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IOWA CONSERVATIONIST AUGUST 1982

IOWA CONSERVATIONIST

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FRONT COVER: Sunset at Don Williams Lake, Boone County by Ken Varland.

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A nice catch of Spirit Lake walleye

A Summer Outing in Iowa's

GREAT LAKES

By J. Satre

With traveling and vacation costs spiraling these days, many people are staying closer to home for their summer fun-planned trips. Iowa is blessed with a diversity of fine places to visit. This story is about one of these popular areas.

Iowa has a beautiful area in Dickinson County near the Minnesota border called "the Great Lakes Region". This popular, picturesque lake country is the vacation playground for thousands of Iowans and other visitors during the warm weather months.

The main highways serving the region are Iowa Highway 9 from the east and west and U.S. Highway 71 from the south and north. Cities and towns in the immediate area are Spirit Lake, Okoboji, Arnolds Park, and Milford. Spencer is located about 12 miles south of Arnolds Park on U.S. Highway 71.

Why is this place so popular? One visit provides the answer. If you and your family enjoy water-related activities such as water skiing, recreational boating, fishing, swimming or sunbathing, they're all here. The two largest glacier-formed lakes in the state — Spirit Lake with 4,169 acres, and beautiful West Okoboji with 3,847 sparkling blue acres are the big drawing card. East Okoboji with its 1,835 acres is another popular lake and is connected to "West Lake".



Water Skiing on West Okoboji

COUNTRY

This scenic outdoor paradise caters to tourists and vacationers. There are numerous motels and lodges available throughout the lake region. Lakeside resorts and overnight cabins can be rented at Lakes West Okoboji, Spirit, and East Okoboji. Eating establishments are easy to find. You can choose from fast food operations, quaint cafes and coffee shops, to a night out at an elegant restaurant. For the shoppers and browsers, there are a number of interesting boutiques, souvenir shops, shopping centers, and other stores. There's even an amusement park located in Arnolds Park complete with several rides and various other attractions. For golfing enthusiasts there are six courses to choose from. Eight public, sandy swimming beaches are provided — five on West Okoboji and three on Spirit.

Camping

Good campground facilities are found in several state parks within the lakes region. Gull Point State Park, located on the west shore of Lake West Okoboji, offers 165 campsites with modern facilities (see Gull Point article in this issue). This park also has a newly-developed self-guided nature trail where visitors can learn about the plants, wildlife, and natural features of Gull Point. A brochure is available at the trail's starting point which describes the keyed marked points of interest. Emerson Bay, located just south of Gull Point, has 117 nonmodern campsites. On the west side of Spirit Lake is the Marble Beach state campground which offers 224 modern campsites. Isthmus access campground with 48 nonmodern campsites is located between East Okoboji and Spirit Lake at Orleans.

Picnicking facilities are available in all the above parks. Four additional state picnic areas are Min-Wakan, located on the north shore of Spirit Lake; Pillsbury Point in Arnolds Park, Lower Gar access located on the northwest shore of Lower Gar Lake, and Pikes Point, located on the northeast shore of Lake West Okoboji.

Fishing

Great lakes region waters are teeming with a large variety of panfish and game fish species. Yellow perch, crappies, saucer-sized bluegills, and bullheads are the most sought-after pan-

fish. Game fish found in these waters is almost unbelievable but all you have to do is check the Commission's annual big fish records registry to verify the number of trophies of different species taken each year. Commonly caught species include walleye, smallmouth bass, largemouth bass, white bass, northern pike, muskellunge, tiger muskies, and giant channel catfish.

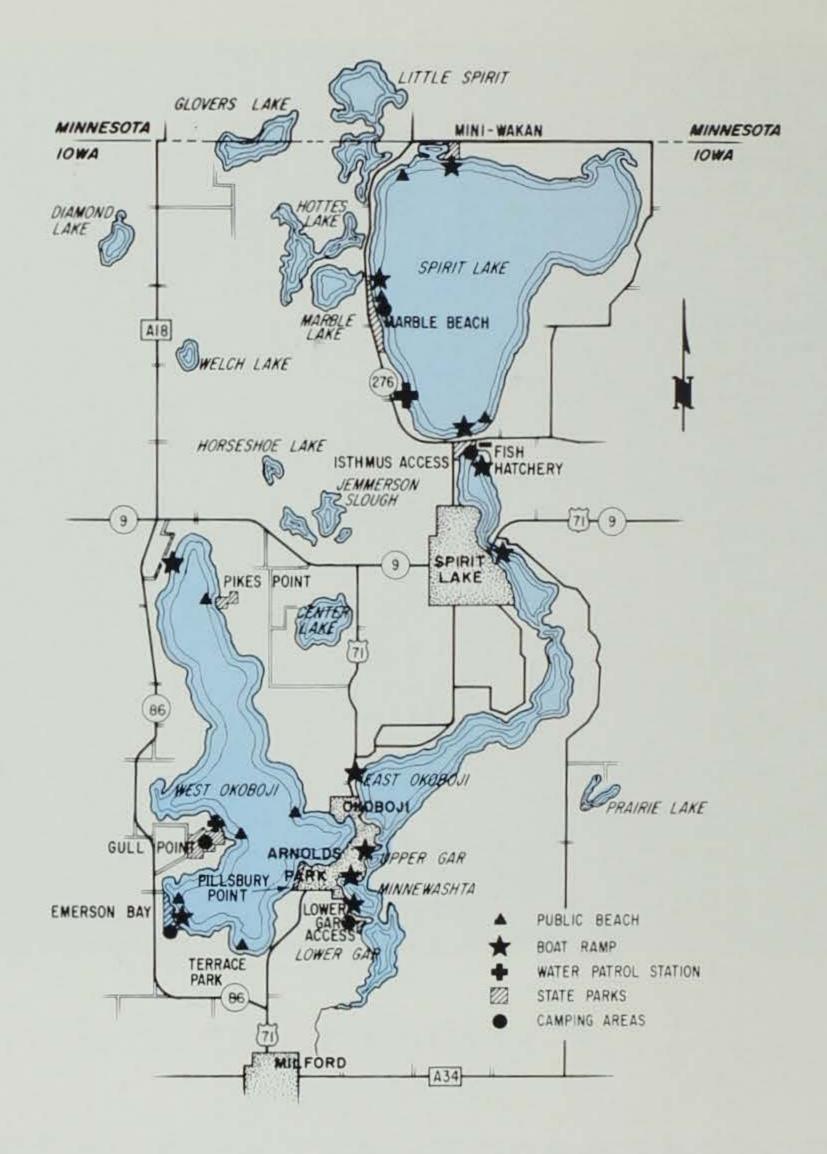
Smaller lakes in the region that offer good fishing, especially for bullheads, a favorite of many northwest Iowa anglers, include Upper and Lower Gar, Minnewashta, and Little Spirit. Center Lake is noted for its largemouth bass, crappie, and bullhead fishing. At nearby Lake Park, Silver Lake is known for its perch and bullheads. There are smaller lakes and sloughs nearby that produce predominantly bullhead fishing.

There are 10 public boat launching ramps in the region — three on Spirit, two on West Okoboji with an additional ramp now under construction, three on East Okoboji, one on Upper Gar, and two on Minnewashta (see map).

Things to See and Do

History buffs will want to take time to visit the Abbie Gardner Sharp cabin and museum — site of the infamous Spirit Lake massacre. The reconstructed cabin is located in Arnolds Park near Pillsbury Point on Lake West Okoboji. Abbie Gardner, 13 at the time, was one of only four people who survived a bloody Indian uprising led by Inkpaduta (Scarlet Point), a renegade chief of the Dakotah (Sioux) nation. Forty men, women, and children lost their lives March 8-10, 1857, before the tragic ordeal was over. The Gardner cabin was the only structure that was not destroyed during the Indian attack and is now designated an historical place in "The National Register of Historic Places". A large monument stands near the Garner cabin, marking the burial site of the pioneers who met their fate during the massacre.

Would you like to see an authentic 160-acre prairie? Cayler Prairie, managed by the Iowa Conservation Commission, is located about four miles west of Wahpeton (west of Lake West Okoboji). Iowa was once one large prairie — "a sea of tall grass and wildflowers", but now the prairie is little more than a glimmer of the past. At Cayler Prairie, some of the more abundant plants include lead plant, blazing star, prairie rose, goldenrod,



prairie clover, scouring rush, pasque flower, wild pea, yellow coneflower, ground cherry, and prairie violet, as well as some very rare species. Picking or digging flowers or plants is forbidden. But, by all means, bring your camera along and photograph some of Iowa's landscape of the past that was once a common scene to our pioneer forefathers.

Between the south shore of Big Spirit Lake and the north shore of East Okoboji is a state fish hatchery. Visitors are always welcome to view the aquariums holding a variety of the native fish of the region. Fisheries personnel are on hand to answer your questions and possibly direct you to the latest "hotspot" fishing hole. While at the hatchery, you will be able to learn about the egg-hatching process for walleye, muskellunge, and northern pike-muskie hybrids (tiger muskies). Various free conservation-related bro-

chures are available at the information center. You may also purchase a fishing license here.

Lake West Okoboji is noted for its stately and prestigious lakeside homes. To view these beautiful structures, take a leisurely boat cruise around the lake. It's a pleasant way to view the oak-lined shoreline and exquisite residences. If you don't have a boat, you can purchase a ticket for an excursion on the "Empress". The "Empress" is a large touring boat that can be boarded about every hour at Arnolds Park.

Wildlife Areas

There are several state wildlife management areas in the vicinity of the Great Lakes region. These lands consist mostly of precious marshlands and shallow lakes with some uplands adjacent to them and are "home sweet home" for a variety of birds and mammals. All of these wildlife lands are open to the public for activities such as



Swimming beach at Gull Point



Abbie Gardner Sharp Cabin

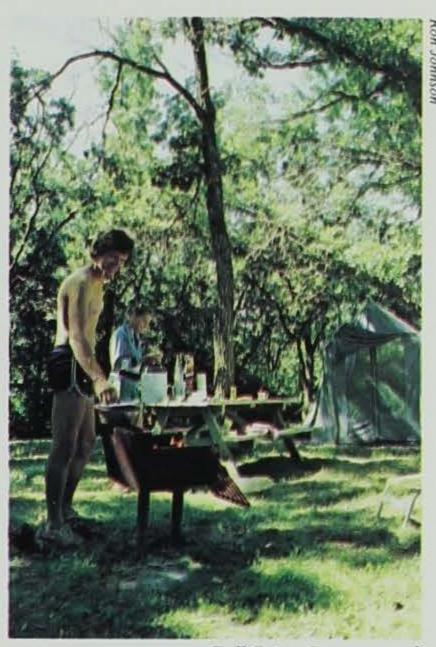
hunting, fishing, hiking, canoeing, bird watching, or nature study.

A canoe trip through a marshland can be an exciting experience, especially if you enjoy bird watching or nature study. Wildlife species commonly observed include bitterns, black-crowned night herons, marsh wrens, great blue herons, yellowheaded blackbirds, red-winged blackbirds, black terns, spotted sandpipers, sora rails, northern harriers (marsh hawks), pied-billed grebes, blue-winged teal, mallards, redheads, ruddys, wood ducks, shovelers, Canada geese, coot, raccoon, muskrat, and mink. Take your camera along. You may have the opportunity to snap an unforgettable picture of a hen blue-winged teal with her brood of ducklings or get a shot of an unusual nest with some fledglings.

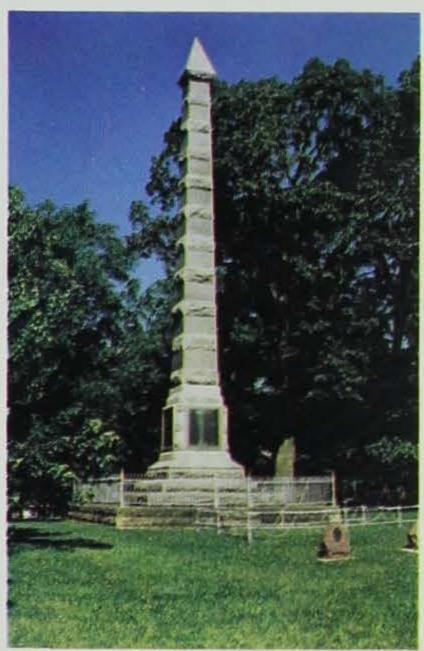
The following are some wildlife management areas you can visit in this region:

Christopherson Slough, 535 acres, located 3 miles north of Superior; Diamond Lake, 563 acres, located 3 miles west, 21/2 miles north of Orleans; Garlock Slough, 222 acres, located 1 mile north, 11/2 miles west of Milford; Hales Slough, 85 acres, located 2 miles north of Orleans; Jemmerson Slough, 343 acres, located 11/2 miles west of Spirit Lake; Kettelson Hogsback, 262 acres, located I mile west of Marble Beach campground; Prairie Lake, 109 acres, located 2 miles east, 1 mile north of Arnolds Park; Sunken Lake, 62 acres, located 3 miles north of Spirit Lake; Swan Lake, 380 acres, located 2 miles north of Superior; and Yager Slough, 56 acres, located 3 miles southeast of Lake Park.

As you can see, the Great Lakes Region offers quite a variety of outdoor recreational opportunities and interesting things to see and do. Enjoy your trip and have a safe one.



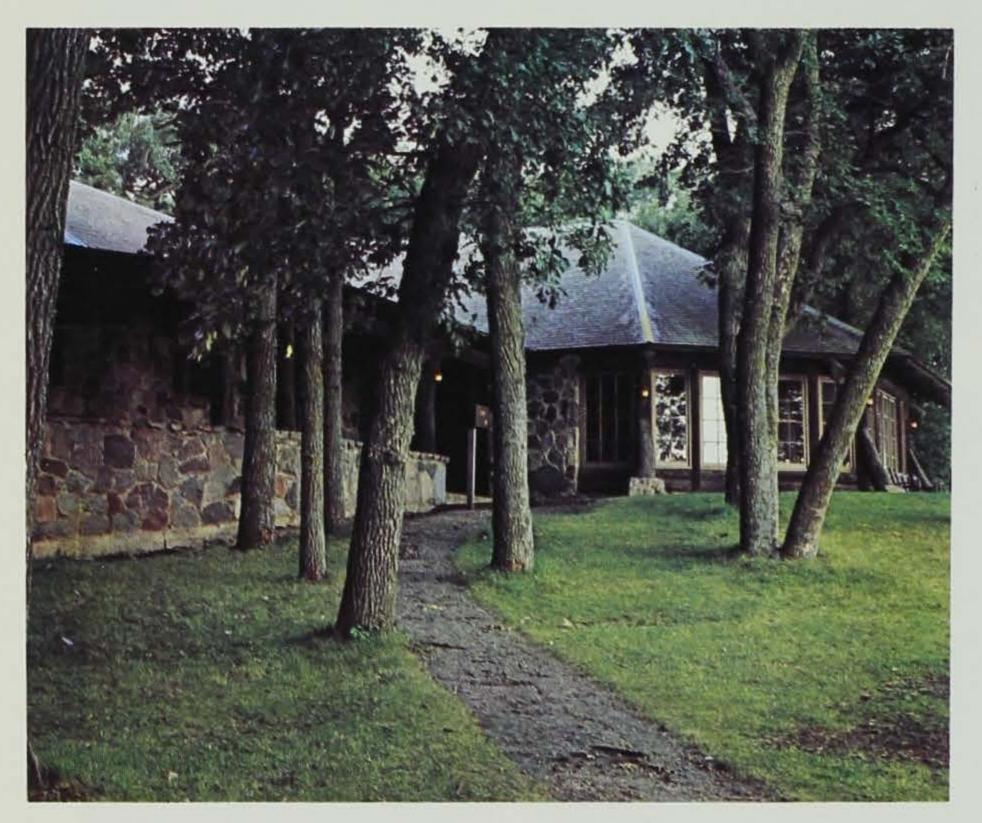
Gull Point Campground



Spirit Lake Massacre Monument

GULL POINT STATE PARK

By Larry Davis



On October 14, 1933, the Board of Conservation (now the Iowa Conservation Commission) accepted a gift of \$5,000 from the Citizens of Okoboji Lake District for use toward the acquisition of a tract of land at Gull Point on the west side of West Okoboji Lake, for a state park. The board agreed to expend \$6,000 toward the purchase of the tract, with development work to be done by the Civilian Conservation Corps (C.C.C.) This was the beginning of Gull Point State Park. It was officially named on March 8, 1935.

Located along the shore of a lake well-known for its beauty and good fishing, the area's wooded slopes are a shelter for Iowa's native birds. The park is in the midst of hilly country that excites the curiosity of those who visit. Its origin is steeped in the interesting geology of this region of the lakes.

West Okoboji Lake rests in a deposit of glacial drift. As the glacier reached its limit of advance the drift piled up in a helter-skelter fashion as the result of the ice edge moving back and forth, melting as it moved. Much of the fine material was carried away by the melting ice, leaving more than the usual number of stones in the subsoil.

About five miles long and almost three miles wide at its widest part, West Okoboji Lake is over 150 feet deep at its deepest point. The boundary of steep bluffs, wherever they are present along the lake's shore, are the result of wear by the waves. the sandy beaches are the sheltered places where sand has been carried and deposited by currents. These currents are generated by waves striking the shore at an angle. The accumulation of large stones or boulders along the shore in places is a striking feature of the lake.

It is only "natural" that amid such geological evidence a nature trail program is available at Gull Point State Park. Its newly developed self-guided nature trail offers visitors an opportunity to learn about the plants, wild-life and natural features of the area. At the trail's starting point a brochure is available which describes marked points of interest.

The Gull Point nature trail is about 1.3 miles in length, and hiking time is about 45 minutes. The area is actually an island surrounded by West Okoboji Lake and a canal. The land was used as a golf course from 1917 to 1942, then closed in 1942 for the duration of World War II. In 1946, it reopened for one year, and was then converted to pasture use. The Prairie Gold Boy Scout Council purchased the property in the summer of 1949 and operated a Boy Scout Camp until 1974, when the property was purchased by the Iowa Conservation Commission.

The area is open for all four seasons of the year. Winter is a good time to follow the trail on cross-country skis. It allows an additional experience with nature while gliding across the snow. Facilities at Gull Point include a modern campground with electrical hookups. Picnicking is popular, and the lake is inviting to swimmers and boaters. Anglers can expect a variety of fishing opportunities. Common species include walleye, northern pike, smallmouth bass, white bass, perch, bluegill, crappie, catfish and bullhead.

The lodge at Gull Point is available for rental, the rate being charged for each 100 people per reservation, with no charges made for electricity or fuel. Reservations must be made through the park ranger. The lodge is closed during the winter.

The trimmed-to-dimension stone of which Gull Point's Lodge is made reveals surfaces that show the real character of the rock. The glacial boulders from which the stone was shaped are similar to the rocks found in the lake shore. Originally they were part of the bedrock of places far to the north in Wisconsin, Minnesota and Canada.

Gull Point gets its name from the point of land which projects into the lake. The boulders out at the end have been a popular resting place for gulls.

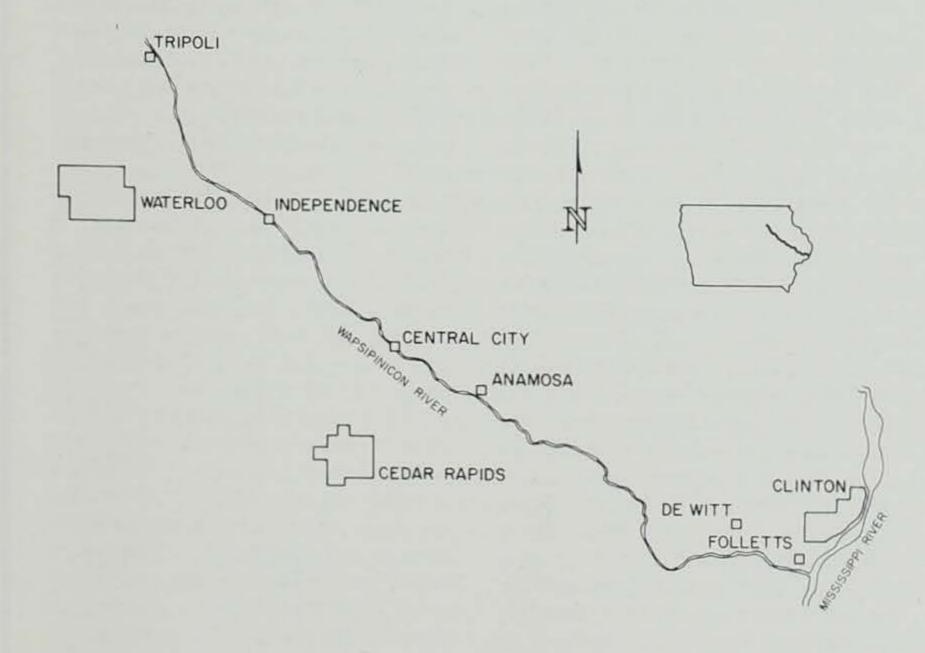
Rich in geologic history and scenic beauty, and abounding in water and other outdoor recreational opportunities, Gull Point State Park awaits your visit. It's located in Dickinson County's Lake area, 3½ miles north of Milford on Iowa Highway 86.



Michael Wade

Floating and Fishing the

WAPSIPINICON RIVER



By Michael Wade

The Wapsipinicon River begins its trek in Mower County, Minnesota, and 255 miles later empties into the Mississippi River near Clinton, Iowa. The river above the Anamosa dam is classified as a nonmeandered stream, meaning that the river bed is owned by adjacent landowners. The "Wapsi" has had a wide variety of fish species for anglers to pursue including smallmouth bass, largemouth bass, rock bass, channel catfish, walleye, northern pike, bluegill and crappie. There are several access points along the river for anglers to fish and canoeists to launch their craft.

The stretch of river that flows through Mitchell, Howard and Chickasaw counties is too small to support large populations of gamefish or float a canoe, so this section of the Wapsi has not been included in this brochure. The Conservation Commission does stock trout in a segment of river in Mitchell County and for information on where and when trout have been stocked contact fisheries personnel at the Decorah Fish Hatchery.

From Tripoli to Independence the Wapsi winds its way through a flat valley with many ponds, marshes and A nice pair of smallmouth bass taken from the Wapsi.



backwater areas along its path. Some of the last major stands of river birch in Iowa line its banks, making this a scenic stretch of river to canoe. Northern pike, channel catfish, and smallmouth bass can be found throughout this stretch of river. There are lowhead dams at Littleton and Independence that should be avoided while canoeing. Be prepared to wade through a few short, shallow riffle areas when canoeing this area.

The Wapsi below Independence flows slowly through a more rough and heavily timbered valley. Its stream bed is sandy with a few rocky riffle areas and deep pools. The most scenic stretch of river is between Waubeek and Stone City. There are lowhead dams at Quasqueton, Troy Mills, Central City and Anamosa.

Due to the lack of a portage site between the segments of river above and below the dam at Independence the river has been divided into two major canoe trips, one from Tripoli to Independence (above the dam) and the other from Independence (below the dam) to Anamosa.

Anamosa to Folletts

The Wapsipinicon River between Anamosa and the Mississippi River sits in a transition zone for Iowa fisheries. To the north trout and smallmouth bass are dominant; to the south catfish, carp and largemouth bass are dominant. Be prepared for some surprises when you fish the Wapsipinicon. Trout will only be a rarity, probably a migrant from upstream. Smallmouth and largemouth will be common in local areas. Channel catfish, bullhead and carp will be abundant because of the excellent habitat. The lower reach of the river will be influenced by the Mississippi River, because of the free interchange of fishes. An occasional trophy size walleye, northern pike or flathead catfish will be the result of the interchange.

The variety of fishing possibilities makes the lower reach of the Wapsipinicon River an exciting challenge to avid anglers. The choice of tackle and bait seems endless unless you concentrate on individual fish species.

Channel catfishing requires a bait which has a distinct odor. It almost seems the more repulsive the bait the better the fish like it. Smell is an important factor in the catfish's search for food. Prepared baits are popular now, but homemade concoctions are still effective. Because of the tangle of habitat at brush piles and drifts, a stiff pole and medium strength reel are needed to insure the retrieval of fighting catfish. The bullhead catfish is probably the most abundant fish species in the river. Its feeding habits are similar to the channel catfish, with smell being very important. Earthworms and pieces of night crawlers are commonly used to catch them. Standard tackle is adequate for bringing them into shore or boat. The flathead catfish offers a challenge to those who want to go after a real lunker fish. The flathead reacts like a snagged log until he puts his muscle to work on the end of the line. Stout tackle is needed to control these hefty fish, and the preferred bait is small fish or chubs worked onto a large single hook. All the catfishes prefer the habitat which offers them protection from the direct current of the river. Deep holes, brush piles and riffles are the first places to look for them.

Carp is rapidly becoming a favorite of many anglers because of its size and eatability. Because carp will grow to a large size, stout tackle is needed to land them. Soft baits are best, because carp move along the bottom searching for bits of organic matter or vegetation. Dough balls of various flavors are the most popular bait, but sweet corn and jello are also used with success. Carp frequent many habitats in the river, but quiet water areas below drifts or large pools seem to be most productive.

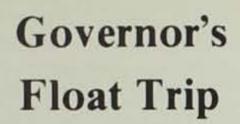
Smallmouth bass, largemouth bass, walleye and northern pike have specific habitat requirements which are not common in the river. Tackle and bait will have to be adapted to the fish's size and food preference. Closed face spin cast, open faced spin, ultra light or fly reels matched with appropriate rods and line give the angler a choice based on his abilities. Baits range from artificial (spinners, crank baits, jigs, spoon, flies, etc.) to natural (minnows, pork rind, frogs, etc.). Check areas such as low dams, riffles, rock outcroppings, weedy sloughs and below sandbars.

Many people are attracted to the scenic beauty of the stream and to its wildlife. Wapsipinicon State Park at Anamosa provides some of the best in rugged bluffs, trails, streamside picnicking and a picturesque low head power dam. The topography levels out toward the lower end of the river, giving a chance to see an excellent example of a hardwood timber river bottom ecology.

Fishing, canoeing, hiking, picnicking, sightseeing and hunting are a few of the many recreational activities which are offered along the lower reach of the Wapsipinicon River.

Please respect local landowner's property and fences. Ask permission before entering private land. Do not litter.

CONSERVATION UPDATE



Governor Ray not only proclaimed June "Iowa Rivers Month" he joined in the celebration by canoeing down the Boone River. Sponsored by the Governor's Office and the Conservation Commission and hosted by the Hamilton County Conservation Board, the canoe trip included Ray's family, friends, legislators, representatives of conservation organizations and members of the press. There were more than 50 canoes in the party.

The float began at historical Tunnel Mill County Park and ended several miles downstream at Bells Mill Park where the group enjoyed a roast pork dinner provided by the Iowa Pork Producers Association.

Rivers Month was promoted in an effort to emphasize the many natural values of Iowa's rivers. The Boone River is recognized as one of Iowa's finest free-flowing streams and rated high on the Conservation Commission's priority for inclusion into the Protected Waters Areas Program.

The primary goal of the Protected Water Areas (PWA) Program is to select the best examples of the remaining natural areas along lakes, rivers, and marshes to assure their continued existence. The management of the resources would be established through the joint efforts of the Commission and cooperating landowners. The specific management practices would be developed to be compatible with the landowner's existing use of the land and with the intent of the PWA program.

1982 Sportsmen Calendar

The 1982 hunting and trapping seasons are just around the corner. Listed below are the seasons that have been set so far. The seasons for pheasant, quail, gray partridge and waterfowl will be set the **first week in September**.

> Hunting - Trapping Seasons and Limits Hunting Seasons

Game Season Dates		Shooting Hours	Daily Bag Limit	Possession Limit
RABBIT				
(cottontail)	Sept 4-Feb. 28	Sunrise to Sunset	10	20
(jackrabbit)	Nov. 6-Jan. 2	Sunrise to Sunset	3	6
(fox & gray)	Sept. 4-Jan. 2	Unrestricted	6	12
DEER (bow)	Service Control of the Control of th	1/2 hr. before Sunrise 1/2 hr. after Sunset	Î	T
*DEER (shotgun) All zones, 2 seasons or		Sunrise to Sunset Sunrise to Sunset	1	1
*TURKEY (Gun)	Oct. 19-Oct. 31	½ hr. before Sunrise to Sunset	Ī	1
*TURKEY (Bow)	Oct. 9-Dec. 3	½ hr. before Sunrise to Sunset	1	1
*GROUSE (ruffed)		Sunrise to Sunset	3	6
CROWS	THE RESIDENCE OF THE PERSON OF	½ hr. before Sunrise to Sunset	None	None
RAILS (Sora & Virginia)	Sept. 4-Nov. 12	Sunrise to Sunset	15	25
SNIPE (Wilson's - Jack)	Sept. 4-Dec. 19	Sunrise to Sunset	8	16
WOODCOCK		Sunrise to Sunset	5	10
RACCOON & OPOSSUM	Nov. 6-Jan. 2	Opens 8 a.m. 1st day	None	None
FOX (red & gray)	Nov. 13-Jan. 23	Opens 8 a.m. 1st day	None	None
WOODCHUCK	June 15-Oct. 31	Unrestricted	None	None
COYOTE	Continuous Open	Unrestricted	None	None

TRAPPING SEASON
MINK MUSERAT RACCOON STRIPED SKUNK

OPPOSUM, BADGER, and WEASEL
FOX (red and gray)
BEAVER 8 a.m. Nov. 6 through March 27, 1983.
except for the federal Upper Mississippi River Wildlife and Fish Refuge. In this

We are losing our wetlands

It is estimated that we have lost at least 40 percent of the original wetlands in the lower 48 states. Of the approximately 148 million acres of wetlands we now have, we lose more than 300,000 each year. Some experts estimate that the loss is as high as 600,000 acres each year. In the United states, coastal marshes have been disappearing at a rate of about one-half percent per year. One million acres of coastal marsh have been lost since 1954. By the year 2000, if the present rate of marsh loss continues, an additional one million acres will have been destroyed.

Sportsmen Asked To Pass On Outdoor Traditions

Saturday, September 25, 1982, will mark the 11th annual observance of National Hunting and Fishing Day.

GEESE Oct 2-Dec 10 (tentative)

The theme of NHF Day this year, "Pass It On," urges the nation's more than 55 million hunters and fishermen to help pass on the outdoor tradition to the millions of young people and adults who have never had the opportunity to experience the out-of-doors as they have.

Each year, thousands of sportsmen volunteer their time to organize NHF Day activities to help make nonsportsmen more aware of the need to conserve America's natural and wildlife resources and of the important role hunters and fishermen play in conservation.

NHF Day activities range from an "open house" at a sportsmen's club to a county-wide sportsmen's jamboree involving dozens of sportsmen's clubs and conservation groups. Attendance can range from 20 at an "open house" to tens of thousands at a sportsman's jamboree or an NHF Day program in a shopping center.

By making millions of nonsportsmen aware of the need for conservation and the contributions hunters and fishermen make to conservation, NHF Day has helped ensure a healthy future for the outdoors, wildlife and the outdoor sports.

The tremendous success of National Hunting and Fishing Day in carrying its conservation message to the public has been possible only because of the support it has received from the nation's sportsmen.

As NHF Day moves into its 11th year, that support is more important than ever before — each individual and every club make a difference.

1982 DEER HUNTING SEASONS APPROVED

The 1982 shotgun-muzzleloader and archery deer hunting seasons are similar to the previous year.

Notable changes include an increase of about 1,800 any-sex permits for gun hunters bringing the total to 15,300 licenses. Again this year, all seasons and zones will have any-sex permits. Bucks-only permit holders will be allowed to hunt in any zone in the state. Shotgun-muzzleloader hunters again this year will have two periods to choose from -December 4-7 (4-day season) or December 11-17 (7-day season). The bow season will again be a 56-day season running from October 9 to December 3.

Prospective shotgun-muzzleloader hunters must apply for the period and zone of their choice. Those hunters receiving an any-sex license must hunt only in their designated zone, while bucks-only licenses will not be restricted. Commission officials emphasized that it is unlawful to apply for both a free landowner-tenant shotgun license and a paid shotgun license, or to make more than one application for any gun license. Quotas again have been established by period and zone for any-sex deer licenses. These will be allotted by drawing, and all other applicants will receive bucksonly licenses. Those applicants submitting their certificate issued when they received a bucks-only license in 1981 will receive first priority in the drawing for any-sex deer licenses. Landowners will be issued licenses at the same ratio of bucksonly to any-sex as is deter-

ANY-SEX LICENSE QUOTA Zone Season 1 Season 2 300 600 250 500 525 1,050 675 1,350 850 1,700 975 1,950 450 900 325 650 525 1,050 10 225 450 TOTALS: 5,100 10,200

mined by the paid gun licenses issued in each respective hunting zone and season. The quotas are as follows:

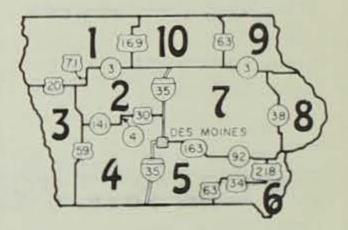
Hunters who pick the second shotgun-muzzleloader period will have a better chance of obtaining an anysex license. Lee Gladfelter, Wildlife Research Biologist for the Commission, explained the reason for this is to equalize the overall success

periods. This is the same system that was used the last six years. During the 1981 season, there was an almost even split in hunting pressure between the two seasons, with half the hunters choosing to hunt each season.

Shotgun-muzzleloader applications will be received by the Commission only during the period of August 16 through September 14, 1982, rate between the two hunting or if the application form biologists.

bears a valid and legible U.S. Postal Service postmark during the same period.

Shooting hours will be sunrise to sunset with a bag limit of one deer, possession limit of one deer, and a season limit of one deer. Zone boundaries will be identical to the previous deer season (see map).



In 1981, Iowa hunters harvested a record 26,000 deer as the herd continues to increase. Prospects for the 1982 season again look good according to Commission game

Odds On The Any-Sex Deer License

QUESTION - How Do I Get An Iowa Any-Sex Deer License?

ANSWER — There is no guaranteed method, but a study of past records may improve your chances.

First of all, if you received a bucks-only license in 1981, you also received a certificate entitling you to a priority in the 1982 drawing for anysex licenses. This certificate was the back part of your 1981 license. It must accompany your 1982 application in order for you to receive priority consideration. In 1981, only 44 percent of the certificates issued in 1980 were returned with the new

applications. There are various reasons why they were not included - lost forgotten, didn't hunt in 1981, etc. One of the largest factors may be that nearly 7,000 hunters indicated on their 1981 applications that they wanted a bucks-only license. Some hunters simply want to hunt only for bucks, but most probably wanted the bucks-only license since they would then not be restricted to hunting in any particular zone and could go anywhere in the state.

Secondly, you should apply to hunt in the zone, and during the period, where the odds are in your favor.

Your chances of getting an any-sex license are better by applying for the second period since twice as many are available during that time. The first period is four days long, with one-third of the any-sex licenses, while the second is seven days long with two thirds of the licenses. The additional days of hunting and the more generous license quotas are designed to equalize opportunities for each of the two periods. Even these additional odds are not attractive enough to create a 50-50 split in hunter numbers. Last year, 58 percent of the hunters chose the first season,

with only 42 percent left for the second period.

Finally, you should study the patterns that have evolved over the last several years regarding the habits of Iowa deer hunters. The following tables have been prepared in an effort to aid you in making the proper selection of zone and period. In order to do this, it was necessary to make a number of assumptions (which may or may not come true): 1) Hunters historically have hunted in the same zones year after year, and we will assume this will continue to be true; 2) It is assumed

that hunters will continue the first period/second period ratio of 58 percent/42 percent as was the case in 1981; 3) The anticipated percentage of hunters requesting bucks-only licenses will remain constant; 4) Assume the total applications will increase by about 3 percent; and 5) Assume 50 percent (28,000) of the persons receiving certificates with their 1981 bucks-only licenses will return them with their 1982 applications.

If these predictions are anywhere near to what actually will occur, then it should be obvious that the chances for receiving an any-sex deer license are much better during the second period than during the first. Without a certificate, it is almost mandatory that a person apply for the second period in order to have any chance of getting an any-deer permit.

Note also the difference between zones, with several zones offering only about one chance in five of getting the more liberal license during the first season even when a certificate is submitted, while an applicant with a certificate would be almost certain of the any-sex license in some zones during the second period and would even have a fair chance of being selected without the certificate.

Please note that these predictions are based on past history, and the figures could change dramatically if there were a major change in hunting pressure from one season to the other or from one zone to another. No assurances are given that these data will apply; they are only for the deer hunters' information.

ESTIMATED CHANCE OF RECEIVING AN ANY-SEX DEER LICENSE — 1982 Season 1

Zone No.	Expected Total Applications	Expected bucks-Only Applications	Any-Sex Quota	Expected Certificates	Chances w/Cert.	Chances w'out/Cert
No Zone	1,533	1,533	0	19	0	0
1	3,084	251	300	1,312	23%	0
2	2,160	135	250	900	28%	0
3	2,655	155	525	850	62%	0
4	5,266	298	675	2,166	31%	0
5	5,869	317	850	2,456	35%	0
6	4,667	204	975	1,918	51%	0
7	5,218	625	450	1,993	23%	0
8	3,171	202	325	1,548	21%	0
9	5,639	281	525	2,908	18%	0
10	2,326	140	225	1,154	19%	0
Total	41,588	4,141	5,100	17,225	30%	0

ESTIMATED CHANCE OF RECEIVING AN ANY-SEX DEER LICENSE — 1982 Season 2

Zone No.	Expected Total Applications	Expected Bucks-Only Applications	Any-Sex Quota	Expected Certificates	Chances w/Cert.	Chances w'out/Cert
No Zone	1,120	1,120	0	0	0	0
1	1,798	94	600	755	79%	0
2	1,042	49	500	360	100%	22%
3	1,872	98	1,050	396	100%	47%
4	3,388	171	1,350	1,145	100%	10%
5	3,968	241	1,700	1,261	100%	18%
6	3,462	127	1,950	949	100%	42%
7	6,385	445	900	2,825	32%	0
8	2,288	136	650	958	68%	0
9	3,492	134	1,050	1,626	65%	0
10	1,214	84	450	485	93%	0
Total	30,029	2,699	10,200	10.775	72%	12%

IOWA'S FORGOTTEN **GAMEBIRDS**

By Rex R. Johnson

"Damn rails. Can't hardly flush'em. When you do they ain't hard to hit; but a fist full of 'em sure make fine table fare." Sage words from the only true Midwestern rail hunter I've ever met. An old German marsh rat and waterfowler of southern Indiana's Ohio and Wabash River bottoms, he had recognized what few Iowa hunters ever have; that before winter takes a bite into autumn and the north winds bring down the waves of mallards and diving ducks, there are two gamebirds in the marsh that offer fine sport, close to home, and without the crowds. Shorebirds or marsh hens, call them what you will, soras and Virginia rails offer an unexplored opportunity to get out on the marsh on those warm, early fall days, scout for waterfowl hunting to come, or just reflect on the changing seasons; all while giving the impression of sober industry by putting meat on the table.

Prized by ornithologists and amateur bird watchers alike for their wild calls, cursed by biologists and students researching them for their secretive nature, and just wondered about by wetland managers who want to know more about them, the sora and its longer-billed cousin the Virginia rail are without a doubt the most unexploited gamebirds in the Midwest. I point out Midwest because our long distance neighbors of the central east and gulf coast states have been getting in on the action for years. The principal game there is clapper rails in the salt grass marshes, through sora and Virginia rails are eagerly taken by many.

Soras and Virginia rails generally arrive on the breeding grounds in Iowa by the last week of April or the first few days of May, though in an early year the peak of migration may come as much as two to three weeks early. Their nutrient stores depleted, the birds spend a week or more skulking silently in dense vegetation as they replace food reserves in preparation for the coming breeding season.

The onset of breeding is heralded by the soft "Kidick," "Kidick" calls of the Virginia rails, and the louder, piercing "Per-weeps" of the sora, signaling that the males are seeking females. Together, the pairs will establish and defend breeding territories. Go out to any marsh at dusk at this time of year and you'll likely hear the bizarre piglike grunts of the Virginia rail, and the horse-like whinney of the sora, announcing to all their neighbors "This is my property, and my mate. Keep your distance!"

Both species lay an average of 8 to 10 eggs and have an incubation period of 19 to 20 days. One egg is layed each day, but unlike waterfowl, incubation may begin after only a few eggs are layed, and as a result a single brood may contain chicks of several different sizes.

The young are fed by the parents for a week or more though they are able to leave the nest shortly after hatching. Totally independent at three weeks of age, chicks reach adult size after about five weeks. By the onset of the hunting season the young birds have lost their juvenile plumage and are almost indistinguishable from the adults.

A dog and a light, fasthandling shotgun are just the ticket for a successful rail hunt. A small 20 gauge or .410 would be ideal, but rails can provide a great warmup for waterfowl or upland game if you choose to use a bigger gun. Rails generally prefer to run rather than fly, so expect close flushes and short flights before the birds set down again. All this is not to imply that the dogless hunter is left out of the fun. Dog or not, hunt the margins of emergent vegetation around lakes, or the shallow water areas of marshes. Pay particular attention to areas with stands of seed producing plants like smartweed or millet along the margins of wet spots. You'll likely pick up soras here. Work these areas thoroughly in a zig-zag pattern. Take it slow and easy; don't push yourself. Rail

hunting can be darn hard work at times, especially in dense emergent vegetation. Perhaps that's just one more reason to use rail hunting as a warmup for later season outings.

The 1982 season on rails opens September 4 and runs through November 12, with a generous daily bag limit of 15, 25 in possession. Don't hold off that rail hunt much past early October. The peak of fall migration usually hits around this time and good hunting can be expected, but its likely that few rails remain in the state by the end of the season.

Whether you're looking for a quality early fall hunting experience, or just a chance to get out and enjoy the changing seasons when the colors and the weather are at their finest, this year, give rail hunting a try.



CLASSROOM CORNER

August has the ring of State Fair time. It's the season for showing off the best of the growing seasons or the best product a company or agency has.

The Conservation Commission shares ideas at the State Fair and monthly in this magazine. Just as a trip to the fair never allows us to view everything, some of us miss parts of the magazine.

The following Conservationist Quiz measures how well you read this issue. It can also be used as a class activity.

There are many ways to learn about wildlife and our other natural resources. Besides reading about them in this magazine, you could also visit a natural area and just observe, or if you have a group you want to help learn contact: The Conservation Education Center, R.R. #1, Box 53, Guthrie Center, Iowa 50115.

CONSERVATIONIST QUIZ

True or False

- A distinguishing feature of deer found in Iowa is the white underside of the tail.
- Iowa's "great lakes" are man-made as a result of a dam.
- Musky and Northern Pike are in the same family, yet don't naturally live together because of competition of habitat.
- There are two kinds of rails found and hunted in Iowa.
- Fishing tournaments are legal only for largemouth bass.
- Wearing feathers as a fashion no longer poses the problem of extinction.
- While fishing, Game Wardens usually encounter poor sportsmanship.
- The Wapsipinicon River is good for canoeing.
- 9. Deer are found in high populations where there is a good stand of native grass.



ANSWERS

associated with timber. False — deer are basically only part of the river 9. Diary 8. True - but that is 7. False - read Warden's used a problem could arise. rated and if they are overcompos pats are now decoor just for fun. 6. False tor prizes, for sportsmanship, ments can be for any species; Virginia 5. False - tourna-True 4. True - Sora & were made by a glacier 3. Lake, East & West Okoboji 1. True 2. False - Spirit

RETORNO

How did you rate? If you answered 9 correctly you are an expert; 8 — good you read most of the magazine; 7 — you might have to check back on a few; 6 — glad you took the quiz.

From Cottonwood to Smokey



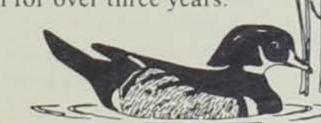
Chad Eells, the park ranger at McIntosh Woods State Park is an energetic individual. With all the chores of keeping a state park looking presentable for the public, he uses his spare time (what little there is) to carve interesting objects from discarded logs for public display in the park. He's a craftsman deluxe!

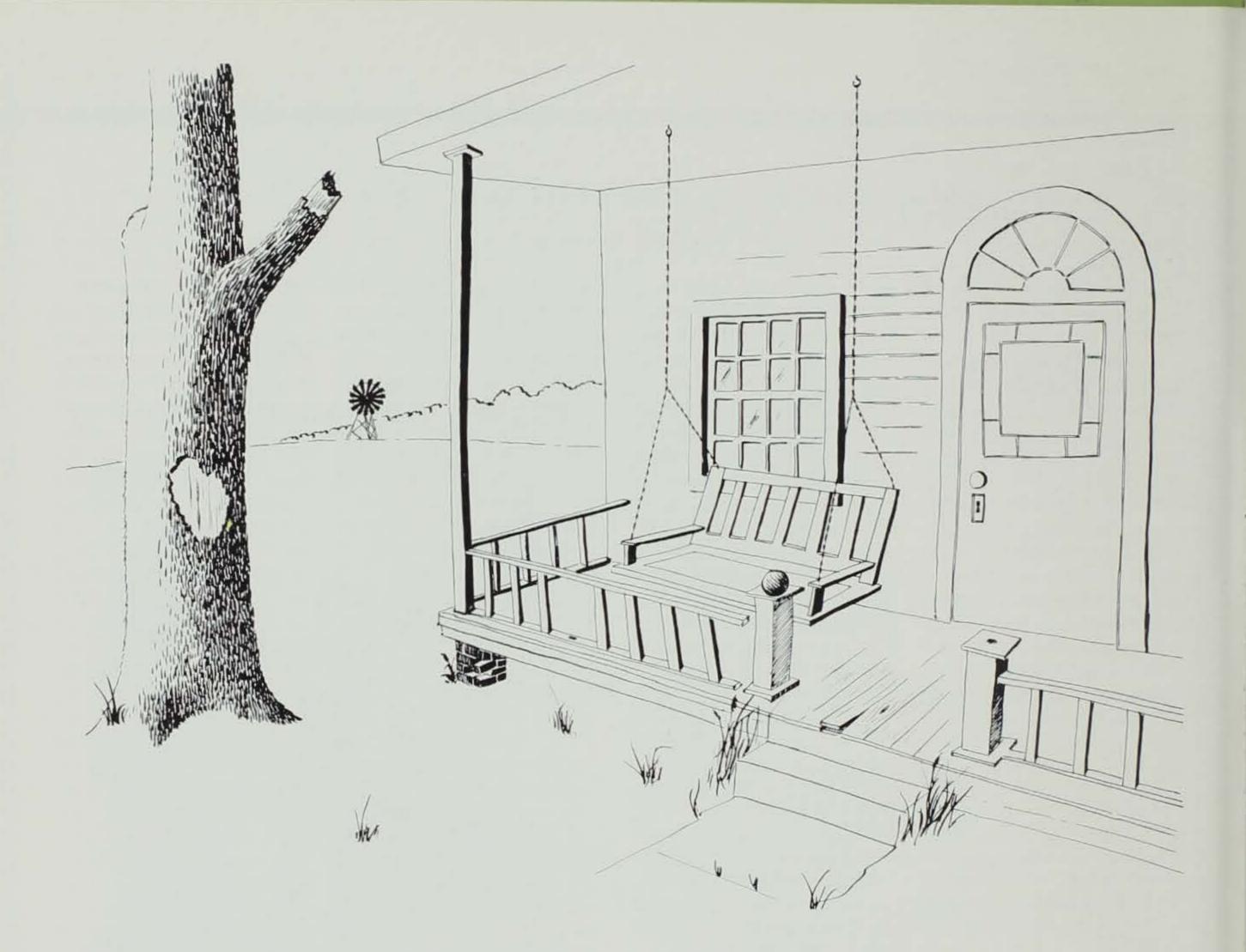
A carving of Smokey the Bear holding a deer fawn is quite unique as the bear even talks! A voice emanates from the giant bear to greet surprised visitors. This ponderous wooden statue was carved from a 500 pound cottonwood log. Eells utilizes wood from storm damaged and diseased trees.

Eells shaped and painted the familiar image of Smokey and he also fashioned a lofty totem pole from a cotton-wood log. These intriguing masterpieces were given to the state and are on display in the park. Visitors who have seen the large carvings marvel at their craftsmanship and authenticity.

McIntosh Woods State Park is located in Cerro Gordo County on the north shore of Clear Lake.

Eells is a native of Ottumwa and a graduate of Iowa State University. He has been employed with the Commission for over three years.





GOOD OL' CHARLIE

By Roger Sparks

We enjoyed a porch swing breeze, inhaling heavy, damp air, lush with the grassy smells of a late spring dusk. We watched barn swallows ghost through the sunset, their fleeting images mirrored in the pond's flaming surface, 'till we couldn't tell swallow from shadow. Then we heard coyote pups learning to howl. We just sat there as we had many times, held in the magic of the moment, while prodigious black hands snuffed the orange blaze in the west.

Crickets were well into their second movement when Charlie spoke. "I've struggled some to keep this ol' place the way I figure it should be kept. Oh, I coulda done a few things different, like sellin' enough land to build a new house. But there is far more than boards here; I was born in this place. That dead tree there shaded this porch 'til it died about the time my folks passed on. No way I could cut it down, besides there's been a pair of bluebirds nesting in a hole in that ol' trunk for many years."

For a few seconds only the tinkling of ice against the glass could be heard, followed by a resolute "spat." I chuckled at Charlie's aversion for filtering bad whiskey through a jawful of "chaw." Oh well, I thought, nobody accused him of being pretty.

"My neighbors accuse me of being old-fashioned and tell me I ought to be

doin' 'progressive' things to the place. They say if I worked at it and changed everything I could make more money," Charlie said. "Truth is though, this land ain't good for much as far as crop farmin' goes. There's not much good ground on it and it's so darned hilly, a man's got to be careful plowin' up what's there. I still rotate crops where the soil's thin, plantin' hay every third year. I try to leave good grass waterways, figurin' what's left of this soil has to be protected."

"Yep, this soil is kinda like my dog."
Charlies voice suggested he was smirking, the way he always smirks before he says something he thinks is clever.
After a disgusting pause which he no

doubt believed hungered me to a drool, he fed me the appetizer. "Most of the year ol" Duke stays close to home but in the spring he gets to thinking about the neighbor's female collie..." He waited for me to ask him to explain how Duke and the soil were similar and I finally did, even though I knew I'd regret it.

"Well, if you don't take care of em' in the spring," he said, "they get loose and run off."

I sat deathly quiet for fear that even breathing might be interpreted as a chuckle, thereby encouraging him further. Mercifully, his mind drifted on to other subjects.

"About all a person can do with this timber is grow trees. I'll bet if I told people out East I owned several hundred acres in Iowa, they'd think I'm rich. Truth is I've never been worth much, at least the way most folks look at it."

"One of the neighbors bulldozed a lot of his timber, but I don't go along with tearin' up steep hillsides. Others are runnin' cattle in their woods but really, timber makes darn poor pasture. Besides cows ain't near as pretty as deer and wild turkeys. I told 'em that the other day and they called me a turkey farmer! Ya know, I liked that." Charlie and I laughed and he knew I liked it too.

Charlie took another drink, cleared his throat, fiddled with his tobacco tin and then spoke in a low and quiet tone.

"Maybe I coulda done better by Marie and the kids. I could have sold this place and moved into a new house in town. Still, right up 'till the night she died, she seemed as happy as any woman I ever knew. And the kids come by often these days, what with all those bass in the pond and the quail and rabbits around in the fall. The whole bunch spends a full week here at Christmas."

"And my gawd those little ones!" He leaned toward me until I could see the faint sparkle of a distant star in his eyes. "Why, they absolutely love it out here. They run down to the crick and come back muddy as crawdads. They lose their shoes and socks and rassle the dog. I mean they can dream up things to do out here and you ought to see 'em identify the birds, why I tell you they know more than..."

During the next hour I became tangled in the rambling web of a grandfather's pride, stretched at times by outright exaggeration, but pleasantly so. I listened until the yawns came too frequently, then quietly explained to my friend that I must leave. Charlie knew I'd be back because I'm hopelessly hooked on his yarns, his perceptive philosophy, his independence and even his sour humor.

As I drove back I considered the "non-progressive and old-fashioned" labels Charlie's neighbors had hung on him. Charlie isn't exactly work brittle, I admitted, and maybe some young, city-born farmer might think living out there alone in that old house is eccentric, but I wished more people could know Charlie as I know him. If they could see past the surface, they'd see the wisdom and sense of value in him. They'd see a heart a big as the

grandest mansion in the county and they'd understand that this southern Iowa soil and Charlie's very soul are one and the same.

It's too bad, I thought, that when Charlie dies someone who doesn't understand might buy his land, and pay more than it's worth. Then he'll have to tear down the house and cut down the dead tree. He'll struggle to make the land pay and likely overgraze the pasture, plow through the grass waterways and bulldoze the timber. When the rains come he'll turn his back on the loss of precious soil that once nurtured so much. And, he'll never suspect he's allowing a grand old friend to wash away.



PORTRAIT OF A CATFISHERMAN

By John Holt

Gate duty — a good park ranger gets up and opens his gates early. A smart ranger installs an automatic opener on his gate, operated by an electrical switch located near his bed. Unfortunately I am only a good ranger and must attend the gate in person.

"Praise the Lord brother, it's a good day for catchin' cats." I stare increduously at the old man leaning against his car, sipping coffee, just outside the locked gate. How can anyone be that happy at 4:00 a m.? And to make matters worse he's there every morning -always happy. How? Today I'm going to get some answers. "What time did you get up today Earl?" "Oh about two." "What time did you go to bed?""Oh, about six or seven.""What did you have for breakfast?" "Catfish." "What did you bring for lunch today?" "Catfish." "What did you eat for supper?" "Mr. Holt, I generally don't eat much supper, a full stomach makes me dream too much - a person can't sleep good when he dreams too much."

The tubular steel gate swings open, screaming out a protest on its unoiled hinges. Earl drives through and for the next ten hours the catfish at this small southwest Iowa springfed lake will face their ultimate challenge, avoiding the old man on the bank, resist his tantalizing homebrewed bait.

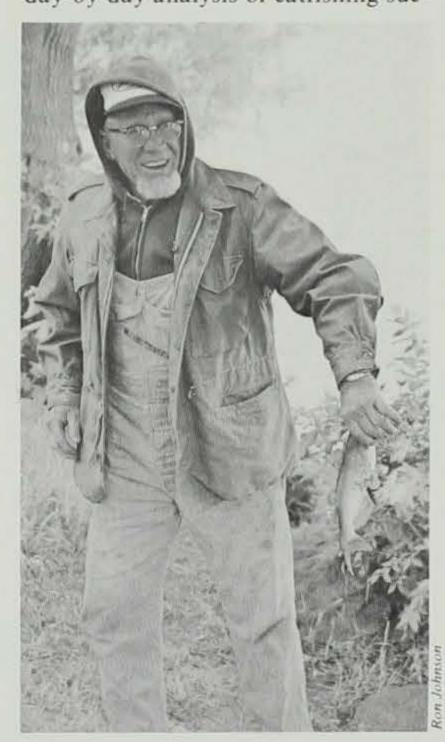
10:00 a.m. — the heavy flail mower drags behind the old tractor leaving a wake of decapitated brome grass along the lake dam. A good park ranger keeps the grass cut. It wouldn't be proper for early morning fishermen to get their pantcuffs wet with heavy dew.

I can see Earl in the distance, barely visible, squatting along the edge of the lake like an aborigine, every sense fine tuned, waiting for the "grandaddy" to hit his bait.

When I reach Earl I can see he wants to talk — and I can guess what he wants to talk about. He reaches one giant paw down to the water and pulls out a fish basket containing three or four hapless victims, all with spines trimmed, a standard procedure for Earl to prevent his catch from inflicting damage upon one another. "Fishin' pretty good today, eh Earl?" "Over yonder — Praise the Lord," a big thumb jerks toward the center of the

lake, "out in the channel I caught three chunkies before the sun hit the water." A "chunky" is a cage reared channel catfish in its third summer, weighing approximately two pounds. Just right for the frying pan. The "channel" is a mysterious catfish hangout located somewhere in the middle of this sixteen acre lake. The exact location is known only to Earl.

"How's the fishing been this year Earl?" Out pops Earl's record book a detailed account of each fish caught, its size class, date caught, a complete day-by-day analysis of catfishing suc-



cess at Cold Springs. It would make a fish biologist's creel census seem pale in comparison. "Well I am down a little from last year." "How many ya got?" "Only two hundred and ninety-two, but Praise the Lord, things are picking up, they've really been hitting this week. Why just yesterday —"

I can see I'd better move on. I push the starter button on the old Ford, advance the throttle a little, engage the mower and start to drive off when an idea hits me. I see an opportunity here. Earl is a conscientious, hardworking sincere individual. His heart is in the right place, he loves this park, he's reliable, he comes here everyday at 4:00 a.m. He's be a perfect park employee — "Official Gate Opener". I could just visualize it. No more screaming alarm clocks at 3:45 a.m., just peaceful slumber while Earl faithfully opens the gate. Why not? He's here everyday.

"Say Earl," I speak in an encouraging tone, "how'd you like to be Official Gate Opener? Since you're here everyday at four o'clock it'd be perfect. You'd get your own key. What do you think?" What a clever idea. Earl could come as early as he liked: 3:30, 3:00, 2:30 and I wouldn't have to worry about it. Earl began to speak, "Well John, as much as I like this park and respect the job you're doing here" my hope began to fade, "and as much as I love catching these catfish, Praise the Lord." I could see Earl did't share my enthusiasm, "I just hate to commit myself. Fishing just wouldn't be the same if I felt obligated to show up." My dreams of uninterrupted slumber slipped away. It's hard to argue with reasoning like that.

"Well, I just thought I'd ask," I mumble as Earl resumes his neverending task. He reaches down and picks up a gob of bait, warm and rotting in the sun, carefully shaping it over the small treble hook into a pear-shaped glob. "Not too hard, not too soft," Earl comments on his bait and prepares to cast.

Earl uses two rigs, both equipped with open-faced reels. The rods are of a surf casting caliber, the kind you'd find along the coast of Florida, designed for hauling in heavy tarpon. The reels match the rods for size. The sinkers, which are the slip type, are sufficiently large to allow Earl to win any long distance casting contest with ease.

Earl cranks up, both hands wrapped around the butt of the rod. He flings the whole works with all the power his 70-year-old plus frame can muster and the line sings off the reel. About a minute later we finally hear the splash, somewhere off in the distance. Earl looks satisfied. "Did you get her where you wanted Earl?" "Why yes!" "Out in the channel?" "No sir, I'm on the reef!" The reef — I should have known, another catfishing hotspot known only to Earl.

John Holt formerly was the Cass County Park Ranger at Cold Springs Park located near Lewis.



Lee Gladfelter

WHITE-TAILED DEER

by Lee Gladfelter

White-tailed deer (Odocoileus virginianus) were probably abundant along the wooded stream bottoms when settlers first arrived in Iowa. However, most of Iowa was native tall grass prairie and not good habitat for deer who prefer to live along the forest edge. Deer were utilized heavily by Indians and settlers for food and clothing. In the late 1830's deer hides were selling for 50 cents and venison was 2 cents a pound. By the 1860's, deer were

rarely seen in the heavily settled areas of central and eastern Iowa. In the northwest corner of the state, deer were common until the severe winter of 1880-81, when many were killed for market.

In 1856, the first law was passed to help protect deer by providing a closed season from February 1 to July 15. In 1872, the closed deer season was extended to January 1 to September 15. In 1898, the 27th General Assembly provided complete protection for deer by closing the season year round. By this time, deer were nearly extinct in most areas of the state.

Deer were reestablished in Iowa through escape of animals from captive herds, trapping and transplanting programs of the Iowa Conservation Commission, and the immigration of animals from Minnesota, Wisconsin, and Missouri. In 1894, 35 whitetails escaped from the captive herd of Wil-

"In 1936 officials estimated the deer herd at 500-700 animals."

"Today... hunters annually harvest 20,000 deer."

liam Cuppy of Avoca which provided the nucleus for future deer herds in western Iowa. In the early 1920's, about 60 deer escaped from the Singmaster farm in Washington County and became established along the Skunk River. Another herd was established in Boone County at the Ledges State Park in 1928 when two deer, purchased from Minnesota, were released. Deer were captured from this herd and transplanted to other parts of the state during the 1940's.

In 1936, ICC officials estimated the deer herd at around 500-700 animals, but this was considered conservative because deer were widely scattered. In 1947, the first statewide population estimate was made with deer herds reported in 58 counties containing an estimated 1,650 animals. Deer herds were reported in 89 counties in 1950 and the population was estimated to be 4,500. By 1953, the population had expanded to 13,000 because of protection from hunting and favorable habitat conditions.

The reestablishment of whitetails in Iowa was complete, but problems with deer damage to agricultural crops were developing. In areas where deer were heavily concentrated landowners were experiencing damage to corn, soybeans, and alfalfa crops and expressing their concern to the Conservation Commission. In 1953, the Iowa legislature provided the laws necessary to open a hunting season to harvest surplus animals and scatter the large deer concentrations. The 1953 hunting season was restricted to 45 counties for 5 days and about 4,000 deer were harvested. Since 1953, hunting seasons have been held annually with various restrictions on number or type of licenses issued. Today, more than 90,000 shotgun and bow and arrow hunters spend ½ million days hunting deer during an 11-day shotgun and 56-day bow and arrow season and annually harvest about 20,000 deer.

Description

The most characteristic feature of the white-tailed deer is the white underside of its tail or "flag" that is flashed when disturbed. Deer are graceful, sleek, and have long legs which makes them look taller than their actual height of 35-38 inches. Deer grow a lightweight, reddish-brown coat in the summer and a heavy, greyish-brown coat in the winter. Fawns have a reddish-brown coat with white spots that helps camouflage them from their enemies. Fawns lose their spots at 3-4 months of age when they are more mobile and no longer rely on camouflage for protection. Fawns weight from 4-7 pounds at birth and will gain 80-100 pounds in their first six months of life. Adult males reach an average wieght of around 240-265 pounds at about 4½ years of age, while adult females average 140-160 pounds. The largest deer ever reported in Iowa was a 440-pound buck taken in Monona County during the 1962 hunting season.

Antlers are normally found only on males and a new set is grown each year. Antler growth begins in March or April and continues until August or September when the soft covering of skin called "velvet" dries up and is rubbed off on small trees and shrubs. Antlers are utilized in sparring matches with other bucks to establish dominance for breeding. Bucks shed their antlers in January and February following the breeding season. These fallen antlers are eventually consumed

Lee Gladfelter is a wildlife research biologist and is responsible for white-tail deer research statewide. He has been with the Commission since since 1969. He holds a B.S. degree from Kansas State University and a M.S. degree from the University of Idaho.

by rodents which utilize the rich minerals in their diet.

Antler size is determined by the animal's age, genetic background, and quality and quantity of food. At about 6 months of age, males will have small unbranched antlers called "buttons" that are barely visible above the skin. When a buck reaches 11/2 years of age, it will normally have branched antlers with 2-5 points on each side. As the buck grows older, the size of the rack increases. Peak growth is usually reached at about 5½-6½ years of age after which antlers may become smaller. The age of a buck cannot be accurately determined by counting the number of points on the rack since this is highly variable, but overall mass of the rack does give an indication of age. Sometimes abnormal points occur which are usually caused by injury to the rack during the growing season, improper hormone balance, or heridity. A trophy buck in Iowa is determined by measuring the length of points over I inch, length and diameter of the main beams, and the spread between the main beams. The largest typical rack measured in Iowa scored 1995/8 Boone and Crockett Club points (7th in the world) and the largest nontypical rack was scored at 282% points (2nd in the world).

Distribution and Abundance

Deer occur in every county but highest deer densities are found in the southeastern and northeastern parts of Iowa. Deer are basically associated with timber and therefore areas with large amounts of timber usually have the highest deer density. Because timber habitat is limited in Iowa, deer densities are low compared to surround-



supports around 3-6 deer per square mile of land while poorer habitat supports only .1 to .5 deer per square mile. With excellent habitat, a good food source and protection from hunting, deer densities can reach as high as 100 deer per square mile. These high densities are usually only found in a small area such as a state park or refuge.

Habitat and Home Range

Deer prefer areas of timber interspersed with agricultural land. The "edge" created where timber joins other habitat types provides a great diversity of forage species. In general, the more forest edge per unit area, the more deer an area will support. In Iowa, the most extensive forest type is oak-hickory which occurs on slopes and ridges or is dispersed in narrow bands throughout agricultural land. Tree species in this forest type are the white oak, northern red oak, black oak, burr oak, hickories, maple, basswood, walnut, and other hardwoods. Bottomland timber such as maple, elm, willow, ash, cottonwood, sycamore, and boxelder is also utilized by deer.

Cover requirements appear to be related to the animal's need for seclusion and escape. In the spring, does seek seclusion for fawning in brushy fields, heavily vegetated stream bottoms, forest edge, pastures, and hayfields. During summer, deer are usually found wherever sufficient food, water, and solitude exist. Standing corn is used for food, travel, and escape cover in the fall. Winter cover is more important, however, since the need for seclusion concentrates deer in protected areas such as heavy timber, cattails, tall weeds, and brush. Because winter cover is critical, any reduction in this habitat type will correspondingly produce a decline in the herd.

The annual home range of deer varies from one half-one square mile and is determined mainly by availability of suitable habitat, food, and water. Home range in the spring and summer is small because of fawn rearing and plentiful food supplies. However, home range increases in the fall and winter because of breeding activity and scarcity of food.

Spring dispersal is extensive, with some deer establishing new home ranges as far as 50 miles from where they were born. One benefit of this dispersal is that small isolated habitats can be replenished if deer numbers are reduced by heavy hunting pressure or some other major mortality factor.

Habits

At fawning time, does prefer solitude and stay close to their young to provide food and protection. Sometimes the doe and her new fawns are joined by previous offspring to form a family group of 4-6 deer which stay together most of the year. Bucks do not take part in the care of the young and usually remain solitary during the spring and summer. During the breeding season, bucks may be found together but only one will be the dominant buck, and he will mate with most does in his territory. This dominance is established by short jousting matches that rarely cause injury to the participants. In the winter, bucks join family groups to form small herds.

Whitetails can run at speeds up to 35 mph but prefer to slip away from danger or remain motionless while danger passes. They are excellent jumpers and can easily clear an 8-foot fence if being pursued. They are also good swimmers and can safely cross large rivers.

Food and Water

Deer habitat must provide a good food supply throughout the year. Quality and abundance of fall and winter food items are critical because they



determine physical and reproductive condition. Deer selectively sample most plant species in their home range but relatively few species make up the bulk of their diet. Cultivated crops, mainly corn and soybeans, provide 78% of the annual diet of deer in Iowa. Corn is the most important food item and is utilized heavily from October to April. A large portion of this use is limited to agricutural residue remaining in fields after harvest. Soybean use is limited to September and October. Woody browse such as buckbrush, oak and sumac provides 13% of the diet and is utilized in the summer and fall and during periods of heavy snowfall in the winter. Various forbs make up 5% of the diet and are utilized heavily in the spring and summer along with grass. Deer will use water daily, if available, but can subsist a long time on water provided by succulent food items.

Reproduction

The breeding season extends from October through January. Breeding by adult does starts in October and continues through December with 70% of the breeding occurring from November 2-23. Breeding activity by fawn does (6-8 months old) extends from November through January with 75%

of the breeding occurring between November 17 and December 22. Fawn does reach a peak in breeding activity about three weeks to one month later than adult does.

Fawns are born from early May through August after a $6\frac{1}{2}$ month gestation period. The peak fawning period is from the last week in May through the first two weeks of June. Fawns are weaned at 3-4 months of age but stay with the doe until they are about one year old.

Adult does normally produce two fawns, but three or four are possible. About 70% of the fawn does bred during their first fall usually produce only one young. Iowa deer have a very high reproductive rate compared to other states because of the nutritious food, relatively mild winters, and lack of diseases and parasites.

Bucks are capable of breeding at 1½ years of age but the majority of the breeding is performed by the older dominant bucks. Does are receptive to bucks for about 24-48 hours and are vigorously pursued during this period. If for some reason, does are not bred, they will again come into heat about 28-29 days later. This cycle may be repeated 2-3 times if the doe is not

bred. A doe bred late in the fall will have her fawn late in the summer which accounts for occasional reports of small deer seen during the hunting season.

Hunting

Bagging a "wily whitetail" is a memorable experience since the hunter is pitting his skill against an animal that has an acute knowledge of his surroundings and a keen instinct for survival. There are many things that a hunter can do to prepare for this ultimate challenge. First, he should become acquainted with the terrain he is going to hunt. This can be accomplished with several pre-season trips to the hunting area. A good knowledge of the habitat, deer trails, topography, location of feeding and bedding areas, and daily activity patterns of deer will pay big dividends when the season opens.

Many hunters prefer to use a bow and arrow to hunt deer. Bow hunting is basically a solitary sport with hunters trying to harvest a deer by utilizing camouflage clothing, ground or tree stands, and masking the human odor with covering scents. This is a high quality experience since the bow hunter must be able to get within 20-30

yards of a deer to make a good shot. In Iowa, about 25% of the bow hunters are successful in harvesting a deer each year. Bow hunting seasons are several months long and include the major portion of the "rut" when deer are more mobile and less wary.

During the shotgun season, both a shotgun with slugs and a muzzleloading rifle are allowed. Shotgun hunters utilize several techniques when hunting deer. When 1-2 individuals are hunting, the best technique is to "still" hunt. "Still" hunting involves slowly and quietly walking through good deer habitat in an attempt to intercept a moving deer or jump one that is bedded down. This is a high quality experience since it requires both skill and experience to harvest a deer on a one-to-one basis. Another technique is hunting from a ground or tree blind, which involves taking a stand near a good trail to intercept an animal moving between bedding and feeding areas. Most hunters utilize the "drive" hunt because they prefer to hunt in larger groups. This technique employs the use of 3 or 4 drivers which push deer past 2 or 3 other hunters that have taken stands on the opposite side of the timber. This is a less desirable method of hunting deer because the hunter is utilizing more luck and shooting ability than knowledge and skill. Regardless of the method used, about 1 out of every 3 shotgun hunters bags a deer during the early December season.

Deer are usually found on timbered ridges and slopes or at the head of draws extending out into agricultural areas. However, after deer have been hunted for several days, they move to remote areas to escape the hunting pressure. These undisturbed areas are usually not associated with normal deer habitat and include small weedy patches, fencerows, and grassy waterways. Hunters should check these areas frequently, especially those looking for a big buck.

Deer on the move normally work upwind or crosswind when possible and frequently use established trails when escaping danger. They rarely move downwind unless they are out in the open. Deer can see hunters at a greater distance with snow cover and will normally move ahead of them. Without snow cover, they will frequently stand or lie still and let the hunter walk by and then sneak out behind him. When it is windy, deer become very nervous because of increased noise and motion in the forest and will move into open areas where they rely on their eyesight to spot danger. All of these factors should be considered when developing the best technique for bagging a trophy whitetail.

Management

The management plan for the Iowa deer herd is designed to maintain a stable to slightly increasing population while providing the maximum amount of quality recreation for sportsmen. This goal is accomplished by monitoring deer population trends, regulating hunting to provide proper harvest, beneficial habitat manipulation, a progressive research program, and active law enforcement.

The size of the deer herd must be regulated to prevent excessive crop damage and loss of revenue by landowners. This can best be accomplished by allowing hunting seasons that provide both quality recreation and control of animal numbers. Harvest manipulation is the primary tool for managing deer in Iowa. The most important requirement for a sound harvest strategy is a good knowledge of annual deer population trends on a regional basis. Population trends are determined from changes in the number of deer reported killed in traffic accidents and conservation officer estimates of winter deer populations. New census techniques being studied are: winter aerial counts and spring spotlight surveys along 30-mile routes.

To help determine if hunting seasons are meeting management goals, harvest results are tabulated from information provided by hunters on post-season report cards. Hunter report cards provide estimates on number of deer harvested, hunter success rates, hunter effort, sex ratio, and crippling rate. Also, age composition of the harvest is calculated from a sample of deer teeth returned by successful hunters.

The return of the white-tailed deer as a major game species in Iowa is a tribute to good landowner attitude and progressive management, research, and enforcement programs. Likewise, responsibility for the future of deer in Iowa depends upon the cooperation of hunters and landowners, preservation of critical timber habitat, legislative support, and continued professional management of the resources.



rtwork by Larry Poo

WHEN LADIES WORE HATS



By R. Runge

There are probably few animals on earth which, at some time or another have not given tails, legs, or part of their skins to decorate a lady's hat. In fact, in the late 1800s you weren't anyone if you weren't walking around the park with half a bird on your head.

The millinery companies saw great profits in providing the fashion-conscious ladies of the era with the grandest feathers known on earth. Just as today, the leading designers dictated what was fashionable. They created the demand and the plume hunters were quick to furnish the supply.

It must be pointed out that these "hunters" were not acting under the framework of existing seasons and limits. So, it is unfair to equate them with the sport hunters of today. They were simply killing birds for their feathers any way they could get them, and they went to the ends of the earth to get them.

Exotic birds could be found in swamps, jungles, mountain ranges and even deserts. It is not exaggerating to say that birds were hunted for their feathers all over the world. In the day and age of cheap, if laborious, transportation, plume hunting was a profitable occupation. It must also be taken into account that certain bird

populations had not been hunted to any extent by man up to that time. Killing large numbers of certain birds in one trip was common. There were great concentrations of birds in certain areas and many of them were not too wary of man.

For the most part, the birds were skinned or stripped of their valuable feathers and the plumage then shipped to London or Paris. During this time large feather markets existed much the same way that a commodity clearing house or diamond market exists today. Hat makers from North America and Europe attended regularly scheduled showings to bid on numbered lots of feathers to use in their trade.

Some of the more exotic feathers brought high prices but it is also worthy to note that the sheer numbers of species represented was tremendous. At any one time the hat makers were bidding on feathers from many types of eagles, hawks, gulls, terns, egrets, swallows, owls, kingfishers and even hummingbirds.

In the United States one of the most prized plumes came from the American egret or its near relative the great white heron (actually a white form of the great blue heron). The egret was found mostly in the southern states and the heron was restricted to Florida. The long fragile plumes deemed most desirable are worn by adult birds only during mating and early nesting season. The plumes sold on the market for over \$50.00 per ounce. Remember, this was in turn-of-the-century dollars.

Therefore, the hunters timed their trips to catch the birds during their stay in the nesting rookeries. The birds were shot as they came into feed their young. The nestlings were left to die. It took five or six adult birds to make up an ounce of the precious feathers.

How much does a feather weigh? At each sale in Paris or London tens of thousands of ounces of feathers were sold. The amount of birds killed through these years must have been staggering. In the states the American egret, white heron and the smaller snowy egret were shot to a point which approached extinction.

Finally laws were passed to save the birds which remained, eventually including statutes that made the mere possession of the feathers illegal. Before it all ended several game wardens were murdered as they guarded the nesting grounds. All in the name of fashion.

Today, the white wading birds still thrive; a proud statement to those who fought to save them. Now, a lady wouldn't be caught dead with a bird on her head but what was that we saw hanging from the back of that guy's cowboy hat?



WARDEN'S DIARY

By Jerry Hoilien

It was early spring, back a few years, at the Mississippi River Lock and Dam #9 and I had promised George Kaufman, a retired warden, a big walleye (that's another story). Curt Noble, the officer at Waukon Junction at the time, and I had taken a boat up to the dam to check on snaggers. It's unlawful to take game fish by purposely hooking them anywhere other than in the mouth. Some lures can effectively snag fish by jerking them hard through the water, rather than the gentle raising and lowering of the lure designed to give it the "action". This amount of action is where the problem comes in. Now that snagging rough fish is legal, it's rather tough for a fisherman to turn loose a foulhooked game fish.

Most of the snaggers were pretty obvious that morning and as we got out our poles, we anchored next to a couple of boats quite close to the fishing barge located just below the dam. There were a lot of people fishing that day and doing quite well, too. Curt had already caught a couple of nice keepers when I hooked into something I couldn't hold. Forgot to tell you, I fish with a "very-lite" pole -just above an ultra-lite with a six-pound test line. I catch a lot of ribbing for fishing with a "cobweb", but that's what I prefer. The fish headed for the rollers and all I could do was let out line. Then it swung downstream and Curt started the motor and we "followed" this one wherever it wanted to go. Everyone was watching us, wondering what in the world was going on. It wasn't exactly what we had in mind that morning, but what can you do? Pretty soon, the fish swam back toward the other boats with me sitting in the front with a horseshoe fishing pole and Curt following along, steering whatever way my fish pole bent.

As we approached the other boats, it was obvious we were going to run afoul of their anchor lines. To my amazement, the other fishermen pulled their anchors and let us by. One pulled alongside and threw us his big landing net. The fish finally tired and we landed an eight-pound walleye a half mile or better downstream.

Returning to the fishing barge to weigh and photograph the fish, we saw another battle going on. Two men finally wrestled a huge fish over the side of their boat - three times the size of ours. We could see them sitting on it in the bottom of the boat from the barge. Soon, it settled down and we yelled over for them to hold it up. As both men struggled to hold up the 20some pound buffalo, someone on the barge yelled, "What is it?" I could see the smile on the fisherman's face as he yelled back across the water "Walleye". He almost tipped over a fishing barge as everyone rushed to see what would have to be the world's record walleye. You can't beat those fishermen!!

Try this on your large fish fillets.

Marinate fish fillets for one hour, turning frequently in dressing made from 2 Tbsp. salad oil, 1 tsp. vinegar, 1 tsp. grated onion, ½ tsp. salt, and 1 tsp. paprika.

Fry the fillets rolled in flour, one beaten egg and cornflake crumbs, using butter or margarine. When well-browned, put in uncovered pan, set in 350° oven until done — 15 minutes should do it.



conditions. The plant grows from two to three feet

in height, with one and one-half inch individual

flowers crowded into a dense terminal spike. The

leaves are arranged alternately on the stem and

are lance-shaped: the lower ones are short-

petiolate.

found in lowa. They vary from white to blue to crim-

son in color, and from prairies to damp swales to

woodland edges in habitat. Look for the lobelias

this summer — especially the striking scarlet lobe-

lia cardinalis, and its hummingbird and insect-

visitors.