

IOWA CONSERVATIONIST

IOWA STATE TRAVELING LIBRARY
APR 19 1956

ST TRAVELING LIBRARY
ST HISTORICAL BLDG
DES MOINES IA

Volume 15 April, 1956 Number 4

LATE SPRING MAY MEAN GOOD PIKE FISHING

NETTING AND HOLDING BAIT MINNOWS

This is a brief excerpt of the complete chapter "Baits and Baiting" which will appear in the new edition of Iowa Fish and Fishing.)

For the beginning bait hunter, only one specialized piece of equipment is necessary: a good minnow net. It may be from four to six feet deep from the cork-line (top) to the lead-line (bottom). The mesh must not be smaller than a 1/4-inch bar measure, or a full 1/4-inch between the knots that tie the twine into the net.

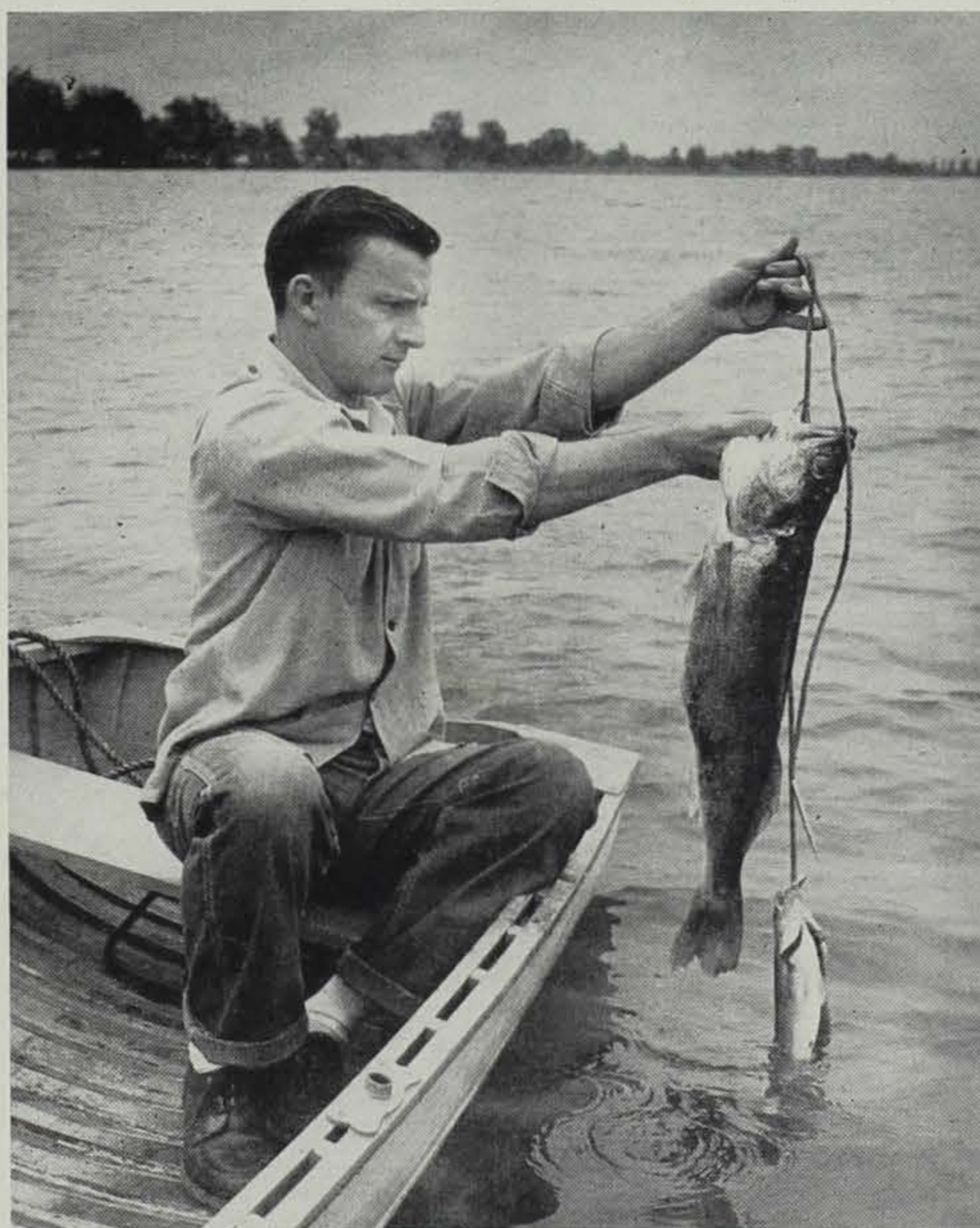
The best seines are tied; not woven. Woven nets are cheaper but have the miserable habit of slipping where warp and woof intersect, leaving holes where the bait will go through.

After using the net, it should be washed back and forth in the water until free of mud and debris, shaken briskly, and all bait carefully removed. It should never be stored or left rolled on the brails while still damp, and should not be dried in the direct sun. It may be suspended from the rafters of a barn or garage with some air circulation and out of reach of mice. Except for the guy on the near end, a bait hunter's best friend is his minnow net. Get a good one and give it good care.

Minnows are among the most important of all baits, since small minnows make up the bulk of food of most of our principal game fish. Minnows of some kind are found in all of our permanent streams—even the smallest—and in most of our other waters. They are available, easy to seine or trap, and with the exception of the shiners are easy to transport and hold if not overcrowded. They're easy to bait, stay on the hook well, and appeal to hungry fish like Thanksgiving turkey to a small boy.

For pan fish, the best baits are the fathead minnow, blunt nose d brassy minnows, sand shiners and big mouth shiners. For catfish, largemouth and smallmouth

(Continued on page 30)



In late springs, the walleye season may open while pike are lingering in the vicinity of their spawning grounds. Some Storm Lake anglers know these early hotspots, which regularly produce walleyes like this one.

TWO NEW PROJECTS ON MISSOURI RIVER

By John Madson
Education Assistant

Two projects now underway along the Missouri River should appeal to sportsmen and conservationists whether they live near the Big Mo or further inland.

In early March, surveying crews began work in the bottomlands of the Missouri in an effort to determine lands to which the state holds title.

Extensive tracts of abandoned Missouri River channel actually belong to the state, even though

the exact areas have not been determined recently.

The 1943 Line

The boundary between the states of Iowa and Nebraska was declared by the acts admitting those states to the union as being the middle of the Missouri River. In 1943, concurrent action by the U. S. Congress and the state legislatures of Iowa and Nebraska established the state boundary according to Army Engineers' maps of 1940.

That boundary was set in the channel as it then existed, both in

(Continued on page 31)

Dr. Kenneth D. Carlander
Iowa Cooperative Fisheries
Research Unit
Iowa State College

This winter has been long and cold and it looks as though we may have a late spring. However, if the theory here proposed is correct, fishermen may find a bright side to this discouraging prospect. The theory, briefly stated, is that walleye fishing is better when we have a late spring than when the ice breaks up early.

I know of no research to prove the theory but I have seen enough circumstantial evidence to make me think it is basically correct. Furthermore, the theory seems to be biologically sound.

Walleyes spawn in the spring when the water reaches 40-42° F. They spawn on rocky shoals in a lake or in tributary streams. The mature walleyes from the entire lake may then be concentrated in one small area. The spawning runs up some streams are truly spectacular. I have seen a single trap catch over 10,000 walleyes in one night—more than could be used to get spawn for a large fish hatchery.

After the spawning is completed the spent walleyes often remain in the same area, feeding rather heavily, before spreading out over the lake again. If the spring is late so that spawning is not completed until the last of April or early May, the walleyes may still be congregated when the fishing season opens in mid-May. Fishing success may then be very good if one fishes in the vicinity of the spawning beds. At most lakes the local residents and boat liverymen know where these walleye spawning beds are and can direct visiting fishermen.

If the spring is early, the walleye concentrations may be dispersed by the time that the fishing season opens. With the walleyes thus scattered, fishing success is not likely to be as good.

One other factor may favor good walleye fishing in years with late springs. It is generally expected that walleye fishing success will decline in the summer as

(Continued on page 32)

Iowa Conservationist

Published Monthly by the
IOWA CONSERVATION COMMISSION
East 7th and Court—Des Moines, Iowa
(No Rights Reserved)

LEO A. HOEGH, Governor of Iowa
BRUCE STILES, Director
JOHN MADSON, Editor
EVELYN BOUCHER, Associate Editor

MEMBERS OF THE COMMISSION

GEORGE M. FOSTER, Chairman.....Ottumwa
JOE STANTON, Vice Chairman.....Des Moines
MRS. JOHN CRABB.....Jamaica
GEORGE V. JECK.....Spirit Lake
FLOYD S. PEARSON.....Decorah
J. D. REYNOLDS.....Creston
E. G. TROST.....Fort Dodge

CIRCULATION THIS ISSUE.....54,000
Subscription rate.....40c per year
Three 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 Conservation Commission, East Seventh and Court Avenue, Des Moines 9, Iowa. Send cash, check or money order.

SMALL BOATS IN ROUGH WATER

By John Madson
Education Assistant

Our midwestern weather is a fickle, treacherous old jade. She can break up a blue summer day with a quick squall or thunderstorm, and our shallow lakes and big rivers stand erect at her commands.

A seasoned boatman or sailor can take much harsh weather in his stride. He either reads it in advance and stays wisely ashore, or is skilled enough to cope with it if there's no other choice.

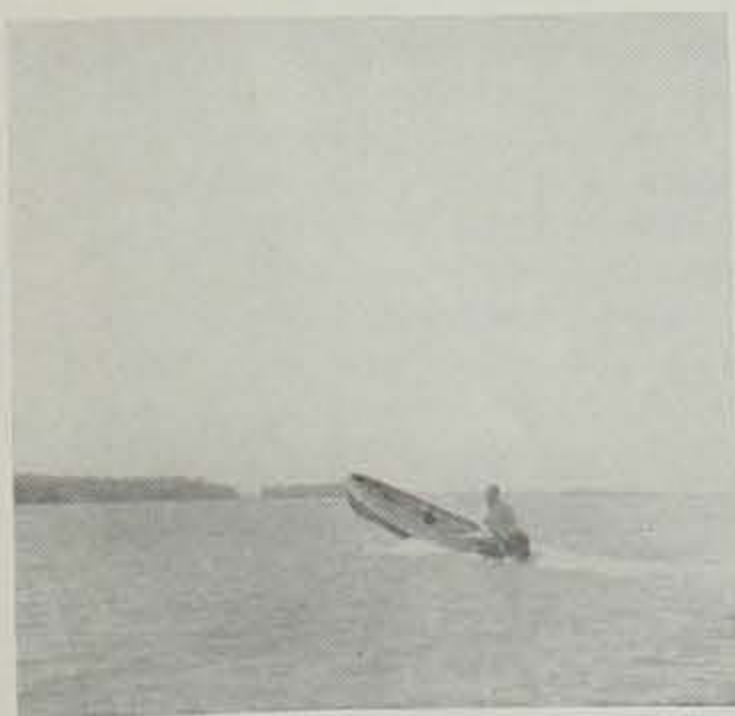
But today's average boater is not boat and water-wise. The ranks of Iowa boatmen are being swelled each year with hundreds of new boat owners, most of whom have only a scanty knowledge of boats and rough water.

For some hints on boating in rough water, we recently interviewed two veteran boatmen from the most extensive water areas in Iowa: the Missouri and Mississippi Rivers.

Bogey Gives Tips

In Onawa, Ralph "Bogey" Jones had some pointed advice for new boat owners. A veteran riverman, hunter and guide, "Bogey" learned boats the hard way: from the Missouri River.

Like most rivermen, Bogey is an ardent fan of big boats. He believes that a big-water boat should



An accident looking for a place to happen: a 30-horsepower motor, and a 2 1/2-horsepower boater.



Choppy water may seem harmless from the beach, but far out on the lake it can be deadly. It's best for the novice to play safe and stay ashore in such water.

seldom be less than 16 feet long, and should be deep, wide in the beam, and with a full, pointed bow.

Some of us have wondered at the comparative lack of "johnboats" or square-bowed river skiffs on the Missouri. There are many such boats on the Mississippi. Bogey offered a partial explanation:

"It can get pretty windy over here. The jo'boat's square bow offers quite a bit of resistance to wind and rough water. In waves, the square bow may scoop water rather than cutting through it. If it's pitching badly, or planing with a powerful motor, the bow may be caught by the wind and the boat can be hard to control."

However, Bogey points out that a long johnboat is good in moderately rough river water since it can span wave crests with its additional length, will not buck and pitch into narrow troughs, and gives a safer, more comfortable ride.

For really rough water, he prefers a pointed boat—plenty long, wide and deep. Such a boat parts rough water rather than just smashing through it. If it is properly loaded the boat will cut and lift, and will not ship water badly.

Balanced Loads

Bogey stresses correct loading of boats. He believes that a boat should be carefully balanced for big, potentially rough water. Too much weight forward, he explains, will cause the boat to be bow-heavy and may drive it through or under waves, shipping water. Too much weight in the stern will raise the boat too high—particularly at higher speeds—and dip the transom dangerously low in the water. Such a boat, with much of its length riding high out of the water, is also subject to the influence of wind.

Another of the riverman's pet gripes is over-powered boats. "There'd be men alive today if they had been using 2 1/2-horse motors instead of 25's," he believes.

Not that Bogey advocates little motors for big waters. But he does think that many boaters are overpowered with power. Novice boaters may "lose" their boat in fast turns, or—not being familiar with some waters—drive their craft into snags or reefs at high speeds. Jones cites novices who, cutting big motors too quickly, cause poorly loaded boats to pitch and drive their bows under water.

Respects Water

Bogey has a deep, almost religious respect for big water. "I'm not really afraid of it," he says, "but I enjoy it with one eye peeled for trouble." On the Missouri he has seen huge cottonwood trees suddenly erupt from the channel, twist and turn for a distance, and then submerge again. He tells of whirlpools 20 feet across and 5

feet deep, and sandbars that appear and vanish in a few hours.

"The worst time is when a hard wind is blowing upstream," he remarks. "It's especially bad where it catches waves at the tail of a sunken sandbar. This gives the wind a foothold, and it can build some rough water."

Bogey once crossed the Missouri in a trough between such waves. The waves were 12 feet high, and although he could see across the river along the trough, he was hemmed in—upstream and downstream—by walls of water. "Had a Greek fellow in the boat with me who had been shipwrecked coming to this country," Jones tells. "He wanted to jump out of the boat a few times, but I talked him out of it. We were both a little nervous."

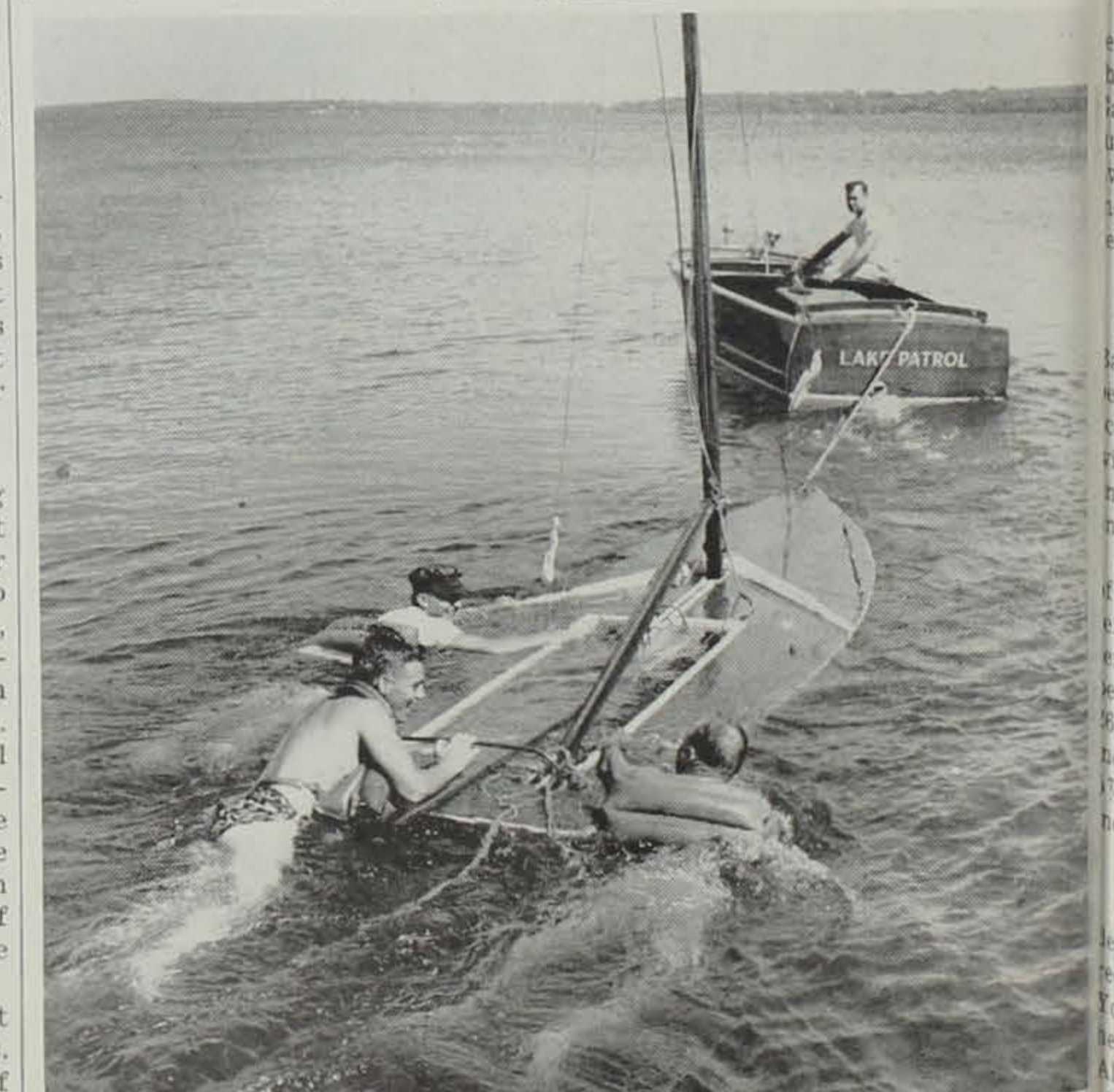
Above all, Jones cautions beginners to study and learn water and weather. "If there's any doubt, don't go out, especially if there's strong wind rising on big rivers or broad, shallow lakes."

Dan's Tips

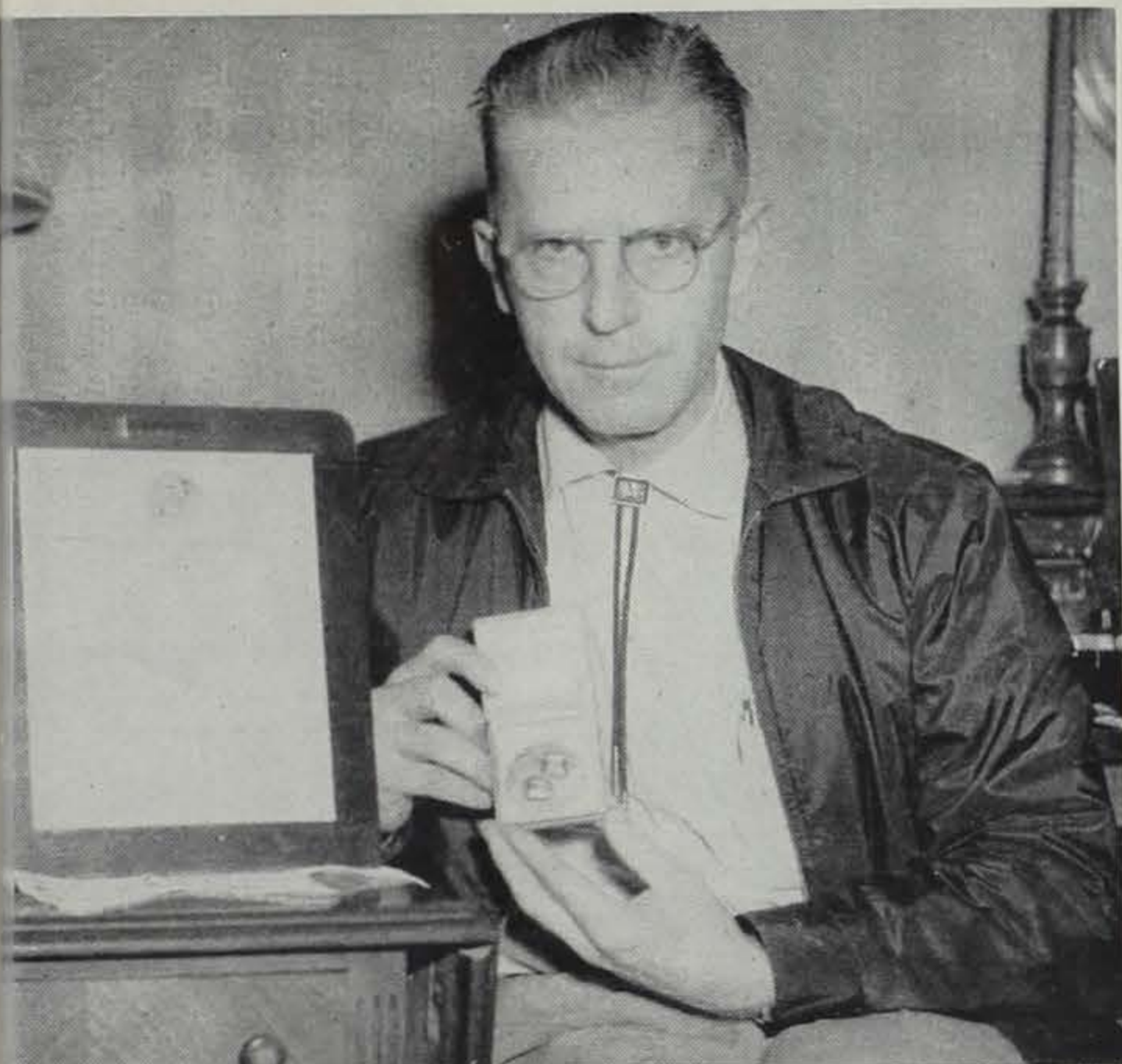
Across the state in Muscatine, Conservation Officer Dan Nichols, a veteran of the Mississippi and a master boatman, agreed with Jones.

Dan's favorite boat for most conditions is a 20-foot johnboat with a small cabin and a 30-horse motor. It offers safe, dry riding in choppy water, easily spans most waves, and provides plenty of work space. Like his contemporary on the Missouri River, Dan doesn't like such a boat for extremely rough water. He agrees that its square bow tends to ship water, but he likes its length.

(Continued on page 32)



Boating danger is reduced with life preservers and alert lake patrolmen. But at best such accidents are inconvenient; at worst, they are tragic.



R. C. Stewart of Lamont and his awards for the third largest whitetail deer head in North America. The contest was sponsored by the Boone and Crockett Club, an organization founded by Teddy Roosevelt.

IOWA DEER THIRD LARGEST IN NORTH AMERICA

By Ernie Eschbach
Managing Editor
Oelwein Register

A long and enthusiastic career as a big game hunter paid off in a big way for Dr. R. C. Stewart, Lamont, on March 14 when he won the coveted Boone and Crockett award at a presentation dinner at the American Museum of Natural History in New York City.

The white-tailed deer head entered by Stewart actually placed third in the North American Big Game competition, but it was judged so excellent that he was awarded the Boone and Crockett medal along with his third place certificate.

Shot in Northeast

Dr. Stewart shot the buck near Backbone State Park at Strawberry Point in 1953. The head scored with 184½ points compared with 189½ points by the winning trophy and 186 by the second place trophy.

Judging was on a basis of length of antlers, inside spread, circumference, and points. The head entered by Stewart measured: right beam, 26¾ inches; left beam, 27¾ inches; inside spread, 27 inches; circumference, right beam, 5½ inches and left beam, 5¾ inches. Each beam had 7 points.

Was World Record

At the time Dr. Stewart shot the deer it was considered a world record, he found out at the New York banquet. The two winning heads were shot in 1954 and 1955. All three of the winners broke the old world record.

In order to be eligible for the

competition, the antlers must be measured by someone certified by the Boone and Crockett Club. Stewart's taxidermist, Heldt's of Sioux Falls, South Dakota, measured and entered the antlers and Stewart later received an invitation. Another requirement included a measurement of at least 150 points.

More than 800 entries were made to the competition from 26 states, five Canadian provinces, Alaska and Cuba.

The Boone and Crockett Club was originally organized by Theodore Roosevelt in 1886 as a method of animal conservation. The club's purpose is to encourage hunters to shoot only for trophy heads.

Experienced Hunter

Stewart also had trophies of car-

ibou, moose, Rocky Mountain sheep and mule deer. They are on display at an Independence store. He shot the sheep in Alberta, Canada.

Stewart, who makes annual hunting excursions, told of his experiences in 1955 in Idaho. He was left in the wilderness without a guide or any means of transportation after his guide was hired by another hunting party to take them out and failed to return.

Stewart had to walk 40 miles to the nearest settlement and in doing so, nearly ran out of food. He had no means to bring in any trophies and, as a result, lost a fine chance at an excellent elk head, he reported.

A few years ago Dr. Stewart bagged a near-record moose in Canada, an 1,800-pounder. He did not have it measured for competition, but feels that it could have been a winner.

The honor Stewart brought to northeast Iowa from New York City is the first of its kind in this area, and may be the first in the state.

BRIDGE OF ICE

An interesting flash emanating from the far North concerns a bridge of ice. Such a bridge was used to span the Yukon River in Alaska on a winter highway over which supplies were carried to the Distant Early Warning radar stations in the arctic this past winter.

As soon as the river ice froze over at Eagle, timbers were placed in the ice and water was pumped on top of the logs and the river ice to form a 40-inch ice pavement.—*The Highway.*

Discarded milk cartons may be filled with water and frozen for weekend camping trips. Four or five of these may be placed in the small camp cooler to keep food and milk cold; when they thaw out they can be used for drinking water.—*Ohio Conservation Bulletin.*



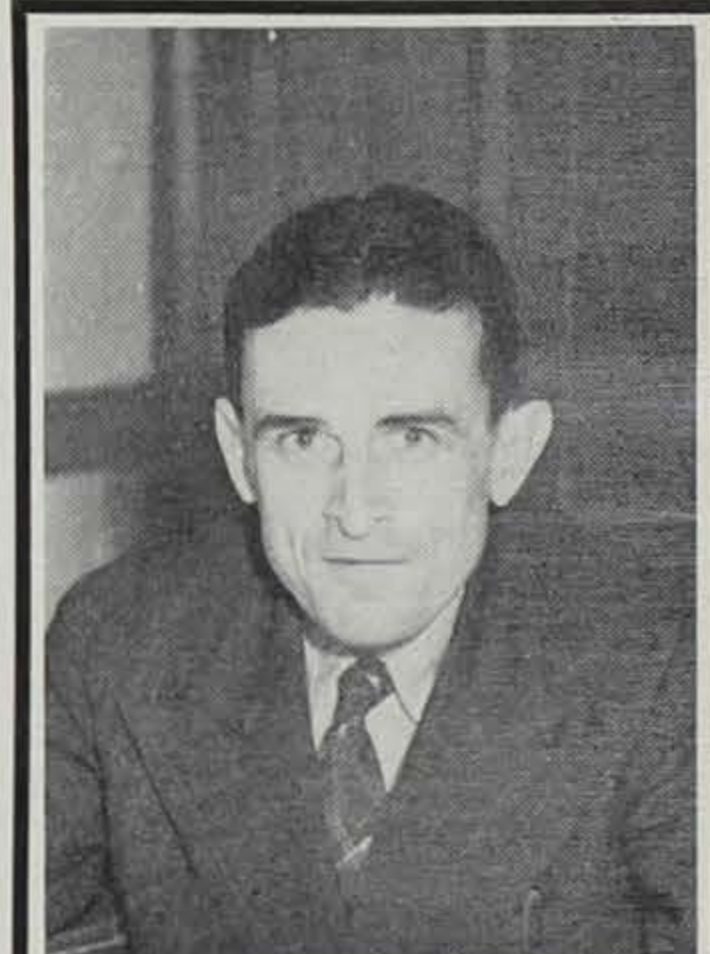
Dr. and Mrs. Stewart pose in New York before the Iowa trophy. They learned that in 1953, when the deer was shot, it had been a world's record.

COLD WORMS

John Huilman reports the story from the Maquoketa fish fry, where a silent ice fisherman just mumbled answers to his friends who quizzed him on the fishing status. Finally in disgust, one man said, "Can't you talk?" And the frustrated fisherman with a mouthful of angle worms said, "I'm trying to keep my worms warm." Well, that's one way to do it. I've known of fishermen who kept them in their shirt pockets—to the distress of their wives who later laundered these same shirts. 'Course these women didn't realize that worms have to be kept warm.—*Bellevue Leader.*

FOR HE WHO KICKS

Audley C. Hawkins, of Lincoln, Illinois, was so disgusted when he reeled in a pair of old trousers that he gave the pants a scornful kick. He got a stab in the foot. A ten-inch catfish was inside the pants!



KENNETH M. KREZEK, CHIEF OF ADMINISTRATION, DIES

Kenneth M. Krezek, 49, of Des Moines, Chief of the Division of Administration of the State Conservation Commission, died at the Methodist Hospital in Des Moines on March 15. He had been ill for about three months.

Krezek was born in Toledo, Iowa, and attended public schools there. He received a B.S. degree at Iowa State College and took graduate work in banking and accounting at the University of Wisconsin. He was deputy county auditor for Tama County, 1933-34; examiner for F.E.R.A., 1934-35; chief of auditing for the Conservation Commission, 1935-39, and Chief of the Division of Administration for the Conservation Commission since 1940.

He is survived by his wife, Janice, of Des Moines and his son, 17-year-old Michael.

Funeral services and burial were held in Toledo.

CANOEOING THE WAPSIPINICON

Ralph A. Church
and
Harold G. Allen

The very name of this beautiful river invites exploration. The name is associated with romantic legend, but more likely comes from an Indian word meaning "White Potato River" or "Swan Apple River" referring to the white artichokes that grew along the river banks. To those who know it best, however, it is just "The Wapsi."

Big and Beautiful

The Wapsi is the largest stream in northeast Iowa. Its headwaters are just over the Minnesota line and it flows southeasterly to the Mississippi, roughly paralleling the Cedar River. The valley is narrow, the central and lower portions being more rugged and heavily timbered than the upper reaches. It is an excellent fishing stream, and is rich in historic landmarks and romantic Indian legends. Moreover, its scenery is superb, particularly in the vicinity of Stone City and Anamosa.

An interesting stretch of the Wapsi for a two or three day canoe trip is that from Independence in Buchanan County, to Stone City in Jones County. This is about 50 river miles. In the unusually low water of July, 1955, the trip required about 24 hours of traveling time, and the estimated times given are for such conditions. In more normal water levels much faster progress can be anticipated.

"Swift-Running"

The place to put in at Independence is on the right bank upstream from the Highway 150 bridge. In the 6½ miles (2½ hours) to Old Iron Bridge the current is slow as the stream meanders through wild country. Its stream bed and banks are sandy in this stretch with some hard-rock bottom. Good campsites are numerous. The country continues flat for the next 4½ miles (1¾ hours) to the six-foot recreational dam at Quasqueton, so named from the Indian name *Quasquetuck*, meaning "swift-running water." In pioneer days this was a junction of Indian trails, and the town which was settled in 1842 was one of the first villages on the river to have a mill. The portage around the dam is on the right bank near the dam. A highway bridge is just below the dam. About one mile above in the backwaters of the dam on the left bank, a large boulder — Cedar Rock — will be seen, capped in these days with an unusual cabin.

The next highway bridge, New Iron Bridge, is 6½ miles (3¼ hours) downstream. The river has a better rate of fall, 4.7 feet per mile, in the next 3¾ miles (1½ hours) to the Troy Mills Bridge and dam. The dam should be portaged on the right bank.



Church and Allen Photo. An elderly Waubeek lady displayed a New England harpoon and a storm lamp to the canoeists. The little village was settled in the 1850's by whaling families who were tired of the sea.

It is 9 miles (4 hours) from the Troy Mills Bridge to the two bridges at the Paris bottoms, and another 3½ miles (1¾ hours) from the second Paris bridge to the Central City Bridge where Highway 13 crosses the river. The power dam just below this bridge should be portaged on the left bank around the powerhouse. Another highway bridge and a railway bridge will be passed below the dam. The river is shallow in this vicinity and some wading will be necessary.

About 2¾ miles (1¾ hours) downstream from the Central City bridge, the Jordon Grove Bridge, where Highway C crosses the river, is reached. This is a pleasant stretch of the river and many summer cottages will be seen.

Harpoons and Anchors

The character of the river changes in the next 4 miles (1½ hours) from the Jordon Grove Bridge to the bridge at Waubeek. The valley narrows and the country becomes wild with steep, heavily wooded bluffs. Camp Waubeek, the Boy Scout Camp, is on the left bank, as is the old Indian lookout, Council or Mile Rock.

The little village of Waubeek has had an interesting history. It was settled in the 1850's and 1860's by New England whaling families who decided to migrate to the midwest so that neither they nor their children would ever again be tempted to go to sea. In the process they transplanted a bit of New England to the Wapsi valley. They named their township Maine, in honor of their old home, and carved emblems reminiscent of the seas over the doorways of their New England type stone houses. They brought with them many of the tools of their adventurous trade and some of the ivory tipped harpoons, storm lamps, ships' bells and anchors

still remain. Waubeek also has another claim to fame as the birthplace of Jay Sigmund, the poet and author.

About 1½ hours below Waubeek the river narrows and divides into several channels, all of which are blocked by fallen trees and beaver dams. The left channel is best. An empty canoe can perhaps be pulled over the obstacles, but with a load a portage will be necessary. The portage should be made through the timbered pasture on the left bank. It is wise to reconnoiter well downstream to find the best trail and to make certain that all obstacles are cleared with one carry.

Teddy Roosevelt Played

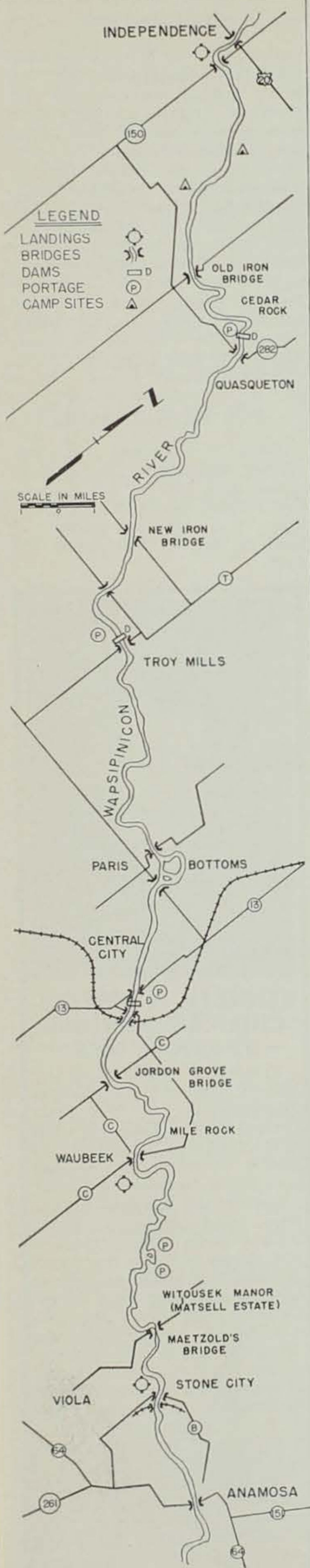
It is 7½ miles (5 hours, including portage) from the Waubeek Bridge to Maetzold's Bridge, about 3 miles north of Viola. On a high bluff above this bridge, overlooking the river is an interesting landmark from Iowa's colorful pioneer past. It is the rambling 99-year-old mansion built by George W. Matsell, New York City's Chief of Police in the days of the notorious Tweed Ring and one of the most unusual of the pioneer settlers attracted to Iowa. His vast estate, known as Castle Farm, included over 3,000 acres and extended for 4 miles along the north bank of the river. Many prominent political figures of the day, including Theodore Roosevelt, were entertained there.

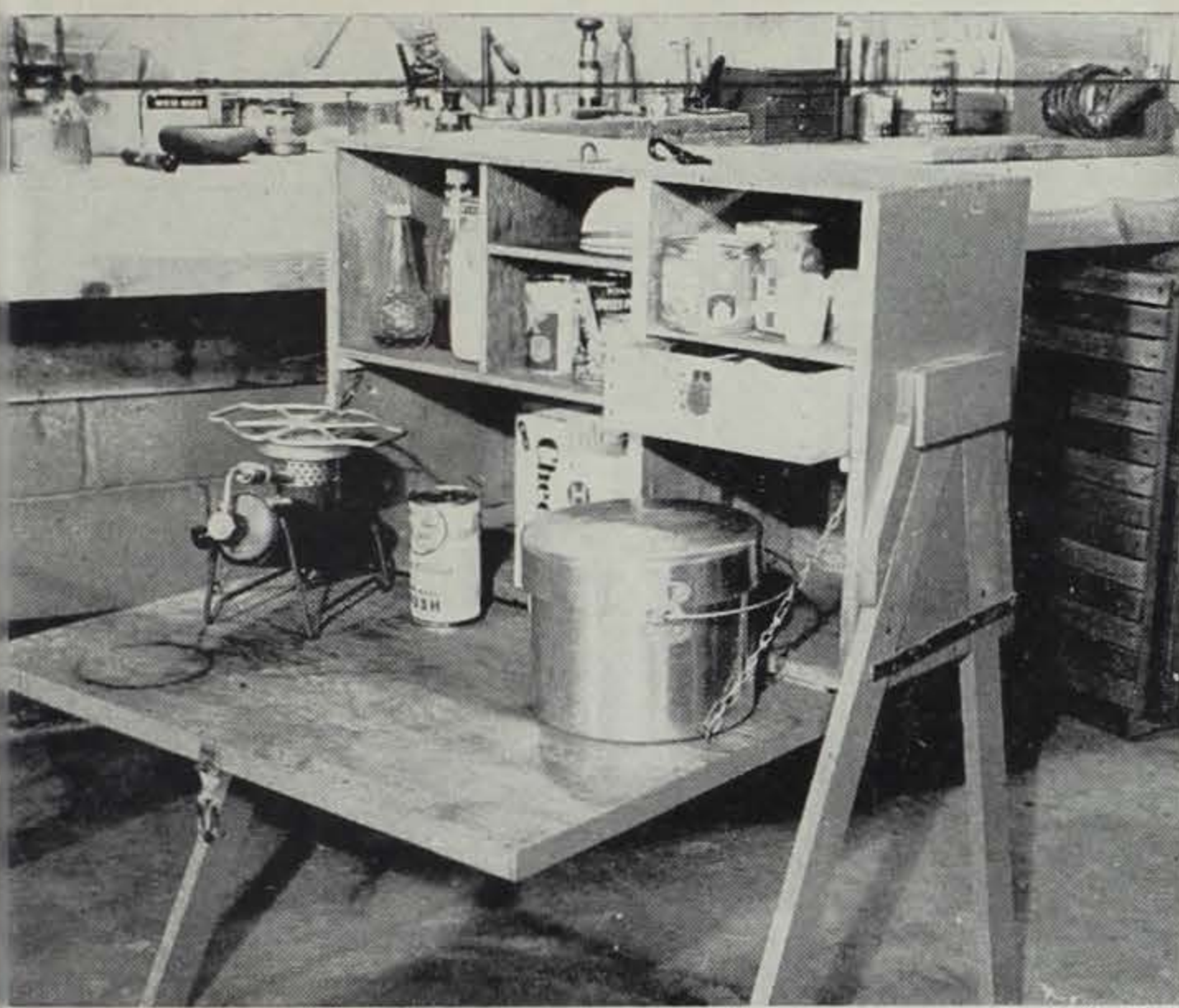
It is 2½ miles (1¾ hours) from Maetzold's Bridge to the take out place at Stone City. The river is very scenic in this stretch and has a better current. Take out on the right bank just above the highway bridge.

Old Art Colony

Don't leave without a visit to the picturesque little village of Stone City. In its long history it

(Continued on page 32)





Rex Pendry Photo. Pendry's picnic box contains an amazing amount of food and picnic gear. Some food staples are kept in the box throughout the picnic season, and perishables can be added at a moment's notice.

PICNICKING THE EASY WAY

A picnic or short camping trip has a lot of its glow if you aren't prepared for it. A slap-dash, spur-of-the-moment outing may be a thrill when you think of it, but it quickly palls if you've forgotten coffee, salt or bug dope.

Some picnickers go whenever the mood strikes them, but are prepared well in advance. They usually have permanent kits complete with stove, staples and those vital (and usually overlooked) picnic necessities.

Handy Grub Box

Rex Pendry, Supervisor of Exhibits for the Conservation Com-

mission, has a setup that looks like a good one. An incurable picnicker, Rex has built a portable picnic and camping kit that serves as a table, a cupboard and work-bench. It's a grub box that is roughly 12 inches deep, 18 inches high, and 30 inches long. Removable legs are provided, and a front panel lets down to form a handy work table.

The outfit doesn't take up much room, but can hold an alarming supply of equipment and staples. Pendry's utensils include a nested aluminum cooking kit with 3 kettles, 2 frying pans, a coffee pot and 4 plates. He has replaced the thin aluminum cups—which are worthless for hot liquids—with heavier enamel cups.

A small drawer in the box contains:

- whetstone
- wire
- small pliers
- matches
- adhesive bandages
- merthiolate
- fish hooks
- hot pad
- scouring pads
- can opener
- insect lotion
- flashlight batteries

In the various compartments are carried the food staples:

- salt, sugar and pepper
- pancake mix (for cakes and fish batter)
- coffee (instant or canned)
- oleomargarine
- packets of dried soups
- small jar of detergent
- small jar of jam
- ketchup and mustard
- powdered milk and cream

Also included in the kit is a small camp stove, either one or two-burner. Since the top of the box, with legs attached, is only about 40 inches above the ground, a stove is handily set on top and is waist-high to an adult but out of reach of very small children. This leaves the drop-leaf front of the box free for provisions and eating. Although only one side of this box drops to form a table leaf, it would be possible to have a

movable front and back, providing two table surfaces.

Always Ready

Such equipment takes the pain out of picnic preparation. Non-perishables are kept in the grub box constantly during the picnic season, and meats, bread, fresh milk, desserts and other perishable items can be quickly added while the car is being backed out of the garage.

Empty, the box weighs about 20 pounds, and when it's full it can still be easily carried by the man of the house. Fully loaded, the grub box can contain enough food for several meals for a family of 4.

If you are heading for a park area the box's legs may not be needed, for it can be set on a picnic table. If you drive a station wagon, the box may be placed on the tailgate.

Uses Pack Basket

For family outings where you will be going some distance from the car, a large grub box would not be practical, particularly if you plan to walk through some rough country. For such occasions, Pendry keeps a fully-equipped pack basket of the sort used by northeastern guides and trappers.

A pack basket has an astounding capacity, and Rex reports that it can hold enough equipment and dried foods to last one man almost a week. Unlike a packsack, this basket stands by itself and is easy to get things from when you want them.

Pendry keeps his basket stocked with a mess kit, condiments, a small box of fish hooks and assorted junk, extra jacket, raincoat and camera. He may or may not include a one-burner stove, depending on space. A camp stove, he believes, isn't a necessity, but is a mighty handy luxury that furnishes a quick, easily-controlled flame.

Eggs may be broken and trans-

ferred to a small olive bottle. They may also be carried unbroken in a coffee can of corn meal to prevent breakage. You'll need the corn meal, anyway. You may include pot hooks made of number 9 wire, plumbers' candles or a small battery lantern for light, and sandwich grills. Such grills take up little space and are excellent for grilling steaks. They are superior to the grills that are set down over a bed of coals since the distance from steak to fire can be easily adjusted.

Foil "Ovens"

Pendry also carries (both in pack basket and grub box) several sheets of heavy aluminum foil of the type used by frozen food lockers. Household foil may be too light for cooking food in open coals, and usually has to be doubled. The heavy foil is often pre-crumpled in order to avoid bringing the food in close contact with hot coals and preventing burning.

Aluminum foil makes a superb portable oven in which food can be wrapped and done to a turn in its own juices. In wrapping food in foil, be sure to fold over and tightly crimp all edges to prevent loss of juices and vapor.

One of Rex's riverbank favorites is to wrap in foil a steak or hamburger with sliced tomatoes, carrots and a single slice of onion on top. To this is added a pat of butter and one drop of liquid smoke.

He lays the foil package in a thin layer of campfire coals and goes fishing for about 45 minutes. When he gets back, dinner is done.

As a result of such campfire feasts, hundreds of picnics, and eating in the open a great deal, Rex isn't exactly built along the running lines of a greyhound. He is—to be charitable—of a slightly square shape. But Rex claims that there's a time and place for dieting, and that doesn't include outdoor eating.—J.M.



Rex Pendry Photo. A safe, handy way to carry a few eggs is to crack them and transfer yolks to an olive bottle.



Rex Pendry Photo. Included in the pack-basket picnic kit are one-burner stove, foil, mess kit and pans, sandwich broilers, condiments and a leather "possibles" kit. Contents may be protected with a canvas basket cover.



Bait minnows and chubs should be carefully sorted to size, depending on the type of fishing you plan. Good chubs are becoming rare in some waters, and should never be wasted.

Bait Minnows . . .

(Continued from page 25)

bass, northerns, walleyes and other large fishes, the best baits are creek chubs, stonerollers, golden shiners and the young of some of the sunfishes, bullheads, rough fish and the common sucker.

No matter how the minnows are taken, two rules should always be followed:

1. Take no more than needed or than can be safely transported and held until used.
2. Select minnow sizes that can be used for the type of fishing planned, and return undersized or oversized bait unharmed to the parent waters. This is especially true of large creek chubs, which have become quite scarce in some areas.

In seining, make short, quick hauls to avoid crowding and bruising bait in the net. Bruised minnows may be subject to fungus and die in the holding tank. The ends of the seine should be pulled up on shore, allowing the bag of the net—and the bait—to remain in shallow water. The bait is handsorted and put into minnow bucket or pails. If crayfish and minnows are taken at the same time, separate the two as quickly as possible in different holding containers.

If possible, seine in an area with a clean bottom to prevent snagging. If flowing water the net is pulled down-current, generally parallel to the banks. In larger streams the outer end of the net is kept a little ahead of the shore end. After a short distance the advance seiner pulls his end of the net into shore. The same is true in lake seining, but the seining is often begun on shore, progressing out into the lake in horseshoe pattern and then returned to shore.

It's best to keep a deep bag in the net to prevent minnows from running around the ends. A deep

bag is formed by seining with the ends of the net closer together, allowing the net to form a U-shape in the water. When landing on shore, the two ends are pulled slightly out of the water, the lead line on the bottom is carefully worked in on shore with the floats holding the net out of the water at the back.

Storing and transporting minnows isn't difficult if certain iron-bound rules are followed, plus a great deal of common sense and care.

Take your minnows without injury, never overcrowd them in the containers, and when held in liveboxes do not allow them to be buffeted by waves or strong current. Feed bait minnows very sparingly.

Immediately after the minnows are taken from the net and put in the minnow bucket, place the inner container of the bucket into the stream where fresh water is supplied by the current. Many

more minnows can be held in this way than can be kept in a bucket of stale water.

When seining minnows, it's advisable to have storage tanks in your car. Five-gallon cream cans work well. Before your bait buckets become crowded, transfer the minnows to the storage tanks. Be sure that the temperature of the water in the storage tank and the minnow bucket does not vary greatly. Cool water is best.

The water in which the fish are transported may be slowly cooled by the addition of cooler water or small quantities of ice. A slick method of keeping a bucketful of minnows on a hot day is to place a fist-sized chunk of ice on the top of the minnow bucket, allowing the cold water to drip into the container as the ice melts. The angler can also aerate minnows with a bicycle or automobile pump.

Most bait minnows are held in liveboxes. These are simply and easily made with 2x2 or 2x4 framing, covered with copper screen wire with a trap door secured with hasp and hinges built in the top. The box is placed in a lake or stream and the minnows receive sufficient oxygen from wave or current action. In streams the box should be placed away from the strongest part of the current, but where there is some current flowing. In lakes, wave action should be broken by covering part of the wire mesh with wooden slats. Dead minnows should be removed at frequent intervals.

For long-time holding, the minnows should be carefully handled from the time of capture and introduced to their new home in top physical shape. Minnows in permanent storage should be lightly fed, the most practical and convenient foods being cornmeal, oatmeal, or small bits of raw hamburger. Don't overfeed them, or the tank will be contaminated by unused food.

Minnows are used dead or alive and hooked by many different

methods depending on how the bait is fished and for what fish it's intended. Some minnows are hooked so that they will stay alive and active. Others are fished as dead bait, as in catfishing. A creek chub, for example, may be allowed to die and remain in the water for an hour or two until it turns white, but not long enough to allow it to become soft. Chubs used in this way after turning white should be removed from the water and packed in a jar in chipped ice to keep from further decomposition.

Wardens' Tales

Clair Rausch, officer for Linn County, reports that some anglers took advantage of low Cedar River levels this winter to build up their stocks of fishing tackle.

In areas around Cedar Rapids where snags and rocks were bared by low water, these anglers prospected for sinkers, plugs and spinners that had been lost in sunnier, wetter times. Clair says that he saw some prospectors fill baskets with lead sinkers and other tackle.

Last fall Dan Nichols, conservation officer for Muscatine and Louisa Counties, arrested a hunter for carrying an assembled gun in an automobile. The man appeared in court and was fined.

A few weeks later Dan arrested the same man on another charge of carrying assembled weapons in a car. He was hailed into court for a second time, appearing before the same judge.

The judge looked the violator over and said "You know, when you vaccinate an animal against sickness and it doesn't take, you usually give it another shot. Sometimes that second shot is twice as strong as the first. So that's what I'm going to do to you." And he did, doubling the amount of the original fine.

It evidently worked. Dan reports that the second "vaccination" cured the hunter.

Jim Becker, conservation officer assigned to Buchanan and Delaware Counties, bought a new Brittany spaniel pup this winter. In one way or another, the pup has managed to stay in hot water.

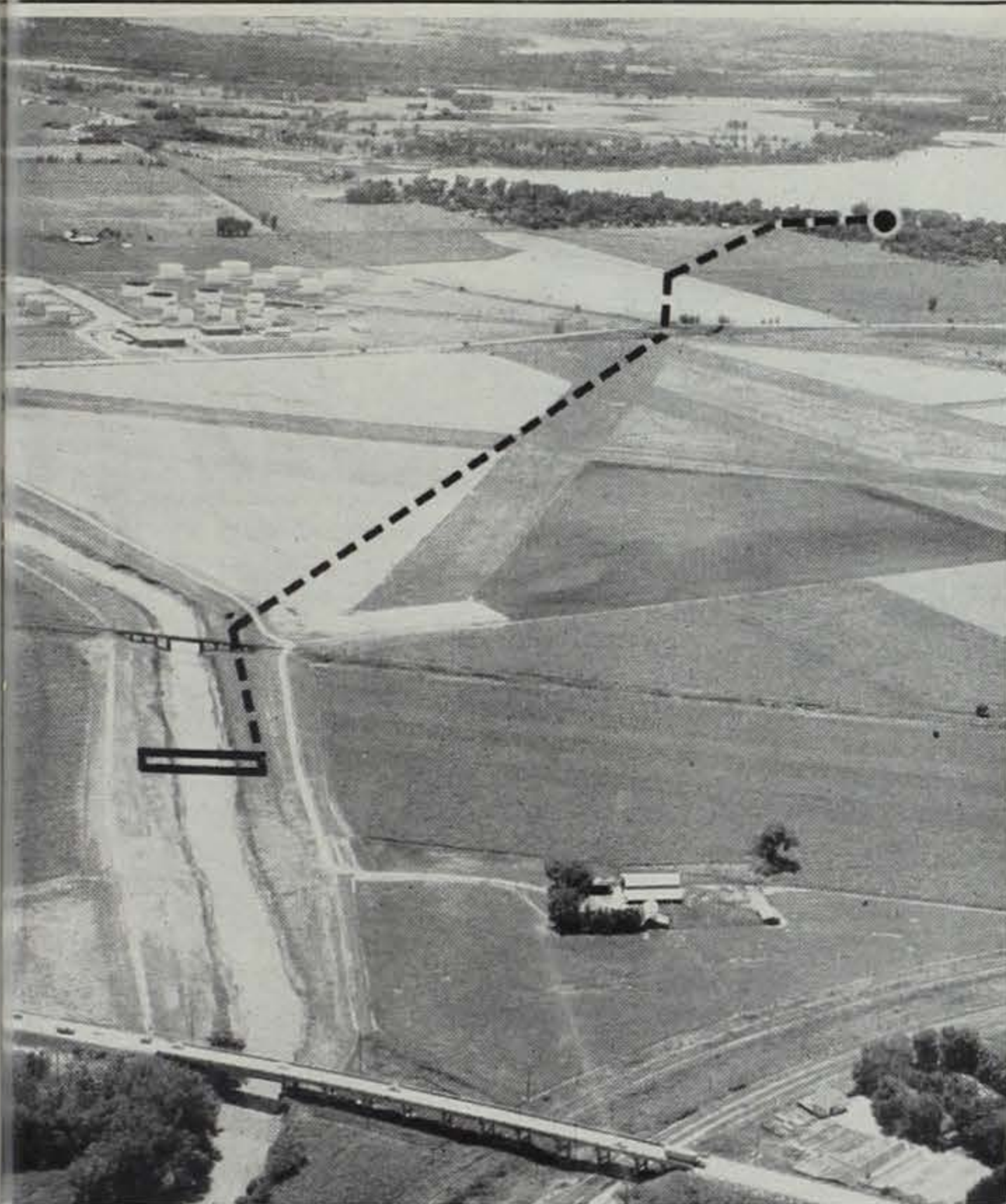
Jim's little boy Greg, aged 2½, was watching his mother do the family washing. When his mother went upstairs to prepare lunch, Greg took over the washing machine. He gently picked up the new puppy, dropped it into the sudsy water, and turned on the switch.

The yelping pup and the frightened cries of the little boy brought mom downstairs on the double. She turned off the machine and lifted out a barking mass of soapsuds. Aside from being the cleanest dog in town, it was o.k.

But the dog wasn't very happy about it. The question is: was the pup agitated because it was clean or clean because it was agitated?



While seining, the net should "bag" in the current, and the lead line should be carefully brought up on shore. Bait minnows are often lost just before the pull-out, when they may escape beneath a lifted lead line.



diversion line from Mosquito Creek will extend 8,100 feet to Lake Manawa, shown in the distance. Council Bluffs Nonpareil Photo.

New Projects . . .

(Continued from page 25)

... portions of the channel in areas that had been changed by the Corps of Army Engineers. It was a permanent boundary that could not be altered or changed by any wanderings of the river itself.

If the channel of the river is changed by man, the eastern half of the abandoned river channel (if the boundary runs down its middle) remains in Iowa's possession, and the western half in Nebraska's. In other words, if a section of the Missouri River is straightened by the Army Engineers, the abandoned river channel is half-Iowa and half-Nebraska. Any further straightened portion of the river may be in full possession of whichever state it flows through, depending on whether or not it is east or west of the boundary line of the channel that had been established in 1943. This is the present situation west of Onawa. Part of the Missouri River was straightened and now flows west of the old channel. As a result, that portion of the river is now entirely owned by Nebraska, and the Iowa line runs some distance east of the present channel. Incidentally, the channel bottom east of the boundary is the property of the state of Iowa, while the channel bottom west of that line is the property of Nebraska landowners.

So Iowa has ownership of abandoned Missouri River channels that are east of the established 1943 boundary. Now that these channels are dry, they are being sur-

veyed in an attempt to learn their extent, location, and best future use.

Trial Surveys

Determining the Iowa-owned portions of these abandoned channels is a major job. Two survey crews from the Robinson Engineering Company of Waterloo and the Wever Engineering Company of Corning are now conducting trial surveys in the Hamburg, Missouri Valley and Onawa vicinities.

These surveys—on a small scale—are being made to get a general idea of the cost and scope of a full survey and to determine some of the legal problems involved.

Much of the work so far has been court house research, and finding old survey lines and markers. Here the great silt load of the Missouri River becomes apparent. One bench mark—set a foot underground in 1952—was found to have been buried beneath six feet of flood silt in only four years.

What's Ahead?

As yet, there are no definite plans for making a full-scale survey of the Missouri River bottomlands. Such planning will hinge on the results of the test surveys.

For now, it is safe to assume that there are vast acreages in western Iowa that are state property—areas not now in public use.

Bringing these lands under full public control could be important to sportsmen. There are pitifully few public fishing and hunting accesses to the Missouri River and its rich sporting areas. There is also a need for more and larger waterfowl refuges along the Mis-

souri; areas that could hold waterfowl—particularly geese—for longer periods and forestall the "burning out" of migrant flocks in the hunting season.

But such developments must wait on complete surveys. The job at hand is to determine who owns what and where. After that, refuges and public fishing and hunting areas can be considered.

New Artery for Manawa

Iowa's most heavily used park area—Lake Manawa south of Council Bluffs—is in the process of getting a badly-needed transfusion. An 8,000-foot diversion line is being built between Mosquito Creek and the lake. Manawa is at its lowest level in years and the new diversion will furnish a good supply of clean water.

Until 1881, Lake Manawa was part of the Missouri River, but a channel change that year created an oxbow lake and the present lake area. Water was originally supplied to Lake Manawa by Mosquito Creek and overflows of the Missouri, but the creek was later channeled away from the lake and cut directly into the Missouri as a district drainage project. After that, the lake's only water supplies were a tiny (2½ square mile) watershed and bank floods of the creek and Missouri River that carried high silt loads. Because of this silt-laden water supply, the average depth of the lake was greatly reduced.

Chooses Clean Water

The new diversion project will drain water directly from Mosquito Creek into the lake. Mike Hill, Conservation Commission Engineer in charge of the project, explains that water can be drawn selectively from the creek. When the creek is clear, water will be drawn through the diversion weir and down the 48-inch pipe to the lake. When the creek is muddy and turbid, water can be bypassed around the weir and on down the creek. Only clear water will be

sent to the distant lake.

Under full head, the pipeline will deliver about 14,000 gallons of water a minute to Lake Manawa.

Although Mosquito Creek is a small stream, it has surprisingly good flowage. Even last month, when most western Iowa streams were reduced to trickles, the little creek carried a good supply of clear water. And although it flows near a heavily congested urban area, there is only one important source of pollution, and this is expected to be controlled before the diversion is opened late this summer.

The diversion presents many problems, and Mike Hill has his work cut out for him. The pipeline will run through a heavily settled area of industrial sites, highways, utility installations and railroads, and the huge pipes—in spite of quicksand, old pilings and other obstacles—will be placed underground in an effort to avoid damages during and following construction.

Lake Being Readied

In the meantime, the lake is being groomed for its new water supply. Conservation Commission seining crews are thoroughly combing the lake with long (4,000-foot) seines with small (¾-inch) mesh, and are removing every possible fish. Game fish and catfish will be returned to the lake, but all rough fish will be disposed of. Crewmen reported taking 60-pound catfish, northern pike weighing over 20 pounds, and a couple of old outboard motors from the lake.

The extremely low lake levels permit intensive and effective netting, but preclude most other types of fish management. The lake will not be stocked this year. Fisheries officials believe that intensive seining of rough fish, plus an increased volume of good water from Mosquito Creek, will put Lake Manawa back on its feet as a fishing lake.



Each section of the Mosquito Creek diversion pipe is 10 feet long; weighs 10,000 pounds. It will be underground to avoid damage to utilities and industrial sites, and may deliver 14,000 gallons of water a minute to Manawa.

Small Boats . . .

(Continued from page 26)

No All-Around Boat

For really wicked weather, Nichols prefers a deep 16-foot pointed boat with a wide beam and a full, pointed bow. Sharp, narrow bows, Dan believes, cut water too easily and do not furnish enough displacement to lift readily. When driving into a deep trough in rough water, they lack quick, buoyant recovery and simply slice deeply into the wave. At best, the results can be uncomfortable.

Dan hasn't much use for boats under 14 feet long. "I'd never take a 12-foot boat into water I couldn't wade out of. Over here, if a man needs a boat 16 feet long, he probably needs one 20 feet long. There's no all-around boat, and different waters demand different things of a craft."

A few boaters may not agree with some of the things advocated by Bogey Jones and Dan Nichols, but they've seen a lot of rough weather and tall water, and they're still float.

Like Bogey, Nichols is cautious of big motors. He spoke of a case where three beginners, equipped with a 30-horse motor, cut their power too quickly after running at top speed. They lost headway immediately, the bow dipped, and the stern wave sneaked up and swamped them. Dan can get much more enthusiastic over the maneuverability and practicality of a 5-horse than a 25-horse motor.

Run Into Waves

Both Jones and Nichols prefer to avoid running through rough water with the wind from the side. It is usually better to run against the waves, or with them. Wind and wave should not—in dire straits—attack a boat from the side.

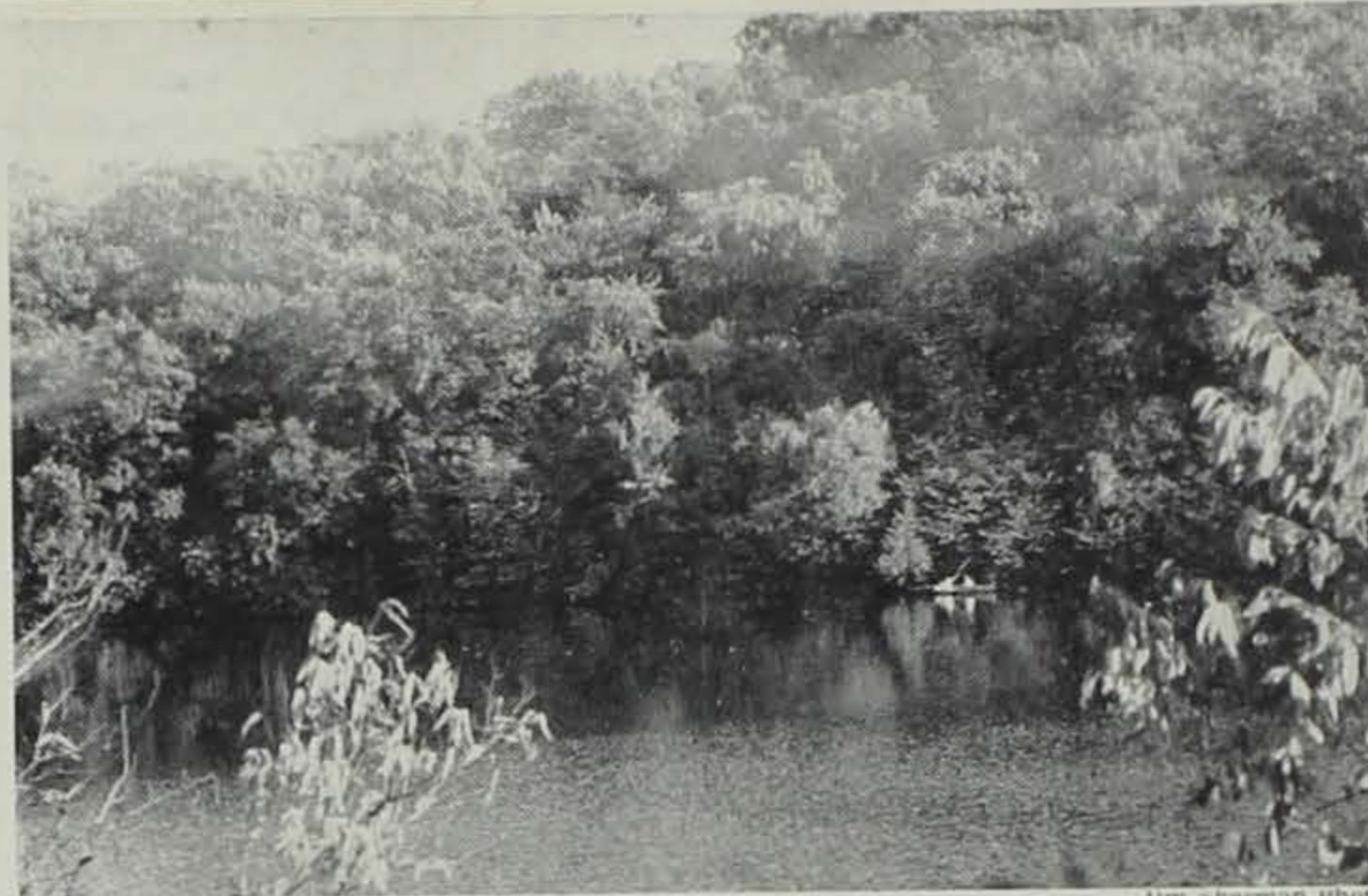
When running into the wind, Dan likes to quarter slightly into the waves; a safer, more comfortable way. By taking waves head-on, you may risk shipping some water over the bow. By quartering into the waves, the trough is entered more gradually and danger of burying the bow is minimized.

With a small motor there may not be enough power to run against the wind and you may have to run with it. In this case, travel just a little faster than the waves, staying with a single wave as long as possible. If you travel too slowly, waves catch up with you and sneak in over the stern. If you're not an old hand at boating and waves are 2 feet high or more, it may be best to head for the nearest land at once and wait it out.

Nichols also suggests equipping your boat with life preservers, oars, and rubber spark plug covers for the motor. Nothing is more irksome than having a wet motor cut out during a blow.

Fitting Boat to Water

A small boat is fine for artificial



Jim Sherman Photo.

"Suddenly—usually later than the agreed-on time—I spot something sparkling on the water. Here come my boys!"

A WORD TO THE WIVES

By Mrs. E.L.K.

This is a fish-story written by a long-suffering fisherman's wife. If your husband doesn't go after the big Channel Cats, he doesn't know what he's missing—and, may I add, tongue in cheek, neither do you! Just listen to this—

It all started once when I wanted to buy a zither. For the first time in my married life I was able to get something without putting up an argument. Little did I realize the consequences, for immediately, friend husband and son Frankie went out and ordered a three-hundred dollar aluminum boat—a fair exchange, to their way of thinking. Then the fun began. From May through September my refrigerator bulges with liver, blood, and entrails from chickens, dead minnows, shrimp (whose best days are over), and earthworms sleeping peacefully in their plastic bags of dirt. Oh, yes, I must not forget the mixtures of "Tackle Smasher Catfish Bait" (with miracle attractor added). This has an odor that defies description.

Now, here is the way we go

lakes, ponds and small rivers. But a 12-foot boat is not for Leech Lake, Mille Lacs, or the Mississippi and Missouri. For big waters, use a big boat. Take your cartop boat or canoe on your fishing vacation by all means. But use it only in the waters it was designed for. For big lakes and rivers, it may be best to rent a good local boat that's designed for use in those waters.

Stay With the Boat!

The most important precaution of all is to stay with the boat at all times. That boat can be your best friend, so don't desert it. Few boats will sink and can support several persons indefinitely even if the craft is filled with water. Never swim for shore; it's farther than you think. If you have the misfortune to capsize, the boat may be your only link with life; stay with it and await help.

about catching old Mr. Whiskers. On the appointed day we pile the station-wagon high with gear—and, of course, food to feed an army. Next, the boat, which rests on a device suspended from the garage ceiling, is lowered onto the cartop carrier, and away we go! In a half hour we arrive at our destination—far upstream on the Des Moines River, which I call my one and only rival. In two shakes of a lamb's tail we have the boat in the water and loaded for action. My boys start off, looking for all the world like a two-man exploring expedition heading down the Amazon. With a wave of the paddle and the dip of a sun-helmet, they soon disappear around the bend floating with the swift current—and I am alone.

Again, the next day I stand on the river bank, but several miles below the original starting point, straining my ears for the first *put-puts* of the little motor. Here it is so peaceful and beautiful that I begin to grasp some of the enchantment that lures my two boys away from their soft beds and regular meals.

Suddenly, usually later than the agreed-to time, I spot something sparkling on the water. Here they come! "They'd better not stop at that secret, one-in-a-billion hole up there because I want a boat ride before we start for home." No, they come right along, and soon I can make out their rugged sun-burned faces, tired from staying up fishing most of the night (although they won't admit it). But more important, they seem released, for the time being, from the tensions and problems of a big world going nowhere too fast.

On the ride home comes a detailed rehashing of the float-trip, and especially of how each trophy was caught. If, by chance, the luck was bad, I get a story that would break the heart of a grindstone—and so it goes—

Oh, the gallant fisher's wife
She is the best—by gummy
She's full of pleasures, void of
strife

And is beloved by—hubby*

* From Walton's "The Compleat Angler"—slightly altered to fit.

Pike Fishing . . .

(Continued from page 25)

young fish and other organisms become more abundant as food for the walleyes. When the spring is early, forage fish may become available to walleyes soon after the fishing season opens whereas a late spring may delay the spawning of perch, suckers, and minnows which provide much of the forage for walleyes.

I know of some lakes in Minnesota where the past-spawning concentrations of walleyes are particularly important. These are small lakes tributary to large important walleye lakes such as Lake Winnibigoshish. If the spring is late, the opening week walleye fishing in these small lakes is very good, but after a few days or weeks the walleyes return to the big lakes where they are no longer concentrated.

As I write this (March 14), I have no way of knowing whether this spring is going to be a late one except that I know we've had few thaws as yet and that the ice on the lakes is probably thicker than most years at this time. If it is a late spring, I'll be looking for further evidence as to the validity of the theory. I believe that for opening day it will be well to try in the vicinity of known walleye spawning areas.

Wapsipicon . . .

(Continued from page 28)

has known both fame and prosperity. From early pioneer days to about 1900, when Portland Cement was introduced, it prospered with the Dearborn and Champion quarries, producers of the finest limestone in the state. The stone for the old State Capitol Building in Iowa City came from these quarries. Then again in 1932-1933 it knew fame as the site of the Grant Wood Art Colony. Clayton Dearborn, a descendant of one of the early settlers and an enthusiastic fisherman, still operates a general store in the stone building across the river from the take out place above the bridge. He has seen a large part of Stone City's fame and prosperity, but still lives very much in the present. After all, he tends his business and fishes at the same time, and what could be better than that?

"TWILIGHT SLEEP"

Use of ether had proved so effective in simplifying the work of fin-clipping trout that workers, as an experiment, applied the same practice while stripping eggs from rainbow trout. Almost a million eggs were taken from etherized trout in half the time usually required. In addition, the percentage of "delivered" eggs that "eyed up" nearly doubled.

The spawn-takers, who formerly had to tussle with slippery trout weighing up to 15 pounds, were enthusiastic boosters for "twilight sleep" for the finny expectant mothers.