



MARCH, 1972



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Forum

I understand that a bill is in the Iowa Legislature to charge \$5.00 for an annual users fee for certain State Parks.

My question is this: Does this user fee entitle one to camp free in State Parks where camping is allowed?

R. J.
Des Moines

Answer:

House File 577 would give the State Conservation Commission the authority to charge a fee of \$5.00 annually or \$1.00 daily to use certain State Parks designated by the S.C.C.

This fee does not permit free camping or the use of other facilities such as lodges, beaches etc. for which there is a charge. The user fee would be in addition to the regular camping fee that is charged now.

Campfire Cookery

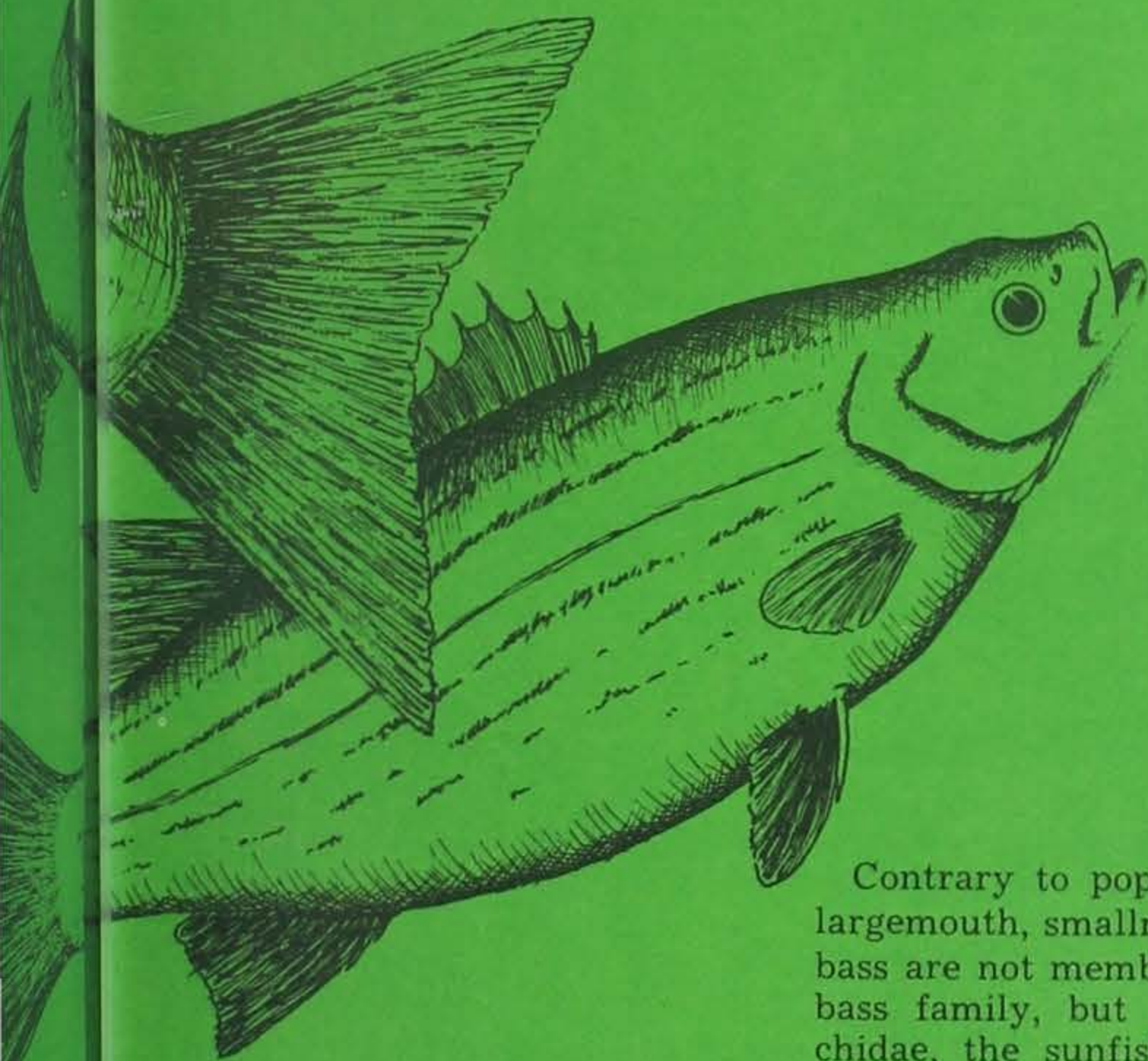
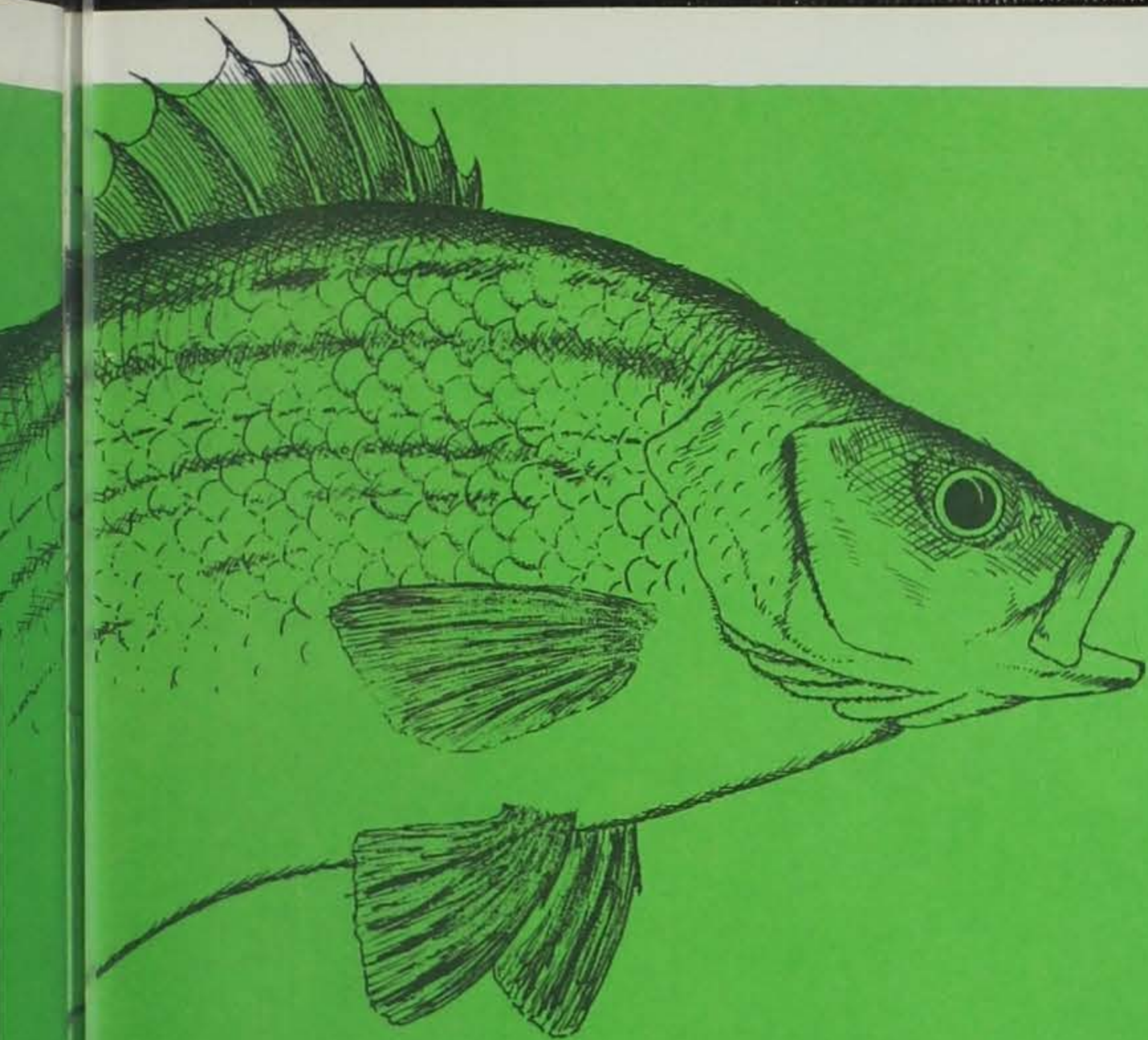
By Dick Ranney

As you know from our past efforts we have failed in our attempt to take over first place. Some of you still do not grasp the importance and prestige of being number one. You know, the fanfare, the honor and tribute given the number one robin each spring. The first robin causes quite a stir, little kids run home and tell their mom, lovers know that spring is about ready to be sprung. Men whistle while they work and gals forsake the electric dryer in favor of hanging a load of clothes out in the sun and fresh air. How the smell of fresh dried clothes brings thoughts of spring. So you see what being number one can do for us.

Annually we call this meeting of the family Liliaceae. We try each year to come up with somebody who can win. Three years ago we put our money on Miss Silly Lily. We all agreed she was a beauty but she didn't come close in the race to be **first up** in the spring. Two years ago we decided to let Dutch Tulip have a chance to bring home the bacon. But alas, his efforts were in vain. He put forth a maximum attempt and even showed his head above the snow. As he stood there with pride and dignity, he looked into the window of the house and sitting there in a vase as pretty

(Continued on Page 10)





IOWA'S TRUE BASS

By Marion Conover
Fish Management Biologist

Contrary to popular belief the largemouth, smallmouth and rock bass are not members of the true bass family, but rather Centrarchidae, the sunfish family. Two members of the true bass family (Serranidae), white bass and yellow bass, are found in Iowa waters. Effort is being made to introduce and establish a third the striped bass, within the state.

Differentiation between the true bass and the sunfish families is most easily made by studying their habits. True bass members unlike members of the sunfish family are free spawners, that is

they do not build nests nor give care to the eggs or young. The general habitat of fresh water true bass is deep water over sand and gravel bottoms in medium to large lakes and rivers. Members of the sunfish family get along quite well in shallow water areas over mud or gravel bottoms in waters ranging in size from small farm ponds to large lakes and rivers.

White Bass

Of the two fresh water species of the true bass family habiting Iowa waters, the white bass, *Roccus chrysops*, is most familiar

LARRY POOL
"72"



to the angler. Other common names are silver bass, striped bass and sand bass.

White bass have characteristics desirable both to fish managers and to anglers. They do not seriously compete with other game fish and they seldom, if ever stunt. Best of all, they are just plain fun to catch.

During periods of feeding activity the fish can often be seen surfacing, as a school actively feeds on shad or minnows. During such periods the water appears to be literally boiling, and schools of minnows can be seen skipping across the surface as they seek escape from the ravages of the white bass. These periods of feeding activity occur at different times of the day in different lakes, but the hour will likely be the same once it is established for a certain body of water. During these periods almost any small lure cast into the "boil" will score a strike. When white bass are not surfacing best fishing success can be attained by moving a bait six to ten inches off the bottom.

Limited Distribution

The original distribution of white bass in Iowa is not known for sure, but it is quite possible they were once found only in the Mississippi River and major tributary streams. Plantings from the Mississippi River were made in Spirit Lake as early as 1874 and in the Okoboji chain of lakes in 1898.

Many stockings have followed in other lakes, but white bass are now found in good numbers only in the Mississippi River and Storm Lake, with fair populations in Clear Lake, Spirit Lake, the Okobojis, the Missouri River and its oxbows.

Adequate spawning conditions, size of water, and the presence of a satisfactory forage fish are the primary factors controlling white bass populations. The fish prefer to spawn in running water, and in lakes with tributary streams. White bass often travel several miles upstream during the spring

White bass fishing on the Mississippi.

spawning run. In lakes without major tributaries, white bass will spawn successfully over wind swept sand and gravel where there is a firm substrate for egg attachment.

White bass reproduce in Iowa from late April to the first of June when the water temperature reaches 60° F. Sexually mature fish form large, unisexual schools. The males migrate to the spawning grounds first and remain there until the fully-ripe females arrive. Several males surround a female during the spawning act and the group swims about rapidly and erratically while the female scatters eggs at or near the surface in water from two to six feet deep. They are fertilized as they sink and being adhesive stick to gravel or rocks, then hatch in about 48 hours. An average size female will produce 600,000 eggs annually. After spawning the adults return to deeper water.

For reasons not clearly understood, white bass seldom prosper in numbers in reservoirs and lakes with less than 500 surface acres of water. The fish also inhabit only those streams carrying a reasonably consistent large volume of water. White bass are found in smaller Iowa waters, but never reach high enough populations to contribute much to the fishermen's creel.

A consistent high population of white bass must be supported by a stable food supply of adequate number and size. The lack of a reliable forage fish has been a major factor for failure of the white bass to establish high populations in most Iowa lakes. Gizzard shad, a small forage fish seldom seen by the angler, is the principal food of white bass in reservoirs located throughout the southern United States. Throughout those reservoirs populations of white bass and gizzard shad reach astronomical numbers, and the two fish populations remain relatively stable without years of extremely low numbers.

Gizzard shad do not adapt well to Iowa's cold, winter water temperatures. Extended periods of

near freezing water temperature or a sudden drop in temperature can spell disaster for this small fish. Storm Lake is the northern most Iowa lake supporting a gizzard shad population, and presently both shad and white bass are abundant. A severe winter die off of shad could start a downward trend in the white bass population. This is the up and down cycle followed by shad and white bass in several of our lakes.

White bass in our northern lakes such as Spirit Lake, the Okobojis, and Clear Lake must rely on food other than gizzard shad for well being. Young of the year perch, bullhead, bluegill, and crappie are commonly taken by white bass in these lakes. Small crayfish and emerging mayflies are part of the diet when available.

In lakes such as these which do not support gizzard shad, the white bass population is usually at a low level. Other game fish such as walleye, northern pike, and largemouth bass, under normal conditions, appear to out compete white bass for available food when gizzard shad are absent. Large numbers of white bass were present in Clear Lake in the 30's and Spirit Lake in the late 40's and mid 60's. But these good years are "few and far between" in lakes without gizzard shad.

Rathbun Promising

Our best promise for establishing a stable white bass fishery lies with some of our large flood control reservoirs in central and southern Iowa. In November of 1971, 3,000 adult white bass were transplanted from the Mississippi River into Rathbun Reservoir, a newly formed 11,000-acre impoundment. An additional 800 were transplanted into Rock Creek Lake, a 640-acre lake in Jasper County.

Rathbun Reservoir is Iowa's largest lake and lies in extreme south-central Iowa. Water temperatures in the lake do not reach the lows common to our northern waters and the rapidity of water temperature change will not be

as great as in lakes of smaller volume. Because of these favorable conditions a large forage supply of gizzard shad exists in Rathbun.

So Rathbun Reservoir meets all three requirements for a thriving white bass population; it has size, adequate forage fish, and satisfactory spawning conditions (either upstream in high water years, or along rock rip rap and gravel areas). Plans are to introduce white bass adults into other similar flood control reservoirs as they are completed.

Yellow Bass

The yellow bass, *Roccus mississippiensis* is found throughout many Iowa lakes and streams, but has contributed little value to fishing in most areas. One notable exception is Clear Lake, where the fish was introduced in 1932. By the late 40's this fish dominated the catch. The yellows averaged 8 to 10 inches during the good fishing years. In a 10-week period in 1953, over 88,000 yellow bass were caught from the lake by fishermen.

Despite this large removal by fishermen the yellow bass continued to multiply in numbers. Food became short and the average length dropped to six inches by the late 50's. Although large numbers could still be easily caught, most fishermen found the small size undesirable to keep. The population had overpopulated and stunted.

The effect of this enormous number of yellow bass on other game fish in Clear Lake was drastic. Since yellow bass consume the same foods as young walleye, northern pike, largemouth bass, and crappie these desirable fish stood little chance for adulthood. The yellow bass were not only stunted and too small for keeping they were directly competing with and feeding on valuable game fish young.

In an effort to reduce the population, thousands of pounds of yellow bass were removed by Iowa Conservation Commission personnel using seines, fish

(Continued on Page 12)

Conservation education ?

By Curtis Powell

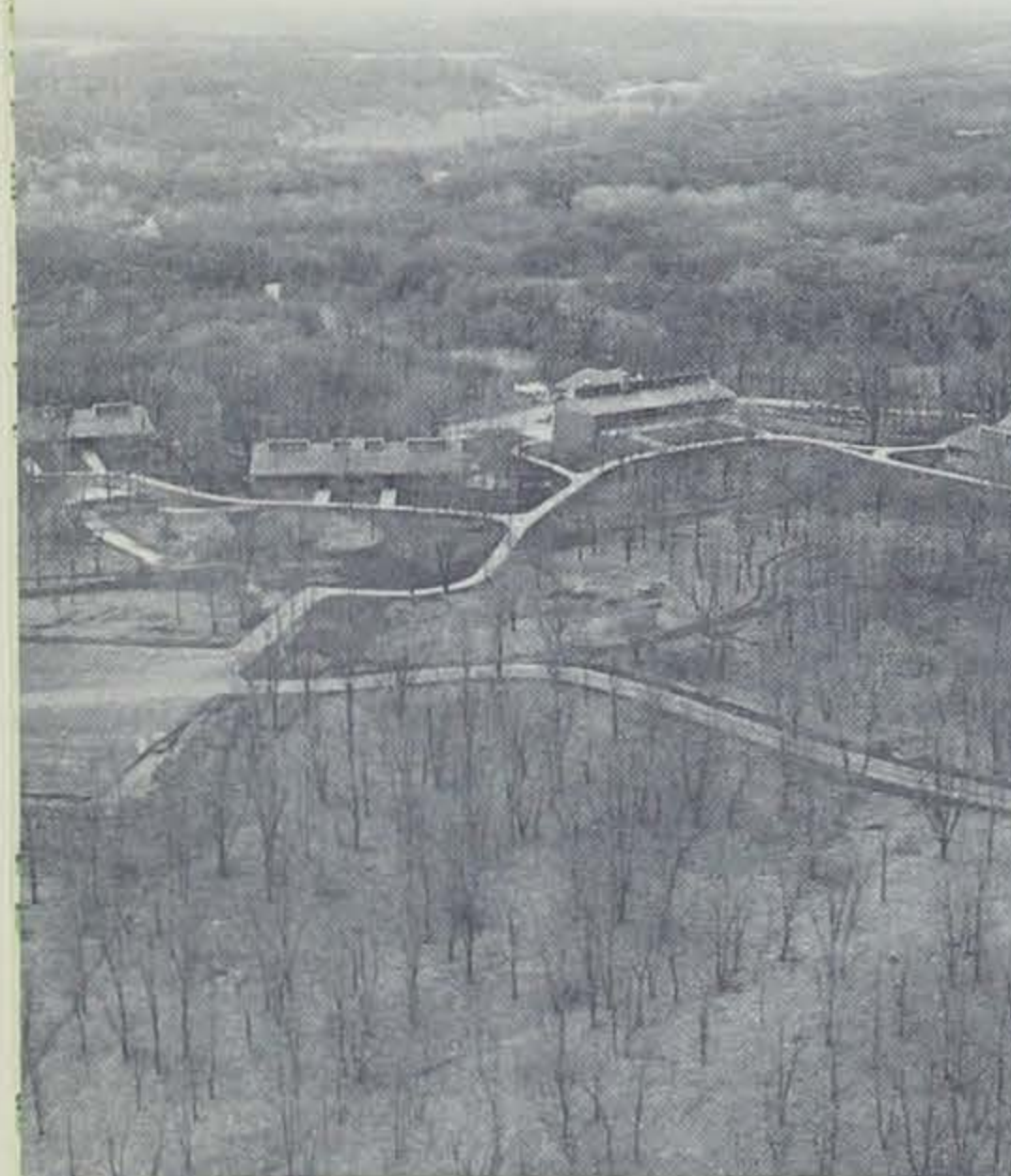
Director
Conservation Education Center

Photos by Jerry Leonard



Modern Classroom in use during Iowa Teachers Conservation Camp.

Photograph taken in winter to show buildings. From left: two dormitories, dining hall and classroom and office building.



This question often arises when people are talking about conservation: "What is conservation education?" Other questions usually follow: "What does conservation education mean to me?" "How does it apply to my town?" "What facilities and resources are available for my use in knowing more about my state and the area in which I live?" "How can we preserve this country for my children and their children?"

You know, these are questions that all of us have probably thought about, but few of us know the answers.

The State Conservation Commission will help the people of Iowa find the answers to these questions and many more through the use of its new Conservation Education Center at Springbrook State Park near Guthrie Center. The Center was recently opened and assigned to the Information and Education Section of the State Conservation Commission. Its facilities are impressive indeed and will provide the people of Iowa with a center to learn about conservation as it applies to our lives today. The facilities include two dormitories (sleeping 64, with all bedding, linen, towels and soap furnished), a dining hall which will seat between 150 and 200, classrooms, library and office complex. The buildings are air conditioned and heated.

Adjacent to the park are the vast resources of Springbrook State Park. The park offers visitors camping, fishing, boating, hiking and swimming. Therefore, using the facilities at the Education Center can be a family affair. With the park so close, those attending classes at the Center can also enjoy its lake, campgrounds and trails. One may wan-

der through the park and Center area, spending time reflecting on the beauty of nature and all that has been placed within your sight and realm of senses. The deciduous forest, geological outcroppings, the rolling hills, secluded glens and the spring carpet of wild flowers—all make hiking through the area well worth remembering.

What can be done at the Center in the field of conservation or environmental education? Granted, the buildings are here. But, how does one use them and what might one do to learn more about the world in which we live? One thing is to sign up for the Iowa Teachers Conservation Camp held at the Center each summer. This is a six-week program broken down into two three-week sessions and managed by the University of Northern Iowa. Anyone interested should contact Ben Clausen, Science Department, University of Northern Iowa, Cedar Falls, Iowa.

But, you might ask yourself, do I wish to enroll in a college course? If the answer is "no", then you might investigate joining one of the various groups that use the Center . . . or organize a group of your own to come to the Center.

The next question you might ask is, what do we do when we get there? The thing to remember here is, that not only does the Center provide facilities but also the personnel who will help you prepare an informative program concerning the things you wish to know more about. At the Center you may wish to study the deciduous forest or wild flowers or the geological soil stratum, the pleistocene era, geology, entomology (study of insects), ornithol-

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Cooperative effort to protect state lakes

By Mervin Danielson

State Resource Conservationist,
Soil Conservation Service

The sediment that's been filling Iowa's state lakes has not only the attention of many citizens — it's aroused their ire.

People knew that Lake of Three Fires has lost one-third of its water holding capacity in 15 years and that it cost a million dollars for a five year dredging project at North Twin Lake. They knew, too, that Backbone, Darling, Pine and other lakes were in trouble. But they didn't know how serious the problem was statewide.

The Conservation Commission began a study of how much silt is going into state lakes. They asked the Soil Conservation Service and the Soil Conservation Districts in which state lakes were located to make inventories including amounts of soil leaving the land above the lakes.

"We think that when we know specifically where the silt and other pollutants are coming from, we're in that much better position to stop them," says Everett Pierce, Land Management Agent of the Commission. "For example, it could be coming from roadsides, feedlots, industrial or residential building areas, or other sources in varying amounts."

Twelve inventories have been completed so far. That many more are planned for next year.

SCS personnel determine how much soil is being lost, and area engineers and the watershed planning party estimate how much of it reaches the lakes.

The inventory also includes land uses, land treatment measures needed for lake protection, a breakdown of wildlife and habitat available, an estimate of costs of conservation practices needed, and evaluations of the urgency of

(Continued on Page 10)

Iowa lakes charted

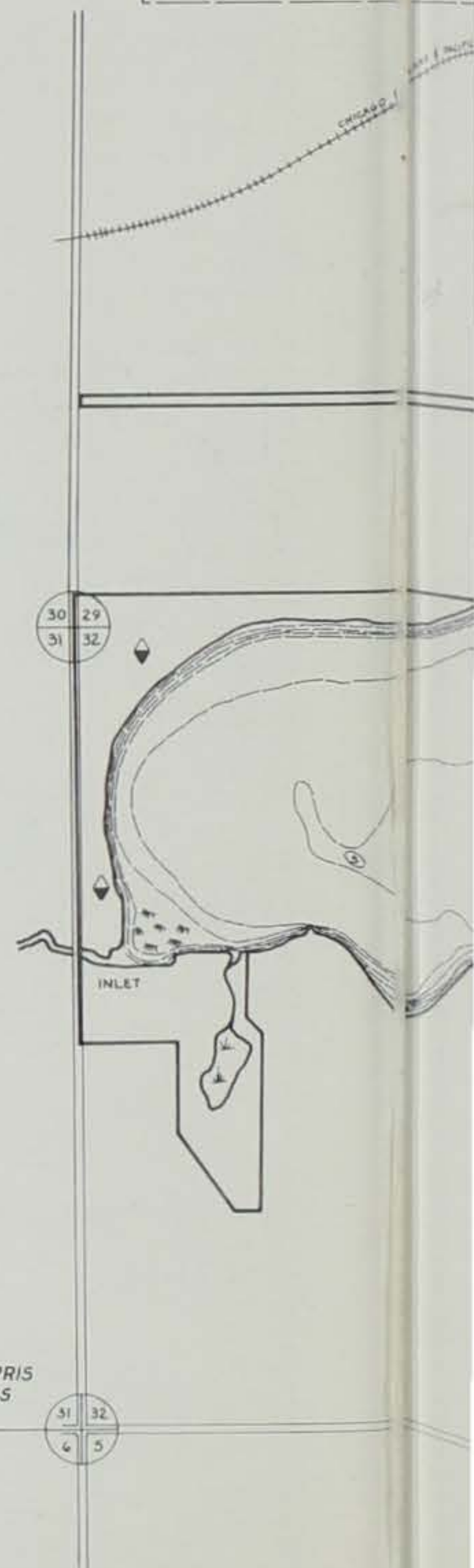
A Study in Depth

silver lake

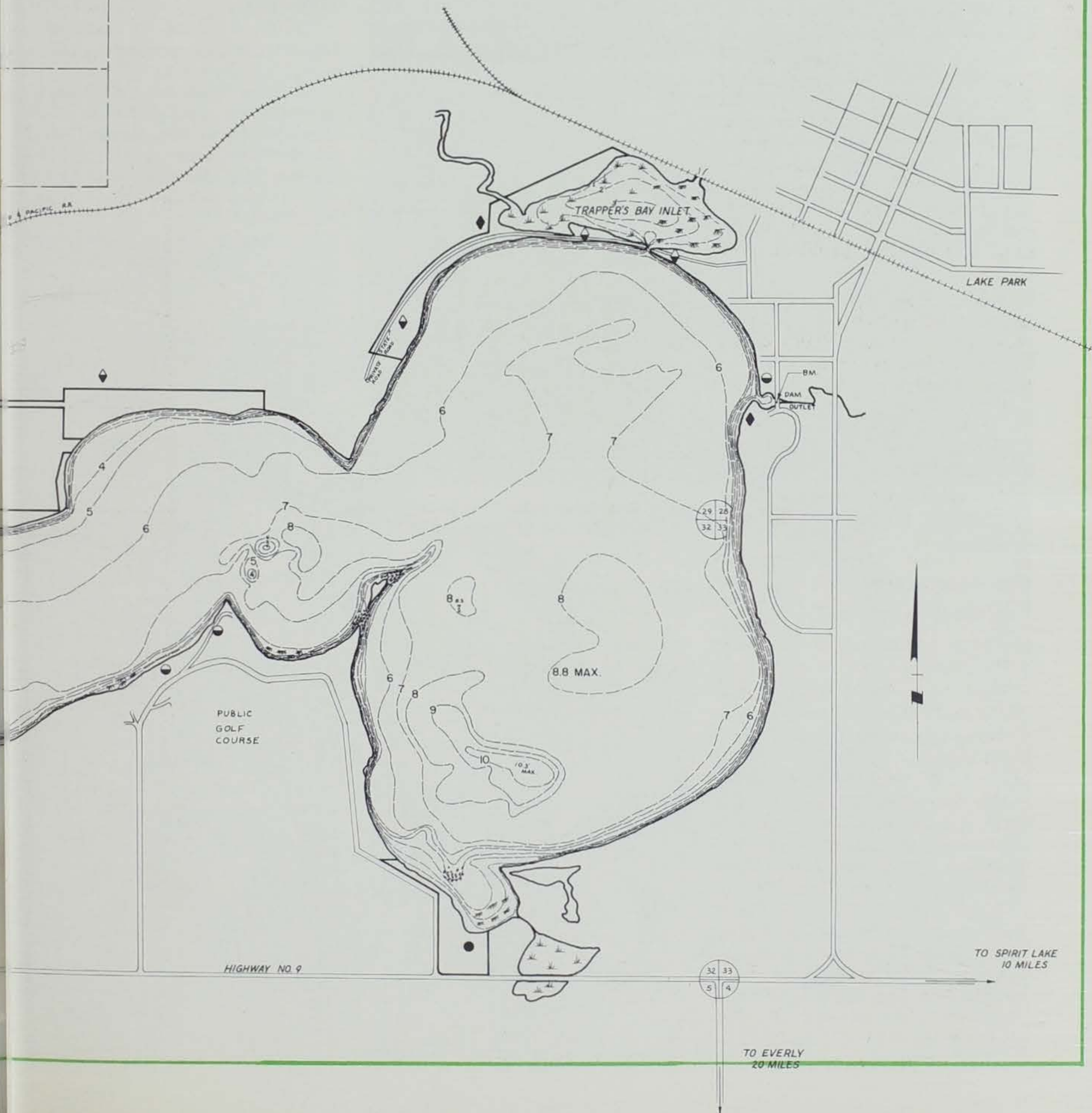
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◊	PUBLIC ACCESS
◇	PUBLIC CAMP
●	BOAT LAUNDRY
○	BOAT LIFT
⋯	ROCK REEF
⋯	SCATTERED ROCK AND
⋯	SUBMERGED VEGETATION
⋯	EMERGENT VEGETATION
Mk	MUCK
Sd	SAND
■ BM	BENCH MARK

NOTES



STATE OWNED LAND
 SECTION CORNER
 PUBLIC PARK
 PUBLIC ACRES
 PUBLIC CAMP
 BOAT LANDING RAMP
 BOAT LIFT
 ROCK REEF
 CATERPILLAR AND GRAVEL
 SUBMERGED VEGETATION
 EMERGENCY VEGETATION
 ROCK
 SAND
 FRENCH MAN





Dredging is no inexpensive operation, Conservation Commission officials agree. It costs about 50 cents a cubic yard — the bill for one state lake was \$1 million for a five year project.

COOPERATIVE EFFORT TO SAVE STATE LAKES . . .

(Continued from Page 8)

applying sediment-reducing measures.

Pierce says other states have asked about the inventory — but he doesn't know of any who have made one.

"Besides this study," says Pierce, "we're taking actual measurements in some lakes with an electronic depthometer or ice probe to see how much silt damage we have. We think all this will provide a basis for planning complete protection of the lakes."

The Conservation Commission has been providing cost-sharing funds for conservation measures that protect lakes from silt the past few years. Pierce feels this is a boost to protecting the lakes,

and hopes the legislature continues to provide funds.

The state legislature also took a preventive measure in requiring that 75 percent of a lake's watershed be protected, or 75 percent of it be planned for conservation measures, before any new state lakes can be built.

The Commission has also adopted a policy that no lakes will be dredged unless the watershed is protected from further siltation.

"Protecting the lakes from siltation is a job that can be done, if we get enough money to do it," Pierce says. "It's everyone's responsibility, and I think people are realizing that more fully now than ever before." ☆

CAMPFIRE COOKERY . . .

(Continued from Page 2)

as you please — you guessed it— **number one** —. Dutch Tulip was wilted to say the least. Last year was a complete bomb. At our meeting we voted to let Big Iris, with the pretty bloomers, do her stuff. She did, and we lost again. Although she did win honorable mention for her colored plants, she didn't even place in the race to be **first up**.

"Quick, someone get the phone. What's the matter, who did they want?"

You say there is an emergency phone call for "Mr. Green Onion?" from his cousin "Bud Garlic." Tell us, what is the trouble Mr. Onion? You look so hot you are turning red. Tell us, what is it?

Bud Garlic just called from out in the western part of the state. He told me that we might just as well forget the race for this year. Bud said the word is out, a man named "Herbie," who lives out by the mighty Missouri River has already found some number ones and has passed them out to his grand kids.

We can't let it get us down gang. Reach for the sun, hold your flowers up with pride—just think how much prettier we are than number one. After all, how pretty can a number one be? How pretty is a plain old pussy willow?

So what, pussy willow, you may be first again this year but you wait until next year. We hear there are some tulips that stay in bloom all year. Some people think they look funny standing there in the snow at Christmas time. We think they are called plastic tulips, any way, we're checking on it. Just like they say, you try harder when you are in second or third or fourth or eleventh place.

To help you guys out of what place you are in, try this. Load your wife or honey (or both) in the car and head for your favorite eating place. After you have eaten take her for a long drive on a warm spring evening. You may find there is a place higher than **number one**. ☆

EDUCATION . . .**(Continued from Page 6)**

ogy (the study of birds), hydrobiology or any other number of things that would be best learned in the outdoor laboratory that the Center provides. Within a short distance of the Center, there are two lakes, a natural prairie and various wildlife refuges and game management areas. These provide excellent opportunities to study the wildlife of Iowa.

But, what happens if you don't wish to do those things? Then remember that the Conservation Education Center is available for your use for group meetings, conventions, seminars and workshops. The facilities still provide

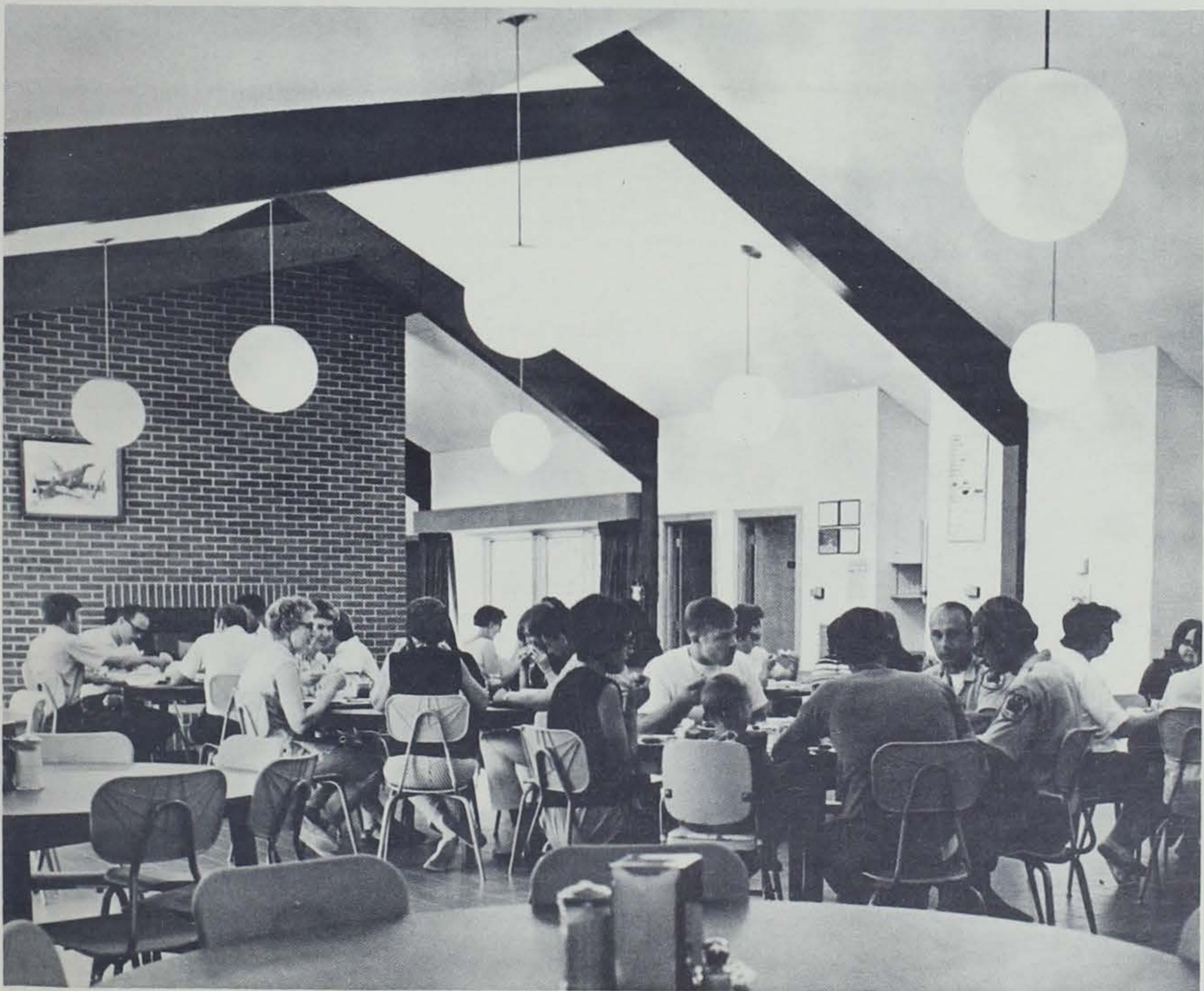
all of the above so that you might do what your group or company wishes to do in a beautiful setting, an area of peace and tranquility.

The future plans of the Center include a walk-down trench for the study of the soil stratum in the area, demonstration plots for proper farming and wildlife habitat and farm ponds for demonstration of construction and use. The future of the Center is bright indeed!

Many people are finding it advantageous to use the educational center and the State Conservation personnel assigned there and throughout the state in helping prepare a plan of action for their counties and school districts to

preserve and protect the existing natural environment. Through wise use of natural resources, future generations can enjoy the same beauty that we enjoy today. It's the goal of the Conservation Education Center to help prepare a means of preserving and protecting these resources. If you are interested and concerned about conservation and your environment, more information may be gained by writing to the Conservation Education Center, Box 139, Guthrie Center, Iowa. The personnel of the Center are available to assist you at project meetings or group meetings or within your school districts to explain the facilities to you and how you may use them. ☆

Meals available at attractive dining hall.





The color of the white bass (top) is dark gray to black on the back, with bright silvery sides and white belly. The sides are marked with several dark colored longitudinal stripes which are normally unbroken above the lateral line. The fish has three anal fin spines that are not so evenly graduated. The white bass commonly attains a length of 12 inches, and

sometimes reaches a length of 18 inches and a weight of over three pounds.

Yellow bass, "*Roccus mississippiensis*," the other member of the true bass family found in Iowa, can generally be distinguished from the white bass by its brassy yellow color along the sides. The color is dark olive green above and white beneath. As in the white bass, the sides are marked

with several dark colored longitudinal stripes which are broken above the lateral line. Positive identification for yellow bass is the uneven graduation of the three anal fin spines. The first spine is quite short with the second and third much longer and nearly equal in length. The yellow bass seldom exceeds 10 inches in length and $\frac{3}{4}$ pounds in weight.

BASS . . .

(Continued from Page 5)

shockers, and fish toxicants. These efforts were to no avail, as the fish continued to multiply.

As is so often the case in wild-life populations, natural means of population control succeed when man fails. In May of 1968, millions of yellow bass died and floated to the shores of Clear Lake during a one week period. The stunted and weekend condition of the over-populated yellow bass opened the door for a bacterial disease that spelled doom for this fish.

As contrasted to the 88,000 yellow bass removed by fishermen in a ten-week period in 1953, only 3,500 were taken by fishermen in the same time period in 1971. Average size of these fish was 9.5 inches, a nice size yellow bass. Other fish species have replaced the yellow bass in importance at Clear Lake. As conditions change the yellow bass could again re-

populate the lake, but hopefully never to the degree reached in the 60's.

Unlike white bass, yellow bass are quite at home in any size water. They build up high populations in small lakes as well as larger reservoirs. It is found in fair numbers in the Mississippi River and upper Cedar River drainage system.

Although the yellow bass is easy to catch, sporty, and good to eat, the stunting tendency of the species makes it a generally undesirable fish to use in fishery management programs. Catchable size populations should be fished hard by the angler for it is unlikely that the fish will remain a desirable size for any period of time.

New Iowa Species

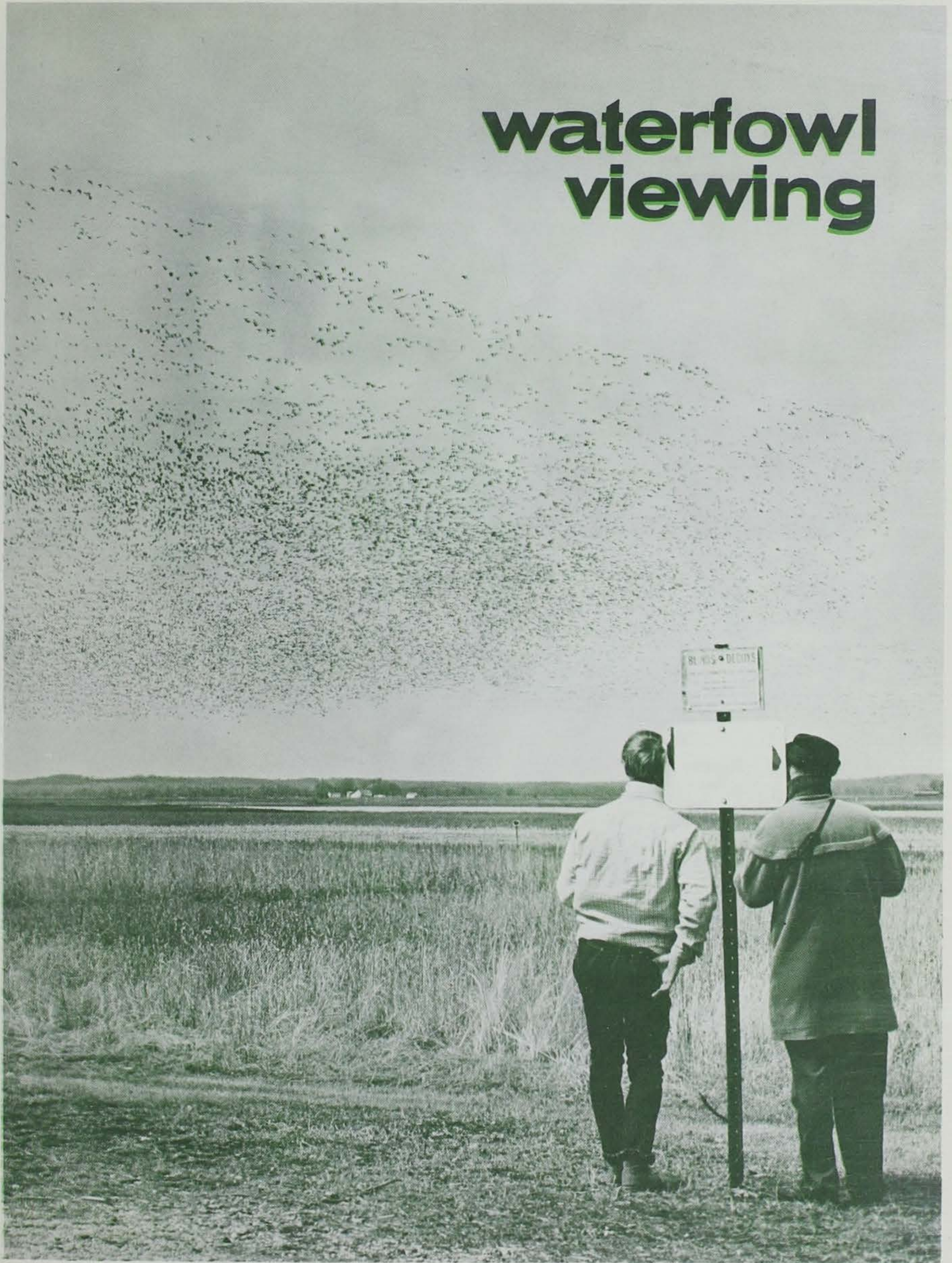
The striped bass (*Morone saxatilis*), large, salt water cousin of the white bass has been successfully introduced into large reservoirs in southern states.

"Stripers" resemble white bass in behavior and appearance, except for size. They average 10 lbs. in some southern lakes and the fresh water record exceeds 40 pounds!

In May of 1971 Iowa put forth its first effort toward establishing this species in the state. One-half million striper fry were flown in from South Carolina in exchange for walleye fry. Water temperatures dipped below the level at which striper fry can survive and surveys show no survival of stripers from the first stocking in Lake Rathbun.

Future plans are to stock stripers in Rathbun as fingerlings by culturing them at state fish hatcheries with water temperature control. As other states develop striped bass hatcheries, we will attempt to receive fry from those states with later spawning seasons. This will eliminate the cold water problem which limits fry survival. ☆

waterfowl viewing



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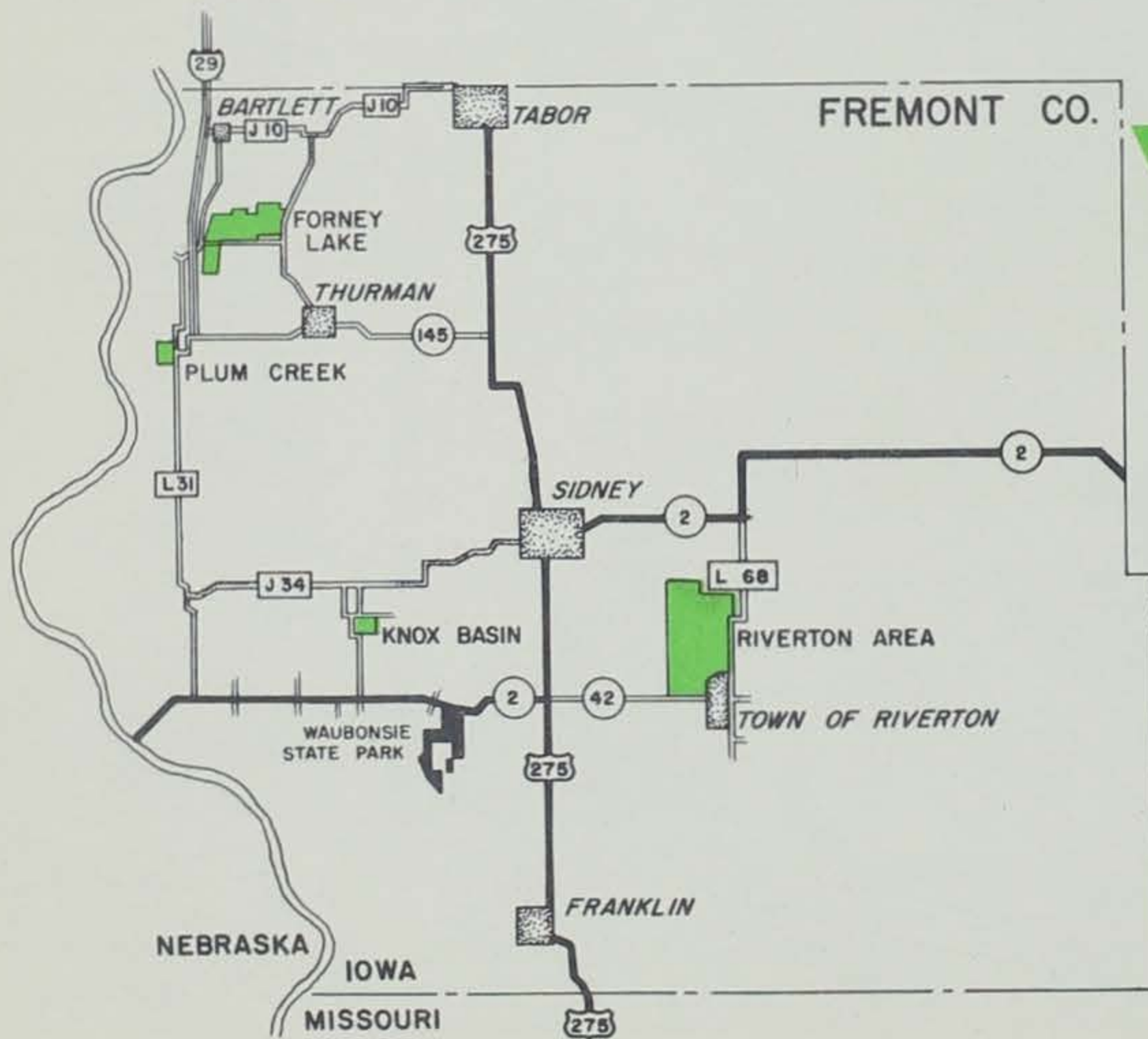
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Photos by Wayne Lonning



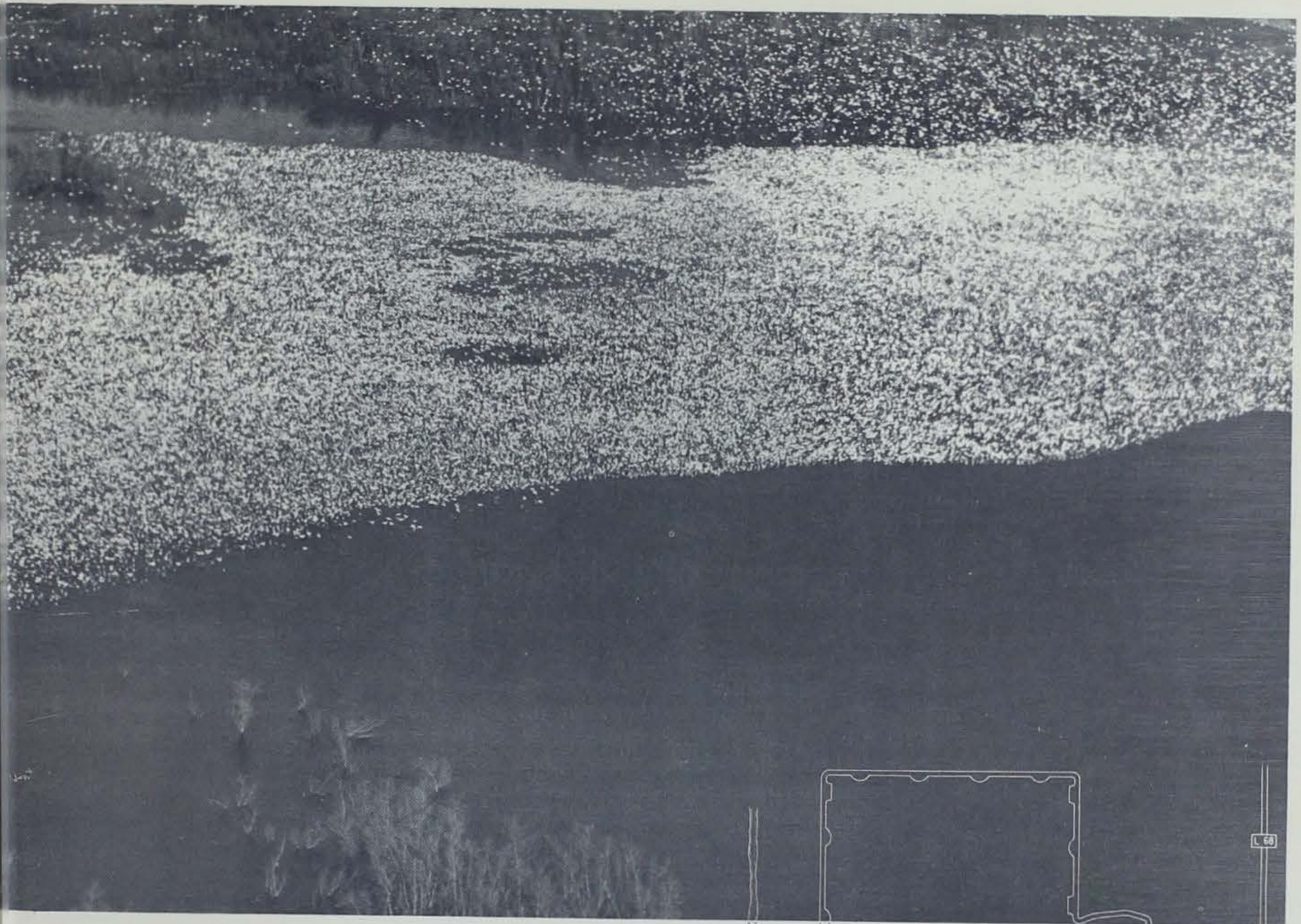
waterfowl vi

By Roger Sparks

Spring waterfowl observers will be pleasantly surprised when they visit the southwest Iowa bottoms this year. A new road has been built around the 2,000 acre Riverton Area in Fremont County. The \$58,000 road construction provides public access to land bordering the refuge where thousands of geese and ducks stop to rest during their spectacular journey North.

Numerous parking areas and pulloffs are located along the road allowing bird watchers and photographers an excellent view of huge flocks of primarily snow and blue geese. The single lane road is about 4½ miles long and

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Viewing



will be one-way from northeast to southwest (see map).

The primary function of the road will be for game management use and to provide access to hunters during the fall waterfowl season. Like all the Riverton area, the road was paid for solely by the hunter through the sale of hunting licenses and duck stamps; and from Dingel-Johnson monies derived from the excise tax on sporting arms. But during the spring migration waterfowl observers and other non-consumptive users will also benefit.

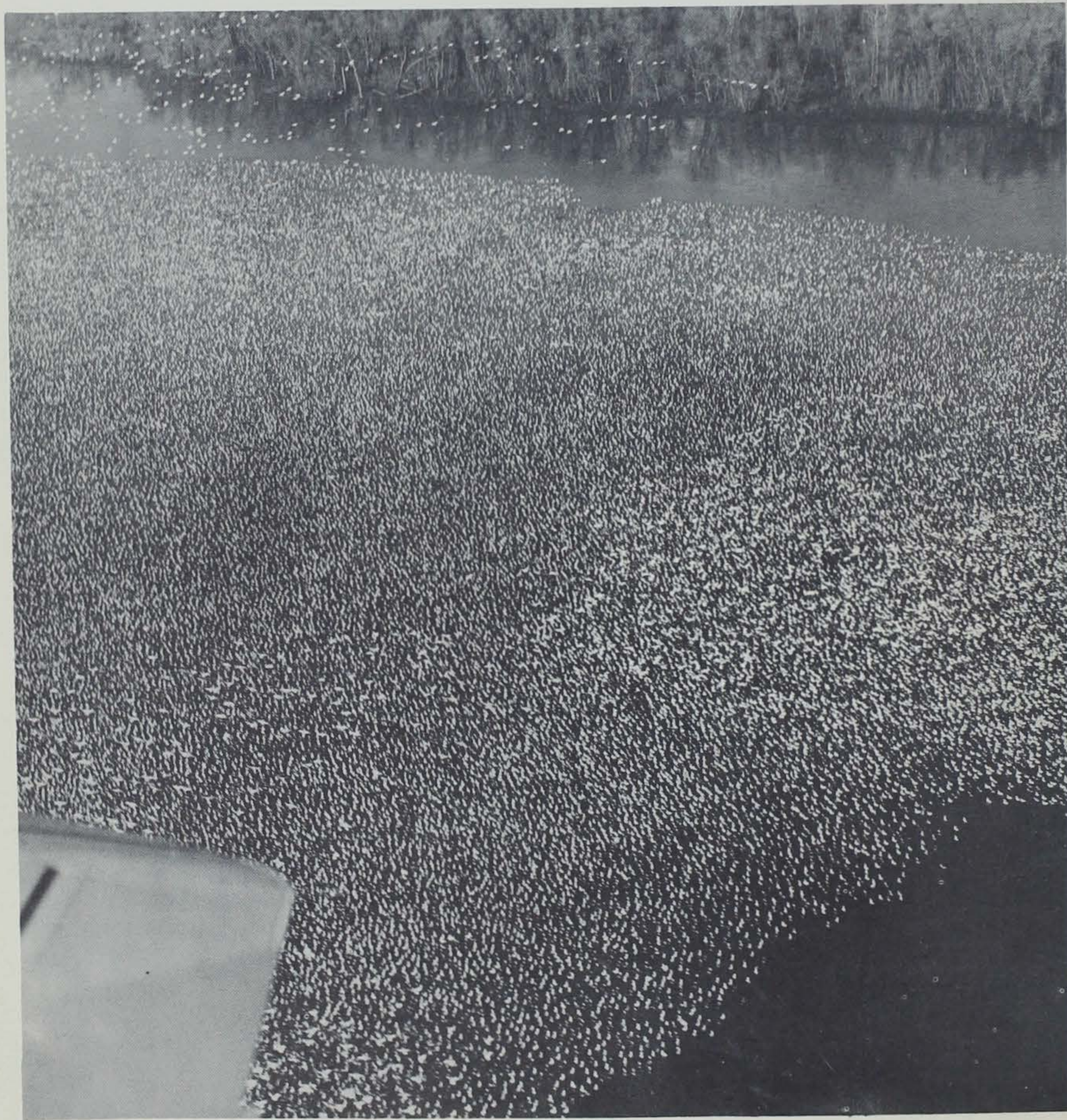
An afternoon tour of Fremont County could also include Forney Lake, another state owned area



used heavily by ducks and geese in the spring.

Two large, private areas, Plum Creek and Knox basins also hold waterfowl, although the narrow dirt road bordering Knox' basin is sometimes impassable.

The spring migration usually lasts from late February to mid-April, peaking about March 15 to 25. ☆



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