

Iowa CONSERVATIONIST

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JUNE 1983



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Iowa CONSERVATIONIST

Volume 42, No. 6 • June
1983

STAFF

Roger Sparks, Editor
Julie Holmes, Assistant Editor
Ron Johnson, Photographer
Kenneth Formanek, Photographer
Larry Davis, Writer
Larry Pool, Graphic Artist

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FRONT COVER: Green Valley Lake in Union County is developing into a panfish hotspot. Many have already discovered its abundant population of crappies.

Photo by Ron Johnson

BACK COVER: The bobcat, as well as other woodland wildlife species, is listed as endangered in Iowa (see story on Page 14.)
Artwork by Rex Heer.

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Ron Johnson

Why would a state lake in Iowa need more fishermen? Is it a new lake? No. Have poor fishing? No. Difficult to fish? No. Poor access? No. Well then, why?

Green Valley Lake presently has an excellent population of seven- to eight-inch bluegill and crappie that average eight inches in length. Fall fisheries research at the lake in 1982 indicated populations of bluegill approaching 400 pounds per acre and crappie at just over 300 pounds per acre. Translate this to catchable fish and it means over 2,000 keeper-size panfish per acre. Toss in excellent channel catfish fishing and respectable largemouth bass fishing and the ingredients are present for an outstanding fishing lake.

This 400-acre lake is constructed in southwest Iowa, near Creston. The lake was constructed in the early 50's and following a good fishing period commonly associated with new lakes, the quality of fishing declined. Over the years, the catfish fishing was good, but a large carp population and numerous small, slow-growing crappie dominated the fishery.

In 1974, the Iowa Conservation Commission began efforts to correct this problem. The lake was lowered to eight feet to reduce the amount of water and thus cut chemical renovation costs. A

selective fish toxicant, antimycin A, was then applied to the lake. At low concentrations, this chemical kills all scaled fish, but leaves catfish unharmed. After the fish removal, bass, bluegill, crappie and additional channel catfish were restocked. Channel catfish and bullhead fishing was great by 1976 and from 1977 to 1979, anglers were treated to large numbers of bluegill up to nine inches long and many black crappie over nine inches in length.

The success story soured around 1980. The Green Valley watershed is small for a southern Iowa lake (12 acres of land drain into every one acre of lake), but land use practices have changed drastically since the 1950's. Today, around 80 percent of the watershed is in row crop and the lake is receiving high amounts of fertilizer in the water runoff. This nutrient loading, combined with a shallow lake depth and much wave action, has led to extensive blue-green algae problems. These algae blooms inhibit fishing success, restrict fish reproduction and create water quality problems.

A lake restoration and protection project is underway at Green Valley. With the help of state and federal funds, improved land management practices will be implemented in the watershed. The project will take five years to

WANTED: Fishermen

LOCATION: Green Valley Lake

By Mike McGhee



Ron Johnson



Mike McGhee

complete and together with in-lake treatment, should improve lake water quality. The total cost will be more than \$1 million.

The lake is located within Green Valley State Park. Camping facilities that will accommodate 112 units are present. The modern campsites have electrical hook-ups, toilet and shower facilities. There is a state operated concession, supervised swimming beach and picnic areas. Rental boats are also available. Hiking trails border some of the lake and part of the system is a self-guided nature trail.

The lake also permits water skiing from June 1 through September 10 in a designated ski zone. Ski hours are between 10:00 a.m. and sunset, with all motor powered boats maintaining no-wake speeds on the entire lake between sunset and 10:30 p.m., between 4:00 a.m. to 10:00 a.m. and at all times outside the ski zone. Before and after the water skiing season only outboard motors not exceeding ten horsepower are permitted on the lake.

Fishing for crappie and bluegill is generally best during the spring, but with a little more effort, anglers can catch panfish all summer. Ice fishing this past winter at the lake was fantastic. Though the season was shortened by the warm

weather, many fishermen took home a mess of fish. It wasn't uncommon for a fisherman to catch 50-100 fish in three to four hours. The catch was primarily bluegill and crappie but some big channel catfish and a few bass were also caught through the ice.

During the open water fishing season, jigs and beetle spins are used to catch crappie. Small lures work best, with jigs 1/16 ounce or smaller ideal. At Green Valley, chartreuse, yellow, white and black seem to be the best colors to use. These lures are fished shallow, near shore when the fish are spawning in the spring. Boat anglers will use the same lures while drift-fishing during the hot summer months.

Not to be overlooked are the stake beds and brush piles located around the lake. Several methods work best for fishing these structures. A person can cast from shore or a boat using a jig and bobber. The float allows the lure to go over or near the structure without getting hung up. From a boat, a fisherman can anchor right over the structure and vertically jig his lure. Also, not to be overlooked is the use of a natural bait, particularly minnows.

Many times, bluegill are caught using small jigs or spinners in the same places

that crappie are caught. Best lure colors for catching bluegill are black or brown. However, for bluegill, a small hook, worm and bobber is a hard combination to beat. In late May and June, the bluegill move close to shore to spawn. Generally, where one bluegill is found there are more around. During other times of the year, they can be caught in the same areas crappie frequent.

The angler planning a trip to Green Valley must remember that there is a fourteen-inch length limit on largemouth bass. Tiger musky have also been stocked and a thirty-inch minimum length limit is enforced.

Maps showing location of facilities, lake bed contours and stakebeds are available at no charge from the Iowa Conservation Commission, Information and Education Section, Des Moines, Ia. 50319 or at the park rangers office.

Mike McGhee is a fisheries management biologist located at the state fish hatchery in Mt. Ayr. He holds a B.S. degree in biology from Friends University in Kansas, and an M.S. degree in fish biology from Kansas State University. He has been with the commission since 1976.



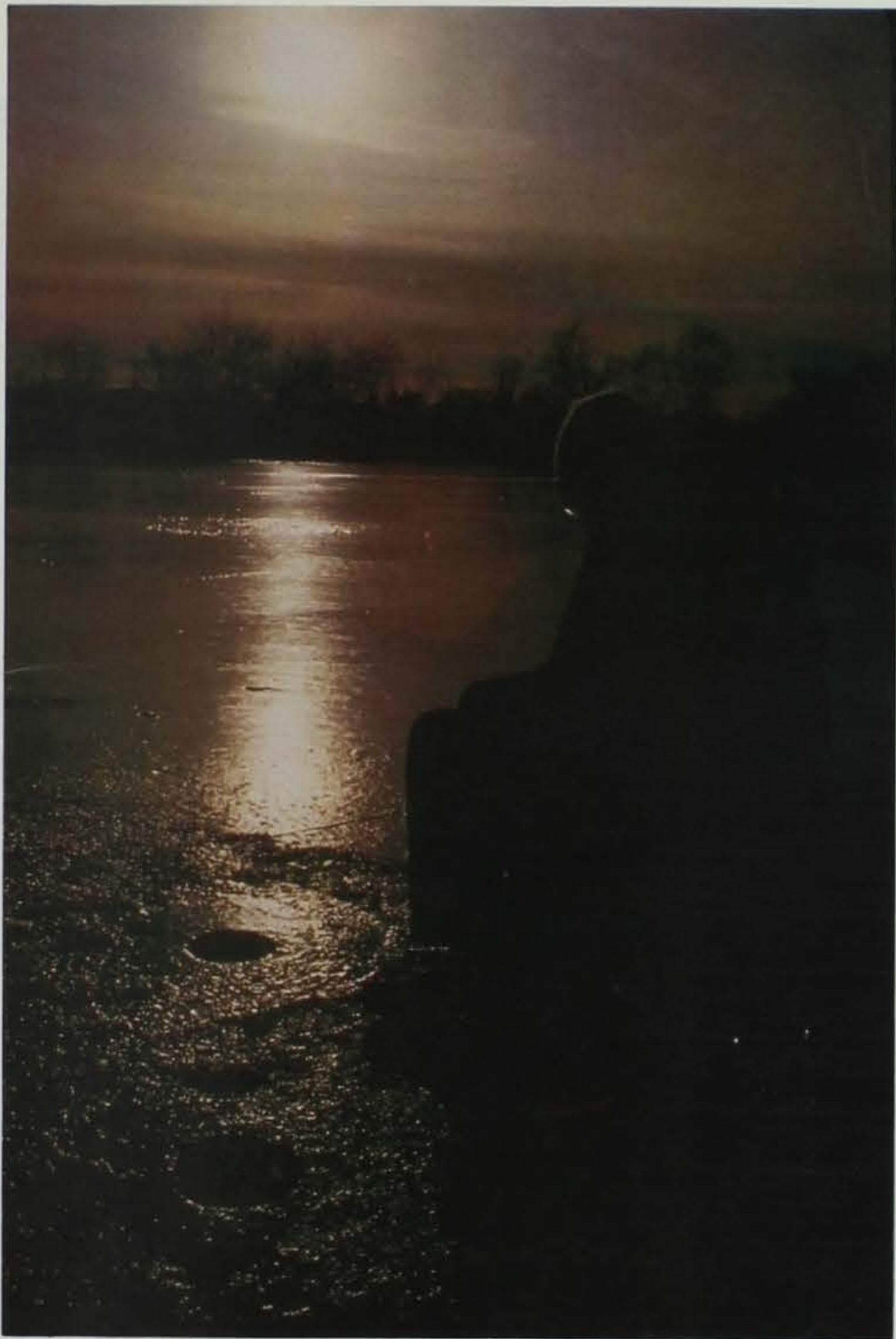


PHOTO CONTEST WINNERS

The *Iowa Conservationist's* first photo contest was so successful, it has been decided by the staff to make it an annual event. So, dust off those cameras and capture some of Iowa's natural beauty. Again, both black and white and color entries will be accepted in four divisions. Look for rules and an entry blank in the January, 1984 issue of the *Conservationist*. In the meantime, use the following pages as inspiration.

FIRST PLACE

Humans and Our Resources

*Ken Krantz
Colo, Iowa*

FIRST PLACE

Power of Nature

*Dennis Campbell
Keokuk, Iowa*

(Opposite page)

FIRST PLACE

Scenic Beauty

*Mary Lamphier
Arlington, Iowa*



SECOND PLACE
Power of Nature

Dr. Gerry Williams
Waukon, Iowa



SECOND PLACE
Scenic Beauty

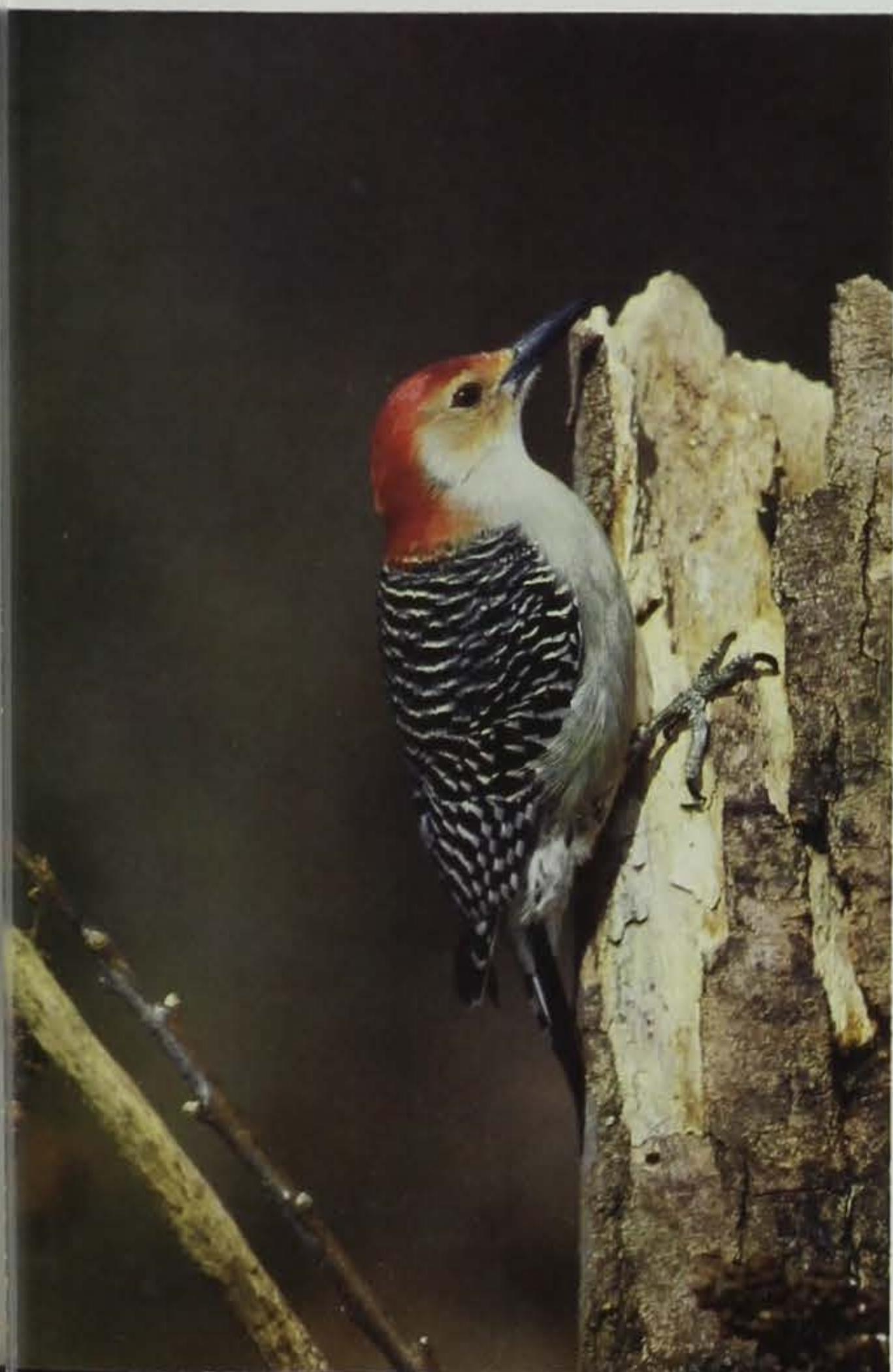
David Menke
Missouri Valley, Iowa



SECOND PLACE

Humans and Our Resources

*Delores Meister
Solon, Iowa*



FIRST PLACE

Wildlife

*David Menke
Missouri Valley, Iowa*



SECOND PLACE

Wildlife

*Juraj Mihalicek
Thompson, Iowa*

FIRST PLACE

Humans and Our Resources

*John Smeltzer
Fort Collins, Colorado*



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FIRST PLACE

Scenic Beauty

*Tom Barnes
Cresco, Iowa*



FIRST PLACE

Power of Nature

*Jim Buenz
Charter Oak, Iowa*



FIRST PLACE

Wildlife

*David Menke
Missouri Valley, Iowa*

1982 — Best Year Yet TROPHY TURKEYS

Another record number of trophy turkey certificates and patches were sent to successful hunters who bagged bearded birds weighing 23 pounds or more. One of the 314 entries set a new state record — tipping the scales at 30 pounds 8 ounces. Dr. David J. Randall of Lucas took the large gobbler in Lucas County, April 21. His trophy bettered the old record set in 1981 by 4 ounces.

In the All-Time Top Ten category (see accompanying list), seven 1982 entries now appear on the list. All in all it was another record setting season!

ALL-TIME TOP TEN TURKEYS (With Ties)

Name and Address	Weight	Date	County Taken
Dr. David J. Randall Lucas	30 lb. 8 oz.	4-21-82	Lucas
Dennis Moore Sherrill	30 lb. 4 oz.	4-17-81	Clayton
James Reihmann Amana	29 lb. 10 oz.	4-21-82	Iowa
Dwight D. Sherman Spencer	29 lb. 3/4 oz.	5-2-82	Monona
Ed Hull Chariton	29 lb.	4-14-82	Lucas
Dwight E. Coulson Dubuque	28 lb. 12 oz.	4-13-82	Clayton
Robert F. Willson Des Moines	28 lb. 5 oz.	4-20-80	Lucas
Terry J. Utke New Albin	28 lb. 2 oz.	4-20-82	Allamakee
Ronald D. Brown Burlington	28 lb.	4-22-79	Des Moines
Keith Erickson Dayton	28 lb.	4-24-82	Lucas
Mark K. Walter Ames	28 lb.	4-14-81	Boone

1982 AWARDS

Name and Address	Weight	Date	County Taken
Dr. David J. Randall Lucas	30 lb. 8 oz.	4-21	Lucas
James Reihmann Amana	29 lb. 10 oz.	4-21	Iowa
Dwight D. Schumann Spencer	29 lb. 3/4 oz.	5-2	Monona
Ed Hull Chariton	29 lb.	4-14	Lucas
Dwight E. Coulson Dubuque	28 lb. 12 oz.	4-13	Clayton
Terry J. Utke New Albin	28 lb. 2 oz.	4-20	Allamakee
Keith Erickson Dayton	28 lb.	4-24	Lucas
Steven R. Lull St. Charles	27 lb. 8 oz.	4-18	Madison
John Holmes Keokuk	27 lb. 4 oz.	4-13	Lee
Dennis R. Maxwell Derby	27 lb. 4 oz.	4-17	Lucas
Gale L. Sindt Buffalo	27 lb. 4 oz.	4-15	Muscatine
John Guess Cedar Falls	27 lb.	4-15	Clarke
Jerry N. Hill Prairie City	27 lb.	5-8	Clarke
Jim Koch Manchester	27 lb.	4-20	Delaware
Robert Runge Des Moines	27 lb.	4-14	Guthrie
Bob Wegter Pella	26 lb. 13 oz.	4-13	Lucas
Eugene Lee Boone	26 lb. 12 oz.	4-23	Boone
Eric Reihmann Amana	26 lb. 12 oz.	4-22	Iowa
Kerry A. Colten Dayton	26 lb. 10 oz.	4-13	Webster

Name and Address	Weight	Date	County Taken
Warren L. Bonnett Bussey	26 lb. 8 oz.	4-25	Monroe
Douglas Boyd Ottumwa	26 lb. 8 oz.	4-17	Van Buren
Kim Cox Boone	26 lb. 8 oz.	4-21	Boone
Jeff Dunham Marshalltown	26 lb. 8 oz.	4-17	Decatur
Jack C. Hahn Middle Amana	26 lb. 8 oz.	4-14	Iowa
Carol D. Loeffler Brighton	26 lb. 8 oz.	5-5	Washington
James L. Malloy Keota	26 lb. 8 oz.	4-30	Washington
P. J. Muldoon Waterloo	26 lb. 8 oz.	4-15	Clarke
Bryan L. Mydosh Oskaloosa	26 lb. 8 oz.	4-15	Monroe
Gordon Plahn Lehigh	26 lb. 8 oz.	4-21	Webster
Michael J. W. Sells Wapello	26 lb. 8 oz.	4-24	Van Buren
R. K. Street Humeston	26 lb. 8 oz.	4-13	Lucas
Randy G. McPherrin Milo	26 lb. 4 oz.	4-25	Madison
Bud Morris Boone	26 lb. 4 oz.	4-14	Boone
Craig Marcks Perry	26 lb. 3 oz.	5-2	Lucas
Thomas A. Swanson Cedar Rapids	26 lb. 2 oz.	4-17	Van Buren
Ron Brislawn Walker	26 lb.	4-30	Benton
Allan Case Argyle	26 lb.	10-24	Lee
James C. Donald Story City	26 lb.	4-18	Webster
David M. Johnson Waukon	26 lb.	4-13	Allamakee
Mike Lewis Seymour	26 lb.	4-17	Wayne
Gregory E. Matz Dubuque	26 lb.	4-21	Van Buren
Roger Ott Charles City	26 lb.	4-29	Allamakee
Rod Rumelhart Guthrie Center	26 lb.	4-17	Guthrie
Bob Self Moravia	26 lb.	4-13	Appanoose
John Taylor Coon Rapids	26 lb.	4-21	Boone
Everett Grasty Stuart	25 lb. 13 oz.	5-7	Guthrie
Roger D. Smith Blakesburg	25 lb. 13 oz.	4-20	Wapello
Larry Fuhrman Story City	25 lb. 12 oz.	4-22	Allamakee
Victor K. Moyer Hamburg	25 lb. 12 oz.	4-17	Fremont
Edgar Shields Panora	25 lb. 12 oz.	4-13	Ringgold
Sean Thompson Panora	25 lb. 12 oz.	4-15	Guthrie
Bob Hibbs Marshalltown	25 lb. 10 oz.	4-27	Tama
Jack Peacock Cedar Rapids	25 lb. 10 oz.	4-20	Delaware
Douglas Seulerer Des Moines	25 lb. 10 oz.	4-20	Warren
Charles Dovel Hamburg	25 lb. 8 oz.	4-25	Fremont
Ron Hathaway Bettendorf	25 lb. 8 oz.	4-17	Davis
Randall D. Jeffs Winterset	25 lb. 8 oz.	4-23	Madison
Jerry J. Kamp Fort Madison	25 lb. 8 oz.	4-13	Lee
Dick Michels Sherrill	25 lb. 8 oz.	4-17	Allamakee
F. Patrick O'Brien Dubuque	25 lb. 8 oz.	4-14	Allamakee
Kenneth Hoch Lacona	25 lb. 6 oz.	5-2	Lucas
Rick Conley Anamosa	25 lb. 5 3/4 oz.	4-30	Clayton
Robert F. Drahm Monona	25 lb. 5 oz.	4-24	Allamakee
Greg A. Mohr Spirit Lake	25 lb. 5 oz.	4-21	Van Buren
Dan Thill Pleasantville	25 lb. 5 oz.	4-20	Monroe

Name and Address	Weight	Date	County Taken
Richard L. Adkins Adel	25 lb. 4 oz.	5-4	Guthrie
Clifford Archer Multon	25 lb. 4 oz.	4-19	Appanoose
John Bohnenkamp Montrose	25 lb. 4 oz.	5-9	Lee
Joey Comes Clive	25 lb. 4 oz.	4-13	Guthrie
Edwin R. Jensen Atlantic	25 lb. 4 oz.	4-18	Guthrie
Dan Scott Tipton	25 lb. 4 oz.	4-23	Appanoose
Edward Ulicki Lehigh	25 lb. 4 oz.	4-20	Webster
Rick K. Weight Mt. Pleasant	25 lb. 4 oz.	4-22	Henry
Dan Youngblut Estherville	25 lb. 2 oz.	4-24	Clayton
Charles Webber West Des Moines	25 lb. 1 oz.	4-18	Lucas
Rupert F. Anderson Des Moines	25 lb.	4-24	Clarke
Douglas Blegen Decorah	25 lb.	4-23	Winneshek
Bill Chase Cedar Falls	25 lb.	4-23	Van Buren
Larry Cutkomp Donnellson	25 lb.	4-17	Lee
Robert C. Erusha Walford	25 lb.	4-26	Johnson
Steve Foster Corydon	25 lb.	4-21	Lucas
Terry Hainfield Chariton	25 lb.	4-25	Lucas
Dennis D. Harrington Blue Grass	25 lb.	4-13	Muscatine
Harold Jensen Pulaski	25 lb.	4-24	Davis
Robert Livingston Guttenberg	25 lb.	4-24	Clayton
Gary G. McClanahan Des Moines	25 lb.	4-18	Clarke
Harold L. McGowan Cedar Rapids	25 lb.	5-1	Iowa
Eugene R. Moore Oskaloosa	25 lb.	5-8	Monroe
Roger Puding Carroll	25 lb.	4-22	Appanoose
Scot R. Ruppert Burlington	25 lb.	4-23	Van Buren
Charly Stills New Virginia	25 lb.	5-3	Clarke
John W. Tinker Altoona	25 lb.	4-20	Clarke
Scott P. West Des Moines	25 lb.	4-13	Clarke
Steven D. Colten Dayton	24 lb. 15 1/2 oz.	4-24	Webster
Arthur J. Delperdang Sioux City	24 lb. 14 oz.	4-18	Woodbury
Dean Campbell Dayton	24 lb. 13 oz.	4-14	Webster
Arther Tomkins Guttenberg	24 lb. 13 oz.	4-17	Clayton
James Engle Waukee	24 lb. 12 oz.	4-29	Harrison
Larry E. Fitchner Conesville	24 lb. 12 oz.	4-14	Muscatine
Jack E. Runnels Chanton	24 lb. 12 oz.	4-15	Lucas
Tom Byrne Anamosa	24 lb. 11 oz.	4-17	Jones
Richard H. Lytle Keosauqua	24 lb. 11 oz.	4-14	Van Buren
Larry Ayers Gilbertsville	24 lb. 10 oz.	4-17	Clarke
James Gray Waterloo	24 lb. 10 oz.	4-14	Lucas
Kurth A. Harris West Des Moines	24 lb. 10 oz.	5-4	Lucas
Lannie R. Miller Lake View	24 lb. 10 oz.	4-29	Guthrie
Tom O'Connor Davenport	24 lb. 10 oz.	4-16	Clinton
Greg Norlin Anamosa	24 lb. 9 3/4 oz.	4-28	Jones
LaVerne Anderson Wheatland	24 lb. 9 oz.	4-29	Clinton
Terry J. Hobbs West Point	24 lb. 9 oz.	4-23	Lee
Gene Sacco Centerville	24 lb. 8 1/2 oz.	5-9	Appanoose
James Baty Moravia	24 lb. 8 oz.	4-22	Fremont
D. Dean Burgess Hampton	24 lb. 8 oz.	4-22	Clarke
Mike Burton Bloomfield	24 lb. 8 oz.	4-30	Davis
Todd Chidester Albia	24 lb. 8 oz.	4-19	Monroe

Taken	Name and Address	Weight	Date	County Taken	Name and Address	Weight	Date	County Taken	Name and Address	Weight	Date	County Taken
Washington	David Claeys	24 lb. 8 oz.	4-18	Washington	Michael J. Glynn	24 lb.	5-6	Clayton	Tony G. Good	23 lb. 8 oz.	5-8	Des Moines
Boone	Victor				Dubuque				Burlington			
Boone	Gary E. Crow	24 lb. 8 oz.	5-9	Appanoose	David C. Gruhn	24 lb.	4-25	Lucas	Jeff Grimes	23 lb. 8 oz.	4-24	Monroe
Lee	Centerville				Knoxville				Bussey			
Boone	James P. Fields	24 lb. 8 oz.	4-21	Boone	Jim Hagen	24 lb.	4-30	Clarke	Rodger Hansen	23 lb. 8 oz.	4-13	Clarke
Boone	Paton				Weldon				Grimes			
Boone	John Gruss	24 lb. 8 oz.	4-21	Union	Bob Hansen	24 lb.	4-24	Allamakee	Raymond Haringsdal	23 lb. 8 oz.	4-15	Allamakee
Boone	Greenfield				Cedar Falls				Northwood			
Boone	Andrew Heiser	24 lb. 8 oz.	4-27	Lee	Steve Heston	24 lb.	4-17	Clarke	James A. Hill	23 lb. 8 oz.	4-23	Benton
Boone	Argyle				Knoxville				Vinton			
Boone	Rik Jimerson	24 lb. 8 oz.	4-13	Decatur	David M. Jacob	24 lb.	5-9	Jones	V. Jackson	23 lb. 8 oz.	4-13	Clayton
Boone	Grand River				Monticello				Durant			
Boone	Susan K. Miller	24 lb. 8 oz.	4-29	Monroe	Dr. James A. Kinnaid	24 lb.	4-16	Lucas	George W. Jaques	23 lb. 8 oz.	5-7	Van Buren
Boone	Chariton				Corydon				Iowa City			
Boone	James R. Olson	24 lb. 8 oz.	4-13	Allamakee	Robert Livingston	24 lb.	5-5	Clayton	Dennis D. Johnson	23 lb. 8 oz.	4-25	Lucas
Boone	Lansing				Guttenberg				Council Bluffs			
Boone	Ernest A. Palmer	24 lb. 8 oz.	4-22	Monroe	George E. Noonan	24 lb.	4-17	Woodbury	Rodney Moser	23 lb. 8 oz.	5-2	Clayton
Boone	Des Moines				Salix				Dubuque			
Boone	Howard Phipps	24 lb. 8 oz.	4-22	Boone	Michael Ryskamp	24 lb.	4-13	Van Buren	David Rice	23 lb. 8 oz.	4-23	Lee
Boone	Boone				Des Moines				Danville			
Boone	David C. Polley	24 lb. 8 oz.	4-21	Clarke	Eddie Scalf	24 lb.	4-17	Washington	Greg Rinehart	23 lb. 8 oz.	4-17	Boone
Boone	Ankeny				Wellman				Boone			
Boone	Ivan Sadler	24 lb. 8 oz.	4-25	Monona	Eldon Sear	24 lb.	4-21	Allamakee	Jerry Roberts	23 lb. 8 oz.	4-13	Van Buren
Boone	Battle Creek	(Bow)			Zwingle				State Center			
Boone	Joe Skow	24 lb. 8 oz.	4-17	Monona	Waylon Taylor	24 lb.	5-2	Boone	Tom Shanahan	23 lb. 8 oz.	4-20	Van Buren
Boone	Sac City				Coon Rapids				Dubuque			
Boone	David A. Sorensen	24 lb. 8 oz.	4-21	Guthrie	Buck Visser	24 lb.	4-13	Clarke	Billie E. Smith	23 lb. 8 oz.	4-13	Boone
Boone	Redfield				Pella				Boone			
Boone	Jason Vanausdall	24 lb. 8 oz.	4-14	Lee	Glenn Vondra	24 lb.	4-14	Clarke	Richard A. Stivers	23 lb. 8 oz.	4-16	Jones
Boone	Des Moines				Grimes				Anamosa			
Boone	Dan Bralrud	24 lb. 7 oz.	4-17	Fayette	Ken Wennekamp	24 lb.	4-20	Jones	Doris M. Terwilliger	23 lb. 8 oz.	4-13	Guthrie
Boone	Waterloo				Monticello				Guthrie Center			
Boone	Glen Fraise	24 lb. 7 oz.		Lee	David Zellinger	24 lb.	4-21	Lucas	Tommy Thompson	23 lb. 8 oz.	4-21	Davis
Boone	Argyle				Knoxville				Bloomfield			
Boone	Harvey E. Harel	24 lb. 7 oz.	4-19	Lucas	Larry L. Brown	23 lb. 15 oz.	5-9	Wayne	James L. Woxon	23 lb. 8 oz.	4-19	Lee
Boone	West Des Moines				Seymour				Keokuk			
Boone	Lee Neary	24 lb. 7 oz.	4-13	Boone	David Jameson	23 lb. 15 oz.	4-18	Monroe	Ron Sanford	23 lb. 7 oz.	4-17	Lee
Boone	Emmetsburg				Albia				Fort Madison			
Boone	Noel Callahan	24 lb. 6 oz.	4-13	Lee	Donald L. Colten	23 lb. 14 3/4 oz.	5-4	Webster	Tim Steckelberg	23 lb. 7 oz.	5-3	Harrison
Boone	Epworth				Dayton				Mondamin			
Boone	John Downard	24 lb. 6 oz.	4-16	Van Buren	Richard J. Hutmacher	23 lb. 14 oz.	4-17	Van Buren	Doug Beaud	23 lb. 6 oz.	4-27	Lee
Boone	Davenport				Muscatine				Keokuk			
Boone	Kenneth Johnson	24 lb. 6 oz.	4-17	Jefferson	Randall L. Kuehl	23 lb. 14 oz.	4-15	Van Buren	Brian J. Koster	23 lb. 6 oz.	4-16	Appanoose
Boone	Janesville				Springville				Moravia			
Boone	Lee M. Warnscott	24 lb. 6 oz.	4-20	Van Buren	Hank Stumpf	23 lb. 14 oz.	4-20	Iowa	Ronnie Robinson	23 lb. 6 oz.	5-9	Fremont
Boone	Muscatine				Amana				Hamburg			
Boone	Jim Woodard	24 lb. 6 oz.	5-2	Appanoose	Bob Kurtz	23 lb. 13 oz.	4-24	Tama	Jon K. Wightman	23 lb. 6 oz. 10"	4-21	Clayton
Boone	Oskaloosa				Tama				Waterloo			
Boone	Scott Adams	24 lb. 4 oz.	4-21	Jones	Tim Adkins	23 lb. 12 oz.	5-9	Guthrie	Robert R. Heston	23 lb. 5 oz.	4-16	Lucas
Boone	Monticello				Adel				Carlisle			
Boone	Roger Blankenship	24 lb. 4 oz.	4-17	Van Buren	John Coovert	23 lb. 12 oz.	4-30	Van Buren	Joe Spoden	23 lb. 5 oz.	5-3	Van Buren
Boone	Janesville				Farmington				Manion			
Boone	Daniel M. Cloke	24 lb. 4 oz.	5-4	Jefferson	Daniel K. Kinsinger	23 lb. 12 oz.	4-21	Appanoose	Gale H. Johnson	23 lb. 4 3/4 oz.	4-20	Monona
Boone	Eldon				Centerville				Missouri Valley			
Boone	Randy L. Dettmann	24 lb. 4 oz.	4-23	Clayton	Glenn Krug	23 lb. 12 oz.	4-15	Van Buren	Ronald Bigler	23 lb. 4 oz.	4-13	Allamakee
Boone	Clayton				Bettendorf				Decorah			
Boone	Todd S. Hall	24 lb. 4 oz.	4-16	Jones	Jerry J. Lee	23 lb. 12 oz.	5-8	Delaware	Keith H. Bostock	23 lb. 4 oz.	4-14	Van Buren
Boone	Marion				Dubuque				Farmington			
Boone	Thomas L. Place	24 lb. 4 oz.	4-13	Jefferson	Merrit Parsons	23 lb. 12 oz.	4-24	Van Buren	Raleigh Buckmaster	23 lb. 4 oz.	4-25	Allamakee
Boone	Janesville				Bettendorf				Lansing			
Boone	Roy Tallman	24 lb. 4 oz.	4-13	Webster	Ken Martin	23 lb. 12 oz.	4-27	Van Buren	M. M. Douglas	23 lb. 4 oz.	5-7	Lucas
Boone	Harcourt				Farmington				West Des Moines			
Boone	Ralph Allen	24 lb. 3 oz.	4-30	Lucas	Robert Martin	23 lb. 12 oz.	5-3	Lucas	Mikael Fink	23 lb. 4 oz.	4-17	Allamakee
Boone	Des Moines				Des Moines				New Albin			
Boone	Jerald D. Crow	24 lb. 3 oz.	4-30	Appanoose	Ed Rink	23 lb. 12 oz.	4-15	Allamakee	Earl A. Fisk	23 lb. 4 oz.	4-23	Delaware
Boone	Centerville				Janesville				Cedar Rapids			
Boone	Steve Goltz	24 lb. 3 oz.	4-14	Allamakee	Joseph A. Schaul	23 lb. 12 oz.	4-13	Clayton	Harold C. Fowler	23 lb. 4 oz.	4-23	Woodbury
Boone	Monona				Dyersville				Smithland			
Boone	Bernie Kauzlarich	24 lb. 3 oz.	4-23	Appanoose	Floyd Seaba	23 lb. 12 oz.	4-21	Lee	Jim R. French	23 lb. 4 oz.	4-24	Monroe
Boone	Rathbun				North English				Albia			
Boone	Frank Vacke	24 lb. 3 oz.	4-13	Van Buren	Tim Seals	23 lb. 12 oz.	4-29	Monroe	Jim Goodwin	23 lb. 4 oz.	4-21	Woodbury
Boone	Cantril				Moravia				Sloan			
Boone	Bernard Eyestone	24 lb. 2 oz.	4-19	Allamakee	Duane Tieden	23 lb. 12 oz.	4-24	Clayton	Mark Haskin	23 lb. 4 oz.	5-1	Allamakee
Boone	Riceville				Elkader				Denver			
Boone	Ed Jones	24 lb. 2 oz.	4-19	Van Buren	Earl Hall	23 lb. 11 oz.	4-17	Van Buren	Francis Hewlett	23 lb. 4 oz.	5-5	Decatur
Boone	Washington				Iowa City				Grand River			
Boone	Thomas J. Marty	24 lb. 2 oz.	4-15	Allamakee	Steve Roling	23 lb. 11 oz.	4-21	Clayton	James L. Hayes	23 lb. 4 oz.	5-2	Benton
Boone	Dubuque				Bellevue				Belle Plaine			
Boone	Ralph Roberts	24 lb. 2 oz.	4-30	Van Buren	James M. Farren	23 lb. 10 oz.	5-5	Des Moines	Carl M. Kickbush	23 lb. 4 oz.	4-19	Clayton
Boone	Oskaloosa				West Burlington				Guttenberg			
Boone	Dennis D. Smock	24 lb. 2 oz.	4-20	Winnebago	Donald Pfeiffer	23 lb. 10 oz.	4-21	Washington	Brad Kramer	23 lb. 4 oz.	4-13	Clayton
Boone	Decorah				Washington				Waverly			
Boone	Avery A. Bennett	24 lb. 1 oz.	4-14	Decatur	Gary Biles	23 lb. 9 oz.	5-2	Jones	Allen L. Morrison	23 lb. 4 oz.	4-18	Davis
Boone	Leon				Springville				Eldon			
Boone	Ken Elam	24 lb. 1 oz.	4-20	Mills	Kyle Bobinet	23 lb. 9 oz.	4-30	Lucas	Gary W. Roberts	23 lb. 4 oz.	4-19	Davis
Boone	Council Bluffs				Indianola				Manion			
Boone	Steve Holkesvik	24 lb. 1 oz.	4-13	Winnebago	Peter Tollenaere	23 lb. 9 oz.	4-21	Van Buren	William B. Rybarczyk	23 lb. 4 oz.	4-30	Monroe
Boone	Decorah				Fairfield				Chariton			
Boone	Gerald Bailey	24 lb.	5-9	Henry	Robby Bain	23 lb. 8 oz.	4-24	Lucas	Stephen M. Smith	23 lb. 4 oz.	4-13	Allamakee
Boone	Salem				Van Meter				Mason City			
Boone	Melvin L. Beratler	24 lb.	5-2	Iowa	John E. Brachin	23 lb. 8 oz.	5-5	Fayette	Joann Sulley	23 lb. 4 oz.	4-14	Woodbury
Boone	Marengo				Waterloo				Sioux City			
Boone	Don Cannon	24 lb.	4-13	Fayette	Eugene R. Condon	23 lb. 8 oz.	4-13	Jones	Bennie Maier	23 lb. 3 oz.	4-25	Clayton
Boone	Westgate				Martelle				Cedar Rapids			
Boone	Marion Conner	24 lb.	4-16	Lee	Michael Deierling	23 lb. 8 oz.	4-21	Henry	Gary Simnacher	23 lb. 3 oz.	4-19	Benton
Boone	Millersburg				Davenport				Vinton			
Boone	Jim Crow	24 lb.	4-24	Appanoose	David Fehrer	23 lb. 8 oz.	4-24	Lucas	Harvey Wilson	23 lb. 3 oz.	4-13	Lee
Boone	Centerville				Indianola				Donnellson			
Boone	Craig Eckhardt	24 lb.	4-22	Clarke	Stan W. Franta	23 lb. 8 oz.	4-14	Lee	Richard L. Young	23 lb. 3 oz.	4-17	Lee
Boone	Hampton				Lisbon				Argyle			

TROPHY TURKEYS

Continued

Name and Address	Weight	Date	County Taken
Michael J. Caldwell Waterloo	23 lb. 2 oz.	4-21	Allamakee
Robert Davidson Donnellson	23 lb. 2 oz.	4-25	Lee
Nancy Flynn Scotch Grove	23 lb. 2 oz.	4-16	Jones
Gerald R. Folt Dubuque	23 lb. 2 oz.	4-29	Van Buren
Floyd Herrstrom Madrid	23 lb. 2 oz.	4-18	Boone
William LaCaille Clare	23 lb. 2 oz.	4-24	Webster
Steven L. Overstreet Ottumwa	23 lb. 2 oz.	4-12	Wapello
Kent Tarnier New Albin	23 lb. 2 oz.	4-14	Allamakee
Merlyn E. Broun Monticello	23 lb. 1 oz.	4-20	Jones
Roger Bubltz Waukon	23 lb. 1 oz.	4-22	Allamakee
Doug Lager Dallas Center	23 lb. 1 oz.	4-28	Guthrie
Kenneth C. Smithson Panora	23 lb. 1 oz.	5-2	Guthrie
Tracey Templeton Clinton	23 lb. 1 oz.	4-24	Allamakee
Rick Trine Pleasantville	23 lb. 1 oz.	4-30	Lucas
William Tndle Orient	23 lb. 1 oz.	4-21	Lucas
Bill Anderson Salix	23 lb.	4-15	Woodbury
Wayne Bain Bettendorf	23 lb.	4-25	Lucas
Larry J. Bjorholm Des Moines	23 lb.	4-22	Lucas
Ted Bieth Britt	23 lb.	4-17	Allamakee
Harold A. Biles Guttenberg	23 lb.	4-14	Clayton
Carl Cable Cedar Falls	23 lb.	4-21	Fayette
Steve Conner Creston	23 lb.	5-4	Lucas
Larry Crow Centerville	23 lb.	4-21	Appanoose
Jerry Dawson Des Moines	23 lb.	4-13	Clarke
Chris DeGroote Waterloo	23 lb.	4-27	Benton
Stanley Delker Farmington	23 lb.	4-14	Van Buren
Bill Denly Farmington	23 lb.	4-13	Henry
Merrill Dorland Osceola	23 lb.	4-20	Clarke
Danell Dunahoo Story City	23 lb.	4-22	Davis
James M. Engle Wauke	23 lb.	4-21	Clarke
Gary Foster Manchester	23 lb.	4-13	Delaware
Michael Godfrey Boone	23 lb.	4-14	Boone
Doug Langel Luxemburg	23 lb.	4-15	Clayton
Nancy A. Mazzoli Des Moines	23 lb.	4-18	Lucas
William McDonald Albia	23 lb.	4-14	Monroe
Darrel Mischke Gowrie	23 lb.	5-3	Boone
Paul R. Purviance Perry	23 lb.	4-22	Guthrie
Jeff Roush Des Moines	23 lb.	4-14	Van Buren
Marvin Schautenbuel Cedar Rapids	23 lb.	4-20	Allamakee
Howard Shields Lamoni	23 lb.	4-16	Ringgold
Burton E. Shumate Bloomfield	23 lb.	4-20	Davis
Larry J. Stanley Burlington	23 lb.	4-15	Lucas
Greg Steiner Dubuque	23 lb.	5-7	Clayton
Butch Tessmer Wadena	23 lb.	4-19	Fayette
Larry A. Troester Dubuque	23 lb.	4-14	Clayton
Steve Ugolini Ankeny	23 lb.	5-1	Appanoose
Reggie Williamson New London	23 lb.	4-21	Henry
Jim Willenborg Dubuque	23 lb.	4-18	Van Buren
Ted S. Yarnes Sioux City	23 lb.	4-22	Monona

CONSERVATION UPDATE

DONATIONS

Since January of this year, the Iowa Conservation Commission has been fortunate in receiving the following donations.

The Commission would once again like to recognize and thank these people.

Prairie Restoration
at Lake MacBride
\$250

William Tucker
Iowa City
Golden Rules 4-H Club
Iowa City

\$200

Johnson County Izaak Walton League
Hostess Club
Solon

\$150

\$100

\$100

Rick Chase

Solon

Betty Tucker

Solon

Four Seasons Garden Club

Iowa City

Wildlife Outdoor Club

Cedar Rapids

Linn County Izaak Walton League

H. Robertson

Solon

Ruth Carlson

Iowa City

Virginia Sigmund

20 acres of land
in Clayton County

Clayton County
D.O.T.

30 foot strip of land
Lake MacBride

Donald & Rose Marie Kasperek
Johnson County

200 truck tire rims

Ellsworth Freight Lines
Eagle Grove

\$200 for raptor
research

Gladys Black
Pleasantville

\$1,400 worth of
Prairie grass seed
for Lake Manawa
State Park

Kenneth Bedwell
Memorial Fund and
Lake Manawa
Task Force

Land donation
valued at \$1,500

Iowa Public Service Company
Chickasaw County

\$10

Joe Dedis

Barn Owl Project
\$15

James Rubis

BIRD PHOTOGRAPHY COURSE OFFERED

Cornell University in Ithaca, New York is offering an excellent home study course in bird photography. The course includes a comprehensive text and other study materials that should help amateur photographers improve their skills. It also involves individual tutoring and critiquing of photo assignments submitted.

For enrollment information write to Photo Course, Dept. AB, Laboratory of Ornithology, Sapsucker Woods, Ithaca, New York 14850.



JUNE IS RIVERS MONTH IN IOWA

On April 22, Governor Branstad proclaimed June, 1983 as Rivers Month in Iowa. The proclamation signed by the Governor recognizes the many values of Iowa's quality rivers, and urges all Iowans to take advantage of their recreational opportunities. This recognition coincides with American Rivers Month which will be celebrated throughout the nation.

The Office of the Governor and the Iowa Conservation Commission are co-hosting a Governor's Fishing Tournament on the Mississippi River near Guttenberg in recognition of Rivers Month. Governor Branstad and Larry Wilson, director of the Conservation Commission, have invited state legislators, state and local agency directors, and heads of special interest groups to join

them in the tournament. The tournament is designed to provide many Iowa decision-makers with an opportunity to learn and enjoy first-hand some values of the Mississippi River.

Numerous groups throughout Iowa are also hosting Rivers Month events in June. Activities include canoe trips and races, fishing tournaments, river clean-ups and photo contests.



BIG CREEK SUMMER

In March, Bud Gandy, Park Ranger at Big Creek State Park, died, following an extended illness. The following thoughts are those of Tim Huisman of Madrid, who worked one summer under Bud's supervision.

I knew Bud for a little less than a year. We first met when I was applying for my summer job at Big Creek. You didn't have to know Bud for a long time to know him pretty well. He wore his heart on his sleeve, so to speak, and let you know his thoughts and where he stood on things. Some people were intimidated by this, I

think, but he did it out of a combination of a sort of innocence and a conviction in his personal beliefs.

Bud's reputation as a tough-old-bird was largely promoted by himself and I don't think it fooled very many people. His young grandchildren were around a lot and they were certainly anything but unhappy to be with their grandpa. Rest assured that Gandy could be a tough "cop" when he had to be, but he was always more concerned with the park itself and "his people."

Bud was only at Big Creek for a year or so when I started

there, but he was proud of what he had accomplished in that time, and also talked a lot about "his other parks," especially Lake Ahquabi. He was proud of his crews, too. They were really family to him, and the whole idea of "family" was important to him. In the times that I would happen to be working alone with Bud he would talk at length about his children and grandchildren, and he made it clear that they came first for him. He felt strongly for the people that worked with him, too, and gloried in it when the feeling was expressed in return.

Bud liked to teach, too. He had a lot of years in with the Commission and had developed his "ways" of doing things. He enjoyed demonstrating these procedures for the crews and got a lot of satisfaction out of seeing things getting done around the park. Bud just simply liked to share anything. Ideas, travel experiences, old "war" stories, you name it. His favorite memories, I think were from his travels. He was so proud of his big, old motor home and the many slide and movies of his trips in it. Bud and Loyce could keep you entertained for hours at a time with their Canadian trips. And it was good entertainment.

Our crew that summer of '82 was a super one. I felt and still feel very close to these people. The other permanent employees, Tom and Shellie and Bob, are the best possible to work for, and the rest of us just fit together in a comfortable way, all taking a certain pride in our work. We didn't consciously look to Bud as our figurehead, but I think he had a natural and quiet way of assuming that role, which made us comfortable without really knowing why.

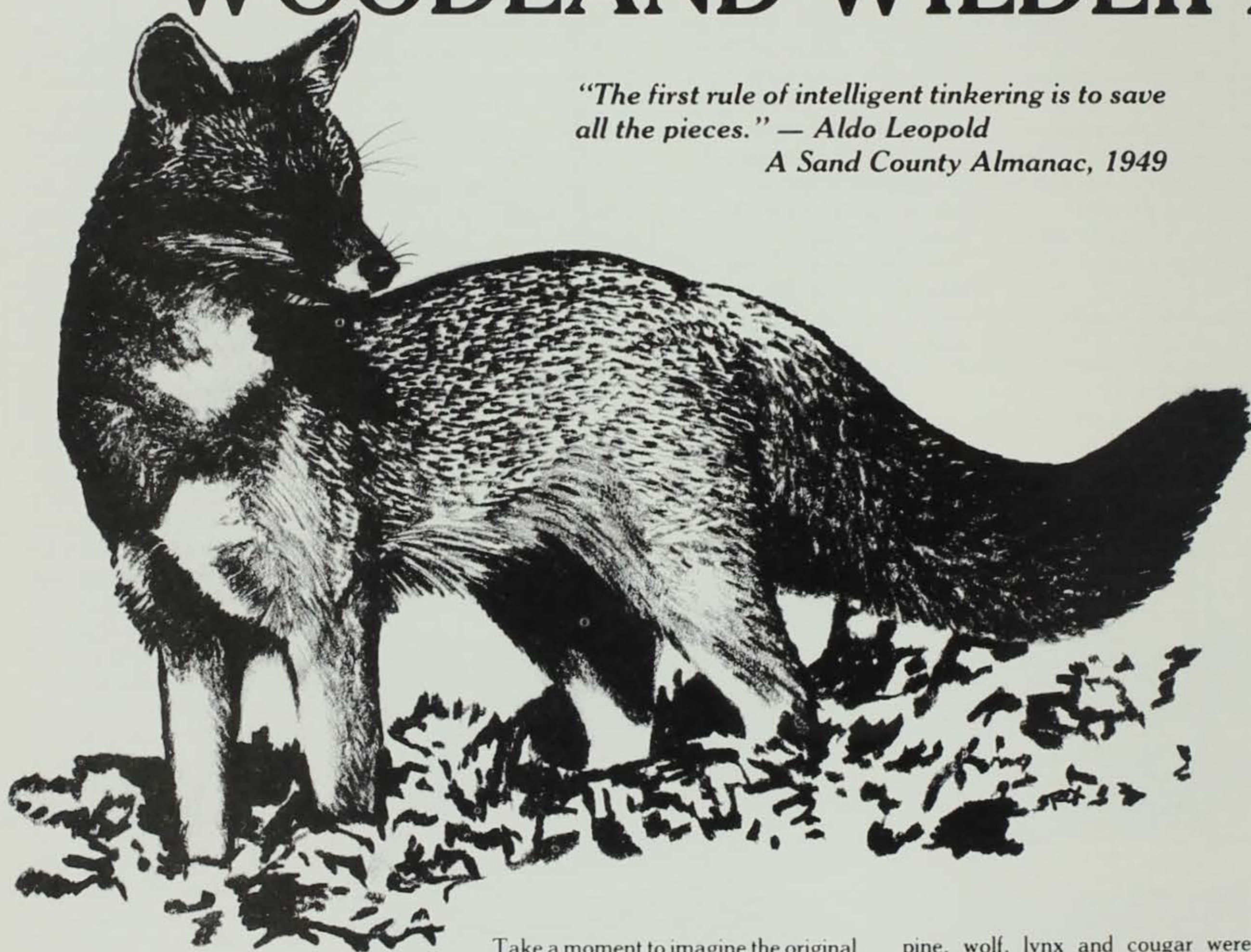
I'll be going back to Big Creek this summer. I love the place, and at the very least one or two of the old gang will still be there. But it will never again be like that first Big Creek summer.



IOWA'S VANISHING WOODLAND WILDLIFE

"The first rule of intelligent tinkering is to save all the pieces." — Aldo Leopold

A Sand County Almanac, 1949



By Jewel K. Bennett

Wildlife illustrations by Rex Heer

Jewel Bennett has been working as a writer for the Iowa State University Extension Service. She holds a B.S. degree from the University of Wisconsin at Madison and an M.S. degree in wildlife biology from Iowa State University.

Rex Heer is a graphic artist for Iowa State University's media graphics department. He holds a B.A. degree in architecture from Iowa State.

Take a moment to imagine the original Iowa landscape. Undulating prairies blending into marshes, remote forests to the east, timber filling the valleys of rivers and streams. And, to attest the richness of this land, there are wild creatures of every shape and calling. But the settling of the state quickly altered the scene and changed the future for the wild animals.

As much as 19 percent of the state was forested when the pioneers arrived. Timbered areas, however, were quickly converted into homes and fences, or cleared for cropland. Some forests were leveled simply to alleviate fears of the wilderness. By 1875 forest cover had been reduced from over six million acres to less than three million acres. Consider the effects of this drastic habitat change on the forest wildlife. It is not surprising that the first loss of our wild creatures coincides with this great loss of habitat. By the late 1800's elk, porcu-

pine, wolf, lynx and cougar were no longer found in Iowa. It could be expected that these creatures would be the first to go, most are very sensitive to the presence of humans, and some, no doubt, were deliberately eliminated.

The status of our forests stabilized after the initial clearcuts, and populations of most woodland species adjusted to the reduced habitat. Many species became tolerant of human activities and co-existed near settlements, while others survived only in the remaining deep forest.

A second great reduction of our woodlands began in the 1950's and continues today. The introduction of bulldozers made it feasible to clear rough land, and modern economic pressures made that option attractive. Expansive road-building operations and urban sprawl criss-crossed and encroached on many forest tracts, in an effort to spare cropland. Grazing livestock in woodlots has become common-

place, exchanging timber values and wildlife habitat for low quality forage.

This second reduction of our forestlands is having a deeper affect on our wildlife. Species that have co-existed with human activity are declining for lack of suitable woodland habitat, and species that need remote timber are indeed threatened.

The following is the first of a three-part series on these wildlife species that depend on Iowa's diminishing timber.

1. Disappearing Creatures of our Upland Forests

The oak-hickory association is typical of Iowa's upland forests, although maples and elms are also common hardwoods. Trees and shrubs help provide for the needs of wildlife; branches support nests and roosts, and nuts and browse are important food items. Dead trees and hollow logs become nest cavities and den sites. Leaf litter on the forest floor is cover for small ground creatures, while returning nutrients to the soil. Dense forest offers seclusion and a feeling of safety for shy creatures.

Wildlife that depends upon these woodland features are disappearing, although the degree of urgency varies between species. Sharp-shinned hawks, for example, are already **extirpated**, they no longer breed or maintain populations in our state. The little red-backed vole, stranded in Iowa by glaciers, is **endangered**, or close to extirpation. **Threatened** species, like five-lined skinks, may soon become endangered if proper steps are not taken. And several animals, like the southern flying squirrel, have declining populations that warrant our attention.

The wide variety of vanishing woodland creatures should be of particular concern. We are no longer losing only "extra-susceptible" species, but are seeing declines in more tolerant ones. Some were considered common only a few decades ago. A few are still common in states that haven't yet lost as much forest. Yet others are losing ground across the nation, as well as in Iowa. All are species that play an important role in our wildlife communities; all could benefit from improved stewardship of our remaining woodlands.

The accounts that follow describe our disappearing upland forest creatures. Most are accompanied by range maps that include areas where they might be found in Iowa, given suitable habitat. In most cases, the range maps are generous, only pockets of the species remain within these potential distributions.

RED-BACKED VOLE *Clethrionomys gapperi* Endangered



Voies are a special group of mice distinguished by short tails, tiny eyes, and small ears almost covered by their thick fur. Red-backed voles can be further recognized by a chestnut-colored hue that runs from head to tail.



This species is a **relict** of the Ice Age in Iowa. More common near the Great Lakes and Canada, their distribution apparently dipped into Iowa when the glaciers advanced. As the glaciers retreated, a pocket of red-backed voles remained in the Cary Lobe moraines of Pilot Knob State Park and vicinity. There the voles have survived for thousands of years in the moist woods, making dens among the mossy boulders and logs. Seeds, nuts, and succulent green plants are the staples of their diets.

Red-backed voles are endangered in this state. A remnant population exists from long ago, isolated from others of their kind. Their future in Iowa is uncertain, it may be that fast-paced changes in land use, which further restrict their habitat may be more devastating to this species than the gradual end of the Ice Age.

WOODLAND VOLE *Microtus pinetorum* Endangered



This vole spends most of its time under cover traveling through small tunnels or scurrying in the leaf litter. Its lips are adapted to close **behind** its upper front teeth to keep dirt out of its mouth when tunnelling. The woodland vole is primarily reddish brown above with a gray belly. As with most small mammals, its life span is short; a vole living beyond one year of age would be lucky.

The woodland vole is rather sedentary, it may range over only a third of an acre during its entire life. It feeds on soft roots

and tubers that are exposed in its tunnels and gathers tender bark, leaves, and seeds off the forest floor. Up to a gallon-size volume of extra food may be stored in underground chambers.

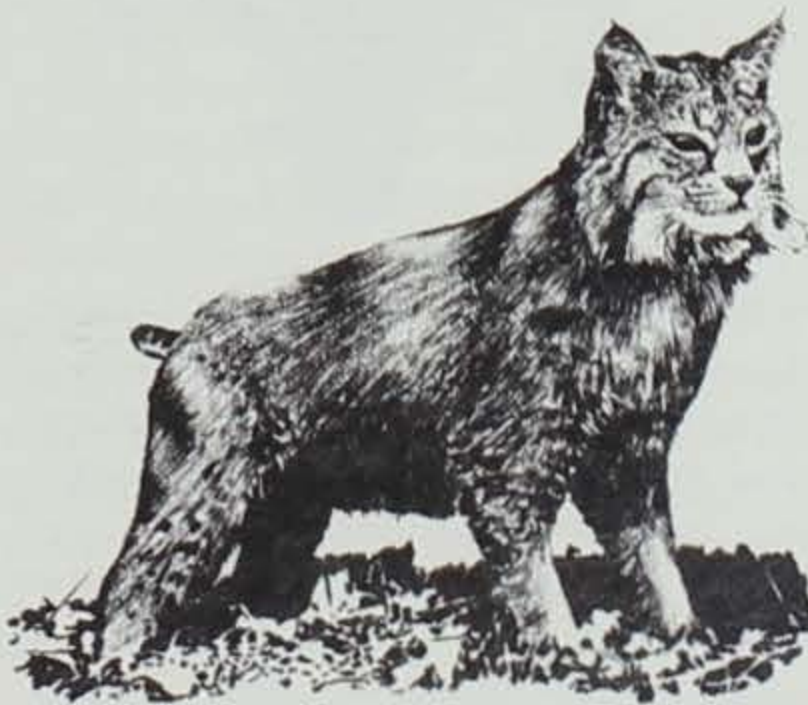


Woodland voles sometimes live in colonies, and are most frequently found in oak-hickory forests that have a thick layer of dead leaves and loose, soft soil for easy digging. The species is most common in deciduous forests of eastern U.S., and its range once included most of Iowa. It is now known to exist at only a few scattered locations in the state, although its distribution may still be more widespread.

BOBCAT *Lynx rufus* Endangered



Its Latin name means "red cat that sees with lamps," perhaps describing how a bobcat might appear in the moonlight. Its rusty coat is flecked with black spots, and its short tail gives its common name. A symbol of Iowa's wilderness heritage, bobcats are restricted to heavily timbered areas that offer relative seclusion. A single bobcat may need 10-30 square miles for its home range, a factor that naturally keeps their densities low. Because of their secretive nature, it is not known if substantial numbers remain in the state.



Bobcat populations over the entire central U.S. have suffered from a loss of remote areas and high pelt prices in the 1970's. The species, however, is now protected from hunting and trapping in Iowa. Bobcats have also suffered from

the notion that they are "varmints." That feeling may linger, but attitudes are changing because it is now known that bobcats pose little threat to well-managed livestock. Rabbits, mice, squirrels, and birds make up the bulk of their diets, and though they have the ability to overpower a fawn or weak deer, scavenging a deer carcass probably occurs more frequently.

Bobcats are solitary creatures, pairing only for mating. Females select a denning spot in a rocky cliff or pile of logs to raise two or three kittens each year. Females teach their young hunting skills until autumn, then most young bobcats strike off to find their own secluded forest tract.

SOUTHERN FLYING SQUIRREL

Glaucomys volans

Declining



This squirrel doesn't really fly, but easily glides 20 or 30 feet with the help of a loose flap of skin that stretches between its front and back legs. "Parachuting" between trees allows the flying squirrel to move about in the woods without risk of being caught on the ground by a predator.

The flying squirrel is grayish brown over its back and tail, but creamy white underneath. Much smaller than other tree squirrels, it avoids competition with larger relatives because of its nocturnal habits. Night activity is aided by over-sized eyes that concentrate starlight. Acorns and hickory nuts are staples in flying squirrel diets, although they may also take advantage of berries, insects and even bird eggs.



Trees with hollow limbs or standing dead trees are a critical habitat requirement. Flying squirrels use hollow trees for their daytime shelter, as well as for raising their young. All too often, the presence of flying squirrels goes undetected until a family bails out of its tree as it falls to the woodsman's saw. A woodlot where all dead trees or hollow limbs are gathered for firewood will not support a population of flying squirrels. The numbers of this species are declining locally. Although still fairly common in the Mississippi River counties, flying squirrels are now quite rare through central Iowa.

GRAY FOX

Urocyon cinereoargenteus

Declining



One of Iowa's furbearers, gray fox, is sought for its salt-and-pepper pelt, highlighted by rust-colored ears and legs. A creature found only in brushy country and forests across the state, its future depends upon the fate of our woodlands. Their presence in a woodlot is often kept secret by nocturnal habits, and the fact that their tracks could easily be confused with a house cat's. Adult gray fox weigh only 10-12 pounds and rarely tackle anything larger than a rabbit. Mice, birds, frogs, insects, berries and corn are also eaten.

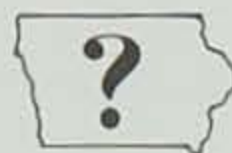


Sharp, curved toenails give gray fox the ability to climb trees to escape danger or sun themselves while hidden in branches. Litters may be raised at some height in a hollow tree, although logs and burrows are more common denning spots. A female gives birth to three to five young in April or May. She trains her pups to hunt and forage during the summer, and by late fall the young disperse. As for most juveniles, the first few months on their own are critical. Young fox may weaken before becoming efficient hunters, then disease may take its toll; or they may have unlucky encounters with automobiles or loose-running dogs. Finding suitable habitat has also become a problem for young gray fox in Iowa.

BLACK BEAR

Ursus americana

Endangered



Black bear probably no longer inhabit Iowa, yet individuals are occasionally spotted in heavy timber along some rivers or in larger forests of northeastern counties. Whether these lone bears represent breeding populations is unknown; it is more likely they have wandered from a northern state. Officially considered endangered, black bears are protected and given the benefit of the doubt.

If the species does exist in Iowa, they would be our largest wild creature. Adults

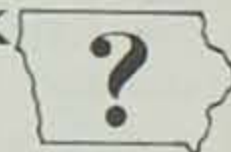


often weight 300-400 pounds, and satisfy their hearty appetites with generous amounts of berries, roots, bird eggs, small animals and carrion of all kinds. It would seem if black bears were present they would be conspicuous, but they are elusive and keep to heavy timber, taking cover in a hollow tree or cave. The only sign of black bears may be droppings or a tree scarred by claw markings. Contrary to popular belief, black bears do not hibernate in the true sense of the word. They enter a deep sleep during winter, but body temperatures and pulse rates remain normal. A warm spell may rouse bears for a short foraging trip.

SHARP-SHINNED HAWK

Accipiter striatus

Extirpated



Sharp-shinned hawks are closely related to Cooper's hawks. The two species have identical coloration and similar habits, but sharp-shins are smaller, the size of a bluejay, and usually feed on smaller birds. The high similarity between the two hawks, especially in favored food items, could lead to competition, so they usually maintain exclusive territories.



"Sharpies," once regular summer residents in Iowa, are now officially considered extirpated as a nesting bird. They still breed in the forests of northern U.S. and Canada, and often enter Iowa when migrating along the wooded corridors of the Mississippi valley and other major river systems.

COOPER'S HAWK
Accipiter cooperi
Threatened



Cooper's hawks were once fairly common in Iowa, but now are only rare nesters of the eastern and southern parts of the state in remnant heavy forest. They belong to the *Accipiter* group of hawks with long tails, and short, rounded wings. These hawks seldom soar above open country, but live and hunt in timber. They exist chiefly by hunting for other birds. Their slim build and wing shape makes them agile, swift flyers that can easily pursue their prey among the brush.



Cooper's hawks have dark gray backs, rust-striped breasts, and bright red eyes. They are about the size of a crow, yet may attack birds as large as doves. They will not pass up an easy rodent meal, however, and sometimes take mice and chipmunks. Their nests are built high near the trunk of a tree, occasionally in an old crow's nest. A clutch of three to five eggs is incubated by the female, with the male Cooper's hawk bringing food.

BROAD-WINGED HAWK
Buteo platypterus
Threatened



This secretive woodland hawk is crow-sized, but appears bigger when flying because of its large, broad wings. It belongs to the sub-family of buteo hawks noted for their thickset bodies, rounded tails, and habit of soaring high in the air. The broad-winged hawk has a dark head and back, streaks of red and white on its breast, and wide black and white bands across its tail. It has become quite a rare bird in Iowa and nests only in scattered locations where it finds adequate woodlands.



Nests are built in tall trees and usually hold two white eggs stippled with purple. Male and female take turns incubating until the eggs hatch after 21 days. The adults and their young feed on small forest creatures such as beetles, toads, snakes, mice and chipmunks.

Infrequently seen in their forest habitat, broad-winged hawks are sighted more often during autumn when they migrate in spectacular soaring flocks called "kettles." These migratory flocks are sometimes made up of hundreds of birds and represent congregations of broad-wings from over large areas.

LONG-EARED OWL
Asio otus
Threatened



Its tall "ears" are the distinctive feature of this owl, but they are actually only long tufts of feathers. Its real ears are mere slits under its feathers near the edge of its face. A long-eared owl has a slender crow-sized body, smaller than the familiar great-horned owl. It appears brownish gray with heavy streaks over its breast and tail. Characteristic of all owls, the leading edge of its flight feathers are slightly fringed, an adaptation that muffles the air and makes its flight silent. Most active at night, the long-eared owl relies to a greater extent on its keen hearing, rather than sight, when swooping down on mice or shrews.



A long-eared owl is very secretive and spends the daytime quietly perched in a dense tree. It may silently watch your approach, letting its slim body blend into the tree branches. The best way to locate an owl's perch is to look for a one-or two-inch, cigar shaped pellet at the base of a tree. These compacted pellets are made up of undigested bits of fur and bone the owl regurgitates after a meal. The long-eared owl dwells in heavy timber and seems to prefer pine forests. Iowa is at the southern edge of this bird's range, but scattered nesters may be found where stands of pine trees are located.

FIVE-LINED SKINK
Eumeces fasciatus
Threatened



There are only four species of lizards occurring in Iowa, and each is becoming rare. Female and juvenile five-lined skinks are the state's most colorful lizards, having shiny black bodies streaked with yellow, and brilliant blue tails. Males appear to have been slighted with dull gray coloration, but during their breeding season this allows a territorial male to distinguish between a visiting female and a trespassing male.



Five-lined skinks dwell in old woodlots that offer stumps, rotting logs, and rocks for basking and refuge. They prefer to remain hidden and will scurry under cover, or up a tree if caught in the open. They forage through the forest debris for spiders, crickets, insect larvae and slugs. Skinks themselves can be victims to raccoons, skunks, and hawks, so they have evolved a startling means of escape. As true for most lizards, their tail vertebrae are only loosely connected, and, if grasped by a predator, the tail will disjoint. The twitching of the dismembered tail confuses the predator while the shortened skink runs for cover. A new tail will regenerate after several weeks, but it will be gray and not as long as the original.

Five-lined skinks are declining through the upper midwest. They are threatened in our state, extirpated from South Dakota, and also becoming very rare in Minnesota.

BULRUSHES — Vital Habitat for Fish

By James R. Wahl

James Hansen

Most outdoorsmen associate the emergent plant, bulrush (*Scirpus* sp.) with waterfowl hunting in a marsh. It is true that many Iowa marshes contain stands of bulrush. Bulrushes play a key role in the lives of many critters that live or frequent the marsh. Muskrats utilize the plant for food and building houses. Waterfowl are fond of feeding on the seeds and shoots. Song and marsh birds are often attracted to the plant and may use it as a nest site. The importance of bulrushes, however, goes much beyond its benefits to wildlife, it is also important to fish in ponds and lakes. This is particularly true in one of Iowa's largest natural lakes, Clear Lake.

Bulrush is a perennial plant and a member of the sedge family. The plant can be identified by having either a triangular or round-shaped stem and may be leafy or have no leaves. The long stems usually have a cluster of brownish flowers and seeds at the end of the stem. Bulrush is generally found growing in shallow water along shorelines.

On Clear Lake stands of emergent vegetation can be found along the north shore and at the western end of the lake. Vegetated areas cover approximately 70 acres or 2 percent of the total surface acreage on Clear Lake. Bulrush makes up the majority (over 70 percent) of this vegetation.

The bulrush is important to the fish community of Clear Lake in a number of ways. Several species of fish utilize the vegetated areas as spawning or nesting sites. Black bullheads and crappies both

build saucer-shaped nests in shallow water within stands of bulrush. Random spawners such as yellow perch and northern pike may use these areas.

Of greater importance than actual spawning sites is the escape cover these vegetated areas provide to newly hatched fry. Bulrushes provide excellent nursery areas for almost all sport fish during their first year of life. In addition to providing a hiding place from predators, the vegetation attracts minute aquatic organisms which are an important food source for young fish.

Because of the abundance of young fish found in stands of bulrush, adult predatory fish concentrate there looking for an easy meal. If the angler can determine such factors as time of year, time of day and food items preferred by these sport fish, it might mean more fillets in the frying pan.

Crappies utilize bulrushes during the spring and early summer. Fish can be caught either from a boat or by wading. Preferred baits include a 1/16 or 1/32 ounce white or yellow lead head jig or a small minnow fished with a light bobber and split shot for weight. Crappies will come up for a bait, so the lure should be fished a foot or two off the bottom.

Yellow perch can be caught using the same methods as those used for crappie, with one exception. Perch feed close to the bottom and the bait should be fished 4 to 6 inches from it. Perch are active during dawn and daylight hours and frequent the vegetated areas during the summer and fall.



James Hansen

Bullheads become most active at night. Feeding on the bottom, they can be caught with nightcrawlers fishing from shore. Bullheads utilize vegetated areas throughout the spring and summer.

Of all the sportfish caught in emergent vegetation on Clear Lake, the walleye is the most popular. Walleyes are active at night and move into the bulrushes looking for smaller fish to prey on. Anglers wading with chest waders in "cuts" or channels that exist within stands of bulrush are often rewarded with nice stringers of walleyes. Floating Rapalas and Hellcats are successful lures, as are 1/4 or 3/8 ounce lead head jigs tipped with minnows. Summer and fall are the prime time of year to fish these vegetated areas for walleyes.

There are a variety of fish which utilize the bulrushes on Clear Lake, and understanding when and why should improve fishing success. Bulrushes are important to wildlife and fish, and need protection. By taking care of the habitat, the habitat will continue to serve its caretakers.

James Wahl is a fisheries management biologist at Clear Lake. He holds a B.S. degree from Iowa State University and an M.S. degree from South Dakota State.

A UNIQUE SYSTEM

IOWA'S COUNTY CONSERVATION BOARDS

By James J. Zohrer

Iowa is the top corn-producing state in the country, and is among the leaders in the production of soybeans, hogs and other commodities. We are also known as the top state in another area. We have a conservation system in Iowa that is unique in its concept and it is generally recognized as the leading system of this type in the country. Iowa has a network of county-run and county-financed conservation boards that serve to provide recreational opportunities in addition to those provided by the State Conservation Commission.

In 1955, the Iowa Legislature passed a bill allowing the citizens of a county to decide if they wanted to have a system of county-managed parks and recreation areas. This concept proved attractive; and at the present time, 98 of Iowa's 99 counties have a county conservation board system by vote of the people. These county conservation boards now manage over 78,000 acres of land that include parks and recreation areas, wildlife habitat areas, highway rest areas, historical sites, greenbelt areas, outdoor classrooms, museums, golf courses, public beaches, target ranges, environmental education centers, swimming pools, and other special-use areas and facilities. These public lands and facilities are located within 1,046 different areas ranging in size from .1 acre to over 2,000 acres. Many of these areas provide outstanding facilities or natural features, and are often less crowded than our state parks.

Besides conducting operations on county-owned lands, many county conservation boards have expanded their activities to include working with private landowners in the planting of wildlife habitat, working with school or civic groups on environmental education matters, and working to establish snowmobile trail systems on private lands. As an example of their accomplishments in improving wildlife habitat in the state, last year alone county boards planted over 711,000 trees and shrubs, established 611 acres of prairie grass at 118 sites, and planted 381 acres of wildlife food patches at 168 different sites. This wildlife habitat improvement work provides benefits to both game and nongame species alike.

As you can see, the county conservation board programs are designed to provide a broad scope of recreational opportunities. They also provide benefits for area wildlife populations and protection of our existing natural resources.

County conservation boards currently employ staffs of 330 full-time employees and 535 part-time workers. These employees include executive officers, park rangers, maintenance technicians, planners, foresters, etc. Also included are 30 naturalists who provide educational services to the public on environmental matters.

The beauty of the system lies in the fact that the recreational desires of the citizens within the county can be ad-

dressed. Besides the traditional camping and picnicking concerns, county conservation boards have been able to provide handicapped trails, astronomical observatories, snowmobile trails, cross-country ski trails, nature centers and wildlife exhibits.

One of the features that allows our county conservation board system to work is a unique blend of local control and cooperation between counties, and between individual counties and the State Conservation Commission. Ideas, equipment and even manpower are often exchanged between the counties and the state. The feeling is that this is a conservation team — all working for the good of the public and our natural resources.

County conservation board lands or facilities can be found in every county of the state except for Allamakee County. If you have not taken the time to visit one of your county parks or meet with your county conservation board employees, this would be a good time to do so. Activities are available year-round and they are close to home.

James Zohrer has been with the Commission for eleven years. He is currently serving as assistant county conservation board administrator. He holds a B.S. degree in zoology from the University of Illinois and an M.S. degree in wildlife ecology from the University of Wisconsin at Madison.



Above: Brown and white arrowhead signs dot the state, indicating over 1,000 county areas and facilities. Left: Bank fishermen enjoy the natural setting at Don Williams Park in Boone County.



Ron Johnson

A New Look at Geode

By Gary Fell & Kirk Mathis

Geode is truly one of Iowa's "picture postcard" parks. Situated in the beautiful, rolling timbered hills along the Skunk River, the park surrounds a gem-like, 250-acre lake. Like most of Iowa's older state parks, the pretty setting offers everything from the solitude of a deep woods trail to the noises of a busy swimming beach on a hot Sunday afternoon.

The first land purchased for the park was 60 acres, way back on June 24, 1935 at a cost of \$840. The last purchase was made in 1961 and amounted to 40 acres for \$3000. The park now covers 1640 acres and was obtained at a total cost of \$98,270. Originally named Danville State Park, it was renamed Geode State Park after the geode, the state rock of Iowa, commonly found in this area.

The first real development in the park was done by the Civilian Conservation Corps. The C.C.C. constructed some of the roads and built the stone shelter located near the ranger's residence at the

north entrance to the park. When World War II began, the C.C.C. was disbanded and most of the work on the park ceased. After the war, though, more land was purchased and construction began anew. This work was done primarily by inmates from the penitentiary at Fort Madison. These men built the bathhouse and boat-house at the beach and helped pave the roads through the park. They also completed work on the historical stone house, which serves as the ranger's residence. Some 4.5 miles of hiking trails through the park were constructed before the inmate work program at Geode ceased in 1968.

The dam was built in 1950 by a private contractor, and the lake began to fill the same year. The park and its lake were dedicated on June 20, 1951, with a number of dignitaries present, including Governor William Beardsley.

Today Geode State Park offers a wide variety of recreational activities, including camping, fishing, picnicking,

hiking, boating, sailing, skiing and swimming. During the winter months visitors hike, snowmobile, cross-country ski, sleigh ride, picnic and ice fish. Throughout the year, visitors, particularly those willing to sneak off into the back woods, see deer, wild turkeys, numerous songbirds, hawks and other species common to Iowa's woodlands. Wildflowers of many varieties are common throughout the park. Many tree species are represented, including walnut, hickory, butternut, wild cherry, maple, ash and several species of oaks.

One of the best times for a hike in the woods is during the fall. A walk on a hiking trail along the lake clearly demonstrates Mother Nature's skill at creating a spectacular beauty as the reds and golds of the oaks and maples are reflected in the lake.

The 250-acre lake offers some of the clearest water for fishing and swimming in the state. The lake is located in a very natural setting surrounded by limestone

Opposite Page: *One of Iowa's more beautiful parks, Geode offers not only scenic beauty but a number of recreational activities.* Left: *Geode State Park is located in southeast Iowa, in the timbered hills along the Skunk River.* Below: *The outdoor enthusiast can choose from a number of activities at Geode, including boating, swimming, fishing, hiking, camping and picnicking.*



bluffs and rolling hills. The lake is deep with a maximum depth of 51 feet near the dam and an average depth of about 20 feet. It was drained in the fall of 1981 to eliminate a population of gizzard shad; then refilled in the spring of 1982. Restocking began immediately and the lake now has largemouth bass, bluegill, channel catfish, bullhead, redear sunfish and tiger muskie. Fisheries biologists stocked adult crappies this spring.

Fishing at Geode is making a strong comeback. It is expected that bluegill fishing this spring and summer will be good, while bullheads and catfish should provide good to excellent action. There is a 14-inch size limit on large-mouth bass, with some keeper bass becoming available by midsummer. A 30-inch limit is imposed on the tiger muskie. Boats and bait are available from mid-April to mid-September from the concessionaire. Outboard motors are restricted to ten horse

Geode has a large, well kept beach, as well as a bathhouse and consession.

Swimming is restricted to the beach area. Lifeguards are provided from Memorial Day to Labor Day and a small charge is made to cover the cost of the lifeguards and the use of the bathhouse.

Camping is very popular at Geode State Park. The park offers a well-shaded 13-acre camping area with sites for 200 camping units. Eighty of these sites have electric hookups, and 45 of the electric sites have gravel pads. A dump station is located in the campground. Two modern shower and restroom buildings are present and water is available through several hydrants located in the camp area.

A visit to Geode State Park is an excellent opportunity to relax and slow down the pace of a hectic lifestyle. There are fish to catch, trails to hike and beautiful scenery to enjoy. We promise you a rewarding experience and look forward to seeing you there!

"Geode State Park is located 6 miles south of New London or 4 miles south-

west of Danville. The mailing address is Rt. #2, Danville, Iowa 52623. For more information about the park, phone 319-392-4601. Swimming, boating or fishing information can also be obtained by calling 319-392-4729 during the summer season.

Gary Fell is the park ranger at Geode State Park. He has worked for the commission at Geode since 1969.

Kirk Mathis is assistant park ranger for Geode State Park. He holds a B.S. degree from Iowa State University and has been with the commission for seven years.

WARDEN'S DIARY

Wild Turkey

By Jerry Hoilien

Wild turkey fever is something else again. I used to think luring Canada geese over decoys was the greatest hunting achievement one could reach. Then I saw my first tom turkey in the spring. He looked like a 55-gallon barrel rolling at me through the woods. What a thrill!

I first heard his voice rolling down the ridge like a jet boom, so loud through the morning stillness I could "feel it" as well as hear it. As he moved forward, I could hear the leaves crunching under his feet, sounding like a man shuffling along. Could it really be a turkey making all that noise?

Suddenly, out of nowhere, his white head came bobbing up over the ridge out front. "Freeze, don't move", my instincts told me and I felt strangely visible to everything, even in my complete camouflage outfit and mask. But on he came, tail spread high with his wings touching the leaves. His head was held back against his black feathers, the red wattles brilliant in contrast.

Next, he stopped and turned slowly, displaying his best to attract that sexy-sounding hen from the woods. Once again he gobbled, booming his magnificent voice and I could almost feel it striking my face like wind. Fantastic! Shaking his tail, he made himself as large as he could; and I can see his long beard protruding from his chest. What a bird! A wild tom turkey in full strut has to be the greatest site in the world.

I told my friend from Missouri, Phil Rice, (warden and one of the finest turkey talkers in the country) he was wrong when he told me a tom turkey in the spring could shake the trees — it's the ground shaking that shakes the trees!

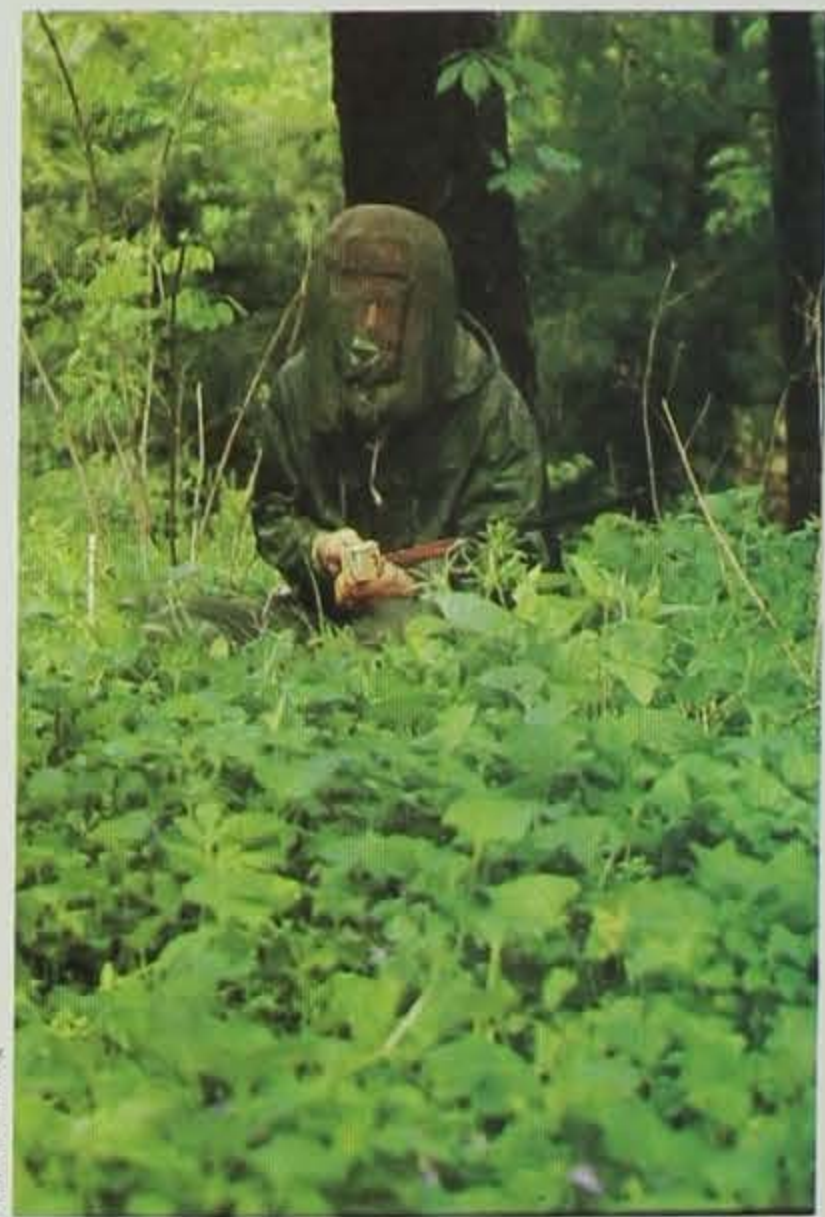


I have been fortunate because I helped stock some of the first wild turkeys in Iowa years ago, and what a success story they have been. Starting with small stockings here and there, turkey populations suddenly boomed.

The Department worked hard capturing the wild birds and spreading them across the state wherever good habitat could be found. Sure we had some poaching, but mostly people were very protective of them. As the birds were becoming established, folks would call us if a suspicious vehicle cruised too slowly past a feeding flock. The legislature wisely put a \$200 liquidated damage value on those birds in an effort to curtail any unlawful poaching, and wardens have spent many long hours watching over them. They're a wary bird, but at certain times of the year and in bad weather they are vulnerable.

There are always a few immature individuals who can't resist during the closed season. They usually take hens which are the least wary.

I mentioned earlier what I thought was my greatest thrill — well, I've topped that one already. I watched as each of my children took their first wild turkey. I saw the look in their eyes and heard the sound of their voices, and something wonderful was shared. That fleeting instant, which will stay with them all their lives and be passed on to their children, made it all worthwhile.



Wayne Lanning

Jerry Hoilien is the conservation officer for Allamakee County. He has been with the commission and has served as a conservation officer since 1960.



Roger Laubman

WILDFLOWER OF THE MONTH

Delphinium virescens
Prairie Larkspur

By Dean M. Roosa and Mary Jean Huston

One of the handsomest of our native wildflowers is the prairie larkspur, a member of the buttercup family (Ranunculaceae). Familiar to many people because of the flower's popularity in gardens, the larkspur genus (*Delphinium*) is characterized by an easily recognizable "spur" on each flower.

Prairie larkspur usually grows in mesic parts of prairies, rather than on dry ridges or bordering wetlands. Growing to a height of three feet, it occurs singly or in clumps, and blooms from late May into July. It is found throughout the tallgrass prairie region, and is sometimes found in dry, open woodlands.

The flower stalk is a terminal raceme of creamy-white or greenish-white flowers. On each petal is a light purple spot. The uppermost of the five petal-like sepals is elongated into a spur. Both the generic and common names come from this peculiar characteristic — *Delphinium* means "dolphin" in Greek — a fanciful comparison. "Larkspur" obviously refers to the shape; some suggest the spur resembles the long spur on the foot of a lark. The species name, *virescens*, means greenish.

The plant has four true petals, of which the lower two are bearded and forked. The fruit is a cylindrical follicle, bearing many small, brown, scale-covered seeds. Leaves are mostly basal, arranged alternately, and are palmately divided.

Another larkspur species, *Delphinium tricorne*, is similar in shape and size, but blooms earlier. It usually has intensely purple flowers and is found on wooded slopes.

All parts of *Delphinium* are poisonous, yet when dried the plant seems to be harmless. Few medicinal uses have been found, although native Americans reportedly used it as a sleep-inducing narcotic. Dried seeds of various species of *Delphinium* have been made into an ointment for destroying lice.

Once, much of Iowa was covered with prairie. Today, this part of our natural inheritance has been reduced to scattered and isolated patches. Wouldn't it be worth the time to discover your prairie heritage? Take a walk this spring and discover the beautiful prairie larkspur.



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