

Iowa CONSERVATIONIST

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Iowa CONSERVATIONIST

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FRONT COVER: *Cross-country skiing — A sport increasing in popularity among many Iowans. Photo by Ron Johnson.*

BACK COVER: *Rocky outcrops and forest of Northeast Iowa contain many unique natural features. These sites are of special interest to the Natural Areas Inventory (story page 18). Photo by Ken Formanek.*

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Ron Johnson

People joke about it, display bumper stickers and posters about it, and generally make light of the idea of skiing IOWA! Although Iowa doesn't offer the downhill skiing of the western Rockies virtually the whole state of Iowa is open to cross-country skiing — and a growing number of Iowans are discovering its pleasures.

Unlike downhill skiing, there are no expensive lift tickets, crowded slopes or lengthy traveling involved in enjoying the sport. According to enthusiasts, a "humbling quiet" awaits the cross-country skier, not to mention the good exercise and beautiful winter scenery.

Sound appealing? For those who might be considering the sport, a few tips are in order. First, to realize the full benefits of cross country skiing, a short course should be taken to develop the proper technique. A number of community colleges, county parks and nature centers offer courses at this time of year. If a course is not available, an experienced skier can demonstrate proper techniques and give some pointers.

As with downhill skiing, there are four basic pieces of equipment — skis, bindings, shoes and poles.

The motion made in cross-country skiing is created by the skier's energy, not by gravity as in downhill skiing. Therefore, cross-country skis are lighter, longer and narrower than downhill skis. The skis are made of wood or fiberglass and come in waxed or waxless varieties. Because beginners should be concentrating more on skills and techniques rather than what wax to use, waxless skis are suggested. Advanced skiers learn that different waxes are used for different conditions.

The footwear can be a boot or shoe type. A light, flexible ankle-high shoe is most often preferred. Unlike downhill, cross-country boots or shoes are fixed to the skis only at the toe. The small plastic or aluminum toe binding allows the foot freedom to push the skis, which creates the gliding motion.

Cross-country ski poles are longer than downhill poles because they are used more for pushing than balancing.



IOWA!

Generally, they should be as tall as the skier's shoulders. They are usually made of fiberglass or bamboo.

It's a good idea for the beginner to rent equipment. For a small fee (\$7-\$10 per day) the beginner can try the sport before making a larger investment.

As in all winter activities, hypothermia must be prevented; thus, something should be said about proper clothing. It is always better to have too much than not enough. Two layers of clothing on the bottom and three on the top will be sufficient. A good pair of insulated thermal underwear and one pair of heavy wool socks should be worn underneath. For the beginner, a pair of old blue jeans sprayed with Scotchguard will be both comfortable and repel moisture.

For the top two layers, a woolen sweater over a thermal shirt or heavy jersey is adequate. For the third layer, wear a windbreaker or a heavier coat depending on the weather.

Most of a person's body heat is lost through the extremities during cold

These areas are good bets for cross country skiing fun:

STATE PARKS AND RECREATION AREAS	MAILING ADDRESS	TELEPHONE	LOCATION-HIGHWAY
Big Creek	Polk City	515-984-6473	2 Mi. N. Polk City-IA 415
Brushy Creek	Lehigh	515-359-2501	4 Mi. E. Lehigh-Co. Rd.
Dolliver Memorial	Lehigh	515-359-2539	3 Mi. N.W. Lehigh-IA 50
Lacey-Keosauqua	Keosauqua	319-293-3502	Adjoins Keosauqua-IA 1
Lake Ahquabi	Indianola	515-961-7101	5½ Mi. S.W. Indianola-IA 349
Lake Macbride	Solon	319-644-2200	4 Mi. W. Solon-IA 382
Lake Wapello	Drakesville	515-722-3371	6 Mi. W. Drakesville-IA 273
Ledges	Madrid	515-432-1852	6 Mi. S. Boone-IA 164
Palisades-Kepler	Mount Vernon	319-895-6039	3½ Mi. W. Mt. Vernon-U.S. 30
Springbrook	Guthrie Center	515-747-3591	8 Mi. N.E. Guthrie Center-IA 25-384
Volga River	Fayette	319-425-4161	4 Mi. N. Fayette-IA 150
STATE FORESTS			
Stephens Forest	Chariton	515-774-4918	W. Lucas, E. Chariton-U.S. 65-34
Shimek Forest	Farmington	319-878-3811	1 Mi. E. Farmington-IA 2
Yellow River Forest	McGregor	319-586-2254	14 Mi. S.E. Waukon-IA 76

weather; therefore, a good woolen stocking cap is necessary as well as a pair of good leather or vinyl ski gloves. Driving gloves, knit mittens, or cloth gloves will not work. They will become wet and soggy very quickly. Leather or vinyl will shed moisture and keep hands warm and dry.

A day pack or belt pack can be a handy item to carry and should hold an extra pair of dry socks as well as other items — candy bars, keys, money, wax, film, etc. If a layer of clothing needs to be shed it can be tucked away in the pack.

Cross-country skiing is a very graceful sport and at the same time an excellent cardio-vascular or aerobic exercise. It is physically equal to or better than jogging. The movement is more from the hips than the legs. When a skier is gliding along at a steady pace, much of the momentum is sustained by pushing with the poles — moving both the upper and lower body, making it more of a *complete* workout than jogging. Still, it need not be a strenuous exercise and may be enjoyed at a slow, relaxed pace.

Although the sport lends itself to spontaneity — slap on the skis and go — planning the ski trip is half the fun and should be a "must" for the beginner. Taking on too big of a challenge or trying to keep up with a group of expert skiers can be a disappointing and discouraging experience. The distance of

the trips and difficulty of the terrain can be gradually increased.

The best areas in Iowa to ski are public lands. The larger state and county parks, particularly those with diverse wooded regions are ideal. Polk County's Jester Park, northwest of Des Moines, and Jasper County's Krumm Nature Preserve near Newton set tracks each year. Both are popular cross-country skiing areas. The beautiful Swiss Valley Nature Area in Dubuque County has both beginner and advanced trails. Rental equipment and instruction are available on the site.

In state parks, the foot trails are most compatible with cross-country skiing. Many of these marked trails are far reaching and lead to some of the best scenery in Iowa. The best parks for skiing are listed below.

Three state forests — Shimek, Stephens and Yellow River — are also open to cross-country skiing. Backpacking trails in Stephens and Yellow River State Forests are perfect for skiing.

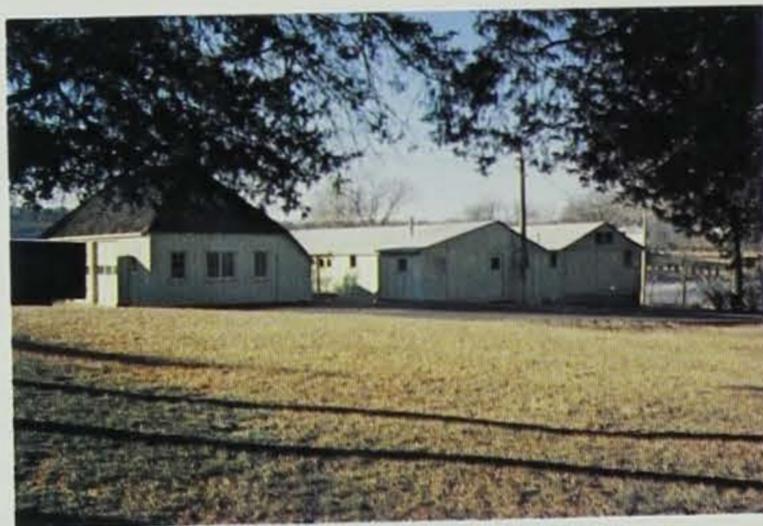
Check with local county conservation boards, state park rangers and district foresters for further information.

Many Iowans have already found that cross country skiing offers a pleasant contrast to "noisy" fair-weather activities. They take along a camera or a pair of binoculars and even pack a lunch for a winter picnic. They all agree that, indeed, Iowa is a beautiful place to ski!

Craftsmen of the Co



Ken Formanek



Top Row: Paul Wears loads a few of the 3,500 signs produced each year, mostly by silk screen process. Bottom Row: Central shop and its long time craftsman, Milt Hunt, repairing cabin furniture. Park entrance signs like the one at Lake Geode are eye-catching landmarks.



Central Shop



Ken Formanek

The beauty of Iowa's parks lies not only in their natural features, but in some man-made ones as well. Many people are familiar with the products from the federal Civilian Conservation Corps (CCC) program of the 1930's — the beautiful stone lodges, shelters and cabins. But also admirable are the creations of two of the Conservation Commission's modern-day craftsmen.

Since the early 1950's the Commission's central shop has been located at Lake MacBride near Iowa City. Milt Hunt and Paul Wears have been with the shop nearly as long as its been in existence and each year they produce some 3,500 signs for parks, refuges and public hunting areas around Iowa. Their most prized works of art are beautiful park entrance signs (*see photo below*).

Signs are the main product of the shop, however, in its early days furniture was built there also. Lodges and cabins around the state have been furnished with kitchen tables, sofa beds, over 400 straight wooden chairs and 200 upholstered chairs, all created at the shop. The 52 bunk beds at the Commission's education center at Springbrook were all hand-made at the shop. And when replica furniture for Fort Atkinson was needed the central shop was called upon to provide it. At one time even the commission's central office furnishings came from the central shop.

In the early 1960's emphasis shifted from furniture to signs and repairs. Today all lodge and cabin furniture is refinished and repaired on a 3- to 5-year cycle. Two complete lodges are done each year during this ongoing project.

From tree to finished product, it's entirely a Commission operation. Cherry, oak, walnut and other hardwoods used for the shop projects are obtained from Yellow River State Forest.





Jerry Leonard

By Bill Rybarczyk and Jim Wooley

The cottontail rabbit was first collected and described in timbered areas of Florida hence the Latin and Greek origin of its scientific name, *Sylvilagus* meaning "wood hare", and *floridanus* "of Florida". The cottontail rabbit includes many species and subspecies that range from southern swamps and eastern coastal marshes to the agriculturally oriented Midwest, tall and short-grass prairies, the Rocky Mountains and beyond to the Pacific. It is found in almost any suitable cover below timberline and above sea level.

Cottontails are the best-known and most widely-hunted game animal in Iowa and all of North America. More cottontails are harvested annually than any other type of game animal.

Cottontails and other rabbits and hares are often classed as rodents, but there is reason to place them in a separate order known as *Lagomorpha*. Rodents have only two upper incisors or front teeth but rabbits and hares have four. The two "extra" incisors are small and are located just behind a larger front pair.

Cottontails weigh from 2 to 2¾ pounds and measure in length from 14 to 20 inches, with females slightly larger than males. Ears measuring up to

3 inches in length can be cocked in any direction to detect the slightest sound. Large eyes are located on the sides of the head enabling a rabbit to see in all directions without moving. Hind feet from 3 to 4½ inches long and large back and leg muscles make the cottontail extremely quick and agile.

Male and females are colored alike and do not change color during the year. Underparts vary from reddish to grayish-brown sprinkled with black, giving the fur a peppery-brown color. Dark gray-brown ears bordered with black, brown chest, rusty-red neck, grayish-white belly, tan feet and dark brown eyes all add to its inconspicuous brown appearance. The short tail is brownish above and white below. When a cottontail runs, the tail is turned up (much like that of a white-tailed deer), and the white part is very conspicuous, hence its name — the cottontail.

Reproduction

Cottontails have been known to breed in every month of the year in the southern part of their range, but in Iowa, the normal breeding season extends from March through September. Cottontails are most active near dawn

THE

and dusk and most courting and mating is done then. Bucks become very aggressive when mating and will kick, bite and tear at rivals. Males often become involved in frenzied, hopping, running and jumping encounters with does also.

A female can produce from 5 to 6 litters a year with litter sizes ranging from 1 to 8 and averaging 4 or 5. Females are capable of breeding at approximately 6 months of age. The gestation period is 26 to 28 days and a doe may be pregnant while nursing young from her last litter. An adult doe can produce 20 to 30 young a year making her a virtual "rabbit factory." Studies have shown that litter sizes are larger in areas where soils are more fertile and that litters of individual females are largest during the middle of the breeding season when the vegetation is most nutritious.

The young are born in a shallow depression lined with grasses, roots, leaves and fur which the doe pulls from her chest and belly. This depression is dug by the doe with her forefeet as she nears the end of pregnancy. Its dimensions are approximately 5 inches deep, 7 inches long and 5 inches wide. When completed, it is covered with leaves and grass until birth of the young. The nest is normally located in idle grassy areas, hayfields, lawns or gardens.

Cottontails and other rabbits are deaf, blind, naked and helpless at birth, range from 3 to 4 inches in length and weigh about 1 ounce. Hares, on the other hand (including the white-tailed jackrabbit in Iowa), are born with their senses well developed, eyes open, well-furred and are able to walk soon after birth. Eyes of cottontails open within a week and the young remain in the nest for approximately 15 days. During this time, the mother will remain concealed in a resting place nearby. However, at dawn and dusk she will move to the nest, uncover it, feed the young and re-cover it. If the nest becomes unsafe, she may move the young to another location. Initial trips from the nest by the young are short. They may nibble on succulent vegetation for the first time but return to

COTTONTAIL



Ron Johnson

the nest at night to be fed and for warmth. By the time they are 20 days old they will have left the nest forever.

It is also during their first 2 to 3 weeks of life the well-meaning humans rescue "abandoned" young. Raising young rabbits is not easy. Many people have tried and few have succeeded. Even if you succeed and release them into the wild, their chances of survival are practically nil because they are not aware of the dangers present in a wild environment.

Food Habits

The diet of cottontail rabbits is almost entirely plant material and it varies by season because of the change in availability of plants. The cottontail's spring and summer foods consist of succulent herbaceous materials including the leaves, stems and flowers of many grasses, sedges, herbs, legumes and garden crops. As summer becomes fall and fall becomes winter, there is a progressive change to a diet of buds and bark of woody plants, including willow, birch, hawthorne, blackberry, multiflora rose, white oak, buckbrush, sumac and many species of orchard trees and nursery stock.

Cottontails sometimes cause considerable damage to flower beds, gar-

dens, fruit trees, and large commercial orchards and nurseries. Rabbits are best kept out of small areas and away from fruit trees with mesh wire fence. Fencing around large commercial operations also works, but in many instances the cost of fencing makes this impractical. Chemical repellents have been developed which aid in repelling rabbits from these commercial operations.

Waste agricultural grains such as corn, soybeans, sorghum and wheat are nutritious, palatable and heavily utilized fall and winter foods. Cottontails may be concentrated in high densities where these agricultural grains are found in close association with brushy, winter cover.

Limiting Factors

The cottontail is prey for virtually all types of predators and host to many diseases and parasites which results in the loss of great numbers of rabbits. Cottontails have a short lifespan in the wild with the average probably not over a year. A study in Michigan showed that only 2 out of 226 tagged cottontails ever reached two years of age. However, cottontails are very prolific and it is this prolific nature that enables them to survive as a species. Predators known to take cottontails include skunks, cats,

dogs, badgers, foxes, coyotes, mink, weasels, bobcats, hawks, owls, crows and snakes.

Young rabbits may also drown in the bowl-shaped nest during periods of heavy rain and flooding.

Man poses a threat to cottontails in several ways. They are taken by hunting and many are killed each year on our roads and highways. Young rabbits in nests are destroyed when hayfields are mowed and idle areas are burned in the spring.

Parasites and diseases are always present in rabbit populations, but most have little serious effect on rabbits or man. However, if predators are scarce, cottontails may build up to extremely high densities in areas of good habitat. In these instances, nature's system of checks and balances steps in and parasites and diseases take a heavy toll of cottontails, reducing their numbers to that which the habitat can support. When individual rabbits become stressed during periods of high density, whether it be due to injury, lack of food or lack of adequate space between individuals, a particular parasite or disease may additionally weaken the animal enough to cause its death. Parasites which rabbits are susceptible to include ticks, mosquitos, flies, fleas, lice, chiggers, lungworms, tapeworms, pinworms, roundworms and liver flukes. Diseases include fibromas, papillomas "rabbit horns," pseudotuberculosis and coccidiosis. With one exception, none of the diseases and parasites of cottontails pose a serious threat to man, particularly if all rabbit meat is well-cooked before it is eaten.

A disease known as tularemia or "rabbit fever" is harmful to both cottontails and man. The chances of catching tularemia are extremely remote and there is certainly no need to stop hunting and eating rabbits. The disease is not common or deadly but is often magnified out of proportion through gossip. Rabbits that have tularemia lose their wariness and appear sluggish and tame.

Tularemia is most prevalent in dense rabbit populations and is transmitted

THE COTTONTAIL

from rabbit to rabbit by biting insects such as ticks and fleas. Infected rabbits die within 7 to 10 days after infection. The incidence of tularemia in rabbits and consequently in humans drops off dramatically after the first frosts in autumn because the insects that transmitted the disease become less active then.

Humans contact the disease generally when cleaning rabbits. Bacteria in the rabbit blood or other body fluids enter cuts, abrasions, and even undamaged skin on a person's hands. The symptoms in humans are much like that of the flu. There are no vaccines to prevent tularemia, but its effects can be reduced by several common drugs.

Though man, predators, parasites and diseases limit rabbit numbers, in the long-term the availability of adequate habitat will dictate the number of cottontails present. If the trend toward more intensive agricultural practices on private land continues, we will surely have fewer cottontails in Iowa in the future.

Management

Most cottontails spend their entire life within a 5-acre area. Therefore, requirements including food and shelter, nesting, hiding and escape cover must be met within this small area. If not, rabbits will range more widely and population densities will be less. In Iowa, the most desirable rabbit cover includes a good interspersion of cropland, idle grassland, brushy draws or brushy woodland borders, briar patches, osage orange or multiflora rose hedgerows and other idle areas.

Probably the quickest method used to increase rabbit numbers is to construct brushpiles, especially if they are located near idle grasslands, croplands and brushy areas. A brushpile constructed for rabbits should be at least 5 feet high and 10-15 feet in diameter, and the more brushpiles in an area the better. Smaller brushpiles don't provide adequate cover to shelter rabbits from the weather or their enemies.

Fencing of farm woodlots and odd areas to exclude grazing and encourage

growth of natural vegetation such as giant ragweed is also beneficial. Abandoned farmsteads grown up in a seemingly impenetrable tangle of grass, brush and briars is another favorite for cottontails. The maintenance or lack of destruction of such areas can provide for some exciting sport on a sunny, winter afternoon.

There are many designs of arranging the cover types mentioned to provide desirable habitat. The key is to intersperse various cover types to maximize the amount of "edge" present. However, it is not necessary to take good farmland out of production to provide habitat for rabbits. On most farms, simple adherence to wise soil conservation practices will provide adequate cover to sustain a healthy rabbit population.

Hunting

Cottontail rabbits are distributed throughout Iowa with generally greater numbers found in the southern counties. Cottontail hunting is enjoyed by thousands of sportsmen each year. Iowa's harvest of cottontails over the past ten years has averaged more than a million per year. During this time, the hunting season has extended from the first or second weekend in September through February. Cottontails are widely scattered during the first two months of the season because of the abundance of cover present, so few hunters seriously pursue them then. With the opening of the upland gamebird seasons, the take of rabbits increases as many rabbits are killed incidental to bird hunting. However, the serious rabbit hunter doesn't get down to business until the ground is snow covered in December, January and February.

There are several effective techniques that may be employed in hunting rabbits including stomping brushpiles and pussyfooting through abandoned farmsteads or along brushy fencerows, wooded draws, or roadsides. The same areas may be covered more quickly if a hunting companion is stationed at the other end, but each must know where the other hunter is at all times.

The purest form of rabbit hunting is done with the companionship of one or more beagles. Listening to a ringing chorus of beagles on a hot track and trying to connect with a bouncing brown blurr flashing through a brushy tangle can indeed be very sporting.

The two most popular guns used in rabbit hunting are the shotgun and the .22 rimfire rifle. The best shotguns for cottontail hunting are chambered for 20 gauge shells or smaller with shells containing 6 or 7½ shot. Rabbit hunting with a .22 rifle is the most challenging.

Most cottontail hunting in Iowa is done on private land, so permission from the landowner must be obtained. Additionally, the Iowa Conservation Commission maintains 260 public hunting areas containing more than 300,000 acres, most of which provide good to excellent rabbit hunting, particularly late in the season.

The cottontail is indeed a valuable resource. Sales of hunting licenses to rabbit hunters provides revenue for state fish and wildlife programs. Hunters spend hundreds of thousands of dollars for food, gas and motels boosting local economies. Fur from cottontails is used for making felt, trim on coats, and lining gloves.

But most importantly, the cottontail provides tons of delicious meat served on thousands of tables across the state each year. The following recipe is a proven winner:

Baked Rabbit In Mushrooms

2 rabbits (cut up)
1 can cream of mushroom soup
½ cup sour cream
½ cup milk
1 small can mushroom pieces
seasonings

Season each piece with salt, pepper and poultry seasoning, to taste. Combine sour cream, milk, drained mushrooms and soup in a sauce pan. Heat, stir and pour over pieces in a roasting pan. Cover and bake at 300° for 2½ hours or until tender to the fork. (Remove cover for last 15 minutes).



Darling Etchings on Display



Jay N. "Ding" Darling, a prominent Iowan, was an ardent conservationist who was active in state and national conservation matters. Best known as the nationally-syndicated political cartoonist for the *Des Moines Register*, Darling created etchings predominantly of wildlife subject matter as a past time and hobby.

In early 1982, Gordon Meaney of Des Moines, the partner who collaborated with Darling in producing

Darling's wildlife art etchings, sold to the Commission an original etching entitled "Design of the First Federal Duck Stamp" and donated approximately 20 additional original Darling etchings.

Larry Wilson, director of the Iowa Conservation Commission, commented that Mr. Meaney's contribution is probably as significant as any contribution ever made by a layman to the state of Iowa.

Included in the donated collection is a series of fish-

ing etchings entitled "Fisherman I Have Met" and a number of waterfowl etchings. The design for the first federal duck stamp is one of Darling's best-known pieces of artwork. Created in 1934, it is considered by many art collectors to be Darling's most significant etching.

The collection including interpretive panels, is now on permanent display for the public, in the lobby on the 4th floor of The Wallace State Office Building.

PROPER GUN STORAGE ESSENTIAL

When it comes time to put the old firearm away until next hunting season, there are a few simple steps that can be taken to ensure its well being.

Open the action, then check the chamber and magazine to make sure the gun is unloaded. If the gun has been used in inclement weather or dirty conditions, it will have to be dismantled for cleaning.

Remove the barrel and dismantle the magazine. Clean them with gun solvent both outside and in. A dry rag should come out spotless when they are all clean.

Residue from plastic shells and shotgun powder will form in the chamber causing rust. Clean the chamber with solvent and a brass brush. Remove grime from the

gun's action. Then wipe all metal surfaces with a lightly oiled rag to prevent rust.

Finally, polish the wood. Store the gun in a dust-free area. If a case is used, keep it slightly opened to avoid moisture condensation. Do not leave cleaning patches in the barrel. They may go forgotten until it is too late next fall.

Book Review

Private Options: Tools and Concepts for Land Conservation

Montana Land Reliance and Land Trust Exchange

292 pages

Island Press, Star Route 1, Box 38, Covelo, California 95428; 1982.

\$25.00

Over the past two decades, an increasing number of diverse and relatively autonomous local land preservation efforts have surfaced. Until recently, these groups have had to function in relative isolation, forced to reinvent techniques and strategies others already had put into practice. In late 1981, two groups held national conferences to explore theories, strategies and fiscally sound techniques for preserving land. This book contains the experiences of distinguished practitioners in land conservation and presents that wisdom to a broad national audience.

Private Options documents techniques that already are being used successfully in communities throughout the nation. Topics include: income tax incentives and recent tax law changes, estate planning, real estate business as a conservation tool, conservation easements, financing options for buying and selling land, managing land and marketing land conservation.

This book is for farmers and other landowners who want to hold onto their land or pass it on to their children, urban and rural planners, urban officials, real estate businesses and land trusts.

SWITCHGRASS CONTINUES TO HELP PHEASANTS AND FARMERS



The Iowa Conservation Commission will spend \$100,000 again this year on a program that benefits both wildlife and farmers. The money will be used to share the cost of establishing switchgrass pastures on private lands.

Cooperating cattlemen like the native switchgrass because, as a warm-season forage, it reaches its peak productivity when bluegrass and other cool-season grasses are

often dormant. Switchgrass compliments the traditional pastures by allowing year-round grazing. As Lee Faris, a Ringgold County cattleman, puts it, "For those of us with a beef cattle operation, a few acres of switchgrass really improves the carrying capacity of a pasture."

Commission wildlife biologists are excited about switchgrass because of its value to ground-nesting gamebirds and songbirds.

Since switchgrass isn't utilized until July, it provides safe, undisturbed nesting cover during the peak nesting period of May and June. In addition, it provides excellent winter cover because it doesn't flatten under snow.

Twenty-nine counties will be eligible to receive cost-sharing payments for the establishment of switchgrass in 1983. Those counties are: Appanoose, Audubon, Guthrie, Jasper, Mahaska, Monroe, Montgomery, Page, Poweshiek, Shelby, Wapello, Buchanan, Carroll, Clinton, Crawford, Dallas, Davis, Fremont, Greene, Harrison, Henry, Iowa, Lee, Lyon, Mills, Plymouth, Polk, Scott and Sioux Counties. Any funds not used by those counties may be used by counties whose eligibility has expired. Those counties include: Adair, Clarke, Lucas, Madison, Ringgold, Union, Warren, Adams, Cass, Decatur, Marion, Taylor and Wayne Counties.

For additional information, landowners are encouraged to contact their local wildlife management biologist or Soil Conservation Service district conservationist. The application period for the switchgrass program ends on April 1, 1983.

WATER POSTER DEADLINE NEARS

The Iowa Conservation Commission would like to remind school children in grades four through six that they can still participate in the Third Annual Boating and Water Safety Poster Contest. The deadline for entries is Feb. 1, 1983. This year's theme is "Learn To Swim — The Number One Rule For Water Safety".

The contest is sponsored by the American Red Cross, Des Moines Power Squadron, Iowa Coast Guard Auxiliary and the Iowa Conservation Commission. It will feature cash prizes and the opportunity to be a guest of the Governor during the signing of the safe boating week proclamation.

Students will compete for a first-prize \$100 savings bond, second-prize \$75 savings bond and third-prize \$50 savings bond.

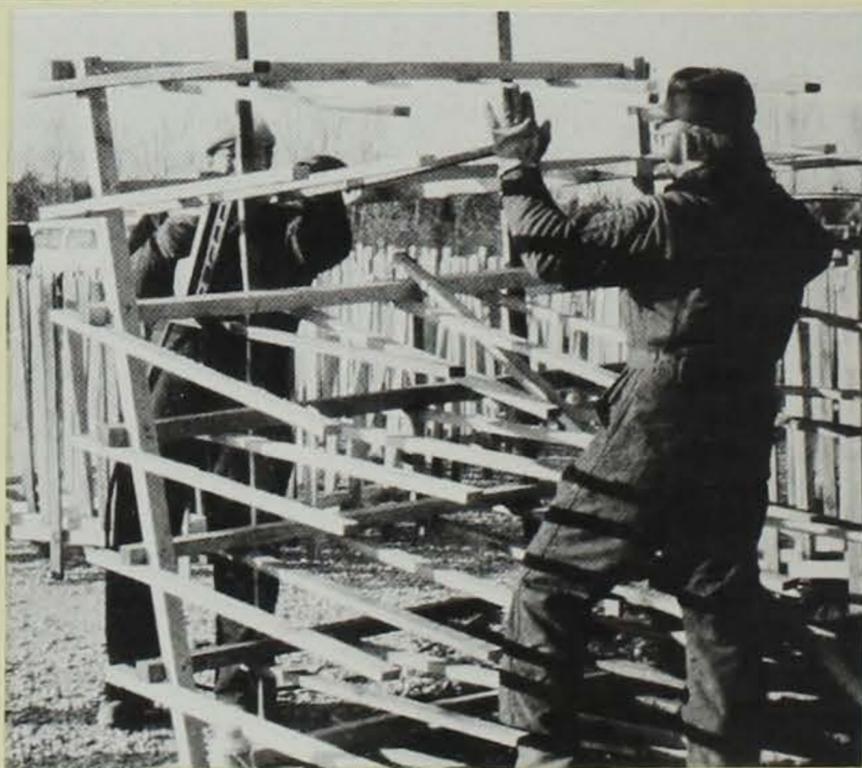
The winners will also receive a plaque. IMT Insurance Company is providing the cash prizes. For further information and contest rules, contact the Iowa Conservation Commission, Wallace State Office Building, Des Moines, Iowa 50319.

Fish Attractors

Each year the fish management section of the Commission places a number of fish attractors in public lakes around the state.

The attraction areas can be in a number of forms — brush, tire or rock piles, or stake beds (pictured right). Fish attractors of this type create favorable habitat for small forage fish. They concentrate around the structures for protection, thus attracting larger game fish to the area. Stake beds are constructed of one by two ruff oak stakes and anchored to the lake bottom with concrete blocks. The largest fish attractor project to date has been at Beeds Lake in Franklin County, where 117 stake bed structures were placed.

White buoys mark fish attractor areas.





PARK FEE INCREASE

At the last meeting of the Conservation Commission held in Des Moines on Jan. 4 and 5, an increase in cabin and shelter rental fees was approved.

The proposed rate increases for the state park enclosed shelters, cabins and group camps were determined by the parks section supervisory staff after a review of the existing fees. Consideration was given to community in which facility is located, length of time since fees were revised, the demand for the use of the

facility, labor and maintenance required for clean-up and rental of the structure.

There has been no adjustments made in the fees for about six years.

The rental of the majority of enclosed shelters include electricity, water, flush toilets, cooking stove and refrigerator. The fee is for one day's rental and the shelter must be vacated at the 10:30 p.m. closing time of the park.

Listed below are the past and present rates for cabins, group cabins and enclosed shelters.

Cabins

	Past Fee		Present Fee	
	Daily	Weekly	Daily	Weekly
Modern Backbone, Lacey- Keosauqua Lake Wapello (except #13), and Palisades-Kepler	\$15.00	\$ 75.00	\$20.00	\$100.00
#13 - Lake Wapello (sleeps 8)	\$20.00	\$100.00	\$25.00	\$125.00
Nonmodern Springbrook, Lake of Three Fires	\$12.00	\$ 60.00	\$15.00	\$ 80.00
Minimum Deposit For Cabin Rental	\$10.00		\$25.00	

CAMPER SELF-REGISTRATION

In 1982, the Iowa Conservation Commission began using camper self-registration at several state park and forest campgrounds. The method used is based upon that employed by the United States Forest Service in over 2,000 campgrounds throughout the nation. Jim Scheffler, associate superintendent of state parks for southern Iowa, feels that the program has been successful. "We have modified the Forest Service's method slightly to fit our program and we are encouraged by its success."

When campers arrive at a self-registration campground,



they fill out the necessary information on a special envelope and stub. Their camping fee is placed in the envelope, and the envelope dropped into a special depository. The stub is placed on the campsite post. The campgrounds are monitored

Organized Group Cabins at Springbrook and Dolliver Memorial

	Past Daily	Present Daily
Youth Groups	\$.75/person \$25.00 minimum	\$1.00/person \$50 minimum
Other Groups	\$7.00/cabin + \$25 for dining facility	\$15.00/cabin + \$25 for dining facility

Dining/Restroom Facility at Keomah

	Past Daily	Present Daily
Youth Groups	\$.50/person	\$.50/person + \$25 for facility
Other Groups	\$.50/person + \$25 for facility	\$4.50/camping unit + \$25 for facility

Enclosed Shelters

Area	Past Fee	Present Fee
Pammel	\$12.00	\$25.00
Fort Defiance	20.00	25.00
Lewis and Clark	20.00	25.00
Gull Point	35.00	60.00
Stone	35.00	50.00
Lake Ahquabi	25.00	40.00
Walnut Woods	50.00	80.00
Wapsipinicon	15.00	25.00
Palisades-Kepler	30.00	50.00
Bellevue	40.00	60.00
Lake Keomah	35.00	40.00
Lacey-Keosauqua	15.00	25.00
Lake Wapello	15.00	25.00
A. A. Call	25.00	40.00
Clear Lake	35.00	50.00
Dolliver	15.00	25.00
Pine Lake	20.00	40.00

These rates are for the first 100 persons; there is a charge of \$.25 per individual in excess of 100.

regularly to make sure that all campers are indeed registered. According to Scheffler, the program provides increased convenience to the camper, as well as a great saving in manpower to the state.

"Because of budget cut-backs, not as much seasonal help has been available in Iowa state parks as in previous years. We simply cannot afford to have personnel manning check stations to the extent that we have done previously," Scheffler said. "Self-registration provides an excellent method to both economize and provide additional convenience to the camper."

Camper compliance has been good in the areas where self-registration has been used in 1982. The state parks system plans to employ self-registration at all of its areas in 1983. Self-registration will be used at most areas during certain times of the week or during those times of the year when seasonal manpower is much reduced or lacking.

Scheffler said the new registration procedure is a way the commission can maintain a high level of visitor service and at the same time stay within its budget. "I hope park visitors will be responsive to the program by letting us know how they feel about it," he said.

CLASSROOM CORNER

By Bob Rye

Particularly at this time of year, groups note the large number of deer using the conservation education center area. Because of this, we frequently use deer trail hikes for teacher and youth groups.

As interpreters, we are expected to know and discuss everything we encounter on a single hike. However, like any hike that we lead, we always stay with one theme. It will supply enough information for any group to absorb.

One hike on deer and deer signs, especially deer tracks, holds the group's interest from their arrival until their departure. From tracks we speculate as to the deer's size, age and health conditions, when the deer was there and where it was going.

Another sign that really excites a group is a buck rub. We have a lot of rubs throughout the area. We also discuss some of the physical factors about deer: what antlers are made of, how they are formed, what antlers are used for and, of course, why the deer attack the sapling. We also discuss the buck's role in the herd and his relationship to predators.

On the observation hike, the group also studies evidence of what the deer are feeding on, browse lines, erosion of deer trails, deer bedding areas, camouflage, white tails and, quite often, the deer themselves.

Information that is usually brought to light as a result of the hike and discussion includes: White-tail deer prefer to live along the forest edge and are frequently found along the river corridors. The most characteristic feature is the white underside of the tail. Their actual height is 35-38 inches. Their coat color changes with the time of their life and the season. Deer will



eat most plants around where they live, but a few locally abundant kinds make up the majority. In Iowa, cultivated crops make up most of the annual diet of deer, the rest is made up of woody browse and various forbs.

Try this method of instruction by yourself or with your group. If you can get to a state park, it will provide a great area for a "deer hunt." Have a general question to start with such as, "what are the deer doing in the park?"

WARDEN'S DIARY

By Jerry Hoilien

"Now that the hunting seasons are about over... I suppose you fellas don't have much to do." The guy was trying to be friendly so I bit my tongue and snuffed my temper... "Yeah," I replied, *"probably get down to only a 60 hour week before long."*

'Course, now when some of the legal seasons end, begins the job of seeing to it that the illegal season doesn't start. Oh yes, there's still coyote hunting, beaver trapping, ice fishing, commercial fishing, hunter safety programs to complete, and others that you didn't have time to complete earlier. There's programs for the public and in-agency training programs... equipment to keep up, inventory, equipment requests, budgets, office work, license recaps, and lots of other things I've probably forgotten to mention.

There's never a dull moment in this work — I guess that's what most of us like about it... constantly changing, shifting and adapting... one season shifts into another with the next coming before

you can get ready for it... fall, winter, spring and summer. There's no quiet time anymore... maybe that's the reason game wardens don't live so long... huh? Someone once suggested too much time in the marsh — too many hours standing in cold water — hands get stiff after reaching into ice water for an unlawful trap or net — drying them on your trousers and letting the cold air finish drying them. Long night hours of waiting for a poacher to come back to pick up his illegal kill, knowing you've got a full day's schedule ahead, if and when he ever shows up, so you can get some sleep. Being a game warden, conservation officer, brush cop, plus a few names I can't mention here, is not a job, but a way-of-life. There's no room for halfway, those that try this don't stay long. They're a strange breed of cats who are strangely different from one another yet similar, independent, self starting, fiercely jealous of their job, will grumble about long hours but in the middle of an investigation, you

couldn't drive them home with a club.

I remember a few years ago in the spring one of the young officers had a raft of geese shot out of season and hollered for help. His fellow officers came running and a concentrated investigation began. Sixty some dead geese were gathered, empty shotgun shells were picked up, tracks were photographed and measured, a door-to-door contact began all around the area. It began at nine in the morning and finished at five the following morning... resulting in five local young men paying fines and one serving 30 days. You probably read about that one in the papers.

Sometimes not too much of the warden's work is newsworthy, because it comes in the form of preventative enforcement. Maybe talks given to clubs, organizations, schools, and camps or even just a cup of coffee in a restaurant will do it... a one on one visit with an individual will accomplish more than a citation and a trip to court. The ways of accomplishing compliance with our fish and game regulations is as variable as the people we deal with... knowing *how* is the mark of a good warden.

I met my friend the next Sunday afternoon. He didn't hear my car as I drove up behind him, and the gun was still pointed out the window of his car as I took ahold of the barrel. It startled him as I said, "Joe... you know better than that!"

"I know, I know," he said, "I just got excited trying to get that coyote, didn't take time... sorry... missed him twice... I am sorry... you've got your job to do." As I reached for my citation book, I suggested he get out his new hunting license for this year and I could take the information from it. "That's *another* thing I've got to talk to you about..." he said.



SAFE SNOWMOBILING PROCLAMATION



On Jan. 17, Governor Terry Branstad officially proclaimed Jan. 22-28 Iowa Snowmobile Safety Week. The proclamation was one of the first signed by Iowa's new governor. The statement calls for increased attention to the safe use of snowmobiles.

Present at the signing were, left to right, Richard Langan of Muscatine, regional director, Iowa Snowmobile Safety Association (ISSA); Gary Wolthuis of Spencer, regional director, ISSA; Dan Martin of Davenport, vice-president, ISSA; Effie Heikens of Spencer and Marvin Heikens of Spencer, president, ISSA; Carole Carlson of Granger, secretary, ISSA; Sonny Satre, safety coordinator, Iowa Conservation Commission (ICC); Larry Wilson, director, ICC; Steve Klinkefus of Des Moines, regional director, ISSA.

COMMUNITY FIRE PROTECTION PROGRAM

According to Gene Hertel, state forester of the Iowa Conservation Commission, federal grant funds will be available through the Rural Community Fire Protection program.

This is a federal 50 percent cost-share program available to communities under 10,000 population to train and equip their fire departments. The program is administered by the U.S. Forest Service through the state forester.

Applications for the 1983 program are being mailed to all fire chiefs and city clerks the first week in February. All applications must be filed by March 15, 1983, to qualify for the 1983 program.

The program has been available since 1975. Grants have been made in all of Iowa's 99 counties. The cate-

gories available for funding in 1983 are training, communication, protective clothing, breathing apparatus and conversion of federal excess property.

Questions concerning this program should be directed to Roy Hatcher, Protection Forester, Iowa Conservation Commission, 2404 South Duff Avenue, Ames, Iowa 50010; phone 515/294-4622.

REMOVE ICE SHACKS

The Iowa Conservation Commission reminds the state's ice fishermen who have ice shacks on state-owned waters to have them removed by the deadline date of February 20. To avoid violation of the state's littering law, fishermen must remove all refuse from the area.



WILDLIFE MANAGEMENT SUPERVISOR RETIRES

Tom Berkley, southwest district supervisor for the game management section of the Iowa Conservation Commission, has retired after 36½ years of service.

Berkley started in 1946 as a fish and game conservation officer assigned to Madison and Adair Counties. Later, he was transferred to northeast Iowa where he worked Winnebago, Fayette and Chickasaw Counties.

In 1949, he became northeast district supervisor for the game management section. In 1962, he transferred to the southwest district and remained there until his retirement on Jan. 13.

Berkley has been involved in the acquisition, development and management of many of Iowa's major wildlife management areas. Some of these include Elk Creek Marsh, Coralville Reservoir,

Otter Creek Marsh, and Riverton, Red Rock and Elk Grove Wildlife Areas.

Berkley has also been responsible for the wildlife damage control program in southern Iowa, controlled waterfowl hunting at Riverton and Forney Lake, and determining wildlife migration along the Missouri River.

The vacant position left by Berkley will be filled by Neil Heiser, wildlife biologist for the Missouri River Wildlife Management Unit.

Heiser has a B.S. degree from Colorado State University and an M.S. degree from Iowa State in wildlife biology. He has been with the commission since 1972 and has managed the wildlife areas along the Missouri River for the past eleven years.

He will be stationed at Cold Springs State Park near Lewis.

ATTENTION STAMP COLLECTORS

The Iowa Conservation Commission announced that 1982 wildlife habitat, waterfowl and trout stamps and nongame support certificates are still available for collectors from the commission until March 31, 1983. After that date, unsold items will be destroyed.

The 1982 stamps and certificates and their fees are as follows:

Waterfowl Stamp	@ \$5.00
Trout Stamp	@ \$5.00
Habitat Stamp	@ \$3.00
Nongame	
Certificates	@ \$5.00

Copies may be obtained by sending the proper remittance to the Iowa Conservation Commission, License Section, Wallace State Office Building, Des Moines, Iowa 50319.

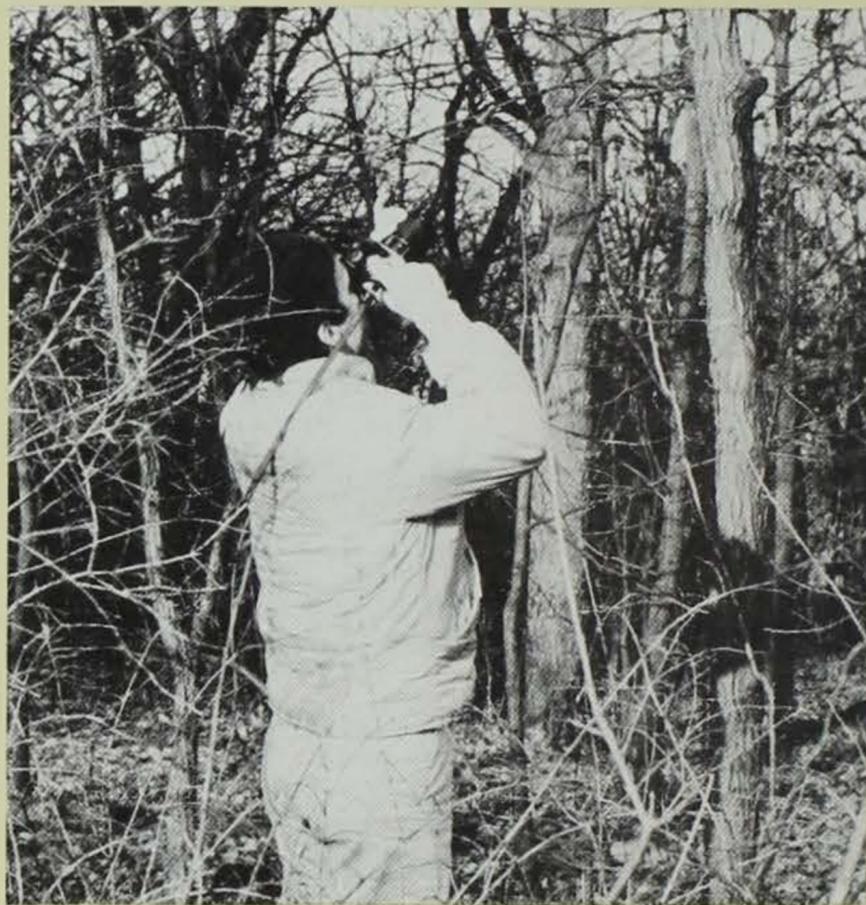
1983 Iowa Conservationist Photo Contest

Through the years we have had requests to hold a photography contest in which winning selections would be featured in our magazine. The conservation publications of several other states, as well as some national magazines, have such contests and they are successful and well-received by the public.

So it has been decided by the magazine staff that it is time to hold one for our readers and it is hoped that many of you will take the time and effort to participate.

The rules are printed below. But, in short, there will be both color and black and white divisions in the following categories:

1. Wildlife (all nondomestic animals native to Iowa).
2. Humans and Our Resources (recreation and outdoor activities).
3. Scenic Beauty (natural settings and scenic views from within Iowa).
4. Power of Nature (weather-related, ice scenes, storms, snow, etc.).



RULES OF ENTRY

Please read the following rules carefully.

1. To enter, submit a color transparency (any size) or black and white photograph (not larger than 8" x 10") for any or all official categories. Color prints will not be accepted.
2. Handprint your name, address, and zip code on the entry form below or on a plain piece of paper. Indicate the category and where the picture was taken on entry form with a separate form for each entry. Tape entry form to back of photo or attach transparency to entry form. Do not write on or staple photos. Please protect entries by use of cardboard backing in mailing envelope.
3. Each contestant may submit one entry for each category. All entries must be received by March 31, 1983.
4. All entries must be hitherto unpublished original photographs and will be judged on the basis of originality, relevance to category, composition and photographic technique.
5. All entries become the property of the Iowa Conservation Commission with all rights, including the right to edit, crop, publish and use any photo without further consideration of payment to the contestant. No entries may be returned. In the event, photos received in the contest are used in future publications by the Iowa Conservation Commission, the photographer will be credited.
6. The contest is open to all U.S. residents, except employees of the Iowa Conservation Commission and their families with the understanding that all entries will have been taken within the boundaries of the State of Iowa.

7. By the act of entry, each contestant warrants that his or her photographs were taken by his or herself and that the contestant has full rights to the photographs and that none have previously won an award or competition.
8. Judging will take place on or about April 4, 1983, with all winners published in the May issue of the Iowa Conservationist.
9. All entries must be mailed to:

Iowa Conservation Commission Photo Contest
Wallace State Office Building
Des Moines, Iowa 50319

ENTRY BLANK Iowa Conservationist Photo Contest

Name _____

Address _____

City _____ State _____ Zip _____

Category _____

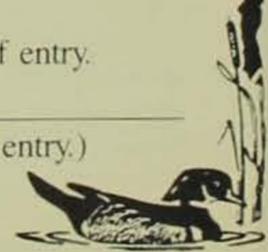
Where Taken _____

Black & White or Color

I hereby agree to the conditions of the rules of entry.

Signature _____

(Please include a copy of this form with each entry.)



The Everglades Deer Hunt



Bob Ellis

A starving, drowning deer lays dying in Florida's Everglades. Anti-hunters cry "Let nature take her course!" but all too often, nature is a cold, cruel option to the hunter's gun.

In July 1982, the Florida Game and Fresh Water Fish Commission ordered an emergency deer hunt on the vast Everglades Wildlife Management Area, north of Everglades National Park. The hunt began as a necessary wildlife management tool, then erupted into a national controversy. Despite major network and newspaper coverage, few people know the complete story.

The results of this controversy affect deer management everywhere. Thus, the IOWA CONSERVATIONIST reprints the article with thanks to FLORIDA WILDLIFE magazine and the Florida Commission.

By B.F. Lampton

In May, the Everglades sawgrass was dry and brown, the muck soils baked and cracked. For two years, rainfall averages had been far below normal and the water supply for the Gold Coast's

four million residents was threatened. Agricultural interests to the north faced rationing as the level of Lake Okeechobee plunged to record lows.

But if the Everglades Wildlife Management Area is anything, it is a place of contrast. Within a matter of days, the shortage of water was history. Suddenly water was abundant, far too abundant for a deer herd carefully husbanded and nurtured since an extensive water-related die-off in 1978.

The Everglades is a unique part of Florida. A third of what was the historic Everglades, it is bordered to the north by vast fields of sugar cane and vegetables and to the south by Everglades National Park.

It covers more than 735,000 acres subdivided into water conservation areas, each surrounded by levees and a system of canals designed to speed the flow of water. Within the interiors of the conservation areas, tiny islands of willow and sometimes, hardwood dot the flat sawgrass plain and the remnants of islands long gone dot the face of the land.

Ever since the conservation areas were created in the 1950's, the deer population has had its ups and downs. During drier years, whitetails multiply

Lt. B.F. Lampton is the regional education officer for the Florida Game and Fresh Water Fish Commission. Lampton's region includes the Everglades Wildlife Management Area where the deer hunt occurred.

rapidly because of abundant and nutritious food supplies. These dry times are traditionally followed by wet cycles when the water rises, covers the normal food supply, and forces the deer to seek sanctuaries on tree islands and levee banks. Die-offs of varying degree usually follow.

The Game and Fresh Water Fish Commission, charged with the responsibility of managing the Everglades wildlife populations, tried various plans of moderating these cyclic die-offs. Supplemental feeding programs met with little or no success in 1958, 1966, 1968 and 1970.

The problem in attempting to feed Everglades deer lies first in distributing food supplies to isolated pockets of animals surrounded by 950 square miles of water and sawgrass. Logistically, it is an expensive nightmare.

In addition to supplemental feeding, the Commission tried massive deer relocation campaigns during the '60s and early '70s. Though these efforts gained nationwide sympathy, they were actually dismal failures. The majority of the deer captured died of the stress of the capture itself. Some of the healthier of those released on higher ground adjacent to the conservation areas traveled back to their waterbound home ranges, but most died.

Leaving the deer alone has also proven to be an alternative that does not benefit the most animals. In 1978-79, deer, for the most part, were left alone and not only did the majority of the herd die, but also the habitat was seriously damaged as the animals stripped the desirable food plants, killing them or severely restricting regrowth.

Following this die-off, the Commission embarked upon a different plan for deer management in the Everglades. Part of this plan was to hold the herd to a moderate level somewhat less than the 8,000 animals estimated to have been in the area prior to the '78-79 die-off, but more than the 1,500 that remained when the die-off had run its course.

Everglades Deer Hunt

Included in this management plan was the concept of an emergency or special early hunt during which, if necessary, a specified number of deer would be removed from the herd, thereby increasing the food supply to those that remained.

The emergency hunt was first tried in September 1981, when deer in a portion of the Everglades, Conservation Area 3B, were stranded by high water following a tropical storm. During this hunt, the herd was reduced by 195 does and smaller bucks, and the roughly 600 deer that remained weathered the crisis (with no recorded mortality).

In June 1982 when Everglades Region personnel discovered that water levels in Conservation Area 3A were rising rapidly following two tropical storms, the management plan for deer was again set into motion.

On June 25, Area 3A was closed to recreational vehicles through an emergency order of the Commission. This was done so that stress to the deer from vehicular traffic in the area would be reduced. At the same time, preparations for an emergency hunt began. A news release was prepared and mailed June 24, advising sportsmen of the impending crisis and that an emergency deer hunt could become necessary.

When the news that the Commission was planning to remove up to 2,200 deer through an emergency hunt became widely known, the telephone lines at the West Palm Beach office lit up with callers indignant that the agency would "kill off" so many of the "soft, cuddly, brown-eyed" animals.

Efforts were made through two press conferences to emphasize the critical conditions in the Everglades and explain why it was not feasible to feed or relocate the deer. At the same time, however, the emotionalism surrounding the issue of hunting in general, and the Everglades deer herd in particular, generated unprecedented media attention.

Wildlife biologists advised the members of the Game and Fresh Water Fish Commission at a meeting in Jacksonville, and after the board heard the report on what was happening to the deer herd in Conservation Area 3A, they gave the go-ahead to the emergency hunt.

By and large, organized hunting and fishing clubs, as well as most other conservation and environmental groups,

supported the concept of the hunt. Likewise, outdoor writers throughout the nation lent their support to the hunt as the only feasible alternative to save the deer. A scattering of newspapers editorialized in favor of the concept.

On the other side of the coin, private citizens opposed to the hunt and favoring another relocation or feeding attempt, rallied around a Miami attorney, Michael Hacker, who had initiated legal action to stop it.

Hacker, on June 29, filed a motion in the 11th Judicial Circuit Court of Dade County for an injunction to halt the hunt, charging that deer "are creatures of God placed on Earth and in Conservation Area 3A with no less dignity and no fewer rights than human beings belonging to the said vertebrate mammal class residing in and around Conservation Area 3A."

He stated before local and national television cameras that, in his opinion, the deer could be saved by dropping food to them or building artificial islands upon which they could survive. He also suggested that deer be rounded up and moved to "safer and drier areas."

The suit and the publicity resulting from it greatly increased the tempo of the anti-hunt crusade.

Continuing pleas to "give us a chance" to relocate deer before the hunters moved in appealed to the emotions of the public, many of whom had never before given Everglades deer a second's thought. Radio talk show hosts utilized the deer controversy to stimulate lively discussions, and national television networks led their nightly programs with coverage of the issue.

Hacker found allies in his effort to stop the hunt. Jack Kassewitz, Jr., owner of the National Wildlife Rescue Team, an animal rehabilitation center in Dade county, said that his organization could relocate the deer.

Hacker's motion for emergency injunctive relief was denied by Judge Edward Klein on July 13. Anti-hunters declared they would carry the fight to a higher court.

In the meantime, deer tags and hunt permits had been issued by the Commission to owners of airboats and tracked vehicles selected through a random drawing from applications filed in Tallahassee. A total of 500 permits were issued for a two-day hunt July 16-17 north of Alligator Alley and 1,000 for July 18-19 south of this major highway.

The Third District Court of Appeals agreed to hear Hacker's motion on July

15, the eve of the hunt north of the Alley. That day, the opposition was joined by Cleveland Amory, president of the Fund for Animals. Amory's presence cast all the others into the background as he was understandably hounded by reporters recording comments like "I'll be able to understand the hunters after I've shot a few."

The three-judge panel found Hacker's motion without merit, which prompted Amory to publicly vow to continue the fight even further, though only hours remained before the hunt's beginning on the north side of the Alley.

Late that afternoon, Commission officials learned that Miami federal judge had agreed to hear the case based on possible violations of federal environmental laws.

It was a little before midnight when Judge Eugene Spellman granted a temporary restraining order good through 5 p.m. Saturday, July 17, to allow the court more time to review the case.

The restraining order took effect seven hours before the hunt was set to start and after many hunters had already established their camps.

Wildlife officers were called and sent out to spread the word among the hunters that the hunt had been called off and to request their cooperation in complying with the order.

Blue lights flickered along U.S. 17 and Alligator Alley as officers stopped trucks with airboats in tow to pass the message.

Early that morning at the Commission's hunt headquarters on Alligator Alley, photographers' flashes and television lights brightened the darkness as hunters and Commission officials were interviewed for their reactions to Judge Spellman's order.

Spellman, Friday morning, appointed an eight-man panel and instructed the Commission to take the panel, and witnesses for the opposition, into the Everglades on a fact-finding mission. The judge himself toured the area in a Coast Guard helicopter.

When the panel and the preservationists returned late Friday afternoon, they were immediately interviewed by the press. Kassewitz told reporters he was "devastated" by what he had seen, but Amory said he had been shown only one "well viewed" deer carcass.

Saturday morning, the two opposing camps met in Spellman's courtroom. The judge heard Amory and his contingent argue that such endangered species as the Florida panther, Everglade kite

and the indigo snake would be adversely affected by the hunters' airboats and tracks. (The indigo snake is an threatened species not found in the Everglades and two other "endangered" species listed by the preservationists included the gallinule, a common gamebird, and the Key deer.) The parade of wildlife witnesses led by Amory failed to convince the judge of harm to endangered species and Spellman dissolved the restraining order that afternoon.

Throughout the court battles, the Commission's attorney, Ken Gileland, had argued that any delay in the hunt schedule could prove a disaster for the deer herd. In order for the thinning operation to be successful, he said, it must be carried out before deer become so weak that those left after the hunt could not take advantage of the remaining food supply.

Because the hunt opponents had misled so many people with the contention that large numbers of deer could be captured and relocated, the Commission offered to allow Fund for Animals from Sunday morning until Tuesday at noon to live-capture 100 deer and prove its case. If Amory succeeded, Colonel Robert M. Brantly, Executive Director of the Florida Game and Fresh Water Fish Commission said he would consider an enlarged rescue effort instead of a rescheduled hunt on the north area. The opposition had testified in court that they could relocate 2,000 deer in eight days, an average of 250 a day, so 100 in two and one-half days seemed fair.

Amory agreed to the proposal and appointed Kassewitz to head the operation. Kassewitz stated that 90 airboats and more than a hundred volunteers were available for the rescue.

Sunday morning, press, protesters and hundreds of hunters gathered at the checkpoints for the hunt south of the Alley with the majority of the action taking place at the Commission's headquarters. All national television networks were on hand and newspapers from as far away as Washington D.C., sent coverage teams to the site.

By day's end, the count stood at rescuers 14, sportsmen 518. Neither group's turnout was as large as anticipated. Just over 600 of the 1,000 permitted airboats showed up for the hunt and only seven "rescue" craft of the 90 said to be available appeared.

The turnout on Monday was lower. Hunters managed to remove another 205 deer during the day. The rescue

operation fared even worse. Only three airboats turned to the site, despite Amory's statement that the turnout would be better than the day before. Later in the morning, Kassewitz requested a meeting with Brantly.

Brantly was at a motel in Ft. Lauderdale where he was busy contacting the five members of the Commission to inform them that it was apparent there could be no hunt in the north area. A critical five days had been lost, he explained, because of the court injunction and, by the time a rescheduled hunt could take place, it would do no good. The element of timeliness was lost. He was notified then that Kassewitz wanted to talk to him.

They met at the Commission's headquarters. Kassewitz said he wanted to discontinue the rescue effort and that the Commission had been right — removing deer from the Everglades in numbers sufficient to do any good was impossible. He was offered the opportunity to participate in a scheduled press conference at 11 that morning.

During the conference, Brantly commended Kassewitz for his handling of the rescued deer and stated that he thought Kassewitz had obviously been misled by false information. Kassewitz said he had proved the point that individual deer could be safely removed, but that "the Commission was correct, that it is a physical impossibility to remove enough animals to significantly reduce the population in this area." Brantly and Amory's agreement with the Commission was still valid but, because of the critical condition of the deer in the north area, a hunt would not be rescheduled. Soon after that, Amory cancelled his rescue attempts.

That evening, Brantly and Amory met in a discussion of the controversy on ABC's News Nightline program. Amory claimed victory for his rescue efforts in spite of the fact that only 18 deer were removed of the 750 that needed to be taken off the north area.

The next day dawned over the Everglades. No roaring airboats could be heard and the press and public had vanished. Only wildlife officers and biologists patrolled Alligator Alley and Conservation Area 3A.

Work would continue there for weeks and months to come. They would survey the herd for mortality, tagging each carcass with an orange plastic streamer to eliminate double counting, and checking water levels and vegetation. Surveys by airboat and helicopter would continue.

On July 28 and 29, Dr. Frank Hayes and a team of biologists from the Southeastern Cooperative Wildlife Disease Study Team joined with Commission biologists in determining herd condition. The team would return again the last of August to do the same. The results were not encouraging.

In the north area, where the hunt could not be rescheduled mortality among the deer soon exceeded an estimated 65 percent as of September 13. Cannibalism was reported among the wild hogs who were also affected by the high water. Vegetation was being stripped from tree islands and levees, and it would take considerable time for the habitat to recover. The herd was so decimated that recovery will be long in coming.

The south side fared much better. Including the 723 deer taken by the hunters, total mortality was estimated at 23 percent. The vegetation, likewise, was not as adversely impacted. The herd there can recover in a much shorter time.



There are charges that Cleveland Amory's Fund for Animals is falsely cashing in on the publicity resulting from the Florida Everglades deer hunt, trying to solicit memberships under the banner of what it did to protect the animals.

The allegations come from Jack Kassewitz, the Floridian who coordinated the ill-fated deer rescue team.

"The fund has put out a brochure with a deer on the front of it which says, 'Fund Stops Everglades Deer Kill'," said Kassewitz. "It proceeds through the whole thing to tell how Cleveland Amory saved the deer. Yet he never put a hand on one deer."

Kassewitz also claims that Amory is pleading for money from the public, even though he donated only \$1500 to help finance the rescue operation.

"This seems to be a pattern of his as a media hound: to come in here, rip off the press and leave the people holding the bag who really do the work."

Kassewitz, who heads the National Wildlife Rescue Team, says a hunting club in Dade County recently donated \$2000 to establish permanent deer habitat in southern Florida.

"One of the lessons we learned in this — as hard as it is to swallow for some of the staunch, conservative conservationists — is that hunters are conservationists."

Remnants of the past...

By Roger Sparks

Dean Kooser

In a moment of history, a wilderness landscape inhabited by several hundred species of plants was reduced to tiny vestiges unsuitable to the plow, yielding, although begrudgingly, to the invasion of a few domestic breeds. The first conspicuous casualties were bison, elk, and sandhill cranes. But numerous other wildlife species also were unable to adapt to the conquered land called Iowa.

More slowly, the broad, hilltop savannahs dotted with sprawling oaks and giant hickories, along with the tangled, stream-hugging forests, relinquished their strongholds and withdrew. Countless marshes and even prairie lakes were trenched and tiled by the forces of agriculture and economic development. Only remnants of our true Iowa roots were spared the struggle between plow and grass, axe and timber, and tile and marsh.

Today, the battle of survival for our diminishing natural features continues. And as the land changes, it becomes critical to identify and save these special resources. Remaining natural areas and the unique wildlife they support not only provide recreational, educational, and aesthetic benefits, but they also serve as reminders of our heritage and forecasters of the future. Tallgrass prairie remnants are a laboratory for observing the natural processes responsible for the most productive agricultural soils on earth. Rocky forests of northeast Iowa harbor plant and animal populations, relicts from the last ice age, that occur nowhere else. Dense river bottom forests provide habitat for numerous threatened and rare species, barometers of a changing environmental climate — living warning signals. The Loess Hills are like no other geological formation in the Western Hemisphere. These natural features must not be lost.



Wild rice, a threatened species in Iowa, overlooks an Emmet County marsh.

... Treasures of the

Toward that end, the Nature Conservancy (a national nonprofit organization dedicated to the preservation of natural diversity) and the Iowa Conservation Commission decided to employ a small team of biologists using modern techniques to identify key elements of our natural heritage. Following similar programs in 27 states and the consultation of State Ecologist Dean Roosa, catalyst and walking data bank of Iowa's endangered species and unique natural communities, the Iowa Natural Areas Inventory was formed. It represents a major step toward ensuring the future of Iowa's finest and most critical natural features.

Established in 1981, funding for the first two years came from the Federal Land and Water Conservation Fund, the State of Iowa, and donations from the Joyce Foundation, Brenton Foundation, Maytag Family Foundation, public utility companies and other private sources. Recently, Governor Terry Branstad recommended continuation of funding.

Generally, the program aims to gather, organize and store in one place information about rare plants and animals, remnant tracts of native vegetation and special geological features. It is hoped this centralized data base will allow future decision makers to plan for human development in harmony with environmental considerations. In most cases, conflicts and the destruction of significant biological areas can be avoided, once all parties are armed with straightforward accessible information.

Highly trained people work with Roosa on the program: coordinator Bob Howe, zoologist, gathers information about the distribution of rare animal species; botanist Bill Pusateri collects similar data on rare plants; Roger Laush-

man, community ecologist, searches for remnant tracts of native vegetation and unique geological features; and Mary Jean Huston, data manager, oversees the information storage system and maintains a map file of significant natural areas. In addition, part-time employees and interns from several institutions assist in data management and field verification work.

County conservation board biologists have been invaluable as sources of information about the location of various

Top: *Blazing star and prairie sunflowers adorn one of Iowa's few remaining floodplain prairies.* Left: *The downey gentian is an uncommon prairie species.* Below: *Prairie bush clover, one of Iowa's rarest plants, is on the federal threatened list. Iowa's prairies are crucial to the survival of this species.*



Bill Pusateri



Bill Pusateri



Bill Pusateri

of the future

remnants. Scientists from state and federal agencies, academic institutions and private organizations, as well as knowledgeable private citizens, continually contribute to this pool of information. Thus, the inventory is an ongoing process constantly and rapidly being updated by new discoveries and changes in known occurrences. The status of each important element can be closely monitored and comparisons with old records can be made.

So what happens when remnants of the past become the subjects of modern technology? When Ice Age meets Computer Age? Many good things. The first steps may not seem earth-shaking, but the far-reaching effects of the inventory will be profound, and with the mechanics established some positive results are beginning to materialize. In many ways the inventory serves as a vehicle for the practical application of work by dedicated naturalists, students and professional scientists. Already the Iowa Department of Transportation, Natural Resources Council and Soil Conserva-

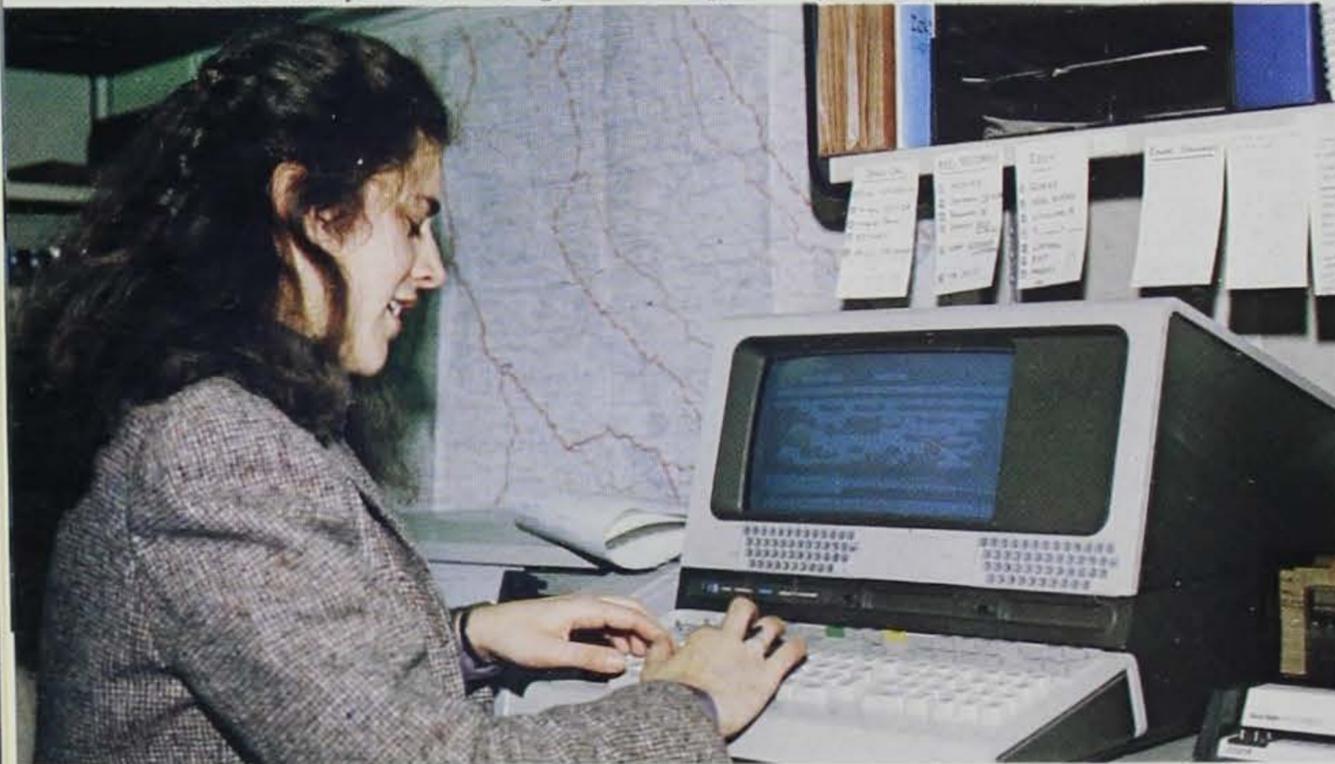
tion Service have used the inventory data to help make decisions about proposed land development projects. In some cases, plans have been modified to ensure that unique natural features are protected. This is not always possible, but alternatives will be given a closer look when accurate information is made available early in the development plans. Loss of a rare plant, animal or natural community is another "cost" that must be considered in our decision-making processes.

One of the program's major goals is to create and update a priority list of natural areas in Iowa. Many important sites are on private property; acquisition or voluntary protection measures will be recommended. Other priority areas are already under public ownership. For example, one of the Midwest's rarest fish species is known from a few places in Iowa, most notably Trumbull Lake. Another rare species occurs in a small city park near Cedar Rapids. A small prairie in Stephens State Forest is the home of a plant known from only 25

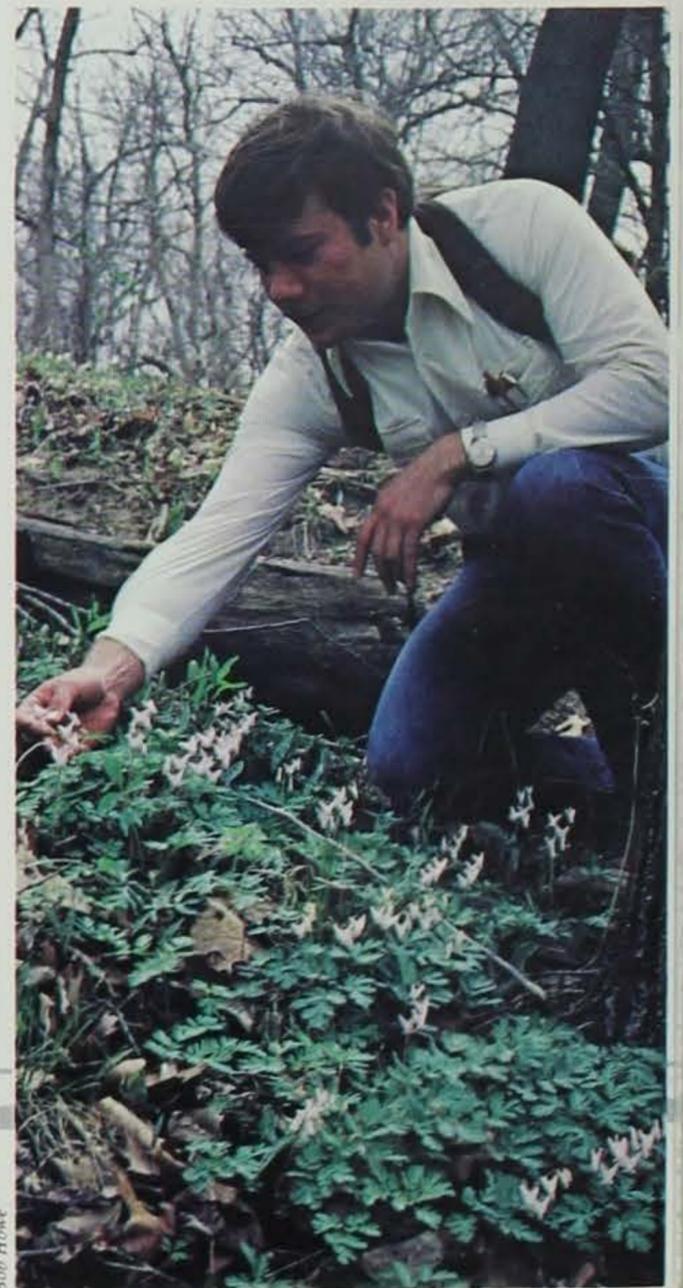
sites in all of North America. White Pine Hollow holds natural treasures of worldwide significance. Once aware of these unique species or natural features, our generation and future generations will be better able to care for them. The inventory data base helps prevent one of the most avoidable, yet otherwise inevitable tragedies: inadvertent destruction of critical habitats or quality natural communities.

The effort to identify and protect special places involves many people, often with the inventory staff serving as catalysts. A fascinating series of events involving the Clarke County Conservation Board, State Preserves Board Chairman Dorothy Baringer, a graduate student at Iowa State University and Iowa Natural Areas Inventory scientists led to the "discovery" of prairie bush

The inventory involves storage and management of data as well as field verification of sites.



Ron Johnson



Bob Howe

clover (see photograph) in southern Iowa. Consolidation of field reports and collections has shown that several species — the state threatened grasshopper mouse, upland sandpiper, and plains spadefoot toad, to name a few, are not as rare as once thought. In the Loess Hills, an extremely rare fern — perhaps even a “new” species — was brought to light through the efforts of inventory botanists and cooperators.

Perhaps the heart of the Natural Areas Inventory is focused on the small, remnant tracts of native prairie. Iowa still has prairie. Not the prairie the earlier settlers knew; not the awesome

tallgrass prairie with hill after hill engulfed by horizons 'round the compass; not the feared prairie with its raging fires nor the magnificent prairie with its great clouds of birds and massive herds of buffalo. We will never see that prairie. But lost in a calmer landscape, small communities bearing the same elements — the tall grasses like big and little bluestem, switchgrass and Indian-grass and the incomparable prairie flowers like rattlesnake master, purple coneflower, and butterfly milkweed — are still here. Recently, some 20 small, unplowed prairies were verified in just one county as a result of the inventory

process. If the native species in these small tracts disappear, they can never return, and like the vista of tallgrass prairie that tossed their seeds to the wind they will be gone forever.

The Natural Areas Inventory is like a special lens which screens the artificial to view the real, focusing on those natural elements of the rarest quality. No matter how insignificant one tiny flower or one endangered bird may seem, they are reflections of our past ... and delicate, living lamplights to the future. Native plants and animals are genetic banks, perhaps holding keys to new agricultural crops, medicines, nat-



Bill Pusateri



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Bob Howe

Top Left: *The Illinois mud turtle is one of the rarest reptiles in Iowa. Left: Tracks of this turtle may be seen in unusual sand dune communities like the one in Louisa County. Top Right: Participants in events such as the Annual Loess Hills Foray contribute information to the system.*

ural pesticides and other human needs. Once extinct, these organisms can never be replaced.

Imagine a world without wild orchids, tall grasses and eagles. To do so is to accept a world without roots, without the tiniest prairie, marsh or woods. An Iowa without wild things

would be a drab domain, plastic, hollow and not much good for living.

Fortunately, Iowa's rich soil has nurtured generations of people who treasure her natural heritage. They know that keeping track of each element will help us preserve the whole Iowa — this productive land sprinkled with con-

trasts, a place of character, a state of diversity and natural beauty.

It's not too late to take stock. By doing so now, our daughters and sons will still know lonely places where they may find rare creatures and dream on fragrant winds.



Dean Roosa

Left: *Red-shouldered hawks, very rare in Iowa, require large tracts of undisturbed timber.* Below Left: *Prairie fringed orchid of national concern, occurs sporadically in moist prairies.* Below Right: *Colorful butterfly milkweed is a common native prairie flower.*



Bill Pusateri



Bill Pusateri

PLANT TALES OF THE MONTH

White Baneberry *Actaea pachypoda*

By Dean M. Roosa and Mary Jean Huston

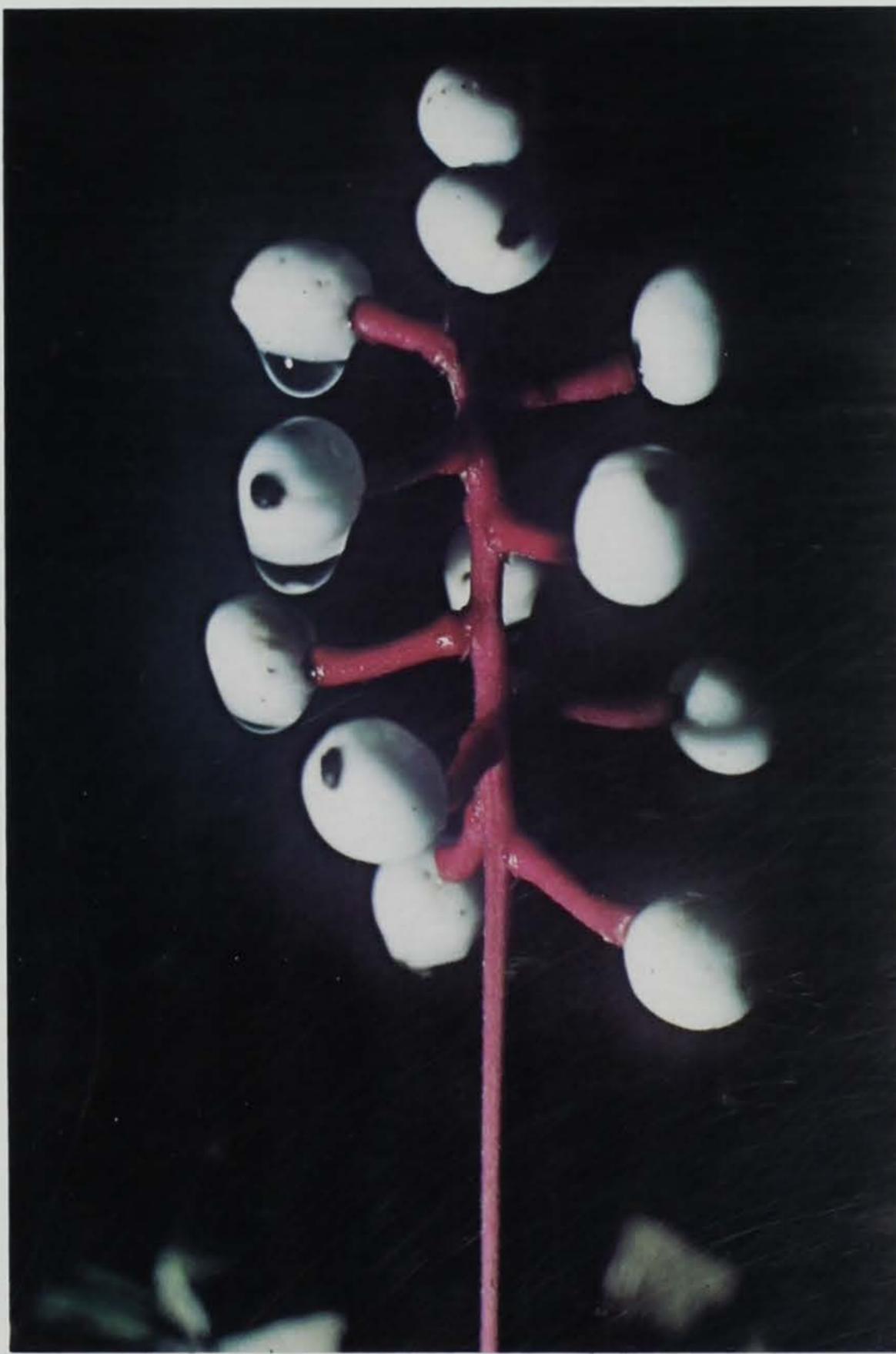
This month's featured flower is an interesting member of Iowa's woodland community. The white baneberry is a common occurrence in the eastern part of the state, but occurs infrequently in the central and western parts of Iowa. While the flowers are pretty and well worth observing, some of this plant's most unusual characteristics belong to its seeds and to the folklore surrounding the plant.

The small and inconspicuous whitish flowers appear from late April until June. They are held aloft in the form of a spike on a long peduncle, which scarcely exceeds the rest of the plant in height. The leaves are divided and subdivided into sharply toothed leaflets with irregular lobes.

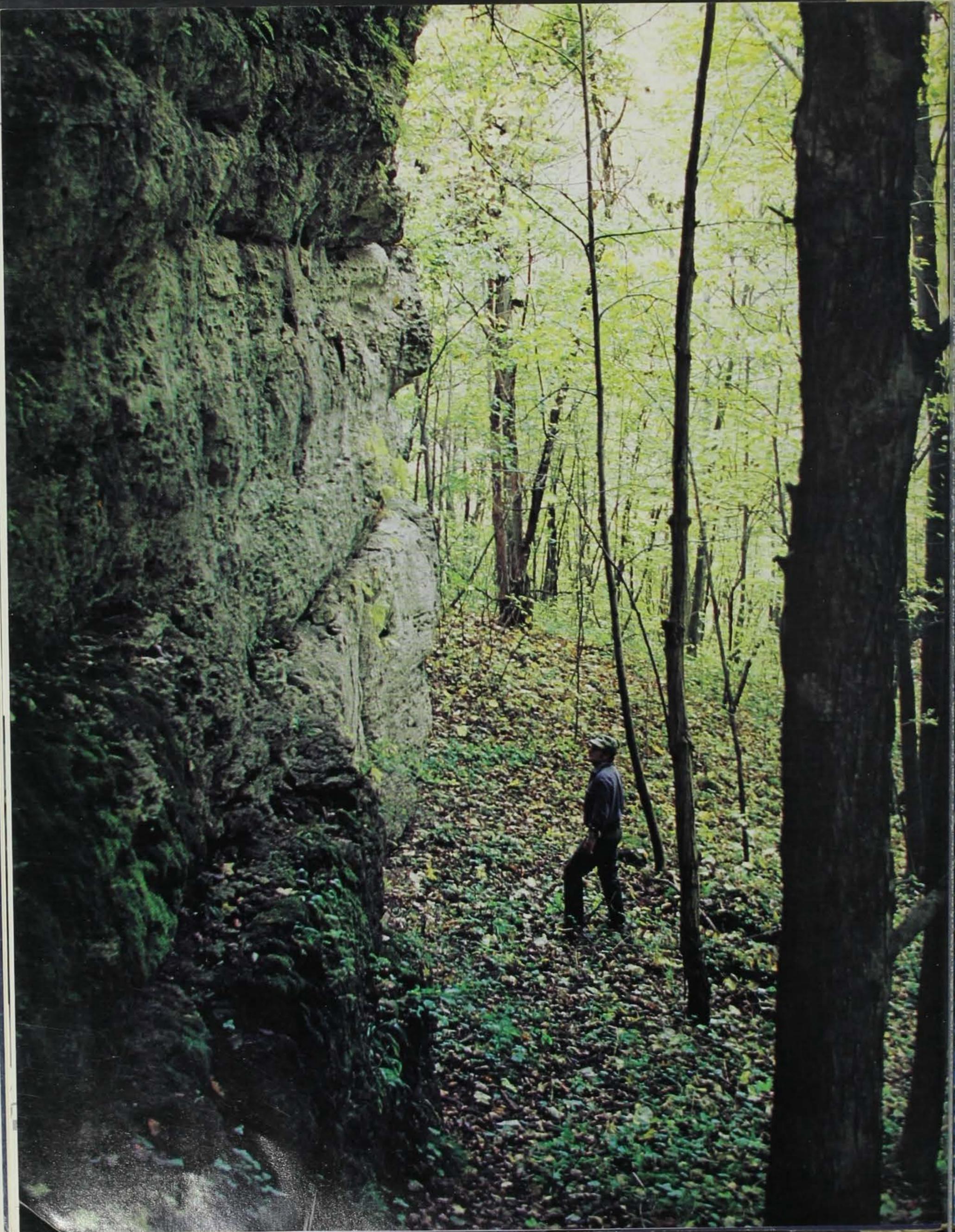
Like many other interesting Iowa plants, the real show begins in the fall. The small, often-unnoticed flowers are gone and their place is taken by bright white berries of a spherical shape. The ends of these berries are dark purple. These fruits resemble the china eyes once used in dolls, hence another common name for the plant, "doll's eyes." The sometimes-red stalk of each berry in the seed cluster is rather thick. This gives us the species name for the plant, which in Greek means thick-footed. The sight of these unusual and colorful berries, while available to intrepid autumn forest-stalkers, may be missed by many wildflower enthusiasts.

As with many things beautiful, an element of danger lurks within white baneberry. The berries are poisonous and will affect the heart of animals that ingest them. The rootstock is even more poisonous and is a violent purgative and emetic. An infusion of the plant's leaves, however, was used by nursing American Indian women to stimulate the flow of milk.

This species, like many other native plants, is rich in lore and adds another dimension to the story of Iowa's natural areas. Perhaps you have this plant growing on your property; if so, it's time you became acquainted. If not, it is sure to grow in a state park not too far from your home. Take the time to find it this year — you will be happy that you did.



Dean Roosa



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