breech safe you can begin the finishing. If your gun was stored in an attic or other dry place you will find that it is only lightly rusted and cleaning and polishing the bores is quickly done. This is accomplished by use of a three foot dowel stick; split one end for two inches with a fine cut saw and in the other end insert a headless screw. Now you can mount the screw into the chuck of a hand or power drill, and insert a two inch wide strip of emery cloth in the barrel. Spinning the stick will soon remove the rust. Polish with fine emery cloth, or with valve grinding compound. Shallow pits will

do no harm, but take no chances on firing a badly eroded barrel.

The action of the gun should also be dismantled. Rust can be removed with steel wool or with the aid of a razor blade. A broken ramrod can be replaced with a hickory-wood stick.

Shooting Black Powder

Caps for the end loading weapons will likely be the number eleven size. For the shotguns FFG powder is generally used. Wadding may be made of newspapers, napkins or similar material though they can catch fire and be a hazard in dry weather. It is preferable to use hard cardboard wads. One or two of medium thickness are used over the powder while a thin one is placed on top of the shot. Use light loads at first to make sure the gun shoots safely.

Standard powder and shot measures are available from reloading supply houses. Some rules of thumb for loading are, "Measure powder in the cup of your hand," "Like measures of powder and shot." A measure that will hold three drams of black powder will also hold the correct amount of shot.

This fall, some black powder smoke will be seen in your favorite shooting territory. Even though modern guns are available that shoot 20 to 50 rounds per minute, the two shots per five minutes from a muzzle loader pack more enjoyment.

Just try a shot with one of those old twist-barreled, fire spewing, smoke makers. If you're a hunter you will like shooting a percussion because every time a member of the black powder gang rams down a charge of powder and shot he ties himself to the men who made this country.

The vocal sounds of the mink include a low growl, a deep, savage snarl and a shrill squeak.

IOWA'S INTERESTING
HARD SHELL SERPENT

Roger Fliger

Turtles arouse the curiosity of man whenever they are encountered. With their heavy shell, claws and ever-ready jaws, they sometimes bring a shudder to the less curious individuals.

Iowa has a respectable number of turtles—soft shell, snapping, painted, box, blundings, and others. The snapper and the soft shell are the largest and are quite abundant in all of our waters. The other kinds take their place in nature's realm, but for other than nuisance or curiosity value, they are not economically important.

The almost universal reaction of turtles by people unleashes a whole barrage of wild tales. One, that a turtle has seven kinds of meat, at least isn't too misleading. They have different types of meat—leg, neck, tail, tenderloin, but it is all turtle. The neck and loin meat is a rather white muscular meat resembling (with a little imagination) chicken breast. The meat is dark and is much like squirrel or rabbit. The legs are fleshy and muscular. When browned and slow baked, they make you a turtle connoisseur of life.

The Snapper

Let's take a closer look at the snapper—it is a reptile on which they hung the Latin name "Chelydra serpentina serpentina." Maybe those Latin namers were about right because he does resemble some of the fairy tale serpents. He's mostly tail, head and four legs and shell. The shell has a top and bottom, the upper story is serrated on the back side and goes by the name of the carapace. The lower floor is called the plastron. The two are connected by two narrow shields between the front and legs.

Turtles have lungs and are breathers, although they can without breathing for long periods of time. After the breeding period in May and June, the female lays from 20 to 40 eggs in open, sun and well drained soil close to a stream bank. The number of eggs probably varies with the size of the female. The eggs measure about one inch in diameter, white and very rugged in construction—a characteristic that follows the snapper through life. The snappers hatch in late summer and are quite able to take care of themselves at birth.

Little is known of the maximum age and weight. If there is any topic in which people like to bend the truth it is size and life span of turtles. With fish and Canada geese, weight of a turtle decreases idly when put on a scale.

Generally speaking, we

(Continued on page 175)

EST FIRST "MUSKIE" FOR WEST OKOBOJI

Carol Buckmann

Iowa's first honest-to-goodness "muskie" in West Okoboji was captured in mid-August by biologists. The muskellunge or muskie is the sign of successful plantings of stocked muskies in Iowa waters in the history of Iowa conservation practices and fishery management. It is one of the 40 models in West Okoboji in 1960. A biology survey crew captured a muskie (*Esox masquinongy*), their routine survey haul made in the vicinity of the Egralharve area on the west side of the lake about 100 yards from the extreme end. The fish, weighing 15 pounds and measuring 19 inches, was well matched with typical muskellunge and identification. In September 30, 1960, when the muskies were released, they measured 19 inches and weighed 15 pounds. These are the only muskies stocked in Iowa waters. In June, 1960, this muskie and 1,499 others were bought from Wisconsin to the tune of \$500 and placed in a special pond at the Clear Lake hatchery for muskies. Of this number 40 were stocked in Clear Lake and 40 in West Okoboji while five were held at the hatchery. This is considered a good survival total for this fish since 10 percent return is considered excellent in such rearing experiments. The cannibalistic muskies feed on carp and goldfish which are artificially spawning. To avoid the cannibalism, the pond was cultured with dayphnia, a microscopic food. There are two strains of muskies, the Ohio River Watershed and the Ohio Lake Erie strain. Iowa used the Ohio River strain which was stocked in Ohio with much success. Muskies will never be abundant compared to bass, crappies, and bluegills since they are not greedy and quite solitary. Paradoxically their solitary habits, the way they set up their own territory in the same manner as the cock pheasant. The potential is unlimited since we don't know the territorial requirements in muskies. Two or three have been reported from Iowa. One was along the Skunk River and another around Clear Lake in roughing operations. The Clear Lake muskie was captured and freed. For several years the same fish was captured in roughing operations and released. Years later it died, washed up on shore and was later found. Now this fish got into Clear Lake remains a mystery but it is thought to have been taken in

TURTLES—

(Continued from page 174)

that snappers have survived twenty years of captivity and they may live twice that number of years.

The weight of a turtle depends on the environment in which he lives. A snapper in a shallow lake that has a constant supply of food will grow faster than a snapper in a fast, rocky stream with little natural food. On the other hand the shallow lake may freeze out or dry up, exposing the turtle to hazards that the other turtle will not encounter. Perhaps the ideal condition would be a deep, slow moving stream that has plenty of drift piles, rooty banks, etc., that would provide a constant food supply and a non-freezing wintering habitat.

The Records

After weighing hundreds of snappers an 11 or 12 pounder was found the average, two of the largest weighed slightly over 20. Old "Hattie" of State Fair fame weighed in at 36 pounds and I have seen a couple over 40 pounds in museums.

Of the hundreds of snapper stomachs I've opened, fish or other aquatic life are most commonly found. Crayfish and small fishes seem to be what they prefer. Some vegetation is eaten and also a wide variety of accidental items. These may be anything that swims, crawls, falls or drowns in the river. The snappers can be a real nuisance by taking young ducks, fish from a fisherman's stringers, bait from hooks, and killing fur bearing animals. They are probably beneficial in eating carion, destroying large amounts of undesirable fish, and taking surplus animals that may be in a population explosion. They also provide a well established article of our diet.

Turtle stew has become a house-

a fish rescue operation in the Mississippi River and transported to Clear Lake with a load of north-erns. The muskie is not a native to the Mississippi but a few are occasionally reported which are thought to come from Minnesota of Wisconsin waters.

One thing for sure, says Ken Madden, Supt. of Fisheries, because of its limited number the muskie is not going to single-handedly control the over abundance of small pan and rough fish. It may, however, contribute its part in predation if it survives in Iowa waters.

Now it's illegal to take muskies, but someday, says Madden, we hope to have the muskie available for sport fishing. As soon as the financial situation will permit, possibly in 1962, the Fisheries Section hopes to purchase more muskies and begin a second rearing project. Improvements planned in rearing techniques include earlier periodic thinning and experimental stocking in different types of habitat.



Jack Kirstein Photo

Hooking the snapper is just half the sport, you still have to get him out of the water and into a gunny-sack. One like this can really give you a tug-of-war.

hold word—although not as popular in Iowa as other areas of the U. S. Some large cities such as Philadelphia have restaurants that specialize in snapper delicacies—many of them Iowa grown.

How do Iowa turtles get to Philadelphia? The turtle hunters (hookers) are a small and little known group of Iowa outdoorsmen. All of them list the sport as their favorite pastime. The activity usually begins in mid September although there is the more elite group that pursues turtles by swimming, diving and catching them by hand. By September the water has cooled off and snappers move out of shallow marshy areas toward running water or lakes.

At this time the turtles go into a more or less dormant or quiescent condition. In running waters, the snapper will choose a protected muddy bank that has an abundance of roots, logs, or debris. If a riffle hits the outer edge of the entanglement, all the better. They wedge themselves into the mud at a depth where they can get air if needed and where the ice will not freeze them during the winter. An old muskrat hole will sometimes have snappers six or eight feet back from the entrance. Also, piles of junk, beaver dams, and springy holes will provide a turtle gathering place.

Hooking

A long steel rod with a small hook on one end and a handle on the other is used to probe these likely places. The hooker usually wades along in hip boots probing all of the likely looking spots. When the steel hook strikes a turtle's shell it makes a noise that sounds almost like hitting a rock. Find a turtle and practice by running a rod over and around the shell.

When you are certain you have located a turtle, turn the hook up and slide it down under the lower shell. When the hook hits solid shell, pull back with everything

you've got. The snapper may come out fast or require much pulling. In any case, be ready to grab the tail the minute it emerges from the bank. The turtle is then unhooked and put in a gunny sack. Tie the sack securely as they are very powerful and will escape from a carelessly tied sack.

Often two, five or even ten turtles will be taken from one gathering place. Early in the fall they are lively and if you don't work quickly they will swim away. Later in the fall they are quieter, but may require much more energy to pull them out through the roots and mud.

Turtles are shipped alive to distant markets in wooden barrels or boxes. They are also cleaned and sold locally. The expert can completely clean a turtle in five or ten minutes. After watching some people wrestle for an hour to clean one turtle, the best advice is to practice and overcome the notion that they are dangerous. The jaws can inflict a painful bite, but they can't take a finger off unless you pull it off. If a turtle latches onto your finger, push back into its mouth and it will release its hold in seconds so you can jerk it out. If you pull and pull it will clamp harder like a bull dog.

A strange highlight of turtle hooking is that the snapper is the only member of the clan that is taken in this fashion. Where do the leather or rubber backs go? Sometimes they bury themselves into the muddy bottom or maybe they don't den up. There are many questions about turtles unanswered, but that is what makes the outdoors and its wildlife so interesting.

The next time you see an old mossback crawling across the highway remember there is much to be said for this serpent with legs that has adapted himself to the changing conditions for millions of years and is still with us today.

BOB WHITE OF THE MARSH LAND

Roger Fliger
Naturalist

The Wilson's Snipe or "Jack Snipe" as it is commonly called, is one of the game birds that was hunted last fall. This year's season runs from October 15 until November 13 during the hours that other waterfowl can be taken. The bag limit allows 8 birds per day and eight birds in possession.

Perhaps there is relatively little interest on the part of the average hunter whether it is included in the list of game birds or not, but to the serious hunter or ornithologist there is an abundance of sentiment and interest.

Being a hunter and amateur ornithologist I must relate my experiences with mixed emotions. The season was closed on Jack Snipe when I first began to hunt. I read articles and books on the subject and listened to the old hunters tell of bygone days of super abundance and the moan and groan stories of outdoors writers and naturalists. It certainly gave one a "born fifty years too late" complex. Since I had never seen the multitudes of fowl or how they had been depleted, I didn't miss them.

I was content to watch the little darter pass over the duck marsh and enjoyed its rasping single call; at least it was a remnant of the horde of the past.

It is said that more Jack Snipe fell to the hunter's gun than any other game bird in the history of this country. Since many formerly abundant species of birds such as passenger pigeon and prairie chicken were included in the list, the number of snipe taken must have been beyond comprehension.

Over the passing years the Fish and Wildlife Service checked and rechecked the increasing numbers until they proclaimed an open season on the Jack. While I was skeptical of the decision I decided to explore the possibilities of the species.

I forgot about trying the little demon until several days of the season sped by. It seems sporting habits are as hard to break as any other one may acquire. Although I'd carried a few 7½ trap loads, it was hard to think about them when there was the possibility of bagging a mallard even though snipe were seen darting over the marsh almost constantly.

One morning only a lone duck or two appeared and they soon disappeared as the sun burned the morning mist away. A pair of Jacks with wings cupped settled into the bogs a short distance away. I shucked a couple light loads into the gun and moved forward. The pair rocketed up almost at my feet and spooked me the way quail often do. I cut loose too quickly when they were still going up and my shot pattern wasn't



much bigger than a hat. Luckily I missed clean. I waited until they leveled off and fired the second shot just as the pair took one of their characteristic flight dips. They disappeared in the distance in excellent health.

Since then I've learned something of their bag of tricks and realize why they must have intrigued the gunners of the past. Light trap loads in the 12, 16, or 20 gauge and open chokes are the order of the day. I had fine shooting with my little .410 single and would imagine a double .410 would be ideal because they often jump in pairs and are by no means an easy target.

The edges of sloughs, pot holes and wet pasture lands provide ample food for this long-billed, small, shore bird. The majority of the birds pass early in October and November though I have seen them while fox hunting around open springs and tile drains in January and February and a few stay with us all winter.

The amazing neutral brown plumage marked with rich brown and black strips over the head and down the back and rusty tail separate the snipe distinctly from the other protected shore birds. The Jack's confidence in its camouflage will allow hunters to approach extremely close before rocketing up emitting a "scap-scrap" to throw confusion into the startled pursuer.

A year or two after first hunting the Jack Snipe I was watching the spring duck migration south of Iowa City along the Iowa River. A pair of 6 by 30 binoculars replaced the old Ranger 12 gauge. The river was at flood crest and areas that had been quail and rabbit habitat the fall before were covered by several inches of water. In the gathering dusk I recognized

the familiar Jack Snipe take flight and ascend until almost indistinguishable, then in a violent vibrating power dive it came earthward. This maneuver produced a soft tremoring whistle equaling no other sound I had experienced in the field before. Not once but many times that evening several snipe put on the performance with the repeated pulsating, haunting cadence of its descent.

Later, while rereading the antiquated text books, I learned that the sounds were once common in the spring on glacial wetlands of Iowa. It is produced by the extended tail feathers and cupped wing feathers as the air rushes through them. This mating flight was commonly referred to as "winnowing".

The Jack Snipe is certainly a northerner; few birds ever nested in Iowa. John Krider's Notes of 1879 report they are "found breeding in northern Iowa". W. H. Bingaman reports "one set (eggs) taken in Union Slough (Kossuth County) May 3, 1901." The only snipe I found nesting were three pairs in a slight rise in a marsh near the Shoshoni Geyser Basin, Yellowstone National Park, Wyo., July 27, 1952. Perhaps it may re-establish itself in some of the restored marsh lands of Iowa, but it is doubtful.

Small compared to our other game birds, the Jack Snipe belongs to our hunting heritage; when shore birds moved through Iowa by the millions. Whether we add it to our game bag or salute it on its erratic flight over the wetlands, controlled hunting, preserves, and restoration of marsh habitat should insure that the brown darter will never follow the path of the passenger pigeon.

Erratic in flight, explosive on

Hunting Outlook—

(Continued from page 169)

northern birds constituting the major part of the flight.

GEESE: The production in major breeding grounds appears about normal so the season should be similar to last year provided weather and other factors cooperate with the hunter.

QUAIL: The quail are making comeback! July and August roadside and whistle counts show definite upward trend in the population, according to M. Stempel, Quail Biologist. Sign counts by mail carriers nearly double that of last year. Conservation officers' counts are somewhat lower, but still up over 1960.

The significant rise this year can be attributed to excellent survival last winter compared to the winter before, which was the worst for quail since 1936. Broods appear late this year and if September weather is damp and warm, quail hunting can be expected in the best areas.

The relative numbers of whites seem to be fairly even across the southern Iowa range. In the southern two-thirds of counties between the Nodaway River near Villisca in the west and the Mississippi on the east, brushy draws running into corn fields can be good ground. Even though mail-carrier reports indicate a higher population in central counties, hunters have recently done better in the southern.

Quail hunters, by the way, consider dogs an important part of their hunting equipment—more than 90 percent rely on the canines in the field. And those with dogs usually come out ahead of the hunters without dogs.

HUNGARIAN PARTRIDGE: Increase in small grain fields this year increased desirable nesting habitat for the Hun. It is expected that improved populations will provide some fair shooting in this splendid game bird.

SQUIRREL: A good population of squirrels is present in all timber areas of the state. A good mast year in 1960 contributed to the squirrel population this year.

RABBIT: The rabbit population is at about the ten year average for Iowa. This year the July roadside counts, conducted by officials and biologists, showed a statewide average of 4.3 rabbits per mile. The highest counts were made in southern Iowa. In 1960 the counts showed 6.9 rabbits per ten miles making that year the highest in the ten year period.

RACCOON: Population is high statewide.

As cool weather and colorful leaves spread across Iowa, the hunter will once again revisit favorite fields, marshes and woodlands. A supply of his favorite game will be waiting to be harvested.

the take off, and a challenge to the gourmet, they are the Bob White of the Marsh Land.