

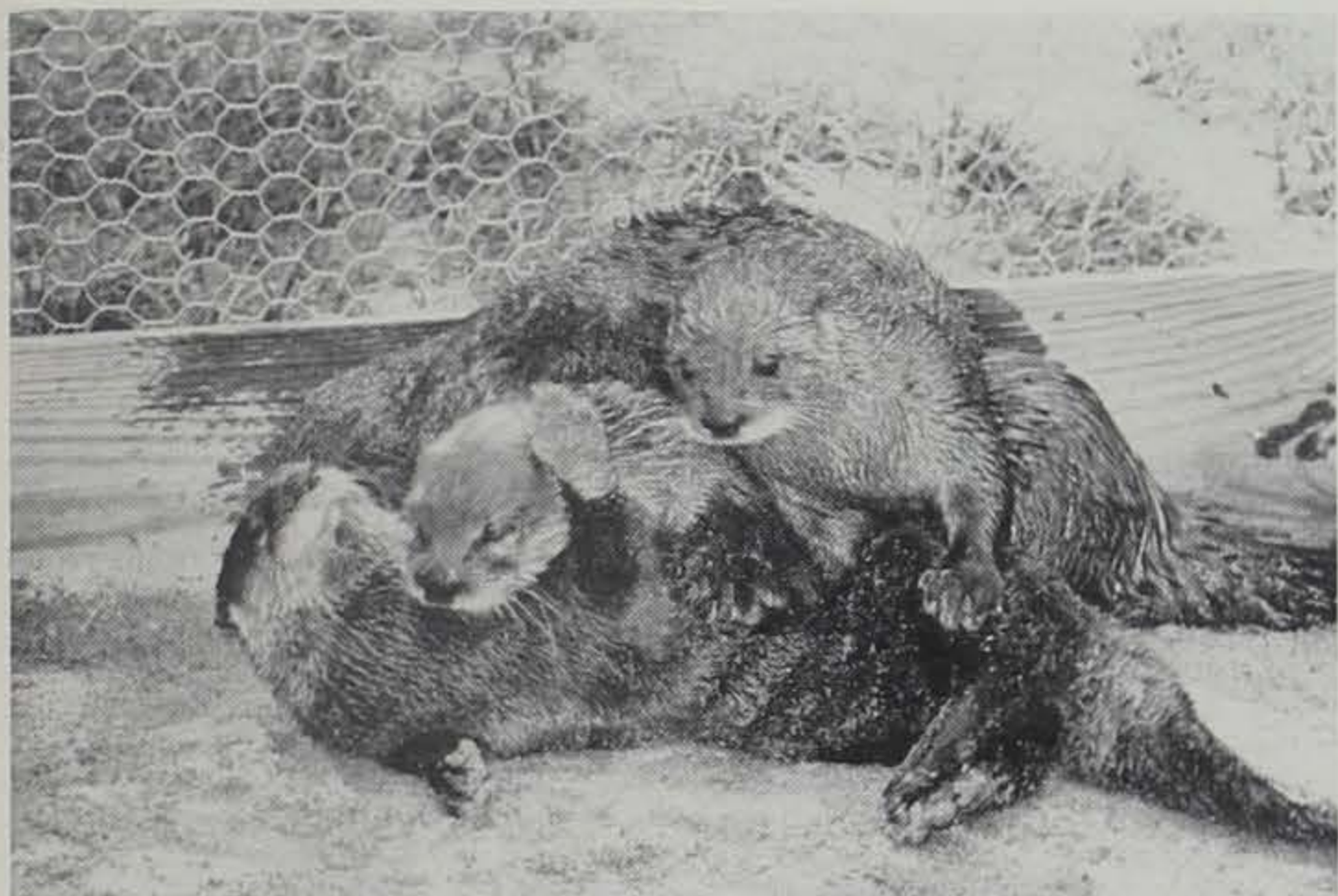
IOWA CONSERVATIONIST

Volume 18

July, 1959

Number 7

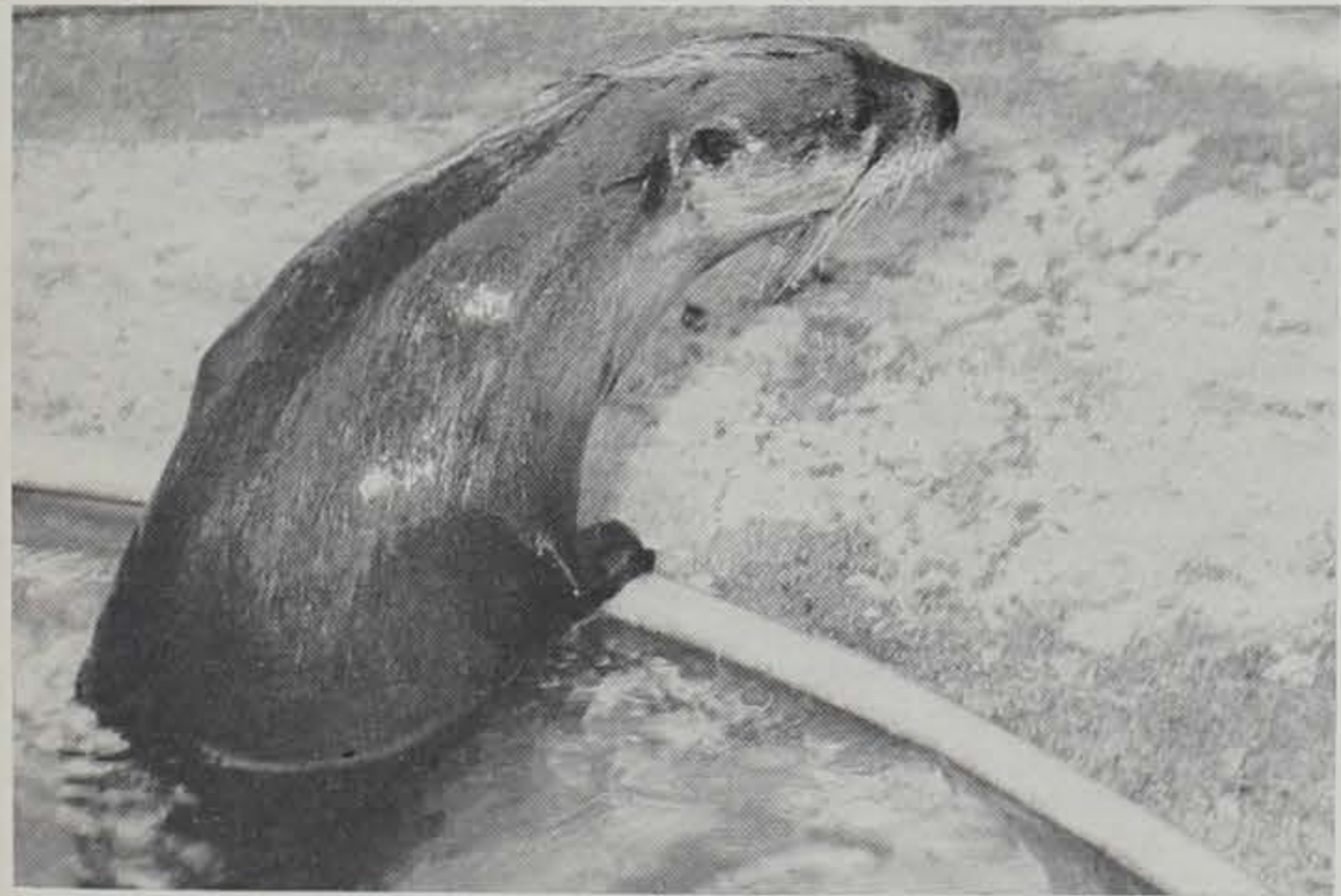
CAPER CUTTING CUTIES NEW ANIMALS FOR CONSERVATION FAIR EXHIBIT



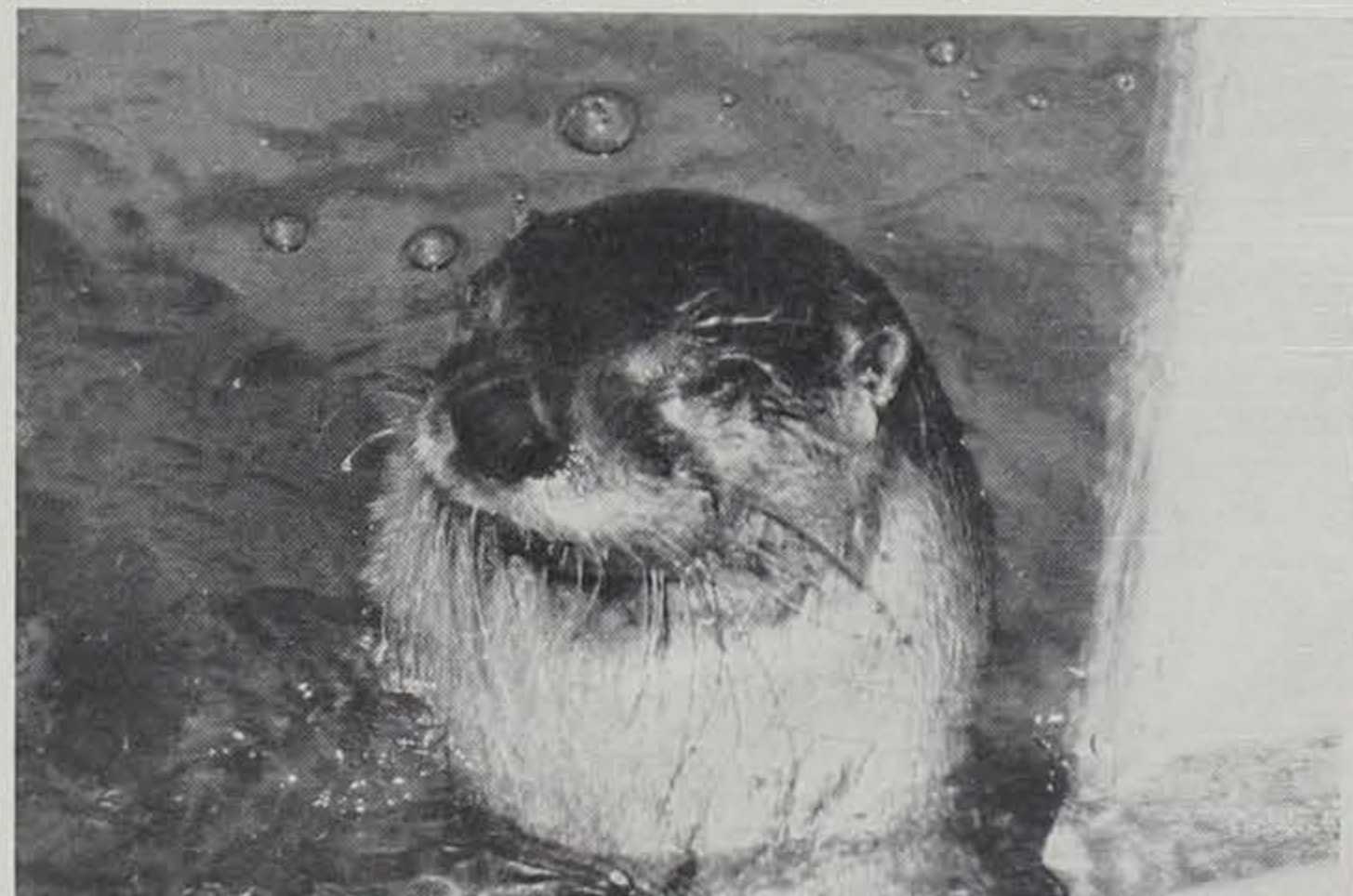
As with human year-olds, posing can be a problem. A fun break lasts all day—every day.



"Come on in Sport!" The otter in the tank is forcibly trying to persuade his land-lubber girl friend to come in for a dip.



"Wonder what's going on over there?" Obviously, there are more interesting things happening over yonder.



"Don't you wish you had it so good?" Come and see us at the State Fair Conservation Exhibit. Jim Sherman Photos.

Visitors to the Conservation Exhibit at the Iowa State Fair have a rare treat in store for them. The three yearling otters purchased by the Commission last May are always ready to romp—and they don't care who's watching.

Though common when this area was settled, it wasn't very long before friend otter and his very durable pelt were thinned out until they were thought extinct. Shortly after World War II some tracks

were found near the Mississippi River in the northeast part of the state and for the past 10 or 12 years a few otters have been seen in the Mississippi and its tributaries. They quite possibly migrated down here from Minnesota, which is in keeping with their wandering nature.

During winter, especially, when streams are frozen over, hunger drives them considerable distances overland in search of open water

and food. Their diet consists mainly of fish and crayfish found in lakes and large streams.

These expert anglers watch from above the water, slip in and come up with a whopper. A few minutes takes care of dinner and he returns to his vantage point to look for dessert or else works up another appetite by sliding down a clay bank.

That water is their home is

readily discernible when you watch them walk on land and see them swim. Diving is a specialty and if encouraged, they can stay under water for several minutes. Highly gregarious, a group will toboggan down a snow or clay slide for hours playing "follow the leader" and wind up with a hot game of tag in a pond or stream. With a short time out for lunch, the game is resumed—these aquatic playboys lead a merry life.

Iowa Conservationist

Published Monthly by the
IOWA CONSERVATION COMMISSION
East 7th and Court—Des Moines, Iowa
(No Rights Reserved)
HERSCHEL C. LOVELESS, Governor
BRUCE F. STILES, Director
JAMES R. SHERMAN, Editor
EVELYN BOUCHER, Associate Editor

MEMBERS OF THE COMMISSION
MRS. JOHN CRABB, Chairman.....Jamaica
CLYDE M. FRUDDEN, Vice Chairman.....
Greene
SHERRY R. FISHER.....Des Moines
A. N. HUMISTON.....Cedar Rapids
EARL E. JARVIS.....Wilton Junction
GEORGE V. JECK.....Spirit Lake
G. H. MEYER.....Elkader

CIRCULATION THIS ISSUE.....54,800
Two Years \$1.00

Entered as second class matter at the post office in Des Moines, Iowa, September 22, 1947, under the Act of March 24, 1912. Subscriptions received at Iowa Conservation Commission, East Seventh Street and Court Avenue, Des Moines 9, Iowa. Send cash, check or money order.

TEST CASE ON BOAT LICENSES

In a far-reaching decision expected to set a national precedent, the Minnesota Supreme Court has ruled local municipalities do not have the right to license recreational boats on waters within their boundaries.

Because boating is enjoyed over a wide area, it "presents a statewide problem and not a matter which is peculiarly subject to local regulations," said Justice Leroy E. Matson, writer of the 5-2 majority opinion.

The decision climaxed a two year legal battle by a former St. Paul, Minnesota, marine dealer, Vern C. Rippen, who purposely violated boat licensing restrictions imposed by several small communities in the Twin Cities area. Rippen claimed the local villages did not have the power to require licensing, but he was hailed before a justice of the peace in the village of Brooklyn Center, found guilty and fined \$100.

After an appeal to the county court, the case was taken to the state's Supreme Court under the aegis of the Outboard Boating Club of America, national association of outboard enthusiasts and manufacturers of outboard boating equipment. "Sensing the broad significance of this test case, OBC wanted to help establish uniformity and state jurisdiction in setting up boating controls," explained OBC Executive Director Guy W. Hughes.

In his decision, Justice Matson pointed out that if one village required a special boat license, there would be no reason why all municipalities could not do the same thing. "The resulting multiplicity of local license requirements would saddle boat owners with burdensome consequences that are both unreasonable and absurd," he said.

Because of the widespread mobility in modern boating, the court emphasized, licensing of boats is a larger matter best considered on a statewide basis.

The ruling, OBC said, provides
(Continued on page 152)

Editorially Speaking

IOWA—A QUARTER CENTURY FROM NOW

In the year 1984 the effects of applied conservation principles could be readily apparent to everyone. Will Iowa still be an agricultural state with only the land best suited to the raising of crops being used? Will tall timber cover many acres unsuited to other crops? Will sloughs contain an abundance of wildlife? Will there be many more lakes? Will our streams be no longer used as sewers, but be running bright and clear, free of all pollution?

Will the population be greatly increased but the crime and delinquency rate be lower, and the average man be a better person because of a tendency to apply conservation principles to the daily life of the individual?

The value of the dollar will be changed, perhaps not too greatly altered in mathematical terms, but will it be altered rather in the concept of human value, for while happiness cannot be directly purchased the wise use of the dollar can bring about conditions favorable to happiness.

If conservation principles continue to be improved and consistently applied, man and nature will live in closer harmony and Iowa twenty-five years from now will still be a better place to live.—George E. Tovey, Commission Photographer

NEW COMMISSION MEMBERS



Earl E. Jarvis



Sherry R. Fisher

Two new members of the Iowa Conservation Commission assumed their duties at a regular meeting of the Commission on July 7.

They are Earl E. Jarvis of Wilton Junction and Sherry R. Fisher of Des Moines.

Appointed to six-year terms, the new members succeed George M. Foster of Ottumwa and J. D. Reynolds of Creston, whose office terms expired this year.

Mr. Jarvis has been employed by the Eastern Iowa Light and Power Company since 1939, with the exception of military duty in the U. S. Air Force during World War II, and is presently the Service Supervisor of the Company. He is a member of the Wilton Lions Club, Izaak Walton League, American Legion Post No. 584, Wilton City Council and St. Mary's Church.

Fisher has been affiliated with the Connecticut Mutual Life Insurance Company since 1930; serving as General Agent in Iowa from

1938 until 1958. He retired in July, 1958, as General Agent but is still associated with the company as Associate General Agent.

He is a member of the Board of Directors of the Central National Bank and Trust Company, of the Des Moines Rotary Club's Board of Trustees, and Chairman of the Planning Committee. He is also a Thirty-Second Degree Mason and a member of the Za-Ga-Zig Shrine, Argonne Post American Legion, Des Moines Chapter of Izaak Walton League, Region Eight Boy Scouts of America, and a member of the Executive Board of the Tall Corn Area Council Boy Scouts of America.

Fisher was Past Board Member and Past President of the Community Chest of Des Moines and of the United Campaign of Greater Des Moines; also immediate Past President of the Des Moines Rotary Club, and Past President of the Tall Corn Area Council Boy Scouts of America.

FISHING'S FINE IN '59

K. M. Madden
Superintendent of Fisheries

Farm pond fishing has reached a new cyclic high. New and old ponds have filled with water and fish since the drought which ended generally in late 1957. This "new water," an estimated 10,000 acres, has produced fish for beginners and experts alike. "No limit" bluegill fishing is made to order for the boy who hates to have to count fish between school bells, which is strictly fishing time. His small hook and garden worm is just as deadly as the finest, most artistically tied fly on the tip of the expert's perfectly balanced fly rod. The bass-bluegill combination does best in farm ponds and they like the shallow edges where they are within "willow pole" distance of 10-year-old farm boys and their city cousins. At least 20 bluegills should be caught for each bass, if bass growth and good fishing is to be expected from the pond. The fish need both the beginner and the experienced bass fisherman to maintain a proper proportion of bass to bluegill.

Louis Lemke, Conservation Officer for Madison County, and the Lions Club of Winterset teamed up with Dale Brannon, a local farm owner, to hold a "Kids Fish Day" on Brannon's pond in 1956. It had "a few too many bluegills" before 60 "kids," aged four to 14, thinned out the crop by catching approximately 800 fish. Mr. Brannon was so pleased with the party and the subsequent improvement in fishing as reported by his Winterset and Des Moines friends that he invited the Winterset Sportsmen's Club to sponsor another "Kids Fish Day" on "and for" his pond in June of this year.

A group of 40 youngsters, aged four to 14, brought their own worms, but were furnished small cane poles, hooks and lines. They fished for three hours during which time several of the older kids caught bluegills at the rate of one every two minutes—30 fish per hour. The younger set was handicapped by the "awkwardness of their mothers" in baiting their hooks with worms and unhooking the five to seven inch fish. In spite of the "technical difficulties," valor and "mother love" plus good fishing won out and about 1,000 bluegills were caught. It was such fun that the three-hour period was extended 15 minutes by unanimous consent even before the Madison County Sportsmen's Club awarded prizes. Those 40 kids from Winterset and many others know FARM POND FISHING IS FINE IN 1959.

Leopards do most of their hunting by night. They are about the most silent of all the larger hunters, being able to make their way through the densest vegetation without a sound.

YOU, TOO, CAN SURVIVE A PINIC

Jack Cawthon
West Virginia Conservation



Picnicking goes with summer about like rock 'n' roll goes with teenagers. Couple a warm, sunny day with a little free time (Ed. Note: At this writing some time was still available free) and a picnic is usually the end result.

Picnicking, like the value of the dollar, most certainly isn't the same as it was back when grandma and grandpa were growing up. They could pack a neat little lunch, hitch up the buggy and sally forth to a day of quietness and contentment. (This era, dating back to Adam and Eve, was called the "good old days.")

Today, the modern picnicker has to prepare carefully for his expedition. Above all, he must select the proper roads. There is absolutely nothing like getting lost enroute for complete family harmony. A list of provisions, which would in many cases have kept the Pharaoh's slaves fed for a month, must be drawn up and these "necessities" obtained from the supermarket. A jet pilot's take-off preparations are simple compared to the check-list compiled by the average picnicker. (This writer is not average, and you readers are not average. I am speaking of a vague test group somewhere out in Iowa.)

When the items are miraculously packed into three or four baskets, someone remembers that the pickles are still in the kitchen cabinet. What started out as merely a family venture oftentimes turns into a community project when friends, neighbors, relatives and total strangers decide to join up.

At the last minute the kids get into a good free-for-all and by the time this is under control some relative has usually taken sides with the kids, which often leads to further complications.

Poor old Dad tries to load the car with sun tan oil, inner tubes

and play horses for the kids, beach umbrellas, folding chairs, blankets and the other assorted paraphernalia. A mere car is no match for all this equipment. A truck, preferably a tractor-trailer, would be the ideal conveyance. Have pity on those people who drive the small foreign cars!

If you're one of the more speedy packers and mediators, you may be able to get on the road within a few hours after the beginning efforts. By this time the kids are completely worn out, the relatives are edgy, and about all that's needed to set off a full scale riot is for someone to drop the ice box.

About the time the first filling station comes into view one of the kids come to life and starts whimpering. It's a full stop and you silently calculate how many filling stations there are along this particular route and divide into the number of miles.

I have no statistics on the number of men in this country with high blood pressure and how it relates to picnicking, but I'm sure there would be some connection. Poor old Pop has just about had it when the picnic spot looms into view, which should be a state park or state forest for the best spot of all. (This takes care of the commercial.)

The kids jump out before the car comes to a complete stop and the unloading operations begin. Great Aunt Susie asks for the pickles first thing off, and someone yells that the kids are in the creek with their shoes on looking for crawfish.

At last a table is spotted and the food spread forth. Everything looks heavenly as the whole crew digs in. Catastrophes are forgotten as everyone comes under the magic spell of food and the wonderful closeness to nature.

Even poor old Pop is eating with

full gusto. All members of the family heap portions of food onto his plate, because there is still the return trip to be taken into consideration.

Despite the efforts and frustrations, a picnic is worth more than medicine, even if the medicine is needed afterward. A picnic is truly an American way of life. If you haven't tried one lately, you don't know what you're missing.

DED

Roberts Mann
and
Noel B. Wysong

Dutch Elm Disease is the most deadly and destructive of all the diseases that attack shade trees in the United States. The abbreviation "DED" is appropriate because an elm infected with it is doomed. There is no cure. Although the Asiatic species of elms and two European varieties seem to be somewhat resistant to this disease, no species or variety or hybrid is immune. The American elm—by far our most popular and magnificent shade tree—is extremely susceptible and, each year, untold thousands of them die.

Shortly after the end of World War I, an unusual number of elms were dying in Rotterdam, Holland. In 1922 the cause was identified as a fungus, possibly brought there from Asia, that grows, like bread mold, beneath the bark of elms. Within 10 years the disease had spread over almost all of Europe. In 1950 the first known case of it in America was found at Cleveland, Ohio. Shortly after, it appeared around New York City, brought in by a shipment of choice elm logs from France. DED is now rampant from New England and the mid-Atlantic states to Kansas, from Michigan and Wisconsin to Tennessee, and in southern parts of the Quebec and Ontario provinces in Canada.

In the Chicago region, the first infected trees were discovered in 1954—one in Highland Park and one in Markham. In 1955, 70 cases were found in Cook County, six of them in our forest preserves. Since then our foresters have waged a ceaseless war on these beetles and

used all feasible means to prevent the spread of the disease. Despite this, 32 elms in the forest preserves became infected in 1956, 514 in 1957, and 1,235 last year. All were removed and burned.

The first symptom on an infected elm is a rapid wilting and curling of the leaves—usually on one or more branches in the upper part of the tree. Then they become yellow, finally brown, and drop off. The bare twigs, when peeled, show brown streaks in the outer sapwood. However, these symptoms are similar to those caused by some other diseases. Positive identification can be obtained only by sending samples of infected twigs to a plant disease laboratory.

If the verdict is DED, then the tree should be cut down immediately and totally burned. Also, all elms within at least a 500-foot radius should be sprayed thoroughly with an insecticide, such as DDT or Methoxychlor, to kill the bark beetles that chew into the crotches of twigs or small branches and infect them with the deadly fungus. That may be applied with a hydraulic sprayer but many experts recommend a mist blower, maintaining that it provides better coverage and there is less danger to birds and other forms of wildlife.

The battle against DED is not hopeless. Adequate control programs have held the losses each year to less than 2 per cent of their total number of elms—about the same as normal losses from natural causes. Those community-wide programs combine three principal jobs: scouting surveys, sanitation measures, and protective spraying.

Scouting detects the infected trees and all potential homes for bark beetles. Sanitation measures include the removal of infected trees, pruning of dying or recently dead branches, and destruction of other breeding places. Spraying is applied to all healthy elms.

We recommend the U. S. Department of Agriculture bulletin on Control of Dutch Elm Disease, obtainable from the Superintendent of Documents, Washington 25, D. C.—*Forest Preserve District of Cook County Nature Bulletin.*



RESULTS OF THE 1958 DEER SEASON

Eddie W. Mustard

Game Biologist
and

Paul D. Kline

Game Biologist
and

E. B. Speaker

Superintendent Biology

Cold, tired, but happy, 2,891 hunters returned home from the 1958 deer season. Cold, because the mercury dropped to -20 degrees; tired, because deer hunting is no sport for the faint-hearted or the easily discouraged; but happy—for these 2,891 nimrods had bagged their quarry.

Iowa deer hunters have shown that not even adversity can overcome their zeal when it comes to deer hunting. Even in the face of Arctic-like weather our deer hunters went into the field, and participated in the recent deer season. This points up the fact that Iowa hunters have a great amount of intestinal fortitude, and nothing like a little cold weather can slow them down or keep them from pursuing the elusive whitetail.

The 1958 deer season was the sixth held in recent years, with the first one in the memory of most Iowa hunters being held in 1953. Our season was of the hunter's choice-type, with deer of any age or sex being legal, and with a possession, bag, and season limit of one deer.

Bow hunters were given a 30-day season from November 1 to November 20, inclusive, and could count from 6:30 A.M. to 5:30 P.M. Shotgun hunters were given a two-day season on December 13 and 14, with hunting allowed from 8:00 A.M. to 4:00 P.M. both days.

Bow hunters were required to use a bow of 40 pound pull or more, with broadhead arrows. Gun hunters were required to use either a 10, 12, 16 or 20 gauge shotgun and rifled slugs.

A total of 6,000 gun permits were issued; the first 5,000 on a first-come, first-served basis, with the remaining 1,000 issued on the basis of a drawing. Bow hunters were granted 1,380 permits for which no limit on the number issued is presently in effect. Owners, tenants, and their children are not required to obtain a deer permit if hunting on their own, or rented, property.

As in the past, all persons receiving deer permits were required to submit a hunter success report. The importance of the hunter return cards should not be underestimated for much of our information regarding the Iowa deer herd, and the ultimate success of our deer management program, depends on the response the deer hunters give in returning their reports.

Gun hunters returned almost 97 per cent of their cards, while bow hunters returned over 98 per cent.

WILDFLOWER OF THE MONTH



CONEFLOWER (Yellow)

- Common Name:** Coneflower and, sometimes, Black-Eyed Susan.
- Name Derivation:** It obtains its name from the conal-shape of the flower.
- Description:** This flower will appear in late June to make gay our waste fields, empty lots, and roadsides. It can be recognized by its brilliantly orange-yellow petals and dark-centered flower heads. The flowers are from two to three inches across. The stem is quite rough. Usually only one flower head grows on the top of each stem.
- Where to Look:** The Coneflowers are primarily a prairie flower. The most spectacular displays are more than likely found in the narrow prairie-like areas along roads and railroad tracks.
(Description adapted from "Wild Flowers of Missouri.")

The response Iowa hunters give on these returns is undoubtedly among the highest in the nation, and exemplifies the cooperation between the sportsmen and the Conservation Commission.

Total deer kill—The total number of deer harvested during the 1958 season was 2,891. Permit gun hunters accounted for 2,141, permit bow hunters for 162, and Conservation Officers reported that 588 farm-killed deer were taken.

The 5,570 gun hunters who reported they hunted on their card returns had a hunter success ratio of over 38 per cent (38 out of every 100 hunters reportedly bagged a deer). The 1,302 bow hunters who participated in the recent deer season realized a hunter success ratio of over 12 per cent.

The total kill for 1958 was slightly below the average total kill for the five preceding deer seasons, with the five-year average being 3,109 deer as compared to the 2,891 taken this season. However, when making such a comparison, it should be remembered that over 4,000 deer were killed the first year (1953). Total kills for the years 1954, 1955, 1956 and 1957 were 2,992, 3,062, 2,678, and 2,805, respectively.

Comparison of the 1958 total kill with the average for all seasons, except 1953, indicates a mean total kill for this four-year period of 2,884, which is about the same as the 1958 kill. Our deer kill for 1958 would undoubtedly have been much greater had it not been for the sub-zero weather encountered

by the hunters during the two-day shotgun season.

Ten top counties—The 10 counties reporting the largest number of deer harvested during the 1958 season were: Allamakee, 295; Pottawattamie, 187; Clayton, 145; Jackson, 108; Kossuth, 88; Monona, 88; Shelby, 75; Fayette, 55; Harrison, 54; and Black Hawk, 50. These 10 counties furnished almost 40 per cent of the deer harvested, with the remaining 60 per cent being divided among 84 counties. Five counties—Davis, Grundy, Osceola, Ringgold and Wright—had no deer killed during the recent season.

Sex and age ratios—Shotgun hunters reported killing 1,364 bucks and 722 does, for a buck to doe ratio of 117:100. Bow hunters took 114 bucks and 48 females for a buck to doe ratio of 237:100.

From the differences in the sex ratios reported by the two types of hunters, it is quite apparent that bow hunters exercise greater selectivity than shotgun hunters when shooting their deer. The bowman probably feels "there is always tomorrow" because of the length of the bow season, while the shotgunner, with his two-day season, is more apt to take the first deer crossing his sights.

Shotgun hunters reported a fawn to adult ratio of 27:100, while bow hunters reported a ratio of 21:100. Again this ratio indicates a greater degree of selectivity exercised by bow hunters than by gun hunters when shooting their deer.

Paul Kline, Game Biologist for

the Conservation Commission, reporting on data derived from check stations and locker plants during and immediately after the 1958 deer season, found the buck to doe ratio, based on a sample of 510 deer, to be 112:100. When only the sex ratio of the fawns was considered, in a sample of 231 fawns, the male to female ratio was 116:100.

Kline further reported a fawn to adult ratio of 83:100 which is quite different from the 27:100 reported by the hunters, and which is indicative of the extremely high rate of reproduction inherent with the Iowa herd.

Number of deer observed while hunting—Iowa's shotgun hunters reported seeing 41,347 deer while hunting, or an average of 7.4 animals seen per hunter during the season. The average shotgun hunter saw 0.6 deer for each hour he hunted during the 1958 season.

Bow hunters reported sighting 19,855 deer while engaged in their sport, for an average of 15.2 seen per hunter during the 30-day bow season. While the average bow hunter saw more deer during the season than did the shotgun hunter, he saw only 0.3 deer per hour hunted, or about half the number observed by the shotgunner.

Of course, the number of deer reported as being sighted does not mean that Iowa has that many deer, for an individual deer could possibly be seen many times during the season. Actually, at the beginning of the hunting season, we had an estimated 15,000-20,000 deer in the state.

Day killed and time of day—Shotgun hunters reportedly took 47 per cent of their deer the first day and 53 per cent the second day of the two-day season. Time of day, morning *versus* afternoon, seemed to make little difference with about 50 percent being taken in each period.

Bow hunters took 43 per cent of their deer during the first half of their 30 day season, and 57 per cent during the last half. As with the gun hunters, time of day, morning *versus* afternoon, seemed to make little difference.

Hunter occupations—All persons returning hunter report cards were asked to list their occupation. Laborers comprised 34.7 per cent of the shotgun hunters; farmers 34.2 per cent; merchants, 7.9 per cent; professional, 3.6 per cent; technicians, 3.2 per cent; retired, 1.2 per cent; housewives, 0.3 per cent; and miscellaneous (mostly students), 14.7 per cent.

Persons classified as farmers harvested 851 deer and had the highest hunter success ratio of any of the occupational groups, 44.6 per cent.

Laborers were by far the largest occupational group among the bow hunters with 47.2 per cent of all bow hunters falling in this category. Other occupations were

(Continued on page 152)

PATTERN FOR PLEASURE— PLAY SAFE ALWAYS

Evelyn Boucher
Associate Editor

More and more people are going to outdoor living, especially boating, for their recreation. Boating is grand fun and among the safest of outdoor sports—provided only that you exercise common sense and common courtesy afloat.

With the fishing and boating season in full swing, Iowa's lakes and streams are furnishing recreation for thousands of fishermen, boaters and swimmers. So far, so good! But they are also the scene of almost daily drownings—caused mostly by carelessness—which in turn could probably have been prevented by the one most important safety precaution in any accident—**THINK**—but don't wait until it's too late.

June, July and August are the drowning months. People plan va-

wheel of an auto or at the tiller of a boat.

Respect Water

THINK! Water demands constant respect and caution should never be relaxed by a boater, fisherman or swimmer. It can, and does, cause damage and loss of life. Proper safety precautions and equipment and sensible planning will save your family and friends worry and possible grief. Knowing emergency procedures before an emergency arises is the mark of a good skipper. Remember that death rides in the boat of the careless, ignorant and reckless person.

Safety Rules

You have read them time and time again. It won't hurt to read them again and *think* about them



DON'T indulge in horseplay in your boat. Keep all weight low to insure stability.

doesn't make sense and a boat in deep water is no place for horseplay.

2. **SIT WHILE CASTING.** It's the experts' way and you'll live to teach your grandchildren to cast.

3. **ADVISE OF WHEREABOUTS.** When taking off for an outing tell someone exactly where you're going, names of others in the party, time you expect to return and any other information which might be useful or helpful if a search should become necessary.

4. **BEWARE OF PRACTICAL JOKES.** One never knows what a simple joke may lead to. If you are planning a practical joke when at the lake or stream, be *doubly sure* it can't hurt anyone—better still—just forget it!

"Over-loaded Boat — Two Drown"; "Bodies Washed Up From Boating Accident"; "Rescue Body

of Boating Victim," etc., etc.—the type headlines we read and will continue to read in the daily papers.

Will one of these headlines mean you, a close friend or relative? We hope not. **THINK!** Don't be among the missing.

But statistics, pledges and slogans do not seem to change us. Something more is needed! What? Most authorities agree that it is mostly to *Think, Think, Think!* But do so before it's too late. "You can't stop people from thinking—but you can start them! That's what counts."

BIG PRAIRIE RATTLER CAPTURED

Nebraska Game Commission biologist Karl Menzel recently captured a state record prairie rattlesnake. The snake was 43 ⁹/₁₆ inches long, exceeding the previous known record of 39 inches for the species.



DON'T overload your boat. Ample freeboard must be allowed to prevent waves from capsizing the boat.

and then keep them in mind when on the water.

1. **THINK!**

2. **IF YOUR BOAT CAPSIZES, STAY WITH THE BOAT. HOLD ON UNTIL RESCUED.**

3. Don't overload your boat. Know its capacity.

4. When changing positions — one person at a time. Hang on and keep weight low.

5. Storms develop fast — strike for shore when storm clouds gather.

6. Don't overpower your boat.

7. Is your boat seaworthy?

8. Know and observe navigation laws. Operate carefully and courteously.

9. Always wear life jackets in small craft.

10. **DON'T TAKE CHANCES.**

This is only a fraction of the safety rules. Perhaps the four following are as important as any:

There are boating laws, the same as highway and auto traffic laws, and violators of these laws are not only subject to fines, but are taking chances with their own lives and the lives of others.

We cannot tolerate the violator, big or small. We cannot turn our backs on death. Develop within yourself the habits of care, caution and courtesy, whether behind the

and then keep them in mind when on the water.

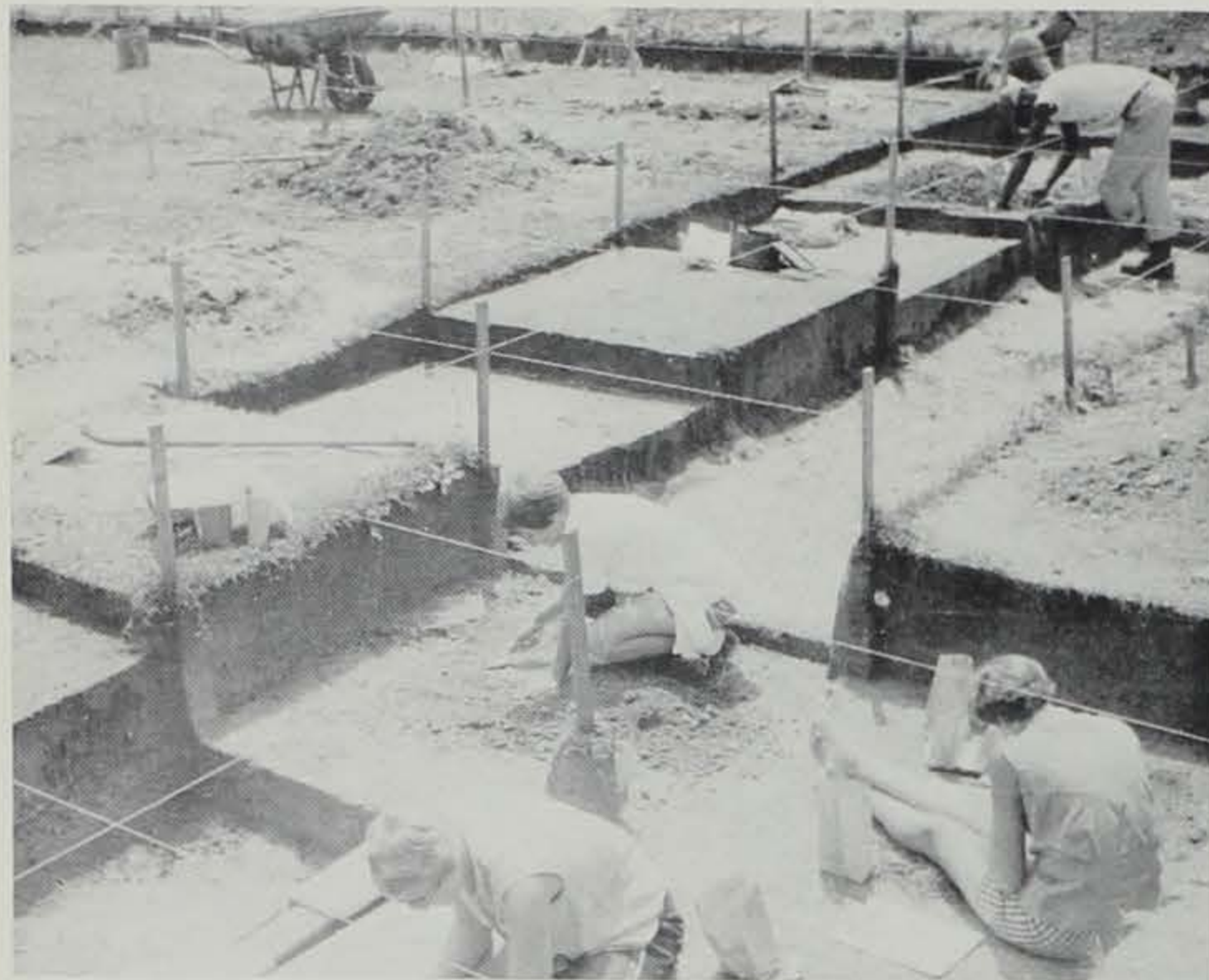
1. **THINK!**
2. **IF YOUR BOAT CAPSIZES, STAY WITH THE BOAT. HOLD ON UNTIL RESCUED.**
3. Don't overload your boat. Know its capacity.
4. When changing positions — one person at a time. Hang on and keep weight low.
5. Storms develop fast — strike for shore when storm clouds gather.
6. Don't overpower your boat.
7. Is your boat seaworthy?
8. Know and observe navigation laws. Operate carefully and courteously.
9. Always wear life jackets in small craft.
10. **DON'T TAKE CHANCES.**

This is only a fraction of the safety rules. Perhaps the four following are as important as any:

1. **AVOID HORSEPLAY.** It



DON'T overpower your boat. Small boats and big motors lead to upsets on turns and trouble from rough water. George Tovey Photos.



Excavation of an Indian village site near Toolesboro was carried on last summer by a group of student archaeologists from the State University of Iowa. Each student was responsible for excavating and recording information about the material found in each five-by-five foot pit.

TOOLESBORO INDIAN VILLAGE EXCAVATION

Vernon A. Glade
Iowa City, Iowa

Do you ever wonder about the people who left the ancient clay pot you may have seen turned up by the plow recently or what kind of person used the arrowhead you may have picked up on your last hunting trip? Each of these artifacts of the early American Indians has an interesting tale behind it and most of us would like to hear it.

However, the isolated arrowhead or cooking pot tells only a small part of the story of the American Indian that is contained in Iowa's rich soil. This story can be read most effectively by the trained eye of the historian of early man, the archaeologist. But there are two few archaeologists to undertake the extensive surveys necessary to find all of the evidence left by the Indians of pre-history in Iowa's ground.

Moreover, our way of life is rapidly destroying the record of our Indian heritage before it can be studied. The cultivation of the land and the leveling of burial mounds to allow easier tending of crops have by themselves taken a tremendous toll. Dr. Reynold J. Ruppe, State University of Iowa archaeologist, estimates that the plow has destroyed more than 50 per cent of the Indian remains in Iowa. The construction of every new highway, large housing development or industrial plant, and each new flood control project may wipe away further invaluable archaeological sites.

The outdoorsman and the farmer can be of aid in conserving this valuable record if he notifies an archaeologist when he discovers a burial or an area with many obviously worked stone, flint, or copper tools. The find should not be

tampered with any more than necessary. Subjected to possible thousands of years of chemical actions taking place in the ground, the artifacts are so fragile that expert techniques only can remove them in one piece. Cover the find, if possible, and prevent cattle and curio hunters from trampling over the site if it can be done. Then notify Dr. Ruppe at SUI, Iowa City, for eastern Iowa, and W. D. Frankforter, Director of the Sanford Museum, Cherokee, for the western part of the state.

If the archaeologist is notified in time, he can excavate the site and allow the land to be used while still saving the Indian artifacts. He does not leave the material in the ground for study but spends at least three times as much time studying the items in the laboratory as he does in digging them up. His scientific methods allow him to recreate an accurate picture of the village site or burial ground on paper, making it possible to excavate in a relatively short time and yet retain a clear idea of the context in which the material removed was found. The archaeologist will return to the laboratory with more than a few isolated artifacts. His records show him where every item was found, with indications of the shape and content of fire and storage pits that could not be removed whole. More important, he has an idea of what the entire village or burial ground was like which cannot be obtained without careful excavation and record keeping.

A good example of what can be learned through the cooperation of the layman and the archaeologist took place last year. Early in the spring, Earl Smith, a Toolesboro farmer, began to cut a new road-bed in a 400-foot bluff overlooking the junction of the Iowa and Mississippi rivers. The cut revealed pits containing charcoal, burnt rock, and a few projectile points

of recognizable pattern. Smith immediately notified a Wapello amateur archaeologist, Don Parsons, who in turn contacted Dr. Ruppe in Iowa City.

The "Smith" site was excavated last summer by an SUI student archaeological team under the direction of Dr. Ruppe, and three distinct levels of occupation were found. Laboratory analysis indicated that the first level dated at about 500 A.D., the second was found to be of the "Middle Woodland" period of 500 A.D. to 500 B.C., and the third an "Early Woodland" village dating from 500 B.C. to 1000 B.C. or earlier.

The middle level is interesting as evidence indicates that this "Middle Woodland" village, while not a site of the famous burial mound builders, the "Hopewell" culture group, had at least trade contacts with that early group which may have had the highest level of culture among the early American Indians.

The Hopewell group flourished in the century of the beginning of Christianity and derived their modern name from the first site revealing the intricate tools and jewelry of the type they made. These people knew the art of weaving and were highly skilled potters, but their best known work was their finely carved stone effigy pipes and small statues of stone and copper of humans and animals.

To obtain materials for their craftsmanship, the Hopewells must have been part of an elaborate trading system. They used obsidian from the Rocky Mountains, copper from Wisconsin and mica from the south Appalachians. All of these materials were found at the "Smith" site, although it is improbable that the connection between the village and the Hopewell group was anymore than a casual economic one. The information found will add greatly to the too vague sketch we have of the "Mound-builders."

The last level may well turn out to be a major archaeological discovery. A great deal of crumbly, poorly-tempered pottery which was at times almost an inch thick and

very crudely decorated was identified as a very early type, called by the scientist "Marion Thick." It was scattered throughout the site at about two and a half feet below the surface. The potsherds found indicate that this site will be a major addition to the knowledge we have about the "early Woodland" group of 3,000 years ago, probably one of the first to give up a completely nomadic, subsistent way of life and turn to the cultivation of the soil for its livelihood.

While this "early Woodland" village is not the oldest find in Iowa, it is significant. Only a few sites of the type have been discovered, and this, the first one found in Iowa, may contain more material of importance than any of the others.

More and more such finds are being studied in Iowa because of such cooperation as that on the "Smith" dig. Much more remains to be done and only the persons who spend their time out-of-doors, the farmer, the fisherman, the hunter, and the hiker, are in a position to locate the many other important bits of Indian lore still left in Iowa's soil.

DALE HOLLOW PRODUCES FOSSIL SHARK

Dale Hollow Lake in Tennessee and Kentucky is world famous for smallmouth bass and walleyes but it recently gave up a shark! The shark, however, was a fossil estimated to be 300,000,000 years old, the National Wildlife Federation is advised. The well-preserved fossil, a Pleuropterygian, is an extinct species believed to have lived in brackish waters of a sea which covered this part of Tennessee ages ago.

Among the badger's favorite foods are mice, gophers, rabbits, skunks, snakes, lizards, or almost any kind of animal the badger can dig from a burrow.

When full grown the badger is about two feet long, five inches at the shoulder and weighs 12 to 24 pounds.

FURS BOUGHT FROM IOWA TRAPPERS 1958-1959

	Number of Pelts	Average Value	Total Value
Opossum	953	.21	200.13
Raccoon	29,361	\$ 1.78	\$ 52,262.58
Muskrat	130,668	.77	100,614.36
Mink	13,308	14.31	190,437.48
Skunk	1,988	1.07	2,127.16
Civet	1,710	1.93	3,300.30
Badger	58	.59	34.22
Red Fox	1,147	.51	584.97
Gray Fox	132	.28	36.96
Weasel	181	.62	112.22
Wolf-Coyote	6	.38	2.28
Rabbit	8,134	.35 per lb.	pounds unknown
Beaver	2,289	5.91	13,527.99
Other (Bobcat)	1	unknown	unknown
	189,936		\$363,240.65

WALLEYE STUDIES ON THE MISSISSIPPI

Giving a hot foot to a fish may not seem the most sporting pastime in the world, but a group of Iowa State Conservation Commission officers spent nearly a whole week doing just that here.

The hot foot—a figurative term if ever there was one, since fish don't even have feet—to the form of an electric shock, which stunned the beasties long enough for the conservationists to attach tags to the gills, and accumulate such sundry information as length, maturity and sex of each fish.

The purpose of all this is to amass information on the traveling habits and the life history of large-river pike. This is the final tagging operation of a three-year walleye and sauger project which began in April, 1957.

Fishermen who haul in the marked fish will, the Conservation Commission hopes, relay the news on where the fish were hooked, how much they weighed, and so on, thus providing the Commission with information on the life cycle of the creatures.

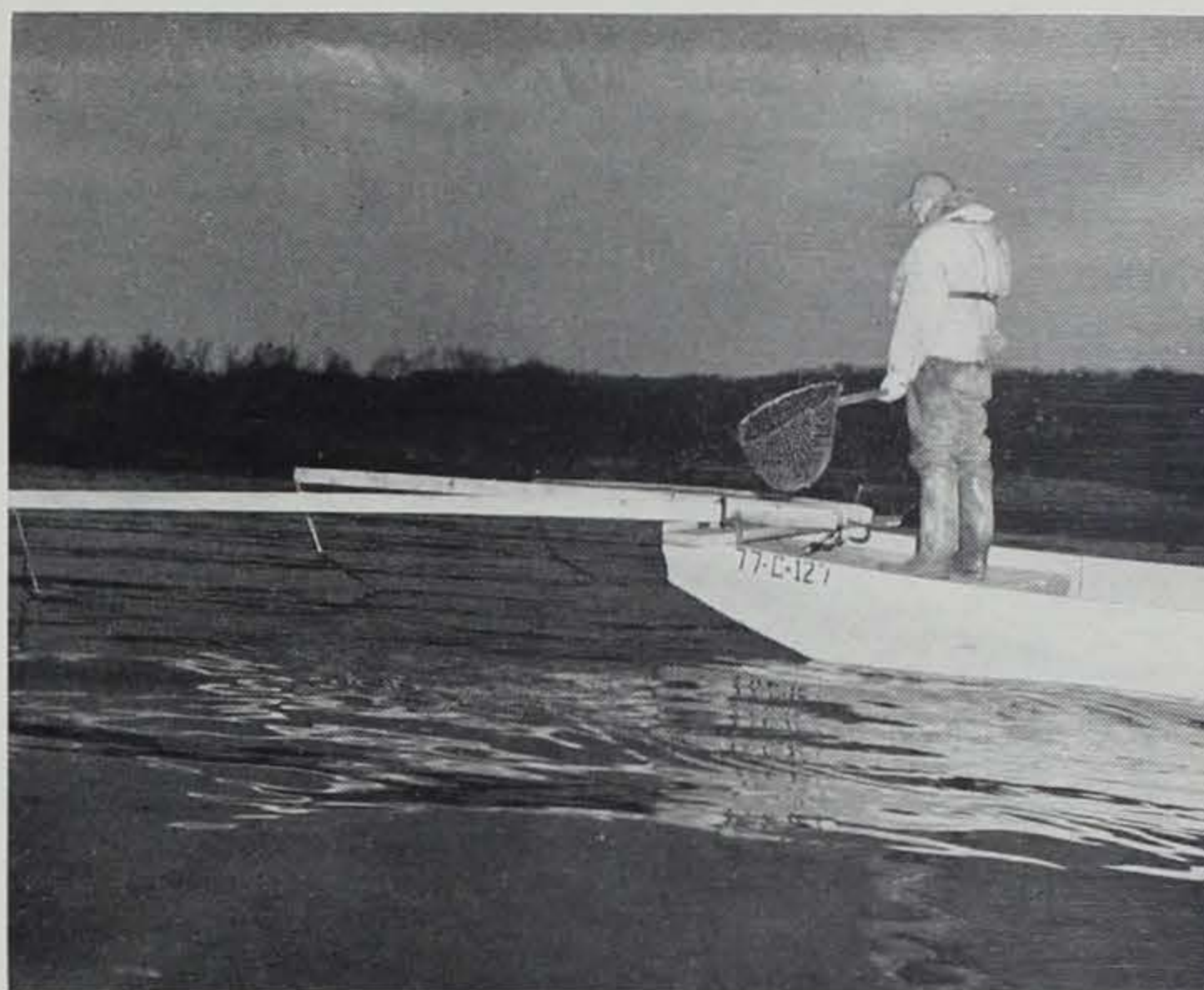
The tagging operation, carried on at night because that's the time the fish come close to shore, works like this:

A boat-mounted shocking device sent electric current through the water, stunning the fish. They, with appropriate gurglings and gaspings, floated to the surface (which even fish do unless they swim to stay down), and were scooped up by the waiting conservationists in nets, and dumped unceremoniously into the boat.

Then, while the poor fish was alternately gasping for air and decrying its lost dignity, the conservation men measured, weighed and determined the age of each, quickly clamped a tag on the fish's jaw, and dropped it back into the water.

The results of the survey in past years are, if nothing else, intriguing. The fish biologists determined, for instance, that over half the fish never stirred from their home pools, or at least returned there in time to bite a worm which was attached to a fish hook.

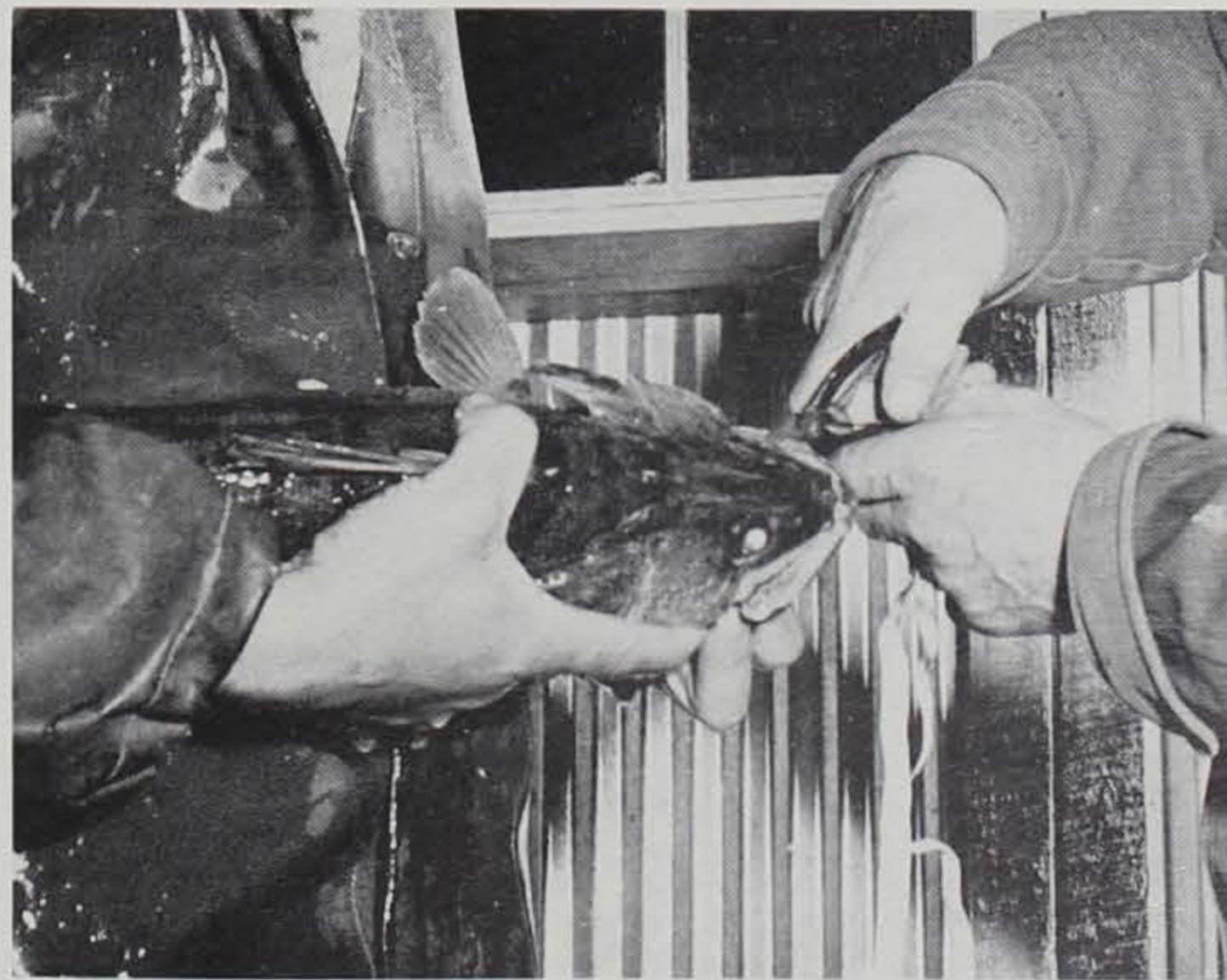
(Continued on page 152)



George Tovey Photo. Three booms on the front of the boat carry three copper electrodes which are hanged with 230 volts of alternating current. Each rod charges an area of water about nine feet deep and for a radius of six feet.



George Tovey Photo. Walleyes which are stunned by the current from the electrodes are rescued with a dip net and held for tagging.



George Tovey Photo. The fish are measured and weighed and a small metal tag is clamped to their jaws. The fish are then returned to the water.



Jim Sherman Photo.

The Mississippi River as seen from Pikes Peak Park. If you have yet to see Iowa, go out and do so now.

SEE IOWA FIRST

A friend who has lived in Burlington 46 years has never seen the view of the Mississippi and Wisconsin rivers from Pike's Peak Park south of McGregor.

A native of this area confides that for years he has planned a Sunday drive, or maybe a weekend holiday, to Lacey-Keosauqua State Park, but for one reason or another he has yet to visit the place.

The list could be expanded at length, but the point is obvious; the ignorance, and neglect, of Iowans about their home state is appalling.

We know Iowans who have been three times to Europe, but have never picnicked in the lovely shadows of Palisades Park near Mt. Vernon; who have scrapbooks of the Bellingrath Gardens, but have

never seen the tulips of Pella or Orange City; who climb the hiking trails at Ledges or Backbone or Waubonsie; who have floated the White River but are strangers to the Cedar and the Iowa, and to the sun-kissed lakes of the northwest.

Iowa, as befits her people, is not flamboyant. Her specialty is the quiet pleasure, the blend of dogwood and rosebud, the hidden columbine, the lazy streams and the calm vistas from the sweep of the big rivers which enfold her.

If you have yet to see Iowa, go out and do so now. Now, when the fields and forests are lush, when the streams are full, when a rain shower can bring the freshness of new life. You will be amazed at the infinite variety of her countryside, and gratified that so much can be found so close at hand.—*Burlington Hawkeye-Gazette.*



Mae Johnson Photo.

A good vice is needed to hold the material, such as a jeweler's block or a Wilton turret vice.

GIVE YOUR GUN SOME PERSONALITY

Malcolm K. Johnson

Those who inwardly ooh and aah while gazing at a friend's nicely engraved gun should give the matter a second thought. The cost of this most enduring form of decoration is great, but as John Rohner, an engraver from Iowa City said after paying a fancy sum, "If you can't beat 'em, join 'em." Seven years later he is an accomplished engraver with much evidence around the house to support this statement. Conservation Officer Wendell Simonson, of Oxford, carries John's first piece of work, a Smith & Wesson, but most of his later efforts John keeps for himself. He spends about 200 hours on a handgun and turns out two guns a year, purely as a hobby. Professionally, he is an instructor of museum technique at the University of Iowa.

Though not the least bit easy, the satisfaction gained from a well executed bit of steel scratching is deep and the engraver is continually stimulated to go the last job one better. The number of requirements for beginning work are few, namely: some artistic talent, about \$50 worth of tools, and the patience to complete the preliminary sketching practice that will show whether you can draw or scroll pleasing to the eye. Time spent perfecting your technique will stand you in good stead later on when poor planning would show up vividly with resultant wasted time and effort expended cutting the steel.

Patience is really the watchword of the craft; as with any delicately detailed operation, haste has no place in the scheme of things. For instance, it will probably take several months to train your hand to reproduce on paper what you are looking at or thinking of. Animals

should look like animals, not sway-backed flights of the imagination. And if you have any native ability, the first attempts will be viewed with distaste as proportions and symmetry improve, and shading to emphasize features becomes natural to you. Stylized figures are common, but individuality reaps a wealth of contentment where your own efforts are exposed to the public eye.

The gravers (cutting tools) used are mainly flat, square, or oval tipped. Both hand pressure (graving) and hammer pressure (chasing) are necessary. At first the hand should be used exclusively to get the feel of the steel. A good vice is needed to hold the material, such as a jeweler's block or a Wilton turret vice. A small electric grinder is handy because it seems that sharpening the gravers is an endless job. An alternative to the grinder is an attachment that fits onto the graver and maintains the correct cutting angle while the tool is sharpened on an oilstone. Although many metals are used for engraving, if your medium is going to be steel, then concentrate on steel and between sessions try your hand at carving figurines of wood or ivory to develop your artistic sense.

Having mastered the basic lines, making them smoothly rounded and with uniform depth, the next step is to lay out simple designs—floral, scroll, etc—on flat metal scraps. This is done by first applying Chinese White (a white filmy deposit to draw on) and then lightly scratching the pattern on the metal with a scribe. Following through with the graver and learning how to roll it properly for each kind of arc and connecting the arcs to form easy continuous curves will increase your skill to the point where you feel confident enough to try yourself on the flat parts of an old gun. Many plates and designs should be tried,



Note in particular the anatomy of the animals, the symmetry of the spirals, and the depth and cleanness of the cuts.

and each of them should be progressively neater and more complicated until the day when you are quite sure that you won't completely botch your first try at the real thing. There is no substitute for careful and painstaking concentration in any phase of the procedure. A hurry-up job is quite obvious to one who knows what to look for, and a magnifying glass will bring minor faults to light.

Perhaps all this sounds too bothersome and meticulous to you. Remember that craftsmen take great pride in their work and feel that only the best that they can produce is worthy of their name. If you elect to pursue this art, you will find in time that, though your work becomes more polished, there are always further refinements to be made, and that the deeper you delve in this centuries-old craft, the more interesting it will be.

This is by no means a complete description of the nature of engraving. Etching, for instance, hasn't been mentioned because though it's used by some engravers—notably European—to rough out the pattern, it technically isn't engraving. Besides cutting out the initial layout chemically, etching can reduce a high gloss to a semi-polished state, but this should only be done before the mechanical engraving is started because the acid affects all exposed surfaces and will therefore blur the design. Punching and stamping are out of the realm of engraving, but are commonly performed. These two methods effect a displacement of the metal by compression and for this reason cannot be called engraving. Pure and simple, engraving is the mechanical removal of metal.

For more specific information on the subject, look in the back issues of *Gun Digest*, especially the 1955 and 1958 editions, which give more highly detailed advice on how to go about decorating guns and suggest places to obtain equipment. And the next time you see an engraved gun, take a close look at it—Rohner says to note in particular the anatomy of the animals, the symmetry of the spirals,

and the depth and cleanness of the cuts. To a critical eye, the kind of workman who held the graver will be apparent.

TEST CASE—

(Continued from page 146)

another buttress in the new nationwide framework of boating legislation built on the Federal Boating Act, passed last year. Under it, the individual states are given the option to register and control pleasure boats operating on state waters. Minnesota and some 16 other states have already enacted state boat numbering programs.

The Minnesota high court ruling, however, is believed to be the first specifically reserving to the state the right to license and number pleasure craft on non-federal waters.

WALLEYES—

(Continued from page 151)

But some went on ambitious forays, ranging upstream as much as 106 miles, and downstream 113 miles. One sauger moved 106 miles in 50 days, which may or may not be like a leisurely pace, depending on how big a hurry a fish is in.

Moreover, the commission reported with a straight face, "indications are that the female of both species (walleye and sauger) is more the wanderer."

Anyone could have told them that.—*Dubuque Herald*.

DEER—

(Continued from page 148)

represented as follows: farmers, 12.3 per cent; merchants, 9.2 per cent; professional, 5.3 per cent; technicians, 4.4 per cent; housewives, 1.0 per cent; retired, 0.2 per cent; and miscellaneous, again mainly high school and college students, 20.1 per cent.

So far as we know, no accidental shootings occurred during the deer season, which would indicate that our hunters can tell a buddy from a buck. Some reports of hunters trespassing on private land were received, and this should not be dismissed lightly, for the good sportsman (99.99 per cent of Iowa's hunters) *always* obtains permission before hunting on another man's property.