Iowa CONSERVATIONIST

MAY 1985

Iowa
CONSERVATIONIST

Volume 44 No. 5 • May 1985

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COVER: *Marsh marigolds bloom in Iowa through the end of May. Photo by Bruce Morrison.*

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IOWA CONSERVATIONIST *(USPS 268-780), is published monthly by the Iowa Conservation Commission, Wallace State Office Building, Des Moines, Iowa 50319. Second class postage paid in Des Moines, Iowa, and additional mailing offices. POST MASTER: Send changes of address to the Iowa Conservationist, Wallace State Office Building, Des Moines, Iowa 50319.*

Send subscriptions — one year, $5.00, two years; $8.00, or 3 years; $10.00 — to the address above.

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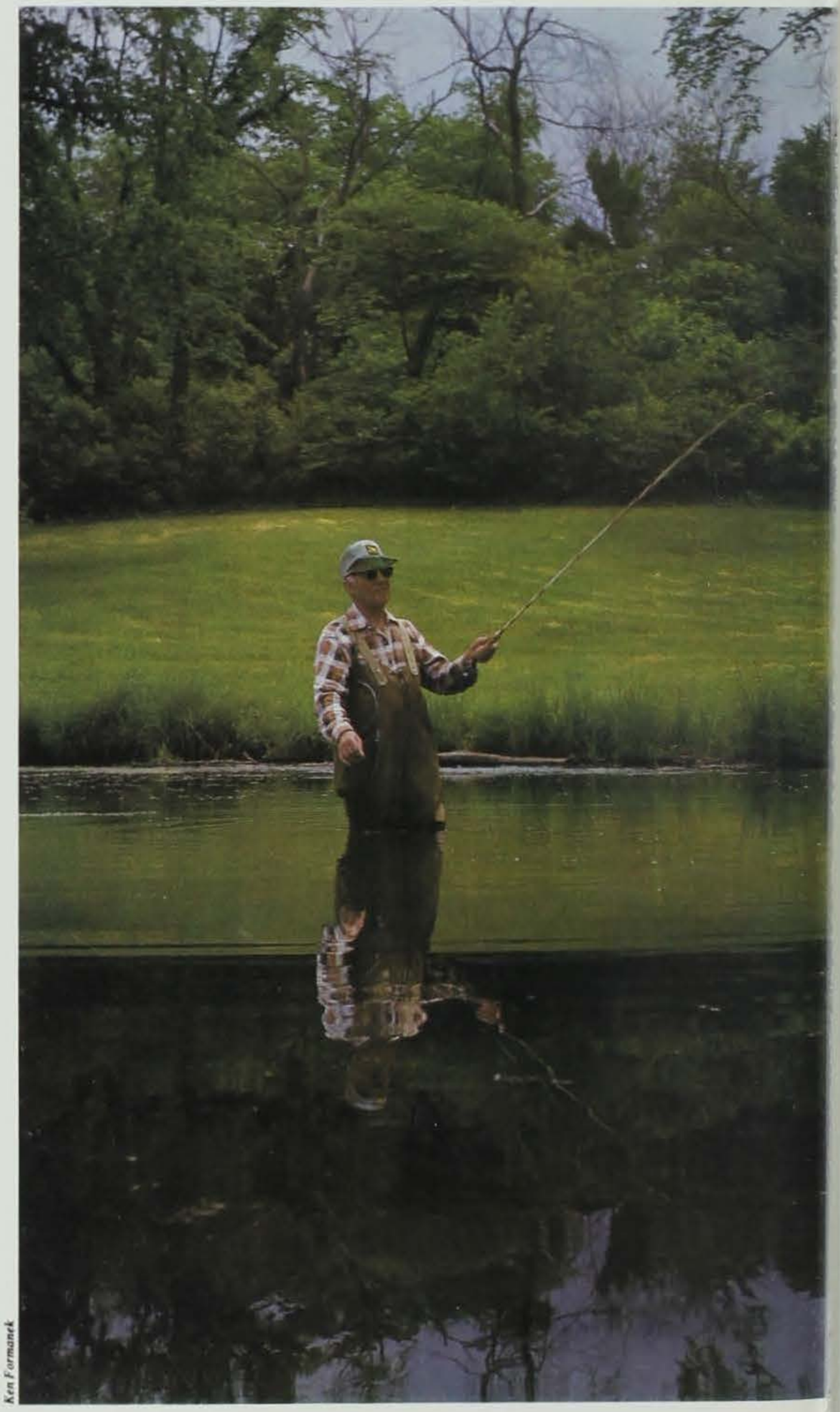
Fly Rodding



Ken Formanek

MAY 17 1985

g for Bluegills

By Jerry Hudson

Mention fly fishing, and most people think of fast-flowing streams and deep pools teeming with trout. Not me. My fly fishing adventures started with bluegills, and it is still one of the most exciting sports I have tried. This little fish can be an aggressive fighter and exists in large numbers in many small lakes and ponds across Iowa. Those who have not explored this technique for taking bluegills do not know what they are missing.

Fly fishing is not an expensive sport nor is it difficult to learn. It just requires patience and several hours of practice. Learning to fly cast along an open lake shore is a much easier task then casting in a trout stream where overhanging trees and shrubs get in the way. An eight-foot fiberglass fly rod, equipped with a single action fly reel and line, can be had for less than fifty dollars. A double-tapered floating line is more expensive but is much preferred because it is easier to cast. The beginner must remember that the line is being cast and not the lure, as a result, the line weight must be matched to the rod. Many rod manufacturers specify which line weight is needed for their rods. Generally, the stiffer the rod the heavier the line needed, but it is wise to consult a tackle catalog or knowledgeable dealer.

Next, a 7- to 9-foot leader is attached to the fly line, providing an inconspicuous link between the fly line and the fly. Tapered or non-tapered leaders seem to make little difference to bluegills, which do not seem to be as finicky as many other fish species. However, the experienced fly fisherman prefers the tapered leader because it casts easier and allows for a more delicate presentation of the fly. The tippet (thinnest part) is nearest the fish. A straight leader of 2- or 4-pound test monofilament line is adequate, but the four pound test leader will allow larger fish to be taken and smaller ones to be extracted from weedy cover.

Finally, an artificial fly or lure is needed to complete the fly fishing equipment. Selecting the right offering for bluegill is not as difficult as it might seem, because this critter will accept a variety of baits. The fly fisherman must remember to think small and include a selection of dry and wet flys, nymphs, wooly worms, poppers and sponge rubber spiders in various sizes from #8 to #16, and perhaps a few tiny jigs. The dry flys, poppers, and sponge rubber spiders are designed to attract bluegill on or near the surface in shallow water, while the other lures will take the deeper lying fish. Fly or lure color is a matter of preference and takes a little experimentation to find the one that will entice the quarry to strike. Like the trout fishermen, the bluegill angler may try to match the hatch; selecting the size and color of artificial lure that most closely resembles the natural food the fish are feeding on.

Now it's time to head to the favorite pond or lake. Early morning or late afternoon are the most productive angling times. In any case, walking the shoreline and casting to swirls made by bluegills feeding near the surface can be productive. If these tell-tale signs are not visible, inundated brush, standing vegetation, or other objects may harbor these scrappy little fish. The usual method is to cast the popper or fly softly upon the water, letting it lie until all the ripples disappear. If nothing happens, the rod tip is twitched slightly. The strike usually comes while the bait is motionless. It is not surprising to catch a few bass or other species, while trying this technique. Once enough large "gills" are taken to fill a stringer, it is time to head home for some of the finest eating anywhere. A mess of bluegill fillets, fried to a golden brown and served with a dab of shrimp sauce will tickle the palate of any aspiring connoisseur.

One successful bluegill trip will lead to other outings at that favorite lake or pond. Becoming comfortable with a fly rod and knowledgeable about fly fishing could lead to pursuing other species, like trout. But for fast action and guaranteed fun, the bluegill will not be forgotten.

Jerry Hudson is a fisheries biologist at Manchester. He has worked for the commission for ten years. He holds a B.S. degree from Kansas State University.

Ken Formanek

A long rod and a good bluegill lake like Red Haw provide all that is needed to learn the fine art of fly fishing.

FARM POND

By Kay R. Hill

Kay R. Hill is a fisheries research biologist located at Cold Springs. He holds an M.S. degree from South Dakota State University. He has been with the commission for 15 years.

The other day my wife and I were out for a drive in southern Iowa. She noticed a picturesque farm pond and mentioned it would be a nice spot for a picnic. I agreed with her, obtained permission from the owner, and we planned an outing. She didn't know it but, ever since I had seen the pond, I had wanted to try my luck on the bass I had seen surfacing in the shallows.

The trip worked to perfection. She enjoyed the sun, songbirds, and the peaceful lap of waves against the shore. I shared those enjoyments, along with catching spunky bluegills on ultralight tackle and casting spinner baits in the brushy upper reaches for bass.

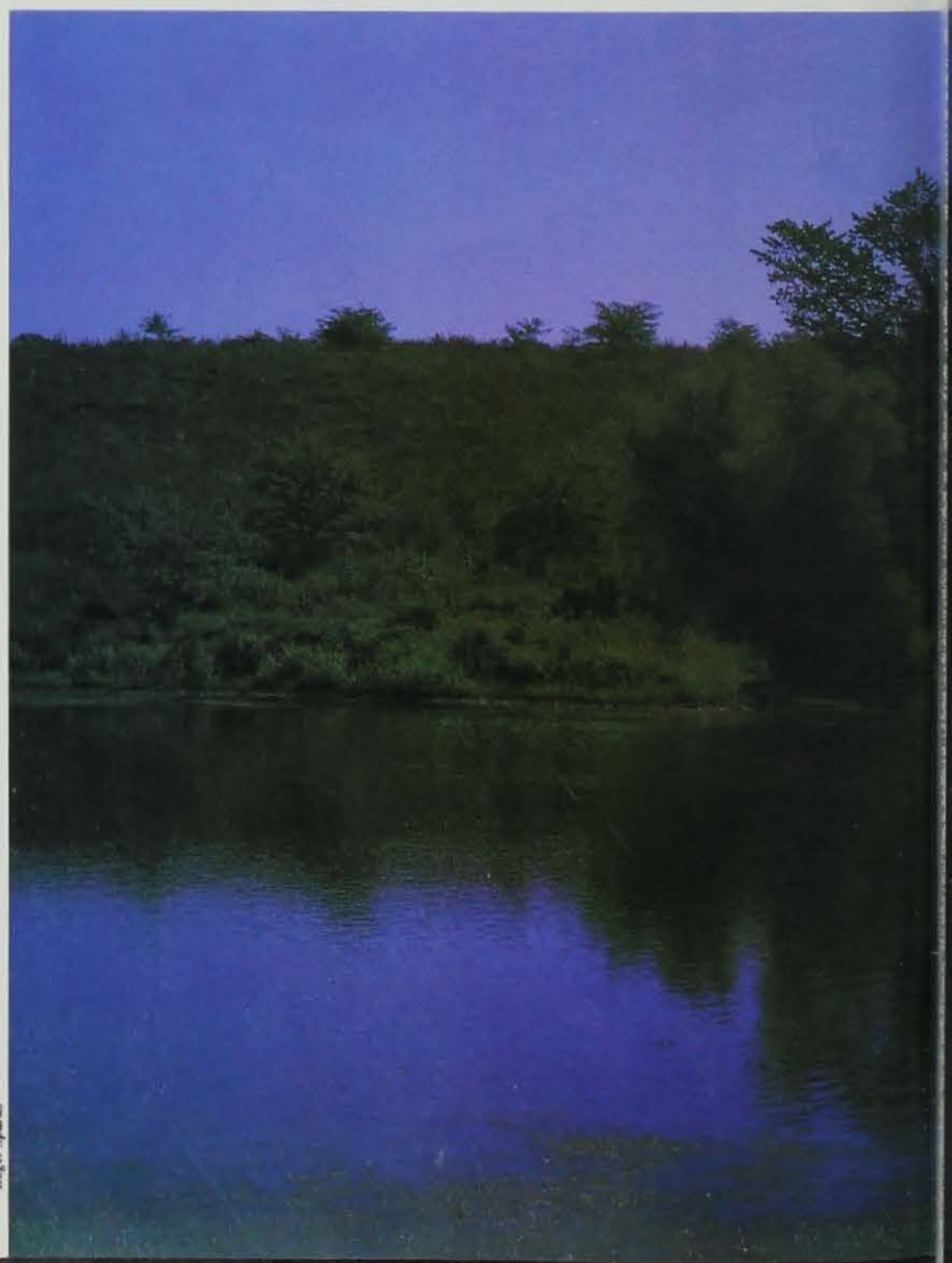
Most farm ponds are built for erosion control and livestock watering, but many types of recreation occur on these ponds. Besides camping, trapping, hunting and picnicking on ponds, I instantly think of fishing. Licensed Iowa anglers take one of every seven fishing trips to a farm pond. This amounts to two million trips per year. They catch more than 10 million fish from 80,000 private ponds. Obviously, farm ponds provide some of the state's best angling and more than 400 new ones are stocked each year.

Private ponds have been stocked by the Iowa Conservation Commission since 1945; however, in the past, stocking policies changed frequently and little was known about the effectiveness of these stockings. Discussions with pond owners indicated some newly stocked ponds provided good fishing but others provided only fair fishing and many fish stockings failed to produce the desired results.

In 1975, an intensive research project was initiated to evaluate the effectiveness of Iowa's pond stocking program. The five years of research that followed showed the best formula takes 1,000 bluegill fingerlings and 100 channel catfish fingerlings stocked per acre of pond in autumn and 70 largemouth bass fingerlings stocked per acre the following June. This produced good fishing in new ponds two years after stocking and excellent fishing the third year. The stocking of 70 bass per acre provided better growth compared to the earlier stocking rates. The improved growth allowed the bass to reproduce the year following stocking. This good reproduction of bass helped keep the bluegill from overpopulating and stunting. The result was, of course, better bluegill and bass fishing.

Today farmers often request walleye, northern pike or even trout for their ponds, but the Conservation Commission stocks only largemouth bass, bluegill and channel catfish. Trout, walleye and northern pike are not recommended because these fish require cool or cold water and few ponds provide this habitat in the hot summer months.

Bluegills play a dual role in Iowa farm pond management by providing most of the "take home" catch and also a major portion of the forage for largemouth bass and larger channel catfish. A bluegill rarely exceeds one pound in weight, but pound for pound it's the fightingest fish around. In a well-managed pond, most



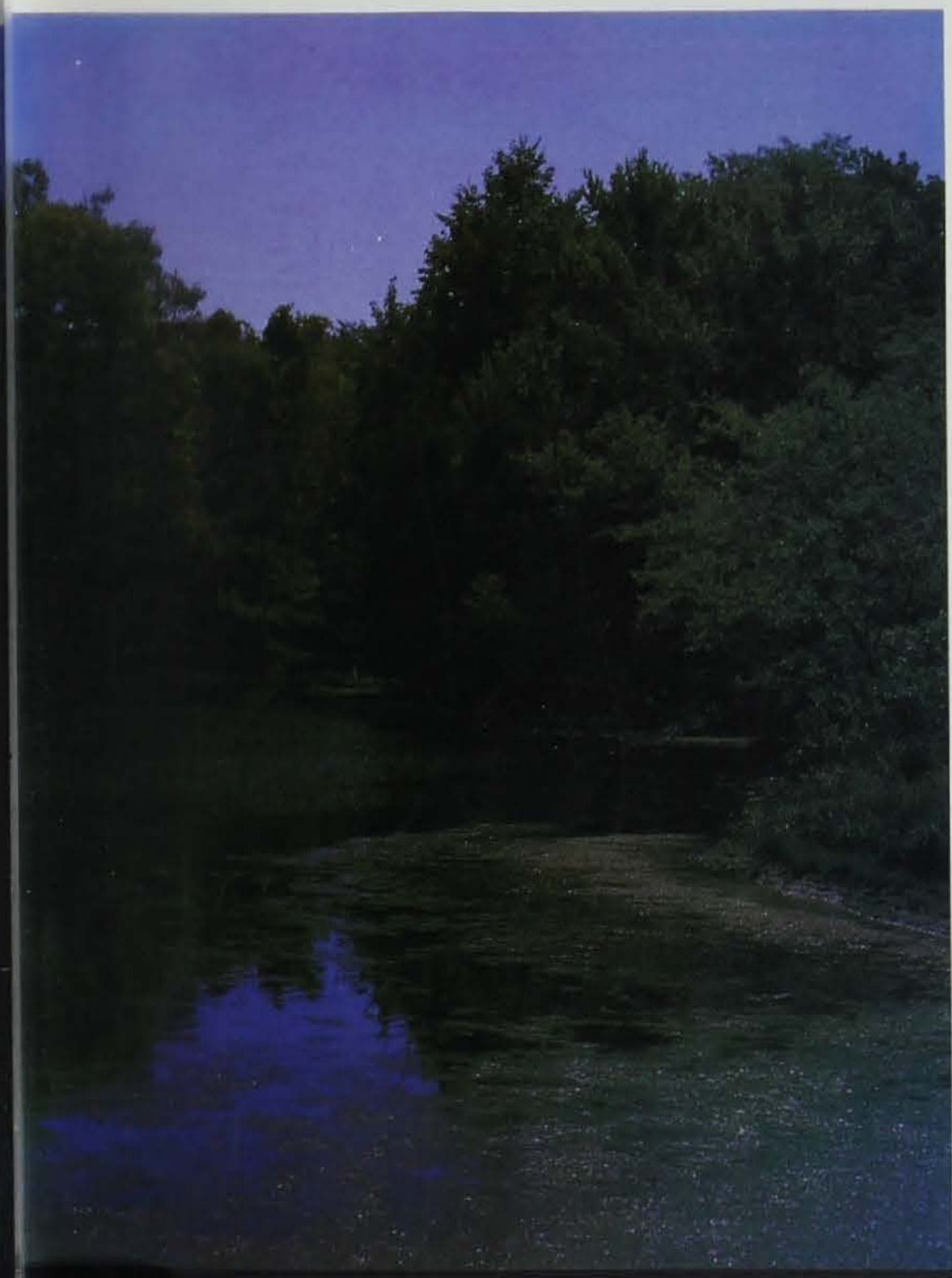
Roger Sparks

FACTS

bluegills caught are six to seven inches in length and weigh one-fourth to one-third of a pound.

The largemouth bass should be considered a trophy fish in farm ponds. It is also the major predator and important in controlling bluegill numbers. Farm ponds are well suited for largemouth bass and can provide excellent fishing. Largemouth ae easily caught, however, and continued good fishing will require release of most bass caught. A pound that supplies good catch-and-release bass fishing will also have excellent fishing for bluegills.

Ron Johnson



Farm ponds, although relatively small in size, produce excellent catches of large bluegills, as well as bass and catfish.

Most farm ponds are built for erosion control and livestock watering, but many types of recreation occur on these ponds.

Catfish do not reproduce in most ponds, but can be replaced by hatchery fish.

Channel catfish are a bonus fish in Iowa farm ponds because they provide quality angling and their presence in farm ponds has a beneficial effect on bluegill and largemouth bass. Channel catfish can grow large in ponds with some individuals reaching 15 to 20 pounds, but most will be in the two- to ten-pound class. Channel catfish rarely reproduce successfully in ponds because most young catfish are eaten by bass and bluegill. For this reason, occasional stockings of eight-inch fish are required to replace larger fish removed by anglers. These can be purchased from one of Iowa's several private hatcheries.

The next time you're out driving and see a nice pond, remember its location and ask permission to fish. Pond owners generally allow access to anglers who ask permission. Be courteous, don't litter, and remember you are a guest. Follow the instructions of the pond owner and you may be allowed a second trip. Remember, the current state record bluegill and the previous record largemouth bass were caught from farm ponds and many more "whoppers" are waiting to be caught. The state record bluegill weighed 2 pounds, 6 ounces and was 10¾ inches long. It was caught in a Henry County farm pond in May, 1983. Perhaps this summer a new state record largemouth bass will be caught by a farm pond angler.

Catch limits apply to fish caught from ponds and you need a fishing license to fish unless you are the pond owner or tenant.

Applying for Farm Pond Stocking

By Bruce Strunk, Fish Hatchery Manager

One of the most popular and beneficial programs sponsored by the Iowa Conservation Commission is providing fish for stocking farm ponds.

A pond may be stocked free of charge, providing the following requirements are met:

1. The pond must be devoid of fish (new construction or properly killed out with fish toxicants).
2. The pond must have a minimum surface area of one-half acre.
3. Minimum depth at the deepest point must be 8 feet to help avoid winterkill.
4. The pond must be fenced to exclude livestock.

Applicants should contact the conservation officer responsible for the county the pond is located in. The officer will arrange for an inspection of the pond.

If the requirements are met, the owner will sign a management agreement which will include the owner's name and address and the size and location of the pond. One copy of the agreement goes to the pond owner and the other copy is sent to the Fairport fish hatchery for delivery scheduling.

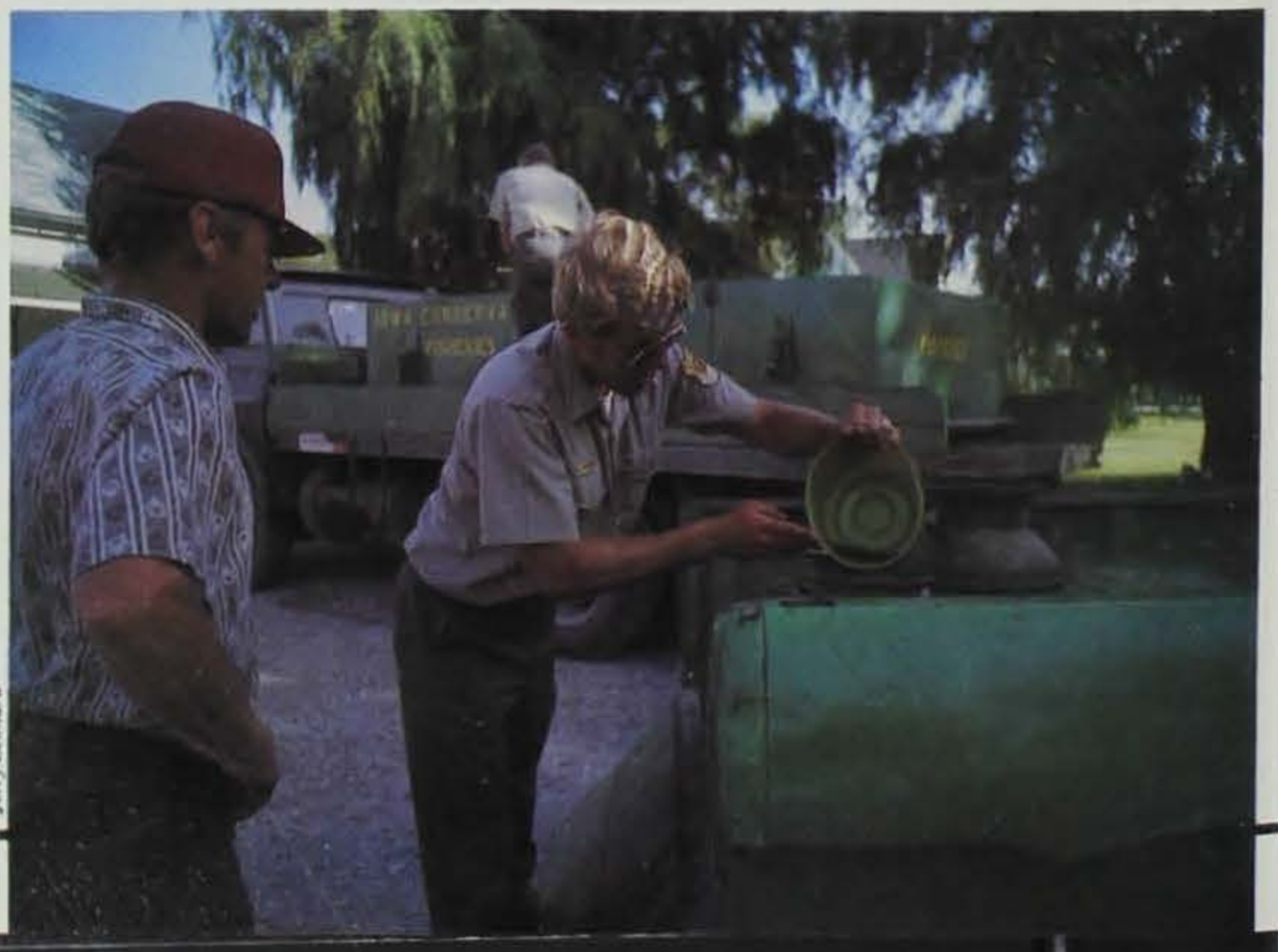
The deadline for applications to be in at the hatchery is August 1, so early contact is important.

Largemouth bass, bluegill and channel catfish are provided by the program. This combination provides fine sport fishing and is the most easily managed fish combination for Iowa ponds. The Conservation Commission recommends stocking no other fish species.

Pond applicants are notified by mail of the date, time and place to meet the delivery truck, usually at a central location within the county. Cards are sent 10 days prior to the delivery date. The cards include instructions for the pond owner to bring clean containers filled with pond water to receive the fish. Prompt acceptance of the fish by the applicants is necessary to help prevent delays in delivery at subsequent stops. Tight schedules are necessary to complete the 400 to 800 acres of ponds stocked annually throughout the state, so 10 minutes is allowed at each stop.

Bluegill and catfish are delivered when they become available in late September and October. Bass are stocked the following summer in late June or July. This gives the bluegill and catfish a head start on the predatory bass. Thee stocking rates are correct for ideal growth and numbers in an Iowa pond. No supplemental feeding or fertilization is necessary.

An excellent booklet, *Iowa's Farm Ponds*, is available at no cost from the Conservation Commission. Written by professional biologists, this booklet provides owners important information about construction and renovation, fish management and wildlife benefits that can be realized from a good Iowa farm pond.



Jerry Leonard

Cecelia Burnett

Spring Beauty

Story County's

ROBISON ACRES

By Bob Pinneke and Cecelia Burnett

Nestled along the picturesque banks of West Indian Creek in south-central Story County is a small 78-acre wildlife area few people, including Story County residents, know exists.

It's Robison Acres, and it's perhaps one of the county's best-kept secrets.

The Story County Conservation Board manages the property, which lies adjacent to the property belonging to the Indian Creek Chapter of the Izaak Walton League, as both a wildlife preserve and an outdoor classroom. More than four miles of trails wander through open fields of prairie grasses and forbs, merging into the oak-hickory communities upland along the creek's banks.

In the spring, the woodland floors bloom with color as spring beauty, bloodroot, hepatica, anemone, trout lily and so many other spring flowers burst forth after the long, cold winter. The spring migration of warblers — yellow-rumped, black-and-white, yellow, chestnut-sided, redstarts and others — gives birders a real treat when visiting the area.

While walking through the park, it's possible to see a white-tailed deer fawn lying in the meadow or to meet an opossum ambling along the trail. Wild edibles abound, including wild plum, raspberries and the elusive morel mushroom.

The area is named after its previous owner, the late Clayton Robison of Maxwell. Clay, it's said, was the Johnny Walnutseed of central Iowa. As a member of the Story County Conservation Board until his death in 1965, he came to Board meetings with a tin coffee can and walnuts in his pockets. Or so Board members claim. He would spend more time stomping walnuts into the ground on field inspections than paying attention to the business at hand. So it's told.

A strange twist of fate put the Robison tract into the hands of the Conservation Board. Seems like Clayton gave the Indian Creek Ikes the property and had willed the rest, now known as Robison Acres, to the chapter after his death. One night at a chapter meeting, a high-stakes poker game took place, as was the practice in those early days. Yes sir, it happened, and Mr. Robison got his feathers plucked, cleaned and whatever else. Now Clay was not a man who liked to lose, and the next day he went to his lawyer and changed the will, leaving approximately 58 acres of land to the Story County Conservation Board. In 1969, Story County gained possession of this unique area, acquiring an additional 20 acres in 1975 from Beulah Whitaker Cook.

A small pond and picnic area are maintained by the Conservation Board, and the park is also open for primitive and supervised youth camping. But the area really belongs to the wildlife which call Robison Acres their home.

To get to the area, find Iowa Center, site of the first designated State Capitol of Iowa, travel four miles west along a wandering and hilly gravel road, park your car and walk the trails. If you pass a wisp of a fellow planting walnut seeds, pay little attention and continue to explore off the beaten path.

Bob Pinneke has been the director of the Story County Conservation Board since 1967.

Cecelia Burnett has been a naturalist/information specialist with the Story County Conservation Board since January 1985. She is a graduate of Iowa State University with degrees in wildlife biology and journalism.

Rue Anemone

Cecelia Burnett

Prints On Sale

Winning designs by Iowa artists available

Limited edition collector prints of Iowa's 1985 waterfowl, habitat and trout stamp designs are on sale from the artists. About twenty percent of the revenue from the sale of these quality prints goes to the Iowa Conservation Commission to be used to help fund trout, waterfowl and habitat programs. There are 600 waterfowl, 450 habitat and 300 trout stamp designs for sale.

All prints are available from the artists. Order them directly from:

Jack Hahn — *Mallard and Decoy.* 1985 Iowa Waterfowl Stamp design. Price: $125 unframed with stamp; remarqued — sold out. Order from Jack Hahn, Nature Window, Box 23, Middle Amana, Iowa 52301.

Bethany Caskey — *Cottontail Rabbit.* 1985 Iowa Habitat Stamp design. Price: $103 unframed with stamp; $153 remarqued with stamp. Order from Bethany Caskey, 310 "A Avenue E., Albia, Iowa 52531.

Bruce Morrison — *Brook Trout.* 1985 Iowa Trout Stamp design. Price: $108 unframed with stamp; $188 remarqued with stamp. Order from Donohue's Limited, 916 3rd Avenue, Sheldon, Iowa 51201.

Note: Please Add 4% State Sales Tax.

ATTENTION MUSHROOM HUNTERS

Many of you will remember a research project concerning morels and false morels begun last year by Dr. Don Huffman of Central College, Pella, and Dr. Lois Tiffany, Dr. Robert Nyvall, and Dr. George Knaphus of Iowa State University, Ames (see May 1984 *Conservationist*). According to the research group the project was quite successful and one more year of sampling and testing will give the answers to some very important questions.

The work last year documented the presence of each of the involved species in several Iowa counties but there is a need to *document* their presence in many more. The research group is particularly anxious to receive specimens from western and northern Iowa.

Testing for the presence of toxins is getting underway and many specimens are needed, especially of the false-morel, *Gyromitra brunnea*. "Hopefully, people are not eating this false-morel," said Dr. Knaphus, "because there is a strong likelihood that it is toxic. But we are asking that collectors submit specimens of it." The Extension Bulletin No. 129 *Mushrooms and Related Fungi* has descriptions and pictures of both morels and false morels.

Collectors are asked to wrap the specimens in dry toweling or other dry paper wrapping. This will allow specimens to travel well and arrive in good condition. The following information should be included with the specimen: 1) County where found, 2) Terrain (lowlands, hillsides, etc.), 3) Tree association (elm, apple, oak, etc.), and 4) Date specimen was collected.

Specimens may be delivered to county extension offices or mailed directly to Dr. Tiffany or Dr. Knaphus c/o Plant Pathology Extension Office, ISU, Ames, Iowa 50011.

26 DROWNINGS IN 1984

Accidental drownings took 26 lives in Iowa during 1984, according to Iowa Conservation Commission officials, representing a 28 percent reduction from 1983.

A breakdown of statistics showed that rivers were the most treacherous claiming 15 lives, while lakes claimed eight. The remaining accidents happened on farm ponds and quarries. Ten of the victims were swimming. Other activities included boating, wading, and fishing. Some accidents were alcohol related.

The majority of the drownings occurred during the summer months resulting in 15 lives lost. Eight occurred during from late March through early June.

According to Sonny Satre, recreational safety coordinator for the commission, most of the drownings could have been prevented. Satre gave the following suggestions to prevent future drownings:

- Learn to swim — it is the number one rule for aquatic safety.
- Everyone in a boat should wear a personal flotation device — especially small children and nonswimmers.
- Parents should closely watch their children when near water and have them wear a personal flotation device.
- If you must wade in a stream or river, wade upstream.
- Avoid alcoholic beverages while engaging in water related activities. A high percentage of all drownings nationally are alcohol related.

Iowa Wildlife in Art Sale and Exhibition

Pictured on this month's back cover is "Woodland Heritage — Spring Beauties" a synthetic floral sculpture by Norman Neal Deaton of Newton. Deaton is this year's featured artist at the Iowa Wildlife in Art Sale and Exhibition to be held at the Des Moines Marriott May 31, June 1 and 2.

Deaton has donated this piece, approximately 39 by 16 by 31 inches, for the Governor's auction the evening of May 31. It is his largest work to date of "amaranth art," Greek for "flowers that never fade." Deaton will join 44 other Iowa artists for the largest-ever exhibition and sale of original wildlife art in Iowa. Tickets to the May 31 evening premiere night are $50 and are available from the Iowa Natural Heritage Foundation, Suite 830, 505 Fifth Ave., Des Moines. June 1 and 2 the show and sale are open to the general public for a $1 admission fee. All show proceeds go to environmental education in Iowa.

FISHING REPORT... call 515-281-3307
(April 10-Sept 2) Updated each Wednesday morning.

COMMISSION MARKS 50TH ANNIVERSARY

Fifty years ago, May 8, the present-day State Conservation Commission became an official agency of Iowa government. In the move to create the new agency, several smaller agencies were abolished and their powers concentrated in the commission. Among those agencies were the State Board of Conservation, which presided over Iowa's state parks, the State Fish and Game Commission, with authority over hunting/trapping, fishing, and the Office of State Forestry Commissioner.

The first biennial report, filed November 7, 1936, states there were 100 fulltime employees of the commission and they operated on a budget of less than $500,000. Today's staff of about 670 employees oversees a budget nearly $30,000,000. The evolution of the Conservation Commission over the past 50 years is the subject of a reunion luncheon hosted by the Commission, June 1 from 11:30 am to 3:30 pm, at the Des Moines Marriott. Hundreds of invitations have gone out to existing and past employees, governors, commissioners, and others who have enjoyed a close working relationship with the agency. (Anyone with an interest may attend the event by sending $10 before May 10 to Frances Brady, secretary to the director, Conservation Commission, Wallace Building, Des Moines 50319.)

Director Larry Wilson referred to the affair: "I feel it is critically important for the next 50 years of successful conservation programs in Iowa to acknowledge and understand the roots and developments of our early years."

WATER SAFETY POSTER CONTEST WINNERS ANNOUNCED

Winners of the Water and Boating Safety Committee of Iowa's fifth annual water safety poster contest have been chosen, according to the Iowa Conservation Commission. The theme for this year's contest was "Think Before You Drink — Be A Responsible Boat Operator."

Susan Eller, a fifth grade student from Denison Elementary School, won first place with her unique design of a ship in a sinking bottle and a message, "Don't Let A Bottle Sink Your Ship." Susan is the daughter of Mr. and Mrs. Thomas Eller.

In addition to winning a $200 savings bond and a certificate provided by IMT Insurance, Susan has been invited to meet Gov. Branstad and witness the signing of Iowa's safe boating proclamation in May.

Second place winner Matthew Menegay of Denison, a fifth-grader in Denison Elementary School, receives a $100 savings bond, and third place winner Christine McMurtry, a sixth-grader in Lincoln Central School, Gruver, receives a $75 bond. Honorable mention certificates will be mailed to 22 additional students whose drawings were selected by the judging panel.

IMT Insurance will print a quantity of the winning poster for distribution throughout the state. Cosponsors of the annual program are the Iowa Conservation Commission, U.S. Coast Guard Auxiliary, Des Moines Power Squadron, and the Iowa Chapter of the American Red Cross.

1984 BOATING ACCIDENT REPORT

Iowa boaters were involved in 45 accidents in 1984 resulting in 28 personal injuries and six fatalities, according to Iowa Conservation Commission officials. Property losses exceeded $75,000.

This is a decrease from 1983 statistics when there were 52 reported accidents, 28 personal injuries and 11 deaths. The decline in accidents may be attributed to below normal boating activity in the spring and early summer because of high water and cool temperatures.

Iowa's inland streams and border rivers once again proved to be the most dangerous, accounting for 23 accidents. Iowa's lakes accounted for 15 accidents and seven occurred on federal reservoirs. Types of accidents included four vessels capsizing, four vessels colliding with fixed objects and 15 boats colliding with other vessels.

According to Sonny Satre, recreational safety coordinator for the commission, almost all of the accidents could have been prevented by using good common sense and by following simple navigational rules. According to Satre, causes of the accidents including overloading, rough or hazardous water conditions, an improper lookout, operator negligence, excessive speed, faulty equipment, and alcohol use.

Satre urged boaters to be familiar with Iowa's boating regulations. To avoid collisions, boaters should be knowledgeable of right-of-way rules and speed and distance regulations. Boaters may obtain a copy of Iowa Boating Regulations from county recorder offices or by writing to the Iowa Conservation Commission at the address below. "Keeping Iowa Waters Safe," a 16-page booklet on water safety, is also available.

The commission has developed a home-study, boating-safety course which is ideal for ages 12 and older. Those who successfully complete the course will receive a certificate and safety boating patch from the commission. Successful students may also receive a discount on their boating insurance from several companies. Course materials may be obtained by contacting the Iowa Conservation Commission, Boating Safety Program, Wallace State Office Building, Des Moines, Iowa 50319-0034; 515/281-6824.

DUCK HUNTERS MUST USE STEEL SHOT

Steel shot will be required of Iowa waterfowl hunters this fall, according to Iowa Conservation Commission wildlife officials.

The commission passed the recommendation in December, and the Legislative Rules Review Committee approved the rule in early January.

The rule prohibits the use of shot shells containing anything but steel or soft iron shot within 150 yards of lakes, marshes, oxbows, bayous, seasonally flooded areas and rivers in the state for hunting migratory birds with the exception of woodcock.

Exempted areas are farm ponds under two acres, streams less than 25 feet wide, temporary sheet water, and dry land, provided they are not within 150 yards of a steel shot area.

The steel shot requirement is an effort to reduce the lead poisoning of ducks and geese. Waterfowl pick up the toxic lead shot while feeding in Iowa waters.

SELECTION AND CARE OF BOAT BATTERIES

By Russ Glime

Benton County Conservation Executive Officer

Boat batteries have come a long way since the 60's, when the first trolling motors were put on the market. Then the only battery available was the standard car battery, which was recommended for use in boats.

The deep-cycle battery had not been invented yet and little thought had been given to battery drain. The standard car battery is designed to deliver high amount of energy for a short period of time and then to be recharged by the alternator. A trolling motor requires less energy for a longer period of time, which drains the charge from the battery, requiring frequent recharging.

This repeated drain and recharge cycle has led to the development of a deep-cycle battery. A deep-cycle battery can be used in an emergency to start a motor but it is not recommended for continued use. Therefore some boats may require two different batteries.

The two batteries are made differently. Car batteries have thinner plates inside them and deep-cycles have thicker plates. The car type battery can normally be recharged about 50 times — whereas the deep-cycle battery with the heavier plates can be recharged around 200 times.

For normal boat applications of engine starting, or lighting, a standard battery will suffice, but a marine type battery or deep-cycle is a better choice. It is normally more ruggedly constructed to withstand vibrations found on a vessel and has screw type terminals for easier removal for charging and cleaning.

There are a variety of both marine and deep-cycle batteries on the market. It is wise to check the warranty on a battery you are considering as some usage will void the warranty such as using a car type battery for a trolling motor.

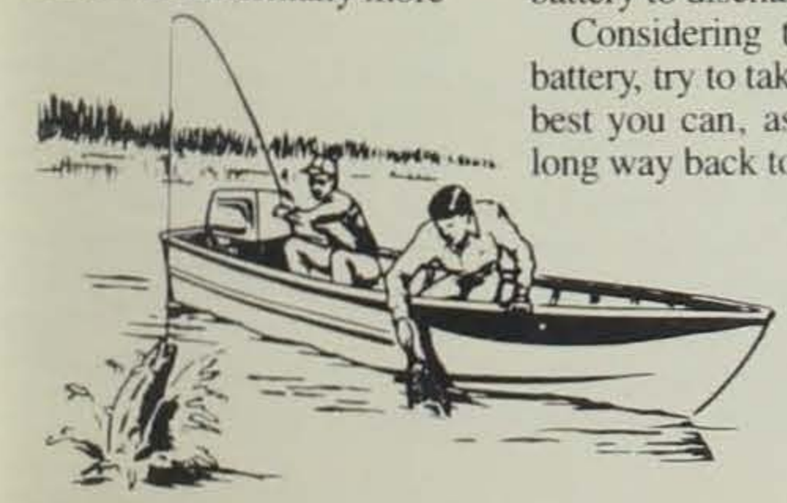
Care of the battery is especially important after you purchase the best quality battery for your money.

The most important item is to keep the water level filled over the level of the plates but below the bottom of the filler tube. Overfilling will cause the battery to overflow when the battery warms. Use any clean water, preferably distilled water to fill the battery.

If corrosion appears around the terminals, clean them with a wire brush. Hot water will remove most corrosion. Do not use baking soda solutions for cleaning as it has been found that the soda solution might enter a battery through a loose battery cap. Soda will neutralize the battery acid. Coat the terminals when dry with vaseline or grease to prevent future corrosion.

Keep the battery charged at all times even during off seasons. Crystalline sulfate forms on the plates of discharged batteries and will prevent full recharge. Keeping the battery in a cool place will also help as heat will cause a battery to discharge.

Considering the cost of a battery, try to take care of it as best you can, as it is often a long way back to shore.



IOWA DUCKS GET FINANCIAL BOOST

Conservation Commission director, Larry Wilson, (left) consumates an agreement with Billy Joe Cross of Clinton, Mississippi, coordinator of Ducks Unlimited's new MARSH program — Matching Aid for Restoring States Habitat. MARSH has donated about $87,000 to match an additional $30,000 of Iowa's state duck stamp money that will be spent on acquisition and development of waterfowl habitat in Iowa. Prior to the new MARSH program, funds had gone almost exclusively to waterfowl habitat work in Canadian provinces. Iowa is one of the nation's leaders in DU contributions per capita. Iowa has more than 100 chapters which raise funds from dinners, auctions and raffles.

Birds sleep in many different places. Most sleep in old nests close to where they feed. But sea birds snooze while floating on the water and a ruffed grouse will dive into a snowbank to catch 40 winks.

Other songbirds may flee when people move in, but the American robin seems to thrive amid civilization. It has adapted so well to humanity's imposition on the land that there are more robins in North America *today* than during colonial times.

CORRECTION: A 20-pound 6-ounce white amur was incorrectly listed in the 1984 Big Fish Awards as a walleye (page 17, April). The state record walleye is 14-lb. 6 oz. taken in 1968. The amur was not large enough to qualify in its class.

Warden's Diary

By Jerry Hoilien

The staff of the *Iowa Conservationist* would like to extend their sincerest sympathy to Jerry on the death of his wife Joyce.

Jerry's column will continue in a later issue.

DONATIONS

The following are contributions to George Wyth State Park:

Earl May Seed and Nursery Company, Cedar Falls	5 shrubs valued at $76.75
Platt's Nursery, Inc, Waterloo	122 shrubs and trees valued at $2,440
Anonymous	One week use of dozer for bike trail clearing, value $1,200
Jordans Nursery, Cedar Falls	35 fruit trees valued at $695
Waterloo Industries, Inc., Waterloo	2 tool chests and cabinets valued at $1,181.24
Anonymous	150 treated parking posts valued at $150 for Lake Ahquabi State Park
Lake Manawa Task Force Association, Council Bluffs	Labor for silt removal at Lake Manawa State Park, value $406
Herb Anderson Constr. Company, Council Bluffs	Equipment use for silt removal at Lake Manawa State Park, value $581
Mike Trebbien, Milford	Used four row corn planter for wildlife habitat enhancement at Gull Point State Park valued at $200
Lowell Walters, Spirit Lake	20 foot power pole for Gull Point State Park valued at $50
Recreation and Athletic Products, Iowa City	Playground equipment for Big Creek State Park valued at $200
Quiet Birdman Club, Waterloo	$100 for shelter construction at George Wyth State Park
Winnebago Corporation, Forest City	Lumber valued at $500 for construction projects at Pilot Knob State Park
Mr. and Mrs. Thomas Carder, Red Oak	$50 for Security lights in Viking Lake State Park
Mr. Bill Ricket, Waterloo	5 4-acre tract of land valued at $2,160
Earl Kralt, Council Bluffs	$5000 for construction of fishing shelter and pier at Swan Lake State Park

The following are contributions to Wapipinicon State Park:

Future Farmers of America	Materials and labor for volleyball court construction, value — $400
Stone City Iron and Metal, Anamosa	Truck rims and galvanized pipe for picnic grill construction, value — $50
Anamosa Stave Co., Inc., Anamosa	50 truck rims for picnic grill construction, value — $1,000
Linn County/Jones County Farm Service, Anamosa	Trenching work for campground electrification project, value — $500
Orval B. Hinz, Anamosa	Electrical supplies and labor for campground electrification project, value — $560
United Telephone Company of Iowa	63 telephone poles valued at $630
Eldon Ripperger, Burlington	Materials valued at $175 for playground equipment construction at Beeds Lake State Park
Estherville Sand and Gravel, Estherville	14 brake drums valued at $70 for fireplace construction at Ft. Defiance State Park
Anonymous	14 utility poles valued at $250 for park and trail projects at Black Hawk State Park
Anonymous	20 loads of wood chips valued at $450 for trail use at Black Hawk State Park
O'Hara True Value Hardware, Ottumwa	14 electric can openers valued at $280 for rental cabins at Lake Wapello State Park
Grandchildren of John F. Zalesky	$62 for waterfowl habitat maintenance at Hawkeye Wildlife Area, Johnson County
Mrs. Evelyn Connell, Des Moines	$480 memorial to William H. Connell, Sr. for fish and wildlife
J. Peter and Mary Gill Teschner	$100 to Gorda Gill memorial for fish and wildlife
Cedar Rapids Audubon Society	$150 to the nongame program

Leaders in Conservation

Dale Blankenhorn

One individual known and respected by many other conservation leaders in Iowa was Dale Blankenhorn of Mapleton. His interest and dedication to conservation issues was valued by public agencies and the political bodies which govern our outdoor recreation programs and maintain our natural resources.

Since his appointment to the Monona County Conservation Board in 1963, he had been a solid and steady force behind many conservation issues facing western Iowans. Of primary importance had been his determination to resolve the loss of wetlands due to Missouri River degradation. Where others might have given up long ago, Blankenhorn persistently spearheaded cooperative work and communication among all county, state and federal agencies. Although this situation has yet to be resolved, Dale diligently strived to keep members of Congress, the Iowa legislature, federal, state and local officials as well as the public abreast of all the facts and needs related to conservation.

His keen awareness and interest in the development of the Monona County Conservation Board's facilities over the past 22 years resulted in an excellent system of ten unique areas that are not only a source of pride to Monona County but also the entire state.

Dale learned early the meaning of conservation while farming a "hill farm" in the unique and easily erodable Loess Hills of Monona County. He found that in order to preserve soil, water, fish and wildlife, the only answer was in hard work.

Blankenhorn's personal commitment to conservation in his home, Monona County and in Iowa, was a testimony of his love and devotion for the natural world of lakes, streams, fish, waterfowl and plants. If the Missouri River, its oxbows and the flyway survive for our succeeding generations to enjoy, it will be due in large part to the unselfish devoted efforts of Dale Blankenhorn. Because of this, the Iowa Wildlife Federation honored him with the "Outstanding Conservationist in Iowa" Award in 1981. Dale Blankenhorn died earlier this year, shortly after being reappointed to another five-year term as chairman of the Monona County Conservation Board. Because of his dedication to conservation in general he will always be honored by the many who benefited from his efforts as a leader in this field.

CALENDAR OF EVENTS

May, June 1985

May 3, 4 and 23	Environmental Education Workshop	Hartman Reserve Nature Center Cedar Falls Black Hawk County 319-277-1536
May 3-28	Iowa's Wild Places Photo Exhibit Meet at Monument	E.B. Lyons Nature Center Dubuque 319-556-0620
May 3 and 4	"Year of the Tree" Planting Activities for Youth	Pottawatamie County Parks 712-328-5638
May 4	Project Arrowhead	Arrowhead Park Pottawatamie County 712-328-5638
May 4	Geological Field Tour 10 a.m. - 2:30 p.m.	Marshalltown Marshall County 515-752-3150
May 5	Grand Canyon from Top to Bottom 1-2 p.m.	Hartman Reserve Nature Center Cedar Falls Black Hawk County 319-277-1536
May 5	Wildflower Walk 1 p.m.	Woodland Mounds Preserve Warren County 515-961-6169
May 5	Wildflower Walk 2 p.m.	Indian Creek Nature Center Cedar Rapids 319-362-0664
May 5	Bird Walk and Slides	Lake Meyer Nature Center Winneshiek County 319-534-7144
May 5	Wild Woods Walk	Swan Lake State Park Carrol County 712-792-4614
May 5	Wildflower Walk	Swiss Valley Nature Preserve Dubuque County 319-556-6745
May 6	Sky Dance 6 p.m.	Lime Creek Nature Center Cerro Gordo County 515-423-5309
May 9	Nature Movie Night 7:30 p.m.	County Arboretum Onawa Monona County 712-423-2400
May 11	Exploring for Birds/hike 7 a.m.	Five Ridge Prairie Plymouth County 712-947-4270
May 11	Wildflower Walk 1 p.m.	County Arboretum Onawa Monona County 712-423-2400
May 11	Wildflower Hike	Jefferson County Park Fairfield 515-472-4421
May 11	Sunrise Bird Hike	Swiss Valley Nature Preserve Dubuque County 319-556-6745
May 11	Warbling Warblers 9-11 a.m.	Hartman Reserve Nature Center Cedar Falls Black Hawk County 319-277-1536
May 11 and 19	Spring Wildflower Rambles 1-2:30 p.m.	Hartman Reserve Nature Center Cedar Falls Black Hawk County 319-277-1536
May 11 and 25	Oskaloosa Community High School Touring Troupe	Lake Keomak State Park 515-673-6975
May 11	Bird Walk with Jim Landenberger 8:15 a.m.	Indian Creek Nature Center Cedar Rapids 319-362-0664
May 11	Wildflower Program with Sylvan Runkel	Indian Creek Nature Center Cedar Rapids 319-362-0664
May 12	Wapsepenicon River Canoe Trip 9:30 a.m. - 3 p.m. reservations must be made by May 5	Indian Creek Nature Center Cedar Rapids 319-362-0664
May 12	Mines of Spain Walk 1 p.m. Meet at Monument	E.B. Lyons Nature Center Dubuque 319-556-0620
May 12	Mushroom Walk and Slides	Lake Meyer Nature Center Winneshiek County 319-534-7144
May 18	Earthsongs — Doug Wood 2 p.m.	Lime Creek Nature Center Cerro Gordo County 515-423-5309
May 18	Kids Fishing Day 8 a.m. - 1 p.m.	Izaak Walton Lodge Warren County 515-961-6169
May 18	Kids Fishing Day	Pollmiller Park Lee County 319-463-7673
May 18	Fat Tire Bike Race 10 a.m. - 4 p.m.	Lake Ahquabi State Park 515-961-7101
May 19	Edible Wild Foods 1 - 3 p.m. Meet at Monument	E.B. Lyons Nature Center Dubuque 319-556-0620
May 19	Snake Program and Hike	Swiss Valley Nature Preserve Dubuque County 319-556-6745
May 19	Chicken BBQ 12 - 4 p.m.	Lime Creek Nature Center Cerro Gordo County 515-423-5309
May 19	Edible Wild Plants	Lake Meyer Nature Center Winneshiek County 319-534-7144
May 19	Exploring the Loess Hills/hike 2 p.m	Joy Hollow Camp Plymouth County 712-947-4270
May 25	Camp Area Program	Clear Lake State Park 515-357-4212
May 25	Bird Binding 9 a.m	Hickory Hills Warren County 515-961-6169
May 25	Wildflower Hike	Jefferson County Park Fairfield 515-472-4421
May 25	Movie Night	Swan Lake State Park Carrol County 712-792-4614
May 26	Wild Food Foray	Swan Lake State Park Carrol County 712-792-4614
May 26	Buffalo Bill and His Ladies Buffalo Chip Throwing Contest	Swan Lake State Park Carrol County 712-792-4614
May 26	Oskaloosa Community High School Touring Troupe	Lake Wapello State Park 515-722-3371
May 26 and June 9	Wagaman Mill Tour	Lynnville Jasper County 515-792-9780
May 27	Lake Race	Clear Lake State Park 515-357-4212
May 29	Dusk Hike and Movie 7:30 p.m.	Lime Creek Nature Center Cerro Gordo County 515-423-5309
May 31, June 1 and 2	Loess Hills Prairie Seminar	Turin Monona County 712-423-2400
May 31, June 1 and 2	Iowa Wildlife in Art Show	Marriott Hotel Des Moines
May 31	Conservation Commission Meeting	State Forest Nursery, Ames
June	Boat Sailing Instruction Tuesdays, Thursdays and Fridays 2:30 - 4:30 p.m.	Pine Lake State Park 319-263-4337
June 1-30	IOWA RIVERS MONTH	
June 1-30	Photo Exhibit "Iowa's Natural Heritage"	Panora Museum Guthrie County 515-755-3061
June 1	Full Moon Swamp Tromp	Lake Larson Story County 515-232-2516
June 1	Camp Area Program	Clear Lake State Park 515-357-4212
June 1 and 2	Canoe Competitions (advanced registration required)	Madison County 515-462-3536
June 2	Folk Arts in the Forest 1:30 - 5 p.m.	East Lake County Park Osceola Clarke County 515-342-3960
June 2	Canoeing for Beginners	Lake Meyer Nature Center Winneshiek County 319-534-7144
June 7-9	Lewis and Clark Festival	Lewis and Clark State Park 712-423-2829
June 7	Pine Lake Wildlife Club Fish Fry	Pine Lake State Park 515-858-5832
June 7-9	Eldora Greenbelt Family Festival	Pine Lake State Park 515-858-5832
June 8	Exploring for Birds/hike 7 a.m.	Five Ridge Prairie Plymouth County 712-947-4270
June 8	Tree Identification Hike	Whitham Woods Fairfield Jefferson County 515-472-4421
June 8	Custer's Last Stand Campground Program 7:30 p.m.	Springbrook State Park 515-747-3591
June 8	Camp Area Program	Clear Lake State Park 515-357-4212
June 8	Skunk River Canoe Trip	Story County 515-232-2516
June 9	Huck Finn Fishing Derby 8 a.m. - 3 p.m.	Brauns Lake Woodbury County
June 9 and 15	Devil's Backbone Nature Walk 2 p.m.	Pammel State Park 515-462-2188
June 9-15	STATE PARK WEEK special activities in state parks	
June 9	Artists in the Parks Day 1 - 4 p.m.	Wildcat Den State Park 319-263-4337
June 9	North Raccoon River Canoe Float	Hobbs Park Carroll County 712-792-4614
June 9	Prairie Flower Walk	Ludwig Reserve Park Winneshiek County 319-534-7145
June 11	Outdoor Photography 6:30 p.m.	Cerro Gordo County 515-423-5309
June 13	Pine Lake Country Club 4-Woman Golf Tournament	Pine Lake State Park 319-263-4337
June 14 to July 26	Junior Golf Program	Jester Park Golf Course Polk County 515-999-2903
June 15	Wild Edibles 10 a.m. - 2 p.m.	Story County 515-232-2516
June 15	Kids Fishing Day	Q-Pond City Park Osceola Clarke County 515-342-3960
June 15	Youth Fishing Clinic	Wright County 515-532-3185
June 15	Camp Area Program	Clear Lake State Park 515-357-4212
June 15	Volga River Rec Area Photo Contest Judging	Volga River Recreation Area 319-425-4161
June 15	Springbrook Bike Hike	Springbrook State Park 515-747-3591
June 15 and 16	Cruiser Regatta	Clear Lake State Park 515-357-4212
June 16	Father and Son/Daughter bluegill fishing contest	Lake Anita State Park 712-762-3564

Nature Tale for Kids

Syl — The Wise Cottontail

By Dean M. Roosa

One of the most abundant species of Iowa wildlife is the cottontail, known to scientists as *Sylvilaqus floridana*. Every farm, every orchard, every woodlot, has one or more resident pairs. In Nature's scheme, they provide food for hawks and owls, foxes and coyotes; they provide many hours of sport for boys, and many hours of merriment for every beagle, past, present and future. They achieve a length of about 15 inches, a weight of two to three pounds. They love bramble patches, and that is where our story begins.

Sleepy Hollow is well known to all the hunters in the county. The soil is sandy and everyone knows sand doesn't grow corn. For this reason the hollow lay

Illustration by Rex Heer

unattended, of uncertain ownership. Some said the county owned it; others were sure the bank did. On one thing everyone agreed — it was good rabbit country.

Farmers had tried to grow corn, oats and alfalfa, all to no avail. Therefore, it was left wild. Weeds flourished, then gave way to young trees. Multiflora rose, a newcomer, did very well — hunters and beagles hated it; rabbits loved it.

One winter, over 80 rabbits were taken home by hunters, but that didn't make a dent in the population. One old buck rabbit, seeing how hunters and their dogs steered clear of the thorny rose, occupied a burrow in the middle of the patch. He was four years old, and the wisest rabbit in Sleepy Hollow. He was wise to the ways of the great horned owl, and, because the owl liked to hunt from sunset until dark, stayed late in his burrow. The owl had caught 15 rabbits during the spring and summer and the sage of the valley did not want to become number 16.

The old rabbit wooed and won a pretty little doe from the sand terrace farther upstream, and persuaded her to come to the multiflora rose patch where seven young were born. These babies, no bigger than chipmunks, wandered near the burrow, nibbling on the delicious new grass sprouts. The old buck worried about them and hovered close, keeping them near the burrow. Early one morning, a young fox from the terrace across the creek found a young bunny that had strayed from its mother. Next, a weasel crept into the burrow and carried away another youngster. Later, despite all the old buck could do, the owl caught his sixteenth rabbit one moonlit night.

The remaining four were nearly grown now, but the hunting season opened one Saturday morning. That night, the mother could account for only two of her young family. The old buck had departed to a burrow in a new multiflora rose patch farther from the owl's territory.

One bright night when the moon was full, every rabbit in Sleepy Hollow bounded in the freshly fallen snow. In the morning, the valley was a mass of tracks, but a small patch of fur and large tracks told a story — a coyote from Keg Hollow had used the bright moonlight to reduce the litter to a single male rabbit, Syl.

Syl had learned everything his mother could teach him — how to hide in the grass and remain motionless, how to listen in every direction before eating, how to use the thorny rose and fence to escape, how to dodge in a zig-zag course when hunters were close. One night the old buck, wise as he was, stepped into a trap, much to the delight of the young trapper from town. This left a vacant territory which Syl claimed as his own in February. Syl hated the beagle that came to Sleepy Hollow nearly every day. He learned that the beagle disliked the thorny rose just as much and delighted in luring the small hound into the patch and listen to his painful yelps. Eventually, the beagle hunted only the lower valley, and once again Syl was at peace.

A strange disease came to Sleepy Hollow and caused many rabbits to die. For two years Syl saw only two others, both males from the sand terrace. Those few remaining had all the greens they could eat and there was little danger because the owl and foxes had left the valley when the rabbit population collapsed. The next year, many new rabbits entered the valley from Keg Hollow where the disease had not hit, and for the first time, Syl was the father of a litter in the same burrow where he had been born three years earlier. He was proud as punch, and fussed over the youngsters until they all were nearly grown. One by one, the young left the burrow until just Syl and his mate remained.

Syl and the doe raised six litters before Syl left to cross the river one cold winter night. He hopped upstream and entered a young orchard. The bark of the immature trees was oh-so-delicious. He went from tree to tree night after night, not knowing the orchard owners were downright unhappy about the damage to their trees. A few nights later, he was standing high on his hind legs reaching for a limb when a thunderous noise and searing pain simultaneously reached him. Over and over he rolled, his piercing shriek told the orchard owners the pellets had found their mark. He ran, limped and bled, and hopped painfully back to Sleepy Hollow where he dragged himself into his familiar burrow. Syl recovered, but still runs with a limp which means he must be even more careful now.

Syl and the doe still live in Sleepy Hollow in the midst of a multiflora rose thicket where the owl, the fox and that cussed beagle can not go. Sleepy Hollow is still known to all the hunters in the county; hunters who know this is where they can find plenty of sand, multiflora rose and Syl, the wisest rabbit in the valley.

Classroom Corner

By Robert Rye

Rodents are easily identified by their characteristic teeth. They have a single pair of long, chisel like incisors, in the front of both the upper and lower jaws. These are gnawing teeth, and this animal group is commonly called gnawing mammals. The word gnawing, in the Latin language is *rodentia;* and hence, the order name, Rodentia.

Rodents do have other teeth, but they are separated from the gnawing teeth by a wide space. They are located back in the cheek and are used for grinding.

There are many representatives of the Rodentia order in Iowa. This is logical because globally this order is the largest of the mammals both in individual numbers and species. Examples of rodents are: squirrels, gophers, mice, beavers, rats and muskrats.

RODENT QUIZ

1. Most common and widespread rodent in America is the _____.
2. The largest rodent is the _____.
3. Introduced rodents that are considered pests are the _____ and the _____.
4. A valuable rodent that builds an oval lodge in shallow water is the _____.
5. Our only tree-living, strictly nocturnal rodent is the _____.
6. A gray, tree-living rodent that has a black phase is the _____.
7. Our largest diurnal tree rodent, sought by hunters is the _____.
8. Multi-striped rodent found in open grassy habitat is the _____.
9. The rodent that hibernates four to five months a year is the _____.
10. Woodland rodent with white stripes on the face is the _____.
11. A stocky rodent that excavates a tunnel system and pushes dirt to the surface through a side tunnel is the _____.

Answers:

1. white-footed mouse. 2. beaver 3. Norway rat, house mouse 4. muskrat 5. flying squirrel 6. gray squirrel 7. fox squirrel 8. thirteen-line ground squirrel 9. woodchuck 10. Eastern chipmunk 11. Plains pocket gopher

Lowell Washburn

Return of the River

When the first white explorers came to Iowa, river otters were a regular part of the animal community. Because otters are carnivores at the top of the food chain, they were probably never as abundant as many of Iowa's native animals. Still, they lived along most Iowa streams, including the interior creeks and rivers as well as the Missouri and Mississippi. Otters, like beaver, were relentlessly pursued by the early trappers and settlers because their pelts were very valuable. In a relatively short period of time, otters were rare in Iowa and by the early 1900's they had been eliminated from interior streams.

That otters occurred along the Des Moines, Raccoon, and other Iowa rivers is indisputable. A specimen at Iowa State University was taken in Story County along the South Skunk River near Cambridge. The otter was captured in 1881. Another report, from a 1913 letter, the author of which remains obscure, states that, "M.W. Conwell, a local furrier, displays the skin of a large otter recently trapped on the Des Moines River near Harvey, ten miles east of Knoxville." The report mentions another otter that escaped from a trap in the same area. Undoubtedly, these reports are but a very small sample of the otters that occurred in interior Iowa because most were probably sold for the value of their pelts and never became a part of the permanent written record.

Today, remnant populations of river otters persist only in northeast Iowa along the Mississippi River and a few tributaries. Otters are now classified "threatened" in Iowa. Although they have been given complete legal protection, there is no evidence that these few otters will repopulate interior Iowa streams on their own. For this reason, the Iowa Conservation Commission is making an effort to reestablish individuals that have been captured in other states where they are more numerous. A three-way trade between conservation departments in Iowa, Kentucky, and Louisiana has resulted in the release of 16 river otters this spring at the Red Rock Reservoir in Marion County. The release site was close to the location where the aforementioned 1913 capture took place. The trade that made this release possible involved 32 wild turkeys that went from Iowa to Kentucky and the purchase of the otters by Kentucky from a person in Louisiana. The otters are coming directly from Louisiana to central Iowa for the release. With a little luck, these animals will become established and develop a self-sustaining population along the Des Moines River.

Besides being a place where otter previously lived, the Red Rock area ha additional attributes that make it a suit able release site. There are over 25,00 acres of publicly owned land around th reservoir where access is controlled an the otters can be given needed protec tion. This large area encompasses a abundance of habitat that otters prefe including tributary streams, borrow pits and ponds. In addition, there is plenty o food (mainly fish and crayfish) for th otters.

Even though Lake Red Rock does nc resemble the bayou country that mos people associate with Louisiana, the ot ters are expected to do well there. Th Missouri Department of Conservatio

Lowell Washburn

Otter

By Doug Reeves

has transplanted Louisiana otters to several areas, some just a few miles south of the Iowa border. These releases appear to have been successful.

River otters are enjoyed by nearly all people who see them or know of them. Their active nature is often described as playful. Their sleek appearance and their habit of sliding along on their belly make them the theme of children's tales. The return of these animals to the Red Rock area will add a significant dimension to the animal community. The few lucky people who actually observe one of the otters in the wild will undoubtedly cherish the experience.

Because otters are secretive and seldom seen, wildlife researchers equipped each of the 16 animals with a surgically implanted radio transmitter. The project, which is being funded with proceeds from the "Chickadee Checkoff," will allow researchers to monitor survival and movements of the otters. Initial movements of some otters might be quite extensive. In other states where otters have been released, individual animals have travelled as far as 20 to 30 miles from the release site. Using the information gathered during the research project, biologists hope to determine the likelihood other releases might be successful.

In addition to the radio telemetry research, another important research tool will be an "otter reporting card" that any observer can fill out and return to the conservation commission. The card will be used to report sightings of otters or otter sign anywhere in Iowa. This will provide additional information about the range of native otters in Iowa as well as movements of released otters when telemetry equipment ceases to function. Eventually the reporting cards may help determine if the released otters reproduce.

Releases of otters on other interior streams are being considered. There are several locations that may be acceptable sites for reestablishment of the animals. One day, river otters may again be found and enjoyed throughout much of Iowa.

Doug Reeves is the nongame wildlife biologist located at Boone. He holds a B.S. degree from Michigan State University. He joined the commission in 1984.

Bill Pusateri

Wildflower of the Month

White Snakeroot

Eupatorium rugosum

By Dean M. Roosa and Bill Pusateri

White snakeroot (*Eupatorium rugosum*), a member of the Daisy family Asteraceae, is found in partial shade in rich or rocky woodlands throughout the state. It blooms late in the summer and grows to a height of up to five feet. It features stark white flowers, and has sharply toothed leaf margins.

The thing which makes it special is the fact that it is poisonous. In the early history of the country, it was an important plant to know because it caused "milk sickness" and was probably responsible for many deaths. When pastures become dry late in summer and forage is scarce, cows will eat this plant and it secretes a poison into the milk. This poison can be transmitted to humans. The cattle also developed a disease called "trembles."

Because the pioneers did not know the actual cause of deaths due to this plant, they felt their land was cursed and would move elsewhere. Due to greater awareness and because woodlands are not used so extensively as pastures, this plant probably no longer poses a danger; however, it would benefit landowners to become acquainted with it to prevent any accidental poisoning.

Larry Mizner

By Vaughn L. Paragamian

"Yuck"! "Dad will you take this glop of green slime off my hook, I can't even see my worm." I reached over and removed the green mass from my daughter's hook. We were fishing the shoreline of a friend's pond which was reported to contain many bluegills, some nice bass and a few channel catfish. It also held an abundance of aquatic vegetation.

I learned a long time ago to leave my gear at home when fishing with kids. Most of my efforts would be in assisting them, especially at removing weeds from their hooks. I said weeds, because when a plant becomes a nuisance, it automatically becomes a weed.

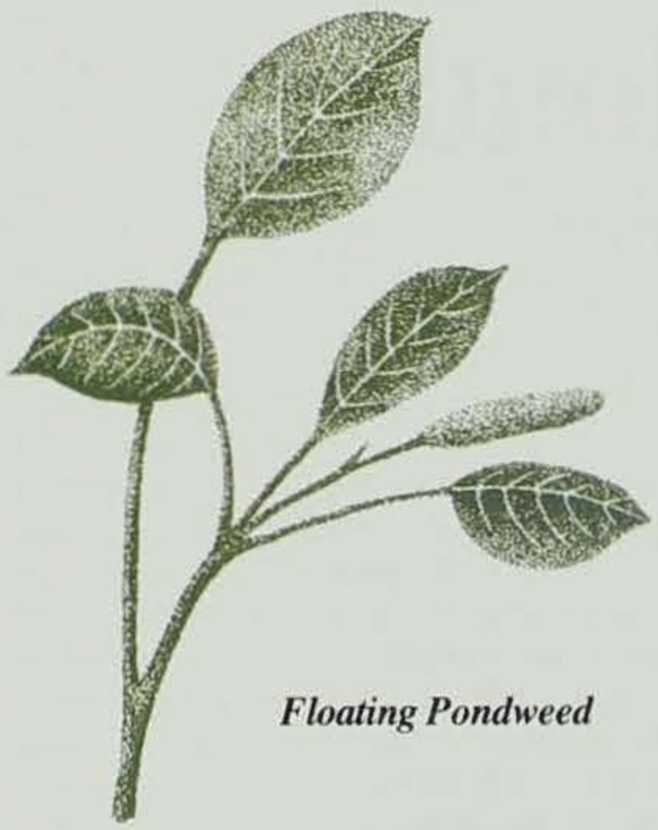
Most lakes and ponds in Iowa have dense stands of aquatic vegetation when not controlled. Depending on conditions, they may or may not be weeds. Many are very attractive and have essential roles in a lake or pond ecosystem. However, when they become abundant, they can create some real problems.

Some colloquial names used in reference to aquatic vegetation are moss, grass, cabbage, slime and of course seaweed. There is a great variety of plants. The four major types are algae, free floating, submergent and emergent.

Algae are very primitive plants closely related to fungi. They do not have true leaves, stems or root systems. These organisms have adapted to a variety of environmental conditions. Although they are often microscopic in size, during periods of abundance the plants create a green cast to the water, referred to as a "bloom." Algae can be placed into three categories; planktonic, filamentous, and attached — erect forms. Planktonic algae are microscopic plants suspended in the water, and when over abundant, create the bloom. These types of algae provide the first stage in the transfer of the sun's energy to food chains and also provide oxygen necessary for fish and other animals. Natural die-offs may occur during the summer, however, and the decomposition of these organisms consumes oxygen. This decomposition process of dead algae, when severe, can use up nearly all available oxygen and result in suffocation of fish. Some of these blue-green algae can even be toxic to fish. Others impart odors or tastes into the water and the fish. Under these conditions the best eating species of fish can taste "musty." Once the bloom is over, however, the fish regain their flavor.

Filamentous algae is often referred to as "moss" or "pond scum." It forms greenish mats that grow on the bottom of lakes, shorelines, rocks, turtles, boats and docks. Individual strands are actually a series of one-celled plants joined together.

The attached erect forms give the appearances of a plant with branched stems. They too are unicellular plants



Floating Pondweed

Vaughn Paragamian is a fisheries research biologist located at Manchester. He holds an M.S. degree from the University of Wisconsin. He has been with the commission since 1973.

joined together at the ends. They may be green or yellow in appearance and have a gritty texture. They are among the most advanced forms of algae.

The remaining types of aquatic plants are more advanced and complex than the algae. Among them are the free floating plants commonly known as duckweed. These plants grow in quiet backwater areas of lakes or ponds. They are sometimes mistaken for algae because they occasionally form such dense populations that they cover acres of water. The commonest form in Iowa has a small root system that extends from small oval leaves.

Submergents include a variety of plants with varying shaped leaves, stems and root systems. These plants are very limp when out of water and lack any rigid support. Many have flowers that often extend out of the water which produce seeds and in turn provide an important food source to waterfowl. Submergent plants provide cover for young fish. They also stabilize silty lake bottoms and serve as places for attachment of small animals that are used as fish food. Lush beds of this vegetation are often jungle-like and beautiful in appearance. However, dense growths can be a serious nuisance to fishermen and swimmers and motor props. Excessive vegetation is often responsible for stunted fish populations because predators can't find their prey. Poor growth of all species results when too many small fish compete for a limited supply of food. Such common submergent plants found in Iowa include: coontail, pondweeds, elodea, eelgrass, water butter cups, najas and water lilies.

Emergent plants grow above water in shallow bays and ponds. Their stems are rigid and are not dependent on water for support. Many can be found in roadside ditches or marshes where the soil is saturated. This group is probably the least responsible for nuisance conditions in Iowa. The group includes cattail, bulrush, sedges and jewel weed.

Weed control begins with the design of lakes and ponds and several considerations should be taken into account before construction. A good lake or pond is relatively deep and the shorelines are abrupt. Maintaining a good sod cover along the banks prevents erosion. Livestock must be kept out and runoff from poultry or livestock operations must be eliminated.

Further control of aquatic weeds can be accomplished by mechanical, chemical or biological methods. Mechanical means usually involve physical removal of vegetation by cutting or pulling. These techniques are not very lasting since removal must be repeated several times throughout the summer.

Chemicals may produce rapid results, can be purchased locally and are selective for certain plants. They are, however, expensive and most require more than one application. Chemicals are dangerous and all require an applicators license. The weed must be specifically identified and the area of treatment must be calculated. The results of chemical control are unpredictable.

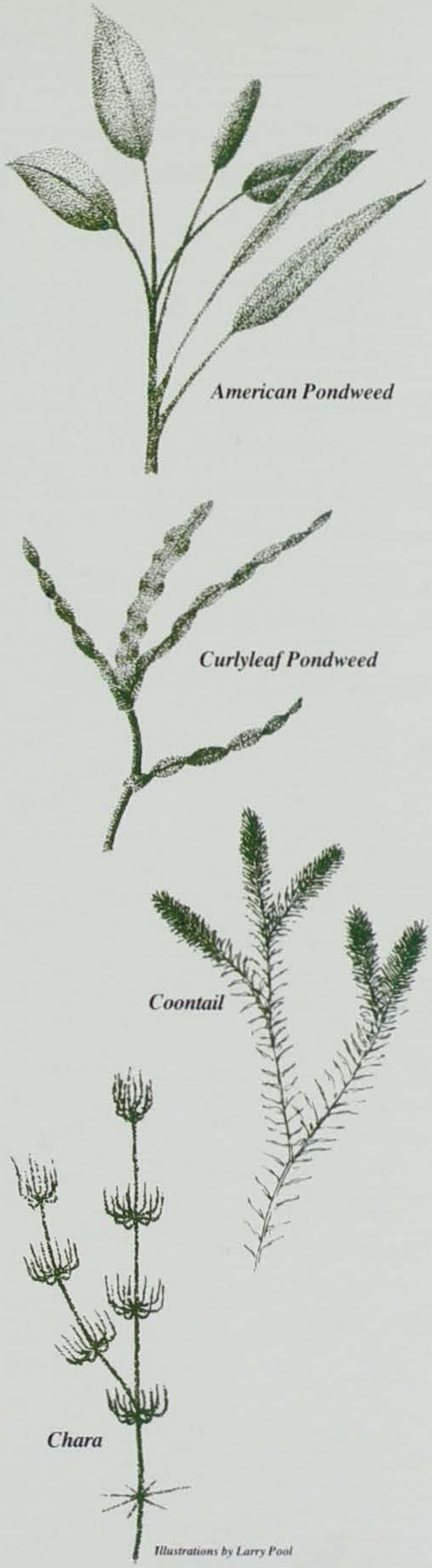
Biological control of aquatic weeds has included crayfish, insects, competitive species of plants, plant diseases, manatees (a large aquatic mammal) and white amur. Some of the biological controls are still in the experimental stage while experimentation with the white amur in Iowa is complete.

Aquatic weed control used by the Conservation Commission involves stocking white amur. Experimentation with the weed-eating fish was conducted at Red Haw Lake for six years. Results indicated nearly 100 percent control of vegetation within four years of stocking, with positive effects on fishing. A big benefit at Red Haw Lake was to shoreline anglers. Angling from shore prior to the introduction of the white amur was nearly impossible from mid-June through August. Fishermen are now able to fish from shore throughout the summer without interferance from vegetation. During the same period the number of anglers fishing Red Haw Lake from shore increased three-fold.

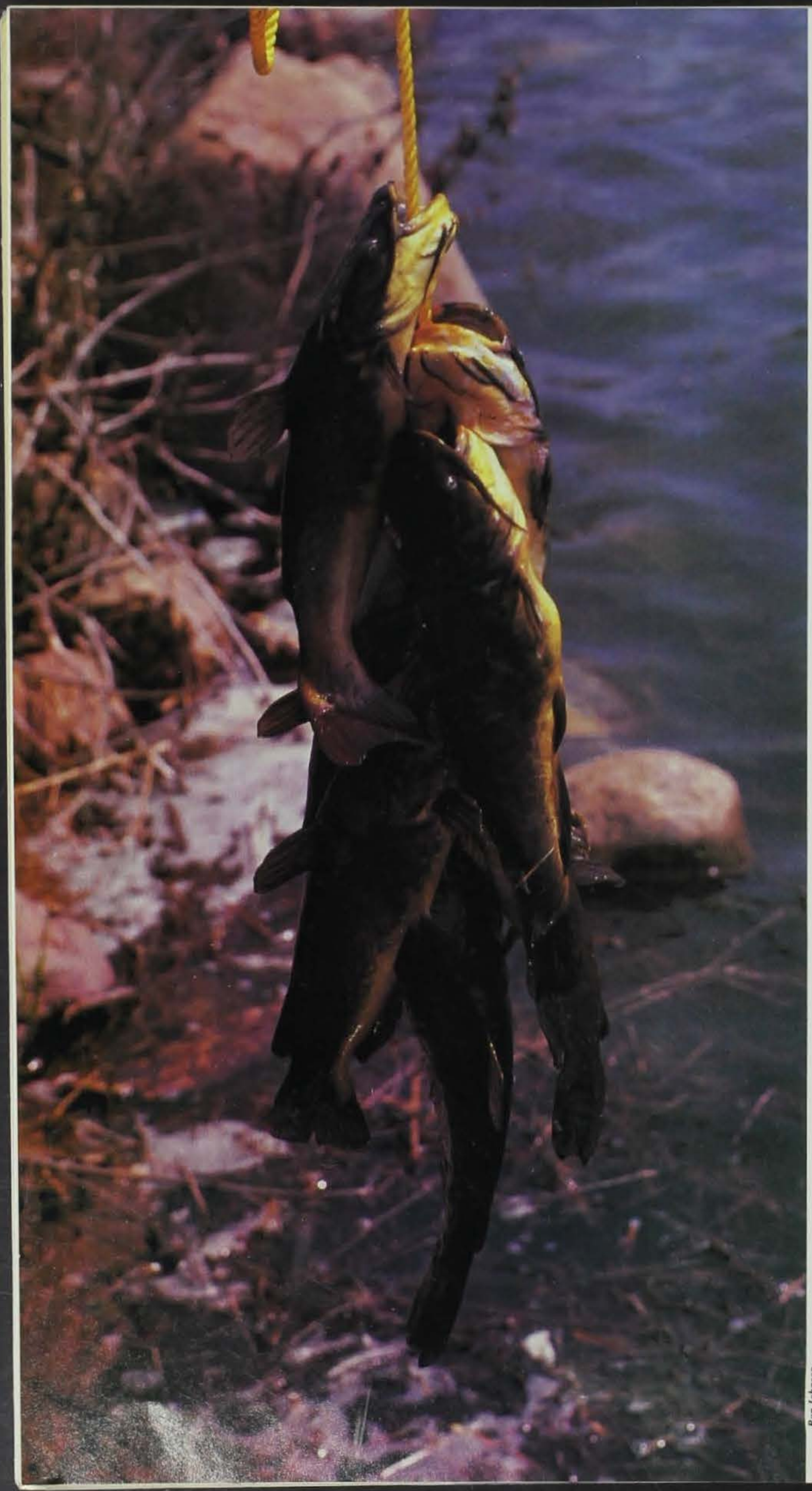
Use of white amur is recommended for vegetation control of farm ponds under most circumstances. Whie amur should be stocked at a rate of ten 10-inch fish per acre. Supplemental stocking should occur about every four years because this species does not reproduce in Iowa. White amur will not control algae blooms or emergent vegetation, however.

White amur are available from numerous private hatcheries in Iowa. A list of those hatcheries is available from any commission district office. A permit is not required to purchase this species.

White amur had been stocked in my friend's pond the previous season. We noticed a modest change in the amount of vegetation, but realized another year would be needed to achieve the proper balance. Then there would be enough aquatic vegetation to attract food and provide shelter for the fish. At the same time, the pond would be open enough to allow my daughter and I to get to them.



Illustrations by Larry Pool



Ron Johnson

The Ar

By Ron Claussen and Jim Christianson

Bullheads, slicks, heads, slimers, or *Ictalurus melas*, no matter what you call them they're still the slippery, spiney critters that many anglers enjoy catching and eating but few cherish the thought of cleaning. The Ouches! Uches! Whews! and Ohs!...are just some of the expressions used while trying to skin, peel, cut, butcher and generally mutilate a good mess of "heads."

After the fun and excitement of bullhead fishing has subsided, anglers are faced with the realization of having to clean their catch. Some choose to hire the job done, others agonize and suffer through the process, and still others, with a little know-how, accomplish the task with relative ease.

Two basic tools required are a good sharp knife and a skinning pliers. A regular pliers will work but skinning pliers work better because they can be used to cut fins and bone. Some individuals modify this pliers by taking the spring out or reducing the tension on the handle.

The first step is to grasp the bullhead, with the thumb and fingers in the gill cavities, (watch out for the spines) and make a cut, skin deep, across the back and down the sides of the fish. After this cut, the pliers are used to clip the forward portion of the anal fin and the dorsal fin. From the top position grasp the skin with the pliers and with a steady pull remove the skin toward the tail. If you're good the skin comes off in one piece.

The next step is to break through the back bone where the initial cut was made. This can be done with the skinning pliers. A downward motion on the head will nearly sever this portion from the rest of the fish. At this point two options are available. If you do not want the belly meat, continue the downward pressure on the head and back toward the tail of the fish. This will separate the head, belly meat and most entrails from the rest of the bullhead. The second option is to save the belly meat. This can be done by continuing the downward pressure on the head and then pulling the head and body in opposite directions.

After either of these procedures, the entrails have to be cleaned out. Again, the pliers can be used. Some individuals leave the tail and others remove this fin. For better keeping, the dressed fish

# of Cleaning Bullheads

fish, and frozen for that future taste treat.

Late May and early June are bullhead times in most Iowa lakes. These fish are usually caught from shore. The nightcrawler is by far the most commonly used and successful bait and it is usually fished on or near the bottom with or without a bobber. Remember, it does not should be put into a watertight container, with enough water added to cover the take heavy tackle; in fact, the lighter you go the more successful you will be. Also don't stop fishing just because the sun goes down. A lot of bullheads are creeled after dark.

After a rewarding bullhead fishing experience, some of the blood-sweat-and-tears of preparing your catch for the table can be eliminated by using these basic cleaning techniques.

Ron Claussen is a fisheries technician and Jim Christianson is a fisheries management biologist located at Spirit Lake. Claussen has been with the Commission since 1957 and Christianson since 1969.

Jim Christianson

Jim Christianson

Jim Christianson

A couple of recipes to try if you want something other than just panfried bullheads:

PICKLED BULLHEAD*

Bullheads	2 cups vinegar
4 medium onions	1½ cups water
5 to 6 bay leaves	1 tablespoon salt
1 tablespoon whole pickling spice	Pepper

Cut up onions; put on bottom of small roaster; add bay leaves and whole pickling spice. Lay skinned bullheads over this, close together. May use more than one layer. Cover with a solution of 2 cups vinegar and 1½ cups water and 1 tablespoon salt and pepper. Cover and boil slowly until fish are cooked. Cool in roaster until cold. Serve cold.

*From: Wild Game Recipes. Carroll County Wildlife League, Carroll, Iowa.

BULLHEADS MARINATED IN BARBECUE SAUCE*

3 tablespoons chopped onion
1 tablespoon olive or vegetable oil
¼ cup packed dark brown sugar
¼ cup catsup
¼ cup cider vinegar
2 tablespoons Worchestershire sauce
½ teaspoon dry mustard
¼ teaspoon salt
¼ teaspoon pepper
⅛ teaspoon dried oregano leaves
1½ to 2 pounds small whole bullheads, heads and skin removed.

4 to 6 servings

In small skillet, cook and stir onion in olive oil over medium heat until tender, about three minutes. Stir in brown sugar, catsup, vinegar, Worcestershire sauce, dry mustard, salt, pepper and oregano. Cook, stirring occasionally, until bubbly. Reduce heat. Simmer, stirring occasionally, for ten minutes.

Place fish in medium bowl. Pour marinade over fish and cover. Refrigerate at least 30 minutes, turning fish over once. Set oven to broil or 550°F. Grease boiler pan. With slotted spoon, remove fish from bowl and place on pan. Baste with marinade. Broil until fish flakes easily at backbone, about seven minutes.

*From: Cleaning and Cooking Fish.
The Hunting and Fishing Library by Sylvia Bashline.

Wildlife

By Ken Herring

The story was not unusual for Iowa. Sad perhaps but by no means unusual. The young farm lad had discovered the litter of raccoons in the old barn and had convinced his parents that he would be completely responsible for his new pet. The parents had reluctantly agreed, but only if "Tommy took complete responsibility."

Things went well enough at first all right. The entire family warmed to the challenge of getting the new pet to accept its new "mother" and the constant human attention helped get "Charlie" used to a new way of life. Everyone enjoyed the bottle feedings of milk and the baths, grooming and playful antics of the young raccoon. Charlie even accepted the collar and leash Tommy used when he walked the animal and Tommy was pretty special when his friends found out about his new pet.

But summer is a very busy time both for young boys and raccoons. Raccoons just don't play baseball very well. When Charlie was little, Tommy had liked putting him in his bicycle basket and taking him for rides to see his friends. But now Charlie was too big and was really somewhat of a bother to carry on the bike basket. Anyway, what does a boy do with a raccoon at the public swimming pool where pets are not allowed?

Then came summer camp and Charlie had to be kept in a cage for two full weeks without any of Tommy's attention. After that came the family vacation and there was just no way the raccoon could go.

Before long, summer vacation was drawing to a close. Tommy's thoughts turned to school and his new bicycle that he had received for his birthday. More importantly Tommy and his friends spent more and more time together during the last of vacation.

Charlie wasn't forgotten completely. Tommy still fed and watered the animal faithfully, but cleaning Charlie's cage was now a real chore. It was much harder to find time to play or otherwise devote time to the raccoon. Then there was the day that Tommy reached in to play with Charlie and received a bite. It wasn't a bad bite but it was enough to scare Tommy. After that Charlie got out of his cage even less.

Charlie was just getting too big. Charlie never wanted for food. He had grown rapidly and was a full one-third larger than his littermates. Charlie's littermates had had an eventful summer as well, learning where to find food in the wild areas around the farm. They learned all that is necessary for raccoons to survive, like where to hide, what to avoid and where to find water and different types of natural food. Charlie's five brothers and sisters were now but three however. One of his sisters had been killed by a car one rainy night and the other sister had been caught by the Johnson's dog when she didn't get out of the sweetcorn patch soon enough.

In the wild, Charlie's life would have been as uncertain as his littermates. He may have lived to be perhaps 10 years old or he may have been the one to be caught by the Johnson's dog. But one thing is certain: Charlie's future in the wild ended the day Tommy took him as his pet.

Not much had changed in Tommy's busy routine for the last month. October's first frost was upon the land. It was Sunday and Tommy's sister Sarah was feeling the excitement of a beautiful October morning on the farm. Charlie also was feeling the effects of October's changes. The shortened day length, cool brisk nights and changing leaves stirred something inside the animal. Fall is a busy time for raccoons. Wild fruits as well as corn are abundant. Heavy feeding by raccoons in the wild prepare them for winter months ahead. Young raccoons like Charlie wander further during the nighttime hours and eventually some of the young but seasoned raccoons disperse into new areas to make homes.

Although Charlie had been raised in captivity, his natural instincts were part of the raccoon's growing resentment of the confining restraints of his cage that October morning.

No one could blame Sarah that morning either. For when she saw Charlie "pacing back and forth in his cage that morning" she realized it had been such a long time since she had seen Charlie. For some reason that morning the cage seemed overly restraining and she returned shortly with the collar and leash to take Charlie for a walk with her. It had been so long since Sarah had played with Charlie, at first she had to ask Tommy's permission to even pet the raccoon. So it was, that this morning she didn't understand the meaning of Charlie's growl. Little did she know that the collar had been long since outgrown.

The first bite wasn't much to worry about. At first it scared and surprised Sarah but then, angry because she was trying to help Charlie, Sarah tried again to secure the collar around the raccoon's neck. It had been a long time since Charlie had been collared. He had forgotten the playful times he had spent on the end of a leash. Charlie's only perception of what Sarah was trying to do was fear and discomfort as the collar was being put around his neck. Charlie did then what any wild animal that is confronted with danger would do. Charlie had changed in the last several months. He was no longer a family pet. Perhaps with the continuous attention of family or by Tommy things would have been different. But Charlie was now a different animal. Charlie was unafraid and unsure of humans. Perhaps stronger than any of Charlie's learning that had occurred in captivity were natural instincts to wander, to mate and to fight when threatened, to be wild. And so it was that Charlie attacked the hand that was trying to do good that morning. Fortunately the cage Charlie was in that morning had been well constructed. The entrance was small and as Sarah withdrew her badly bitten and scratched hand, Charlie's fate that October morning was sealed.

After Sarah was treated for her injuries at the local hospital, the conservation officer for the area was summoned. As is often the case when dealing with any type of injury arising from wild pets, the doctor treating Sarah requested that the animal be destroyed and tested for rabies virus. The cage door had been left

Pets

open after the accident and Charlie could have escaped to freedom. However, had Charlie escaped, Sarah would have undergone the anti-rabies virus shots and Charlie's life in the wild without natural knowledge about the environment would not have been without much suffering.

The story of Charlie happens each year in Iowa hundreds of times. Indeed every year the Iowa Conservation Commission must respond to hundreds of private offers to "give-away" wild animal pets. Many wild pet owners discover each year that few facilities or individuals are prepared to care for wild animals. Moreover, wild animals raised from a very young age by humans are often unable to deal with new owners or zoo-reared counterparts.

It never occurs to many people that declawing, defanging or isolation of their pet from contact with members of their own species can permanently ruin their pet's future chances of reintroduction into wild environment. Many wild animal owners have no idea that they may be in violation of state or federal law by possessing a wild animal.

The issue of wild pets is a complicated one, with all sorts of legal and moral ramifications. The hazards to public safety and sanitation are obvious. More subtle is the loss of the right of any wild animal to live uncaged, free to follow its natural instincts.

Please leave wildlife wild. If you find unattended wild animals alone their best chance for survival is to leave them where you find them. The parent is usually nearby. Removing them from the wild is their greatest threat. If you find an injured or orphaned wild animal you should contact your nearest conservation officer as soon as possible.

Ken Herring is a wildlife biologist for the Bays Branch Unit. He holds a B.S. degree from Iowa State and has been with the commission since 1976.

Illustration by Gary Zika

"Woodland Heritage-Spring Beauties," a synthetic floral sculpture by Norman Neal Deaton of Newton, this year's featured artist at the Iowa Wildlife in Art Sale and Exhibition — May 31, June 1-2 at the Des Moines Marriott, Seventh and Grand.

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