MAY, 1974

# conservationist

2

# conservationist

ROGER SPARKS, EDITOR WAYNE LONNING, PHOTOGRAPHER JERRY LEONARD, PHOTOGRAPHER

### Page

### CONTENTS

- 2 The Pure Form
- 4 State Forests Your Special Domain
- 6 Iowa Farm Pond Program
- 8 Facts Controlled
  Harvest of Largemouth
  Bass
- 10 Hunting lowa's Leapers
- 12 Fairport Fish Hatchery
- 14 Park Tales Dolliver Memorial State Park
- 15 Warden's Diary
- 15 Classroom Corner
- 16 Field Glances



Campground scene still exhibits a few tents.

Cover — Teenage girls about to enjoy an old, but never outdated form of camping.

## I O W A

Fred A. Priewert, Director

### COMMISSIONERS

LESS LICKLIDER, Chairman — Cherokee THOMAS A. BATES — Bellevue JIM D. BIXLER — Council Bluffs JOHN G. LINK — Burlington CAROLYN LUMBARD — DES Moines HERBERT T. REED — Winterset JOHN C. THOMPSON — Forest City

### Iowa Conservationist

Vol. 33

May. 1974

No. 5

Published monthly by the Iowa Conservation Commission, State Office Building, 300 4th Street, Des Moines, Iowa 50319. Address all mail (subscriptions, change of address, Form 3579, manuscripts, mail items) to the above address.

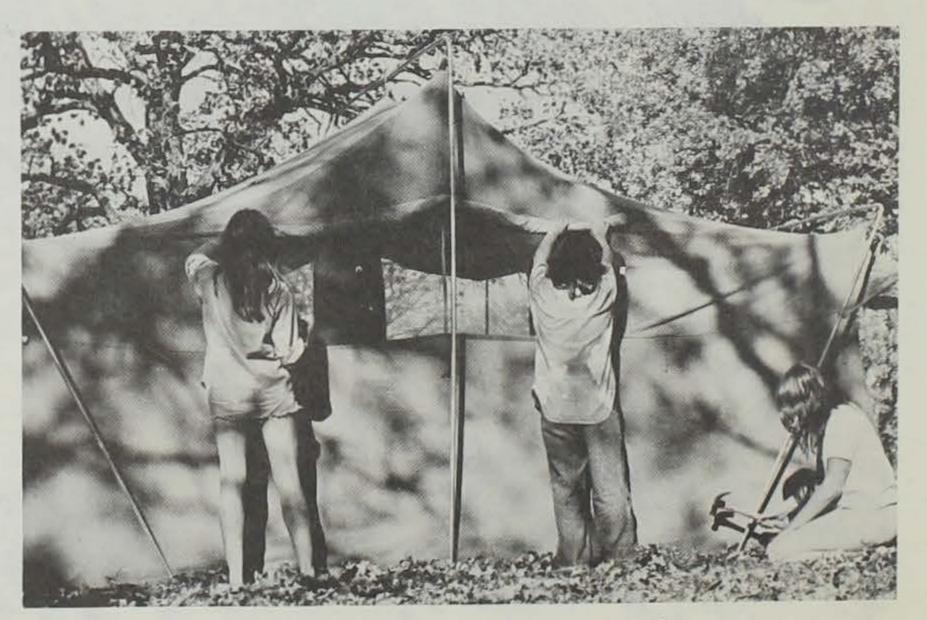
Subscription price: one year at \$1.00 two years at \$2.00 four years at \$3.50

Second class postage paid at Des Moines, Iowa. (No Rights Reserved).

### "The pure form"

return of tent camping

Photos by Jerry Leonard



Tent camping — Enjoyed mostly by youths today.

Is spec men providum vast vehicle

vast vehice and conshini some reasc Ev camp He a

week
owne
come
lov
prin
camp
partie

ty, S and lamal

S 918





A State Park campground on a busy weekend. Tent camping at Yellow River State Forest.

Which Do You Prefer?

Is the tent camper an endangered species? Having witnessed the development of modern campgrounds that provide electrical hookups, sewage dumping stations, and other facilities to a vast array of attractive recreational vehicles, one might think so. The comfort and convenience offered by one of those shining beauties is unmistakable. But for some, the tent lives on and with good reason!

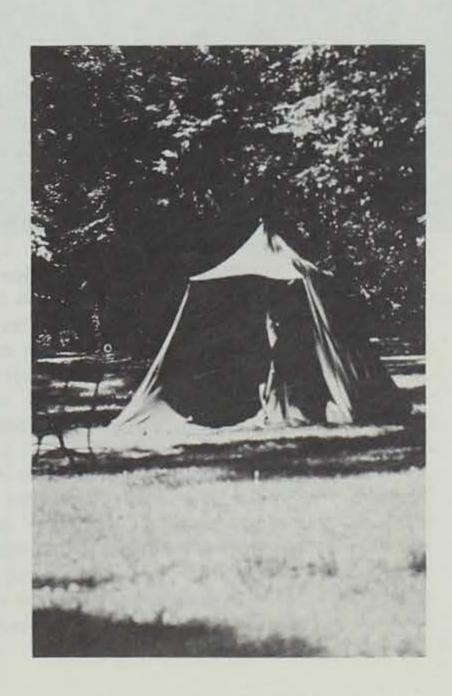
Ever try to position a trailer on a hilly camping area? No sweat for the tenter. He alone may find a spot on a holiday weekend. And how about cost? Tent owners just smile when that subject comes up.

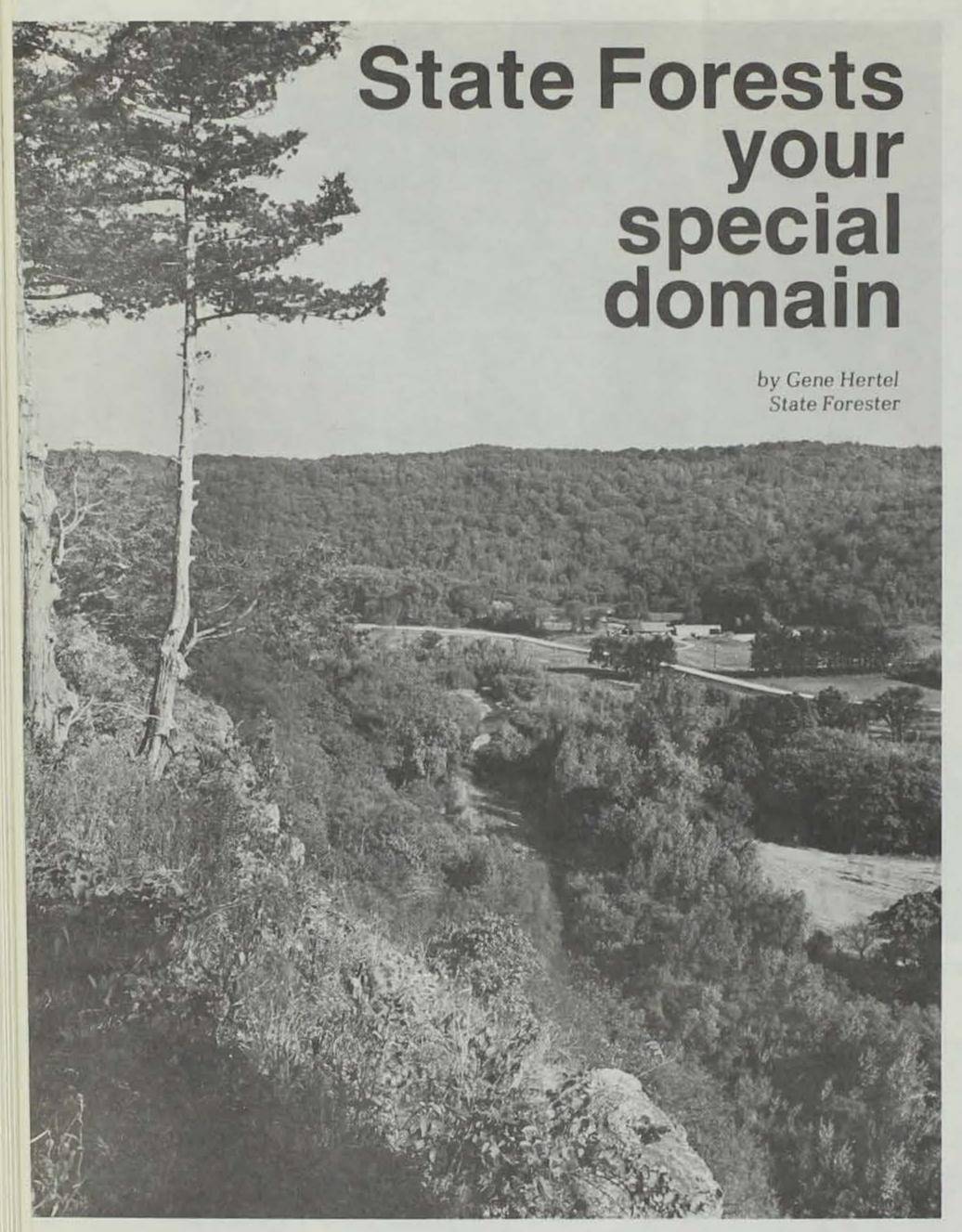
Iowa State Forests accommodate a "primitive" form (sans electricity, etc.,) camping. Three large forest areas are particularly attractive to tenters. They are Stephens State Forest in Lucas County, Shimek State Forest in Lee County and Yellow River State Forest in Allamakee County.

Many county parks have small, out-ofthe-way camping areas that are attractive to tent campers. Several state parks have campgrounds that are ideal for tenting. They include Lake Macbride, Backbone, Green Valley, Rock Creek, Viking Lake, Ledges, Maquoketa Caves, Viking Lake, Ledges, Maquoketa Caves, Pammel, Prairie Rose, Union Grove, Wapsipinicon, Waubonsie, Wildcat Den, Bob White, George Wyth, and Lacey-Keosauqua State Parks.

Tents will always be popular with the younger generation. As one tent camper put it, "My family tent-camped for four years, from coast to coast. We then purchased a fold-down type camper and from that we 'graduated' to equipment even more elaborate and comfortable. But my boys still talk about the tent."

For a free Iowa State Parks & Recreation Areas Camping Guide, write to: The Iowa Conservation Commission, 300 Fourth Street, Des Moines, Iowa 50319.





"The fundemental idea of forestry is the perpetuation of the forests by use. Forest protection is not an end in itself; it is a means to increase and sustain the resources of the country and the industries that depend on them. The preservation of our forests is an imperative necessity."

President Theodore Roosevelt expressed these thoughts, so applicable today, when speaking of our national forests in 1901. At that time, there was a great deal of land remaining in public ownership that could be easily set aside for the purposes that President Roosevelt



Gene Hertel State Forester

envisioned in the national forest system. The day of public domain lands which can be set aside for development and management is past. The need for protection of our forests is, perhaps, greater today than in 1900.

The ideas and goals of those who set aside the national forests are the same as those that motivated people in Iowa to initiate the development of state forests. The first movement to create Iowa forests was made in the depression days of the 1930's with modest additions being made since.

The present state forests are the Yellow River State Forest in Allamakee County, the Shimek State Forest in Lee and Van Buren Counties, and the Stephens State Forest primarily in Lucas and Monroe Counties. There is a total of 23,000 acres in state forest land at the present time. The open space funds, appropriated by the legislature, made it possible to begin expansion of the Stephens and Shimek areas.

Plans for management have been developed for each of the three major state forest. The management objective is to demonstrate good woodland management practices and production of forest products, while providing outdoor recreational opportunities to the

public.

Forests are being developed to serve as many public recreational needs as possible within the major governing use of forest production and demonstration. Fortunately, many of these uses are available from the same area of land. The building of a road to serve logging needs, for example, provides a route for snowmobile or trail riders. Firebreaks, constructed to protect the forest from fire, create openings along the edge of the forest which are of benefit to the wild birds and animals.

All uses are not possible on a single acre of land, but many activities are possible upon areas as large as our state forests. We are attempting to recognize those recreational activities which are of most desired by the people of Iowa and to provide some outlet for these activities.

The Yellow River State Forest in Allamakee County is the most highly developed of Iowa's forest areas and a good example of management practices. It has been more heavily used by a greater variety of users than the other areas. About 3,500 acreas are devoted primarily to timber growth and harvest. This acreage represents the land to be used for timber production to point the way for private owners to manage their own woodlands. This land has been protected from domestic livestock grazing for at least three decades, which is very uncommon on private woodlands

mad

the ! In re Req limi

but need opp Bales can natu

avai trail yield Ves man

and fore from tree

as a exh of the state. Already, this permits us to observe the potential of crop production and erosion control. In 1972, the first stumpage sale from a managed portion of the forest was made. The trees were sold at public bids for removal by a local logger. It was a competitive sale, brought a good price, and pointed out the economic justification for managing woodlands.

Harvesting from this acreage will be done on a continuing basis as set forth in the forest management plan. The public will be assured of a reasonable income from the land it is holding in trust and can be confident that the area will be protected for the future. The supply of sawlogs to the local wood-using industry represents a return to the county in which the area is located. A complete harvest of timber management acres and the replacement of young trees on this acreage is programmed over a 115 year period. Considerable discipline will be required to continue a cutting schedule long enough to get the forest on a sustained yield basis.

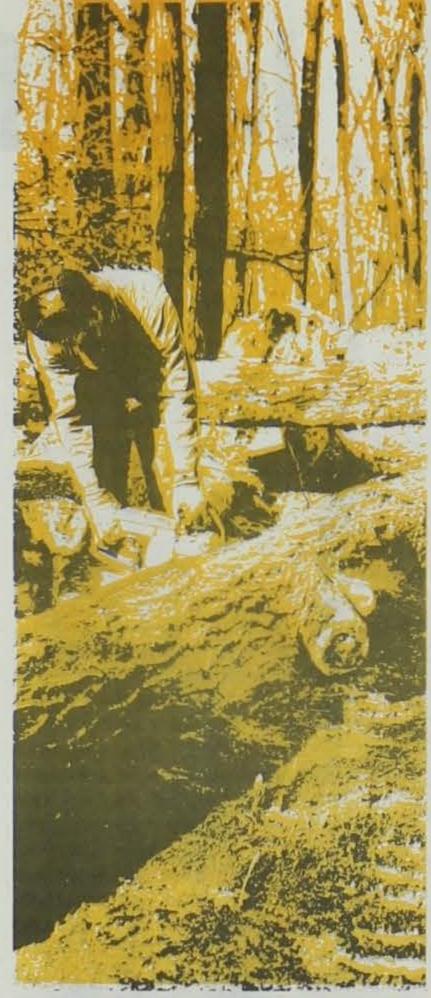
Although harvesting the wood crops from the forest is a prime use of the area, it is dedicated to the multiple use concept. Certainly, one of the best uses that the public can make of the forest area is that of recreation. The recreational use available is no less a crop than the wood

which comes from the land.

Recreational use at the Yellow River Forest includes camping. Some camp sites are near trout streams to permit more enjoyment by the user. A campground near the bridle trail permits the horseback rider to have his livestock around his own campsite, without conflict with other users. Efforts have been made to accommodate the bike rider, and the snowmobile user as well. Obviously, some uses conflict with others, whereas many are compatible.

Backpacking has been of more interest in recent years in all three state forests. Requirements for the backpacker are limited compared to other types of users, but definite trails and camping spots are needed. The state forests offer a unique opportunity because of the size of the areas and the length of the trails which can be designed. This "pure" use is a natural for the wilder forest areas.

An "educational harvest" is also available from our state forests. Nature trails, with vegetation labeled for study, yield one such harvest. Timber harvesting under sustained yield management results in a variety of tree and age sizes. The observation of the forest at its many stages of development, from seedlings to the harvest of mature trees, points up the renewability of trees as a natural resource. They are never exhausted under the watchful







Three types of state forest "harvests".

management of the professional forester.

Some arguments can be made for preserving a part of a forest in an undisturbed condition, and this has been done on a national scale. The Iowa Preserves system also fulfills this type of need where the natural sequence of events is permitted to occur on forest land. These are important to those who study the ecology of plants and plant succession, but they are not a part of the usual harvesting schedule under forest management.

Fish and Widlife produced on the forest are also crops, along with sawlogs and natural beauty. Timber harvest creates openings and the young growth which follows serves as browse for deer and food for other birds and animals. The hiker and bird watcher can enjoy the forest under a harvesting schedule as much as they could under strict preservation management with no cutting permitted. The observation of birds and wildlife and the oppotunity to photograph these creatures is of increasing importance to the people of the state.

The harvest of game and fish during appropriate seasons is obviously of importance. This has elements of recreation as well as the potential to put some meat on the table. Deer, ruffed grouse and wild turkey are woodland species and the extent of the state forest lands enhances the production of these particular game animals and birds. Shimek and Stephens State Forest have secluded ponds of various sizes providing bluegill.

The Yellow River Forest provides trout fishing from stocked streams. The governing use of the excessively steep land is watershed protection. Harvesting timber or any other activity, which would disturb the soil surface, is not permitted on these lands. The quality of water entering the streams below is thus improved.

channel cat and bass fishing.

The heritage of some healthy and well-managed forest land being available to the people is important from a psychological standpoint. Land in private ownership does not lend itself to the long periods of management required for forest land because of the uncertain economics for private owners.

State forests provide us with a glimpse of the past and a promise for tomorrow. They are lands in public trust which are being managed for the food of the most people, whether they seek recreation in the ordinary sense or simply want to experience the forest itself. We may all take pride in these public forest and the various resources they supply. If our children have the opportunity to enjoy them, we will be a small part of the future.



Commission Photo

Farm pond fishing — some of lowa's best!

## lowa farm pond

by Marion Conover District Fisheries Manager "Fish 10,000 acre Jumbo Lake for the big ones! Big water means big fish!"

How often have you seen or heard similar words, bragging up a large reservoir or lake? While it is true that large water bodies annually produce many lunker fish, don't overlook farm ponds, Iowa's smallest reservoirs. Paul Burgund didn't and hung a 10 pound 5 ounce Lee County largemouth bass. Bob Adam brought home a 2 pound 3 ounce plattersize Jefferson County bluegill. Both are all time Iowa state records, and both fish once called a farm pond their home.

Since 1945, 25,700 Iowa farm ponds have been stocked by the Iowa Conservation Commission and Federal Fish and Wildlife Service. Applications for Fish and Wildlife Service fish were handled through the local Soil Conservation Service Offices in each county. The Fish and Wildlife Service has withdrawn from the farm pond program effective 1974.

We took a close look at the farm pond program in Iowa following withdrawal by the Fish and Wildlife Service. Under the old minimum farm pond requirements, our pond fish allocation would more than triple. Some of these small fish would be stocked into waters where they had no chance of survival. At the same time this large commitment to farm pond fish would cramp our stocking program for public waters.

Questions we asked were: How many ponds are open to fishing upon request? Do licensed anglers utilize these ponds? Are there conservation interests other than fish which are associated with farm ponds and important to Iowans? Can we carry a farm pond program that will not hinder fish management in public waters. and still be of benefit? In short we asked: What do we have and what do we want? And can we administer this program?

Through a cooperative study with Iowa State University we will gain insight into the fishing habits of Iowa angler. Information gathered during 1972 in Illinois relative to their farm pond program is useful now in answering some of our questions. That study found that 75 percent of the pond anglers had a fishing license. As in Iowa, farm pond owners and their children are not required to possess a fishing license to fish their own

pond pond requi OWNS to the that sion

pond angle The f the s that i licen Ou the p a pro fence derin avail

> Shrul covel wildl hunte trips of lov

wildli outlin requi Brond

### program

Young fish, ready for stocking are delivered to a central pick up point.

for are o a up int.

pond. Sixty-five percent of Illinois farm ponds were open to public fishing upon request. Again as in Iowa, farm pond owners have the right to regulate access to their land. We have reason to believe that the public has access upon permission to more that 65 percent of Iowa farm ponds. Over 400,000 different licensed anglers fished in farm ponds in Illinois. The figure would be lower in Iowa since we have but 400,000 licensed anglers in the state, but it does point out the fact that farm ponds are utilized for fishing by licensed fishermen.

Our wildlife section has long realized the potential wildlife benefits adjacent to a properly managed farm pond. When fenced to exclude livestock, land bordering ponds produce plant growth available for song and game bird nesting. Shrubs and trees offer valuable winter cover for many bird species. Farm pond wildlife habitat is important to the Iowa hunter, since the majority of hunting trips taken are enjoyed on the 95 percent of Iowa's land in private ownership.

To protect our investment in fish and wildlife the following pond criteria were outlined for 1974. These minimum pond requirements must be met before approval by the Conservation Commission

for fish stocking. The requirements are basic to sound fish and wildlife management practices, and will select those ponds which will truly benefit our natural resource.

- Ponds must contain at least one-half
   (½) surface acre of water. Ponds
   larger than 5 acres will be stocked
   as 5 acre ponds.
- The pond must have a maximum depth of at least 8 feet.
- The pond should not have contained water for more than one year prior to stocking, or have been recently renovated and free of fish.
- Ponds must be surrounded by a continuous buffer strip; the entire area being encompassed by a fence to exclude livestock.

Farm pond application forms are available at 20 unit wildlife biologist headquarters. These men will arrange for inspection of ponds for minimum requirements. At the same time they will assist pond owners in planning a wildlife habitat program for land adjacent to the pond, and other odd areas throughout the farm. Trees and shrubs to aid in habitat development are available at nominal charge. Fencing from livestock often yields the greatest wildlife benefit.

Small fingerling fish will be delivered by hatchery trucks free of charge for approved ponds. A central delivery point, such as county seats, is chosen. Pond owners are then notified of the time, place, and date for delivery, and reminded to bring cream cans, barrels or other containers for transportation of fish.

Bluegill at 1,000 per acre and channel catfish at 100 per acre are delivered in the fall. Largemouth bass fingerlings at 100 per acre are delivered the following spring.

Harvest of fish is an important factor affecting development of populations in a correctly stocked pond. To aid in maintaining balance in farm pond fish populations, no bass should be removed until the third year following stocking. Use the bass fishery for sport and release back to the water those 14 inches and less in length. Bluegill will be harvestable size by their second summer in the pond. To maintain an adequate predator base, remember to remove no more than one pound of bass for every five pounds of bluegill.

Information relative to other aspects of farm pond fish and wildlife management is available at your nearest Iowa Conservation Commission field office.

### Excellent hunting & fishing can be found around ponds like these.





Commission Pho

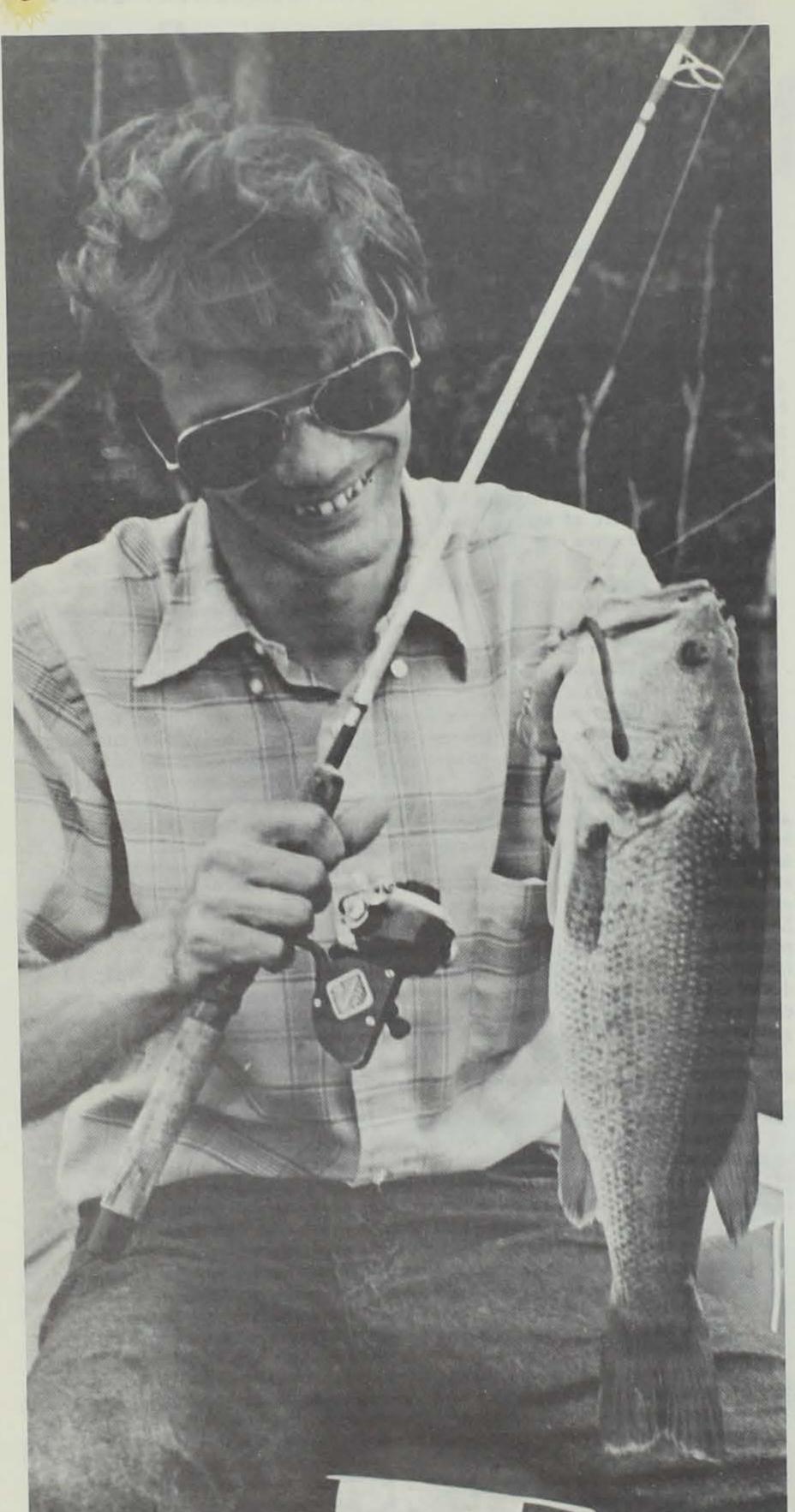


Photo by Ken Formanek

Length limit on largemouth can mean improved fishing for panfish as well as bass like this one.

### Controlle Ha

by Don Bonneau Assistant Fisheries Superintendent

Have you ever experienced the excellent bass fishing provided by a small lake or pond during the first three or four years after impoundment? If you have, you might also have noticed a decline in your catch of nice "keeper" size bass in succeeding years. This phenomena has been associated with largemouth bass fishing provided by new ponds and lakes all across the Midwest.

Why does largemouth bass fishing follow this trend and what can be done to maintain the high quality fishing provided during the early years after impoundment? These important questions have been asked by fishermen and fisheries biologists alike. These questions are not as yet fully understood, but information is available that will help us better understand largemouth bass and the fishing provided by this species.

Largemouth bass are extremely vulnerable to the angler and can be overfished. What information is available to indicate this? We have studied the bass and the catch of bass fishermen during the period of new lake openings. These studies indicate it takes only a few days for anglers to harvest 80-90% of the adult bass. An example would be the Memorial Day opening of Rock Creek Lake, Jasper County, to fishing in 1953. Prior to this opening, 400 adult bass were marked. Within the first three days after opening. 340 of these marked fish had been caught. Assuming an equal proportion of untagged bass were caught (which is entirely logical), 85% of the adult bass contained in Rock Creek Lake had been harvested by anglers. Results from other areas in Iowa and other midwest states are similar. The above isn't new to those fishermen that have enjoyed boom bass fishing provided by new lakes. What are the consequences of this period of overfishin One fishin reduce the besidered adults protected less).

young produchild reduced the besidered adults protected the besidered adults adults protected the besidered adults adult adults ad

panfis

balanc

specie

and cr

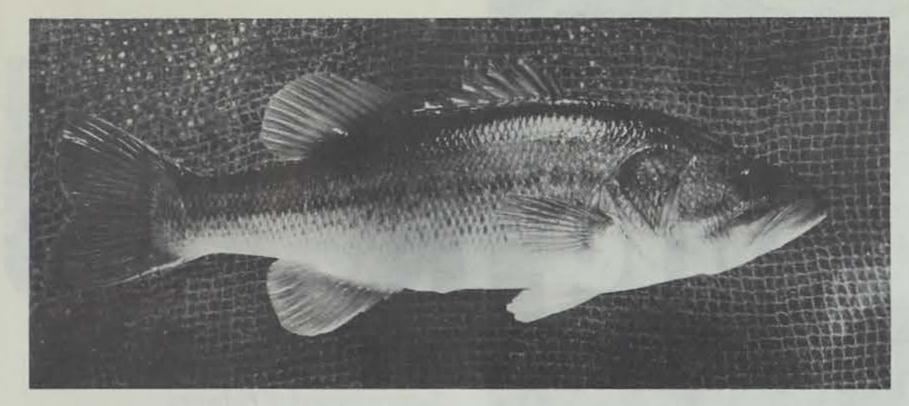
Ove

taining has t proxim bass a crappi bass ar arise. pounds popula Secon predate to over and cra impour growin provide grow to Therefo with fe

provide So, e importa fisherm

because

Provide



### e Harvest of Largemouth Bass

fishing?

One of the major problems with overfishing adult bass is not associated with reduction in the number of offspring (little bass). Historically, this was considered the problem; consequently, seasons were used to protect spawning adults and size limits were used to protect small bass (usually 10 inches and less). But considering the thousand of young fish one pair is capable of producing, rarely is motherhood and child rearing a problem in balanced basspanfish populations.

Overfishing does, however, upset the balance between predator and prey species (e.g. largemouth bass, bluegill, and crappie). A 100 acre fishing lake containing a balanced bass-panfish fishery has the potential of providing approximately 2,000 pounds of largemouth bass and 10,000 pounds of bluegill and crappie to the angler annually. When bass are overfished, two major problems arise. First, few medium-size bass (1-2 pounds) go uncaught - this poor bass population results in poor bass fishing. Secondly, reduction of the major predator (largemouth bass) contributes to overpopulation and stunting of bluegill and crappie - a problem of many smaller impoundments in the Midwest. Slow growing (stunted) crappie and bluegill provide poor fishing because few fish grow to a size acceptable to the angler. Therefore, a lake containing a fishery with few bass and an excessive number of bluegill does not interest fishermen because of the poor quality of fishing it provides. When this occurs, only a limited portion of the lake's potential to provide fishing is utilized.

So, elimination of bass overharvest is important to bass and bluegill-crappie fishermen alike. Bass convert excessive numbers of bluegill to largemouth bass flesh. New bass flesh is produced annually and in the process, bluegill and crappie are thinned to help insure a quality size panfish to the angler. If the bass are harvested too rapidly, few bluegill are eaten and little new largemouth bass flesh is produced. This predator-prey relationship or the conversion of small panfish flesh to largemouth bass is very important and is the key to successful, enjoyable fishing in Iowa's small ponds and artificial lakes.

If largemouth bass are being overfished in some of our lakes, what can be done to prevent it and provide better fishing to the angler? Many techniques have been experimented with. Annual closed seasons are unacceptable in most cases because, as discussed in the Rock Creek example, overfishing can occur in a short period of time. A bag or creel limit has been found to be unacceptable in preventing overharvest although it may help to better distribute the fish among anglers. Another method experimented with in other states and found unacceptable involves a period of "fish for fun" prior to allowing the angler to remove his catch from the lake. It was thought that subjecting bass to this learning experience might prevent initial over-harvest. The bass did not learn and retain enough, and over-fishing occurred. Other studies indicate fish are capable of learning, but retention of what they learn is extremely short.

If these methods of regulating harvest are unacceptable, what can be done? Within the past three years, minimum legal length limits were experimented with as a method of preventing overharvest of largemouth bass. This regulation requires the angler to release all bass under the minimum size back into the lake.

The regulation is an attempt at protecting 1-2 pound bass, and can be contrasted to the historic size limits used to protect small bass (usually less than 1/2 pound). The 1-2 pound bass (12-14 inches) are important to the fishery because of their ability to prey on 3-4 inch bluegill. If this size group and larger bass are overfished as has occurred in the past, the bluegill population are being preyed upon only during their first year or two of life. This predation isn't adequate, and many times leads to an overabundance of bluegill small enough to be unacceptable to most anglers.

Considering the above, in 1971 the Commission began experimentation with larger minimum-size limits as a method of maintaining good largemouth bass and panfish fishing. Presently, this minimum legal length limit is being used to control bass harvested from eight state and county conservation board lakes. The success of this program will depend to a large extent on the cooperation of fishermen.

In his consideration of this regulation. the fishermen should keep several major points in mind. It is true a new lake will provide excellent bass fishing for a few days or weeks, but what about the future? The size limit will help ensure quality fishing next year. Many bass will be growing over the minimum size limit annually, and these will become available to the fishermen. The sublegal bass will provide an abundance of recreation, and will be released to prey upon the excessive numbers of bluegill and eventually attain the "keeper" size.

Information indicates many of the sublegal bass are caught several times prior to attaining "keeper" size: therefore, it is important that care be taken in release of these fish. The hook

(cont. on p. 13)



by Jerry Conley Superintendent of Fisheries and Roger Sparks

"Jug-o-rum" - "That's what I could use now - a good stout drink!" "Quiet dummy! That's what we're after - Rana Catesbeiana or plain bullfrog to you amateurs!" Sound like something out of the deep South, or a John Steinbeck novel? Nope, just the start of a typical Iowa bullfrog hunt. Unknown to many lowans, certain lakes, ponds and streams in Iowa have good populations of this sporty, culinary delight.

they

nab

crui

seng

brig

ever

and a

widt

large

spot

the p

grab

man

mesn

direc

OVer

the f

Wet.

no ci

most

misju

meas

Netti

untar

are t

key-

SCULL

Water

IS DE

result

leap.

zeroe

carefi

trick

shore

the fl

other

stalki

lots of

Tw

night

limits

licens

open ;

ters b

Summe

Water

Fro

The bullfrog is the largest of our America frogs. It is a comparatively slow grower, reaching a maximum weight of three pounds after five years. The meaty hind legs on a big bullfrog can weigh four ounces, but only in select areas in Iowa are frogs of that size plentiful. Found in Iowa normally only south of Highway 30, the further south one goes, as a general rule - "the bigger the frogs and the better the grabbing!" Current Iowa hot spots include Rathbun Reservoir, Red Rock Reservoir, the Skunk River, and the numerous state lakes and private farm ponds in southern Iowa.

Bullfrogs breed in Iowa in late June or July when water temperatures approach 70°F. Eggs are black and white and are laid in large surface floating mosses of 2-21/2 feet diameter. In Iowa, tadpoles spend two winters before transforming into frogs in July or August of their second year.

Unlike leopard or pickerel frogs, bullfrogs hunt for food only in the water area where it makes its home. As for food preference, any moving object that can be swallowed will be taken, including smaller bullfrogs.

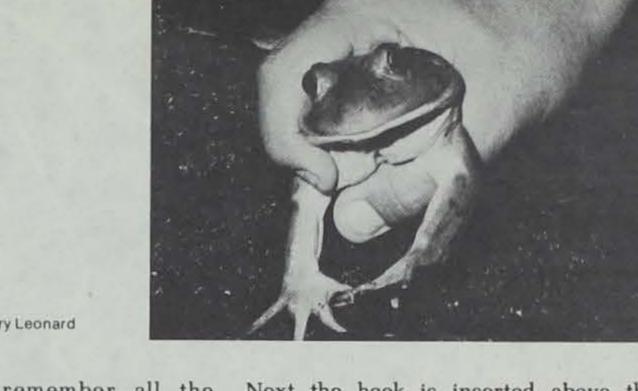
By day the bullfrog retreats to a grassy shelter and listens quietly to the sounds of the Iowa countryside. Then cued by the setting sun, he slips onto a mossy podium and proceeds to clear the air. On a good frog night the discordant conglomoration of bullfrog bellows resembles an unhappy marriage of bagpipes and a hard rock band - excellence, to a frog, is measured in volume.

Many methods are used to capture,

Wading shoreline can be effective.

# IGA DE S

Photos by Jerry Leonard



catch, spear or hook frogs. But where they're really thick, the simplest way to nab 'em is to grab 'em. A canoe or boat cruises along the shoreline, its passengers searching the shallows with bright flashlights. Bullfrog eyes glisten everywhere, just above the waterline and along the shore. Size is judged by the width between the eyes and only the largest frogs are taken. Once a big boy is spotted, the boat is pointed shoreward, the motor is idled to a slow crawl, and the grabber makes ready up front. The front man has most of the fun. Keeping the frog mesmerized with a flashlight, he verbally directs the driver, then reaches down over the front of the boat and snatches the frog with his free hand. Grabbing a wet, wiggling frog from a moving boat is no cinch and many frogs escape even the most deft efforts. Spearing is effective, but a speared frog must be kept even though his size may have been initially misjudged. If a grabbed frog doesn't measure up, he can quickly be released. Netting is easy but too much time is spent untangling the critters.

Frogs in water too shallow for the boat are tougher. Slow, quiet wading is the key - any sloshing about sends the frog scurrying into deeper water. Frogs out of water are most difficult to catch. Stealth is necessary as a detectable motion results in a startling yelp and a quick leap. By keeping the flashlight beam zeroed in on the frog's eyes, a slow, careful approach can sometimes do the trick. Two men walking and wading the shoreline can be effective, one holding the flashlight and a bag or stringer, the other doing the grabbing. It isn't exactly stalking big game but it is challenging and lots of fun.

Twelve bullfrogs may be taken in one night (both the daily and possession limits are one dozen). An Iowa fishing license is required. There is a continuous open season on bullfrogs but most hunters begin the frog season on a warm summer night in June or July when the water becomes suitable for wading.

Boaters must remember all the required safety equipment and the appropriate boat lights.

Once a limit of frogs has been taken, cleaning them doesn't need to take all night. Some people prefer to save all the white meat on the frogs and if so, they can be cleaned as follows: Cut the head off, pull the front legs through the skin, then skin out the rest of the frog using pliers. Remove the entrails and wash the meat thoroughly.

Most folks prefer to save just the legs and this job is made much easier with the use of a simple tool. First a strong nail is bent in a "hook" shape and clamped securely in a pair of vise grips. The frog is killed by a sharp blow to the head.

Next the hook is inserted above the pelvic girdle and allowed to penetrate through the belly skin. The back bone in front of the hind legs is then cracked by a slight blow. The hind legs are separated from the body by grasping the frog with one hand and pulling firmly downward with the vise grips. The skin formerly on the hind legs will remain attached to the body.

Bullfrog hunting appeals to those who like mild excitement, wet feet and a lack of sleep. Others perhaps subconsciously yearn to return to their childhood, frogin-the-pocket days. Regardless of your reasons, a platter of frog legs makes wandering around a lake in the middle of night seem worthwhile.



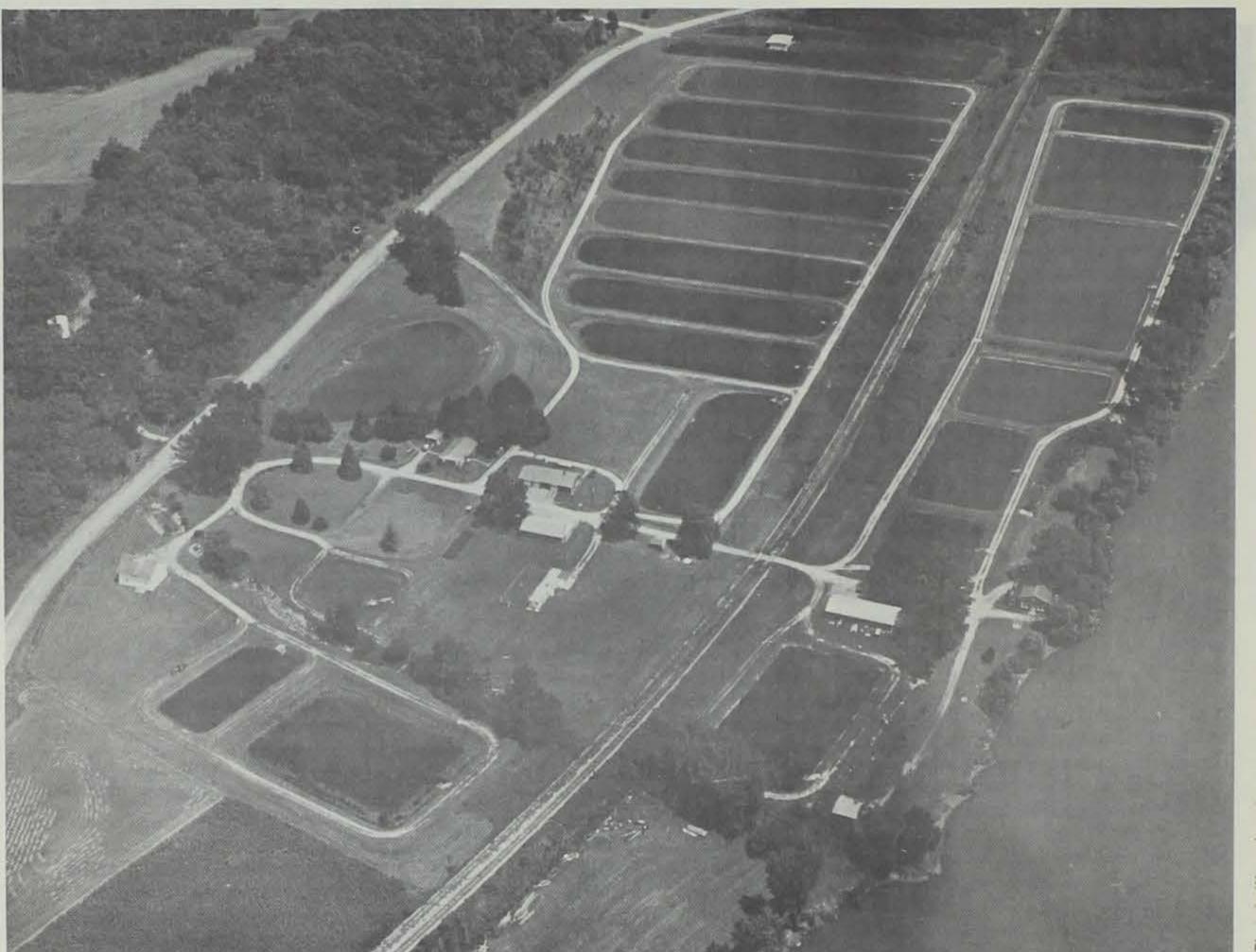


Photo by Wayne Lonning

fish hatchery

Bill J. Smith Hatchery Manager Jerry J. Spykerman Asst. Hatchery Manager

In the February issue of the "Conservationist", 1973 fish production from Iowa hatcheries was presented. Did you ever wonder about the facilities where these fish were reared? Have you ever visited an Iowa fish hatchery? Most of the bluegill, channel catfish, and largemouth bass stocked in 1973 were produced at the Fairport Fish Hatchery. This article will relate some of the intimate details of this installation.

The Fairport Fish Hatchery is the most recent addition to the list of fish hatcheries serving Iowa fishermen. Although much of the 1973 production from this station was designed to benefit Iowa anglers, the hatchery was not officially part of Iowa's hatchery system until August 30, 1973. On that date a representative of the Bureau of Sport Fisheries and Wildlife signed a lease agreement turning operations of this hatchery over to the State of Iowa. Signing of the lease terminated several months of negotiations between the Federal Government and the State of Iowa.

During April, 1973, the Bureau contacted the Conservation Commission regarding the closing of Fairport as a federal installation. During the initial contact they offered the hatchery to the Conservation Commission. The major reasons for closing the hatchery were abolishment of the federal farm pond program in the midwest and severe budget restraints. It was offered to the state because it was apparent that closing the station would increase the demand for fish from Iowa hatcheries.

Iowa accepted the offer because it presented an excellent opportunity to add, without cost to Iowa anglers, a modern well managed hatchery to our system. Acquisition of Fairport enabled the Commission to close the Lake Wapello Fish Hatchery. Although Lake Wapello contained as many acres of production ponds as Fairport, it was seriously in need of extensive renovation and modernization. Renovation would have cost Iowa fishermen several hundred thousand dollars.

hatche moder produc stocke Total to be

0.13

social 1908

struc

econo station when

pound lished bass. catfish Pected 1,388. Lary bluegil the sta be use

Pie bri wild as Alth located Will b progra tained

reques Young lowa 1 加加山 growin produc stockin

alengt

### **Location and Description**

The Fairport Fish Hatchery is located eight miles east of Muscatine in Muscatine County. The hatchery is very easy to find because State Highway 22 bisects the hatchery grounds.

At the present time this is the largest warmwater hatchery in Iowa. The production portion of the hatchery consists of 19 ponds ranging in size between 0.13 and 1.95 acres. All totaled the ponds cover about 18 surface acres. Also located on the hatchery grounds are three storage buildings, a fish holding building, a workshop-office building, and two residencies. The hatchery is situated on the bank of its water source, the mighty Mississippi River.

History

The land on which this hatchery is located was donated in the early 1900's to the Federal Government by the Association of Button Manufacturers. In 1908 an act of Congress authorized construction of a biological station on the site. The purpose of the station was freshwater mussel research and propagation, which was of great economic importance at the time. The station was operated as such until 1929 when it became a full-fledged fish hatchery. It has been operated as a fish hatchery each year since. During the late 1960's and early 1970's the Bureau spent over 200,000 dollars renovating and modernizing this facility.

### **Fish Production**

This hatchery will be expected to produce most of the warmwater fish stocked into Iowa waters during 1974. Total fish production for 1974 is expected to be 2,420,250 fish weighing 10,923 pounds. This production will be accomplished by rearing 380,000 largemouth bass, 1,388,800 bluegill, 251,450 channel catfish and 400,000 black crappie. Expected poundage for each species is 753, 1,388, 8,382, and 400 respectively.

Largemouth bass, channel catfish, and bluegill broodfish are held in ponds on the station. Offspring from these fish will be used for stocking in 1974. Black crappie broodfish will be collected from the wild and spawned on the station.

Although channel catfish broodfish are located on the station and their offspring will be used in Iowa's fish production program, Fairport will rear catfish obtained from the State of Texas. We requested Texas catfish because their young will be available in May whereas Iowa hatched catfish are not available until July. Obtaining catfish early in the growing season will enable this station to produce 5-inch catfish as requested for stocking. Iowa hatched catfish will attain a length of only about 3-inches by fall.

Being a State hatchery, fish produced at Fairport will be stocked wherever in Iowa they are deemed, by fisheries biologists, to be needed. In addition to producing fish for public waters, Fairport will also supply fish for Iowa farm ponds.

### Visitation

Visitors individually or in groups are welcome at the hatchery during daylight hours every day of the year. Employees at the station will cordially answer your questions. A slide series detailing station activities will be presented to groups that request in advance such a service. For those of you that would like to visit Fairport but are not sure when would be the best time, a table of major station activities is included in this article.

When the fish aren't biting, plan a trip to this hatchery and obtain first hand knowledge of the station and the people that operate it. Who knows you may some day catch one of the fish you see in the ponds. W

Table 1. Fisheries cultural activities that occur at the Fairport Hatchery.

May	June
Spawning Largemouth Bass and	Fry removal Bluegill
Bluegill	Rearing
Fry removal	Largemouth Bass
Largemouth Bass	Spawning and Hatching Channel Catfish
July	August
Rearing Largemouth Bass Bluegill	Rearing Largemouth Bass Bluegill
Channel Cat- fish (feeding)	Channel Cat- fish (feeding)
Cropping Largemouth Bass	
September	October
Fingerling removal Bluegills Largemouth Bass	Fingerling removal Channel Catfish
Rearing Channel Catfish	

### Bass (cont. from p. 9)

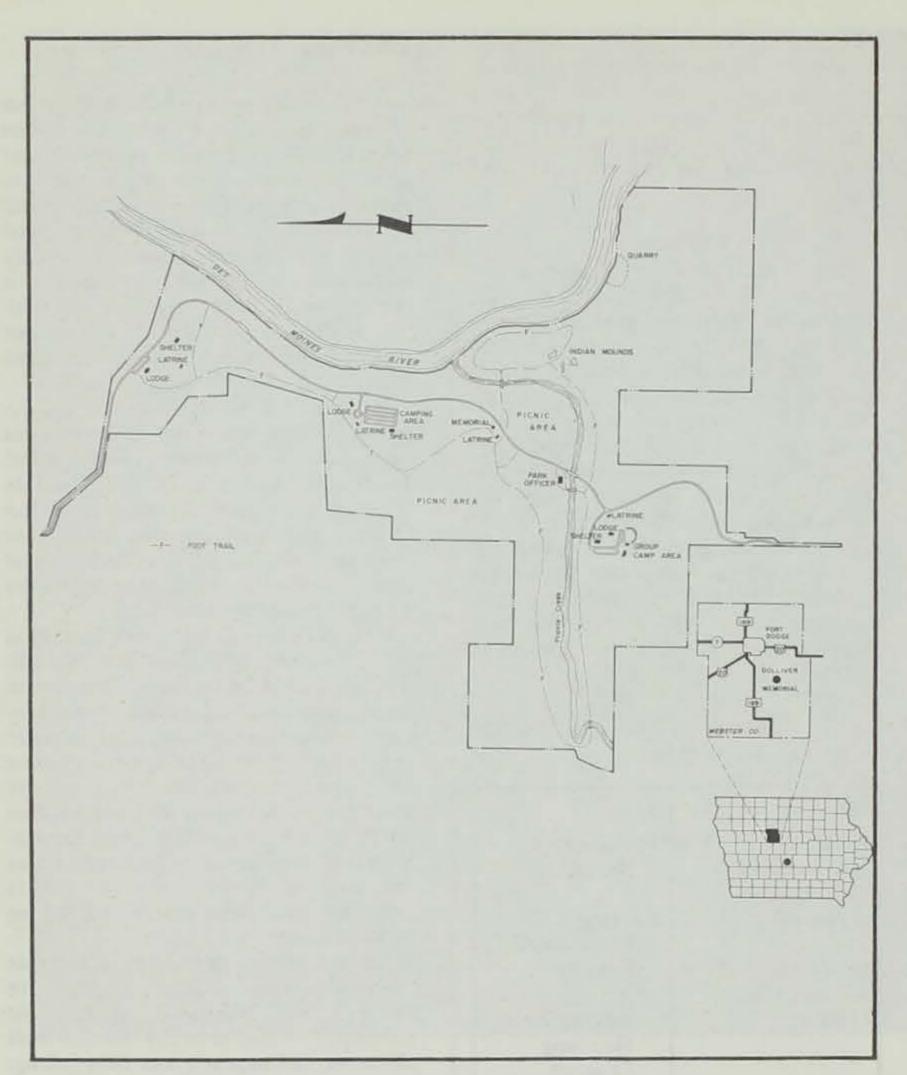
should be removed carefully, and the fish returned to the water with a minimum amount of stress. Another very important point to remember as you hesitate to release the sublegal bass is that it will help maintain good panfish fishing. The panfish will not overpopulate as readily and, consequently, will grow faster. It is not uncommon for both winter and summer anglers to catch 50-100 panfish per trip; therefore, it is important that these fish be fat "pan-size" fish.

If overharvest of bass is such a problem, why not apply minimum legal length limit to all waters - statewide? To understand the answer to this question, we must first realize all bodies of water are unique and nature's systems are extremely complicated. Because of this complexity, each lake must be managed as an individual.

One lake may contain many species of fish - another only bass and bluegill. Another lake may be muddy because of the watershed, and yet another lake may have excessive growths of aquatic vegetation. Other lakes are too shallow and subject to winter kill. One or more of these factors or others may overshadow the need for controlling bass harvest. Why limit the harvest of bass from a lake that may winter kill, or a lake that is providing good bass and panfish fishing at the present time.

Another important point is the fact that the minimum size limit is a preventative rather than remedial management technique — that is to say the size limit alone may not improve poor bass fishing. The bass and bluegill may be stunted and growing very little. In this case, a size limit would antagonize the problem. If the bass are already slow growing, a condition not uncommon in unbalanced fish populations, very few bass would grow to "keeper" size. However, the size limit in conjunction with other management. such as selective chemical reduction of bluegill may be beneficial and improve fishing. This procedure is presently being experimented with at Wilson Park Lake, Taylor County and Cold Springs Lake, Cass County. The other six lakes sporting the minimum legal size limits on bass are newly established fisheries.

The larger minimum legal size limits will definitely benefit fishermen, however, if any regulation controlling the harvest of fish is to be a success, the angler must provide his support. This regulation is not expected to be a miracle cure-all to be applied to all lakes; however, correct application will definitely improve the quality of recreation enjoyed by you, the Iowa angler.



"PARK TALES" - True & otherwise

## Dolliver Memorial State Park

by Don Blasky Assistant Superintendent of Parks

Dolliver Memorial State Park was dedicated on June 28, 1925, as a memorial to Senator Johnathon P. Dolliver, a lover of nature and mankind.

An interesting event took place that drew attention to the area and perhaps influenced an early purchase of the area. In 1912 the Albert Peterson family of Callender came to the J. B. Black farm for a picnic. While there, one of the Peterson children while playing near the mouth of what is now Boneyard Hollow, found a

lead tablet that was inscribed in Latin. This tablet was sent to Edgar Harlan, the curator of the State Archives, who, in turn, sent the tablet to Archbishop Ireland in Minnesota. The translation of the tablet stated that it had been placed there in 1701 by Father Hennepin, a noted French Priest and explorer who is often credited with the discovery of the Des Moines River. He was claiming this land for the King of France. Eventually, Archbishop Ireland reported back that the tablet was not authentic as the Latin grammer was extremely poor and Father Hennepin was known to have been an excellent Latin scholar.

But the discovery of the tablet had created an interest in the area and Mr. Harlan came to the Black farm to investigate the site. After touring the area, he was so entranced by the beauty of the scenery, that he contacted Dr. L. H. Pammel, the head of the Botany Department of Iowa State College. Dr. Pammel and Mr. Harlan made several trips to explore the area.

It was about this time that the State Conservation Board was formed. A petition was presented to the board urging the purchase of the area for recreational, historic, and scientific purposes.

The drive to establish the state park was interrupted by World War I. In April of 1920, the Ft. Dodge Chamber of Commerce recommended that the funds raised as a memorial to the late Senator Dolliver be used as a portion of the purchase price for the park and that the park be named for Senator Dolliver.

In 1921 this recommendation was followed and the state provided \$38,500 and the memorial fund \$10,000 for the purchase of land.

Boneyard Hollow is the most interesting of the ravines in the park. It was named for the numerous bones of animals that were found.

A unique geological formation known as copperas beds are found on the banks of Prairie Creek which runs through the area. Copperas (sulphate of iron) beds are a coal sandstone formation. Many species of fern are found in the gorge.

What happened to the tablet which started it all? It eventually came to light that two residents of Lehigh had prepared the tablet as a practical joke. They buried it at the edge of Boneyard Hollow in 1911 but they had buried it too deep and no one found it. The next year they dug it up and exposed it a little more so that it might be more easily found. It was then that the Peterson child found it.

As a direct result of this hoax, thousands and thousands of people have enjoyed the park for camping, picnicking and fishing.

Law

Som

shotgu shootin There rocks. Part teachin This is one ho last day

go hun

How is the pr Would right ca or good Soil is posed

decayed



by Rex Emerson Law Enforcement Supervisor

Some sportsmen have not hung up the shotgun yet. They are still enjoying shooting blue-rocks at the trapshoots. There is no closed season or limit on bluerocks.

Part of my day was spent at a school teaching hunter safety to the students. This is a four hour course usually taught one hour per day with a test given the last day. Some of the students may never go hunting, but they each need to know

how to handle a gun safely.

Maybe the girl that will never go hunting will want to clean the closet where the gun is stored. When she picks it up to move it she should know the potential danger if it should be loaded. If we had her dad in a hunter safety class it wouldn't be loaded, but it should still be handled like a loaded gun. There are more young ladies taking up the sports of hunting and trapshooting each year.

How about the boys that are left alone in the house? Can they resist picking up dad's gun? Too many gun accidents happen in the home.

In the hunter safety class the students will not touch a gun unless the instructor asks them to assist with a demonstration. We don't make sharp shooters of them, although straight shooting is stressed as being important. The reason we don't teach them to actually shoot a gun and how to learn to shoot straight in the hunter safety course is simply a lack of time. It's great to see groups of young people like the Keosauqua Jr. Rifle Club take the hunter safety class one step farther and teach the actual shooting of the different size guns. You should see some of those girls shoot!

If they should want to go hunting in a state that has a mandatory hunter safety program, they would have to produce evidence as to having passed a hunter safety course. Our course is accepted in all of those states.

We may never know how much good we do in these classes. If we can prevent just one gun accident it is well worth the time. When the student passes the written test he receives a certificate suitable for framing, and a billfold size card showing they have taken the hunter safety course.



By Curt Powell

How many of you have gardens? What is the prime ingredient for a good garden? Would you say that good soil, given the right care, would produce a good garden or good crops for the farmer?

Soil is very important to life. It is composed of fine particles of rock and decayed plant and animal life called

humus. The most valuable part of the soil is topsoil. It is from this that the most productive crops are grown.

Topsoil is the top three to four inches of soil which is richest in nutrients and decayed plant materials. Topsoil can vary in depth from place to place. You may find a very deep layer of topsoil in a farmer's field and a very shallow layer in a forest. Why would this happen? Compare topsoil from a forest and a plowed field. Which is deeper? You can tell when you've dug through the topsoil because the next layer, subsoil, is lighter in color and contains less decayed plant materials. The textures of the soil may differ also.

Sometimes the topsoil lacks certain ingredients and therefore does not produce as good a crop as it should. There may not be as much humus or minerals in the soil as needed. How could we find out what is lacking in the soil?

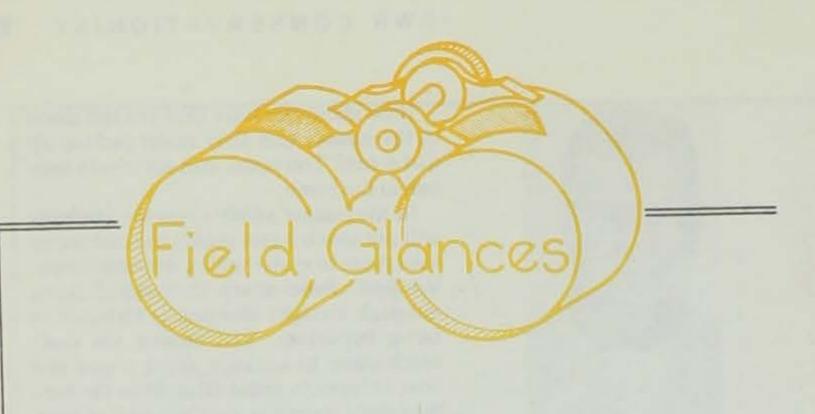
One method of testing the soil is to send a sample to your County Extension Office for testing. There is a charge for this service, however. The Extension Office also has publications available on soil testing and gardening that you might be interested in. Another method is to use a soil test kit of your own. One thing you would wish to test for is phosphorus (pH). Most plants do well in a pH range of 6.5 to 7.0. This test determines the acidity or alkalinity of your soil.

Soil test kits are available at a nominal cost. Using your soil test kit check the pH of your soil. You will need dry soil, but do not heat it. Let it dry naturally. Follow the directions in the soil test kit. If you don't have a test kit, check with your science teacher for another method of testing for pH. If the pH is high or low. you may wish to plant crops which do better in that type of soil.

There are some other ingredients which are important to good soils. These are phosphorous, potash, and nitrogen. A good supply of nitrogen in the soil means dark green foliage and active vegetative growth. Potash helps produce good strong root crops. These minerals are all

important to good crops.

Soil is very basic to life and good soil produces good garden crops, wildlife habitat, and forests. Man and wildlife both benefit from good soil and the crops produced on it. We are very fortunate to have some of the finest soil in the United States. With proper care, our forest, wildlife, and human resources can develop and grow abundantly.





Illustrated by Larry Pool

Your boat trailer may need some attention — first, start by checking the wheel bearings for pits and rust. If there is any doubt in your mind about the bearings, replace them. Repack the bearings with wheel bearing grease, as grease gun lubricant is not adequate for the job. Check the tires for proper air pressure and wear, also see that the hitch on your car is tight. Hook your trailer to the car and test your lights.

There are other moving parts on your trailer which may need attention; lubricate all working parts of the couplers, winch, tilting mechanism, moving brackets and oil rollers. Each trailer is different, so deal with specific problems.

Make certain your trailer and boat licenses are current.

The next items on your checklist should be your safety equipment. Take a good look at your Personal Flotation Devices. By law thay must be serviceable. This means the straps should be firmly attached and the kapok bags unruptured. If your P.F.D.'s suffer from these deficiencies, thay should be replaced.

It takes just a few minutes to check your running lights and horn. Replace bulbs where needed. If they all shine but seem dim, your batteries may need replacing or recharging

before you drove all the way out to the lake. Your fire extinguisher also needs a check for cracked or broken hoses or obstructed nozzles. Check the pressure gauge, locking pins and sealing wires. Recharge if your guage indicates the pressure in your extinguisher is low.

Before heading to the lake or river, your outboard motor may need attention. Remove and clean, or replace the spark plugs. While the plugs are out pull the starter rope slowly or engage the electric starter to make sure the pistons are not stuck. Check the lubricant in the lower unit. Check the propeller and shear pin. Always use a new gas/oil mix at the start of each season to ensure a smooth running motor.

REMEMBER

SAFE BOATING IS NO ACCIDENT