

# KANSAS

*Wildlife & Parks*

MARCH/APRIL 1988

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**THE BUCK STOPS HERE**

New Name, Same Game

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**Kansas Spring Gobbler Fever**

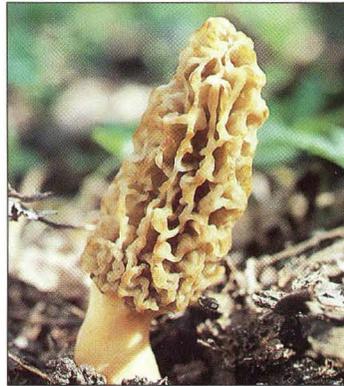
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**Editorial Creed:** To promote the conservation and wise use of our natural resources, to instill an understanding of our responsibilities to the land.

# THE BUCK STOPS HERE



## New Name, Same Game

**B**y now you've probably noticed the new logo that adorns the front cover of this magazine. The change from KANSAS WILDLIFE magazine (which we'd been known as since the January/February 1981 issue) to KANSAS WILDLIFE & PARKS has been planned since last summer. That's when the Kansas Fish and Game Commission merged with the Kansas State Park and Resources Authority to form the Kansas Department of Wildlife and Parks.

The addition of "& PARKS" to the magazine name is fitting, then, in that it mirrors the new agency's charge. And since the state park system is new to the family, the Information-Education Division wanted to provide a special 16-page parks section in this issue. The special section, loaded with information you can use to plan your next vacation or weekend outing, appears on Pages 9-16 and 29-36.

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The name change from KANSAS WILDLIFE to KANSAS WILDLIFE & PARKS sent a curious staffer rummaging through old bound issues of the magazine. The search uncovered, in part:

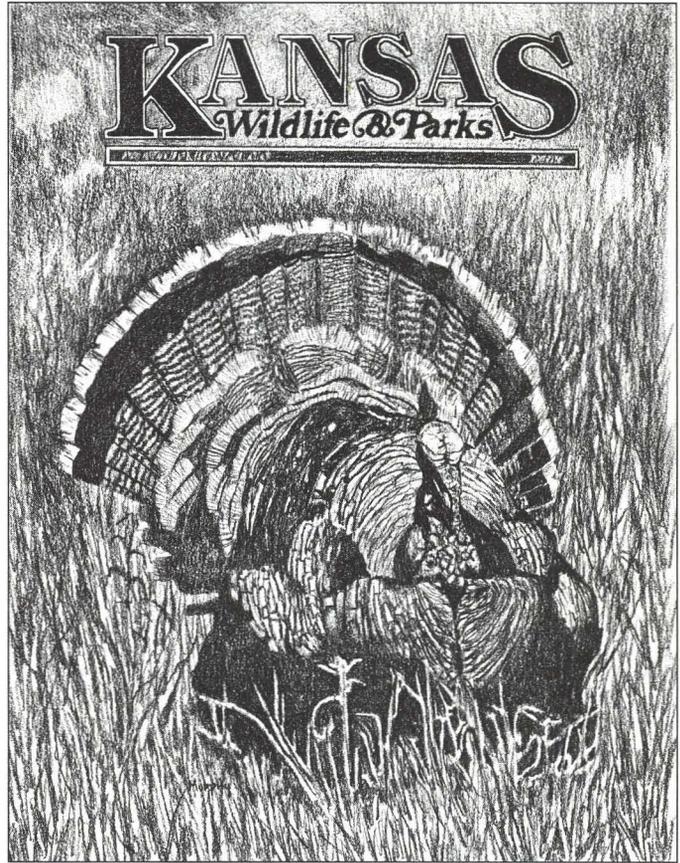
- That the agency's publication has changed its name three times (the current title is the fourth in 50 years) and that the logo has changed no less than nine times. The first issue we know of, published in April 1938, was called *Outdoors with the Forestry Fish & Game Commission of Kansas*. The publication (actually a newsletter back then) was typed on legal-size paper and ran all of seven pages, not including the cover and credit pages.

The publication kept the long title for a little more than a year and beginning with the June 1939 issue became known as KANSAS FISH & GAME.

For the next 4½ years, the title — KANSAS FISH & GAME — stood atop each issue even though the logo (the cover insignia) changed at least five times during that period. As mentioned earlier, the name changed to KANSAS WILDLIFE with the January/February 1981 issue and had kept that name up until today.

A random sampling of other discoveries includes:

- The Spring 1971 issue was the last time the magazine was issued quarterly and the first issue to feature both front and back color covers. This publication has been issued bimonthly ever since the May/June 1971 issue.
- The magazine went to a paid subscription base beginning with the July/August 1976 issue. This was also the first issue that carried full-color photographs inside the magazine.
- The November 1942 issue of KANSAS FISH & GAME carried a front cover cartoon lampooning the three Axis power leaders: Hitler, Mussolini and Tojo.
- The July 1957 cover photo showed Miss Kansas (Georgia Rundle from Axtell) and Miss Lawrence (first runnerup



Patti Murphy illustration

Norma Jean Cook of Winfield) admiring a museum wildlife exhibit.

But maybe the most important find is that 1988 marks the 50th anniversary of this publication. Other conservation magazines have marked their 50th anniversary in recent issues. *Wildlife in North Carolina* and *Colorado Outdoors* are two that come to mind. We, too, shall look back at the last 50 years of conservation stories in either our September/October or November/December issues. We've only begun planning for this special presentation.

Meantime, we hope you enjoy this premier issue of KANSAS WILDLIFE & PARKS.

*Paul*

**Paul G. Koenig**  
Editor



# Kansas Spring Gobbler Fever

Before 1960 a gobble was something most Kansans had never heard. But that's all changed now as gobbler fever is sweeping the state.

by Mike Miller  
*Associate Editor*

**K**ansas Spring Gobbler Fever, or KSGF, is a disease that afflicts more Kansans each year. Experts agree that if the wild turkey population continues to grow in this state, KSGF could reach epidemic proportions.

Consider this a warning from a hopeless victim: If you've had even the slightest urge to hunt turkeys in the spring, you're a candidate for the not-so-dreaded KSGF disease. Symptoms include waking up at 3:30 a.m. (without an alarm), getting goose bumps upon hearing a turkey gobble and alienating family and friends by practicing turkey calls at all hours. The only known cure (temporary at best) is to bag a tom turkey in the spring season. But be warned — many hunters become even worse after bagging their first tom, and symptoms may persist all year long.

It wasn't too long ago that Kansas hunters didn't have to worry about KSGF. In fact, before 1960 a gobble was something most Kansans had never heard in their state. But when a flock of Rio Grande turkeys wandered across the Oklahoma border, Kansas biologists decided to stock the birds in our state. In the mid-1960s, wild turkeys trapped in Texas and Oklahoma were released in south-central and southwest Kansas. The birds adapted quickly to their new home and as their numbers increased they expanded their range. Biologists accelerated the birds' spread by trapping turkeys from established Kansas flocks and transplanting them to other parts of the state. Turkeys proved extremely adaptable, inhabiting not only the wooded areas along streams and creeks but old farmsteads and shelterbelts as well.

The turkey reintroduction had lots of successes and a few failures, too. One

problem was establishing birds in eastern Kansas. The Rio Grande subspecies, which adapted so readily to central and western Kansas, didn't do well when released in the eastern third of the state. Eastern turkeys, received from Missouri, were released in eastern Kansas and have done extremely well. Today, nearly every county has healthy turkey numbers, and the state's total population is estimated at more than 100,000 birds.

The real kicker here is that only 6,000 hunters pursued turkeys last spring. Nearly 50 percent of those hunters were successful — an impressive success rate. And while the number of turkey hunters increases each year, hunting areas aren't becoming more crowded because the birds keep expanding their range. The old belief that it's impossible to find a good place to hunt turkeys is no longer true. By visiting with landowners or scouting public hunting areas, hunters should find excellent opportunities.

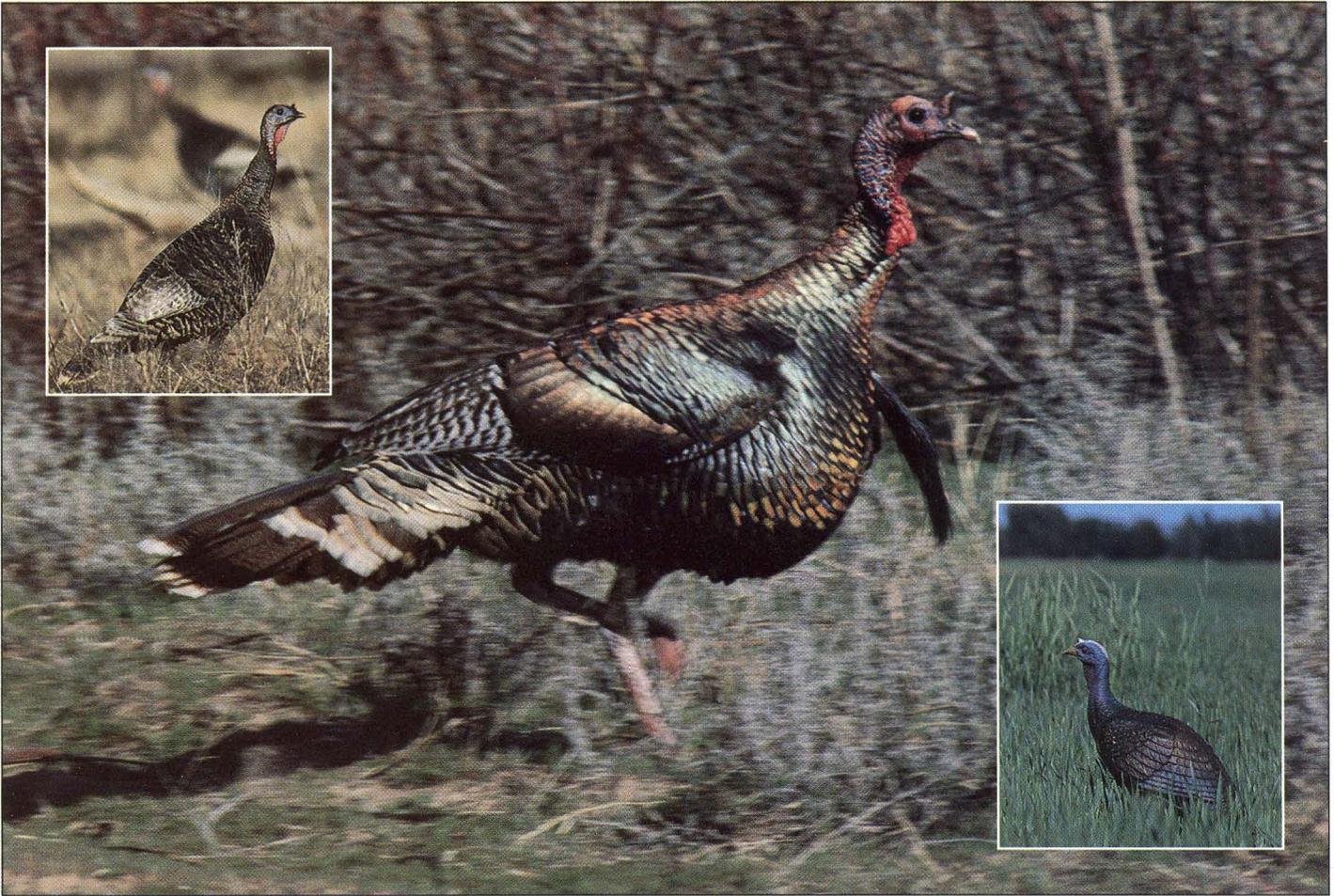
Securing a place to hunt is the first step toward a successful spring outing. Talk to landowners during the winter, before other hunters beat you to it. The permit application period is in January, and it's good to know you have a place to hunt before you apply.

The next step in preparation is learning to call or brushing up on calling skills. Calling isn't as complicated as it may seem. A novice hunter can learn basic calls in just a few weeks by listening to instructional cassettes or an experienced hunter. The most important thing is to find a call you're comfortable with. There are dozens of different brands and types of calls

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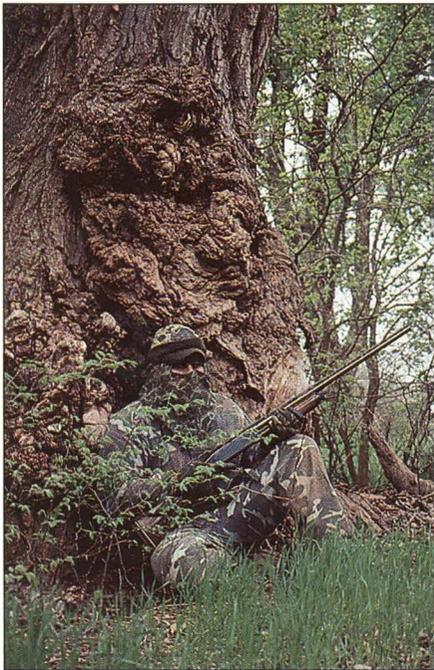
A Rio Grande gobbler struts into shotgun range. One wrong move and the bird is lost.

Gene Brehm photo



Gene Brehm photo; Ron Spomer upper left inset photo; Mike Blair lower right inset photo

If a hunter is in the right spot at the right time, a basic series of calls is all that is needed to bring a tom (above) in. The strategy to calling? Imitate the hen turkey (inset upper left), which may be competing with you for the gobbler's attention. A hen decoy (inset lower right), which is legal in most states including Kansas, will increase your odds of drawing a tom into shotgun range.



Ron Spomer photo

A hunter sits with his back to a big tree. This precaution protects him against another hunter that may be sneaking on the calling position.

available. The easiest to use are the box and peg-and-slate calls. A more difficult, yet more versatile call is the mouth diaphragm. Choose a call you can use well and stick with it.

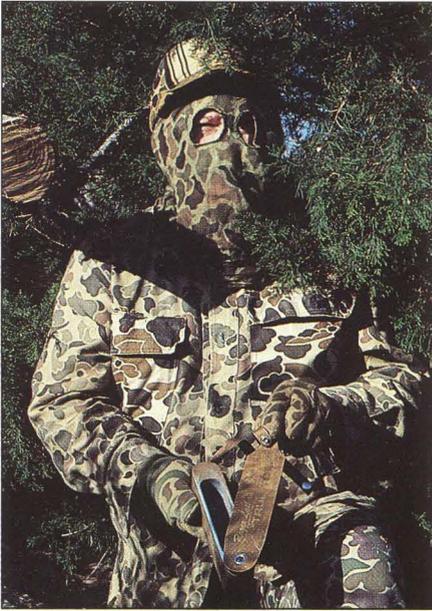
Begin practicing your calling early and practice frequently until the season starts. Become proficient with the basic yelp and cackle. Putts, clucks, tree yelps and gobbles are learned with experience and practice, but these calls aren't absolutely necessary. Kansas turkeys receive relatively light hunting pressure, so they're not as call-wise as those in Southern states. If a Kansas hunter is in the right spot at the right time, a basic call series is all that's needed.

**B**eing in the right spot is no accident. It's probably more important than your calling skills, and it also takes preseason preparation in the form of scouting, which can be

done from a vehicle or on foot. Driving roads through your hunting area in late evening or early morning will help you find roost sites with minimal disturbance to the area. Turkeys will often gobble before flying down from the roost in the morning and after they fly up in the evening. Toms will also gobble from the roost if they're shocked or surprised by a loud noise. Some hunters blow a crow call or owl call and some merely bang on a pot. A high-pitched predator call may also help you find turkeys; toms will often gobble after hearing a coyote howl.

You can locate roost areas by looking for droppings and feathers under tall, mature trees. Turkeys aren't particularly graceful when they fly up. So there's usually plenty of loose feathers on the ground. If you find such a tree, watch from a safe distance as the sun sets that evening. Turkeys don't always roost in the same tree every night, but on a calm evening you can hear them fly up from several hundred yards away.

If you can watch a tom fly down from



This hunter demonstrates how a box call is used. Another popular turkey call, a mouth caller or diaphragm, is shown below.



Mike Blair photos

the roost in the morning, you might find another key area — the strutting area. At daybreak toms will often fly to an open area and immediately begin strutting and displaying. The tom expects hens to come to him, so calling him away from his preferred strutting area can be almost impossible. But if you can position yourself near this area, your hunt might be a short one.

After you find a roost site or strutting area, select a place to call from. Be close enough so that you can hear the tom gobble and so that he can hear your call. Try to get within 100 yards of a roost site or even closer if you've found a strutting area.

When you're selecting a calling spot, choose an area with brush or trees at your back. It's imperative that you not be silhouetted above the vegetation. There's no real need to have any brush in front of you if you're properly camouflaged. Many hunters will sit with their backs to a large tree and wear a tree bark-type camouflage. This not only hides the hunter, but it's safe as well. If a hunter stalks the sound of

your call or your decoy, your back will be covered from an unseen shooter. If no large trees are available, look for thick, brushy vegetation such as cedar trees. Wear dark-green and black Vietnam-type camouflage and sit with your back to the cedar.

A quality camouflage outfit, complete with hat, face net and gloves, is highly recommended. Your hands and face will stand out like light bulbs if you don't cover them. A favorite adage goes like this: "A white-tailed deer sees a man and thinks it's a stump. A turkey sees a stump and thinks it's a man." Turkeys have excellent eyesight and will notice anything unusual about their surroundings, even if it's not moving. They'll spot movement even faster. Full camouflage might let the hunter get away with the movement necessary to raise the gun. But even in full camouflage, hunters should keep

movement to a minimum. Set up in a ready-position with your gun at or near your shoulder and braced on your knees. If you must move to aim at a bird, wait until the bird's head is screened by brush. Then move slowly.

Turkeys are not particularly smart, but they have excellent hearing and eyesight. Those sharp senses along with their paranoid behavior make turkeys challenging to hunt. Another adage goes like this: "If a turkey had the white-tailed deer's sense of smell and intelligence, we'd never kill one."

When everything falls into place, though, bagging a tom can seem easy. A friend of mine ended his 1987 spring season rather quickly. On opening day he was hunting a tree belt where toms had been roosting. As he walked in under the cover of darkness, he heard a gobble. Being careful not to get too close to the roosting birds, he sat

## Tips For The Turkey Hunter

Another important factor of turkey hunting is selecting a shotgun and shell load. Legal shotguns must be 20-gauge or larger. I recommend a modified or full choke. The shell load should be a magnum, but the shot size is a personal preference. When calling birds, I limit my shooting range to 35 yards, and at that range I like to shoot 4s or 6s. This gives me more pellets and a larger pattern. My shotgun has a modified choke, so I've experimented with steel shot loads, which have a tighter pattern and shorter shot string than lead. I've found 2 $\frac{3}{4}$ -inch magnum steel No. 4s to be deadly out to 35 yards.

Pattern your shotgun before the season. Choose several loads and shot sizes and shoot them at different distances. Use a solid rest so flinching won't be a factor, and shoot at a target with a turkey head and neck silhouette drawn on it. After each shot, count the number of pellets that strike in the vital area, and examine the entire pattern for an even distribution of pellets. You'll learn which load and shot size performs best for your gun and at what distance your load will be effective. Many turkey callers will load their shotgun with smaller shot sizes up front and a larger shot (such as 2s) for a backup shot.

Now that you're ready to hunt tur-

keys, don't overlook the most important facet of your hunt: safety. Take every precaution when camouflaged hunters are in the field. And remember these safety tips:

- Never wear red, white or blue clothing. A glimpse of one or a combination of these colors may (to an unthinking shooter) look like the head and wattle of a tom turkey.

- Think before you shoot, and always be sure of your target. There's absolutely no excuse for a hunter to shoot at what he *thinks* is a turkey. Only toms are legal, so a hunter must identify the sex of the bird before shooting.

- Never try to sneak up on a yelping turkey that doesn't seem to be moving. As unlikely as it seems, accidents occur each year when one hunter stalks another hunter who is calling.

- If you see another hunter approaching, don't wave or move to alert him of your presence. Yell or whistle to inform the hunter of your position. Even a slight movement may draw fire.

- Wear a blaze-orange hat when walking to or from your hunting area, and especially when carrying your bird back to the vehicle.

- Some hunters will tie a strip of blaze-orange tape on a branch near their calling area to alert passing hunters.

Safety boils down to common-sense precautions that should be followed whenever you hunt. But some hunters let excitement cloud their judgement. Hunt defensively so you won't be listed as a statistic in next year's hunting-related accidents. — Miller



The author displays a Rio Grande tom turkey that came in silently to a mouth caller. He was patient and had his gun ready. The wait paid off.

Gene Brehm photo

against a cedar. While the birds were still in the tree, he made some soft yelps on his handmade peg-and-slate caller and got an immediate response. He heard the bird fly down and made another series of yelps; the bird gobbled. Knowing the bird had a fix on the make-believe hen's location, my friend put down his call and readied his shotgun. A few minutes later a tom strutted into view 15 yards away. The hunt was over 20 minutes after legal shooting hours. He used no fancy calling techniques and no fancy tricks. He was in the right place and well-hidden.

I hope my friend doesn't think that all his turkey hunts will be that easy. Just when you think you've figured turkeys out, an old tom will outsmart

you. Don't get discouraged though. One key element in a successful turkey hunter's character is patience. If you're unsuccessful at your first calling spot, fight the urge to walk around looking for a turkey to shoot. In the flatlands of Kansas, it's nearly impossible to sneak up on a turkey. If you move, take a route that stays away from open areas and keeps you in low, brushy areas. Go to another calling spot slowly and listen for birds gobbling.

**I** bagged a tom last spring because I've learned to be patient. My first calling spot was a dud. I had heard one distant gobble. I made a

deliberate move to another area, pausing every 20 or 30 yards to call and listen. I didn't want to blunder into a tom, so I sat down in a cross-section of tree rows, knowing birds moved through this area. I decided that I'd sit for an hour and call frequently. After 30 minutes, I was beginning to think this wasn't such a good idea, but then I heard a gobble. I called, and the bird gobbled back. The jake was suspicious, but after some well-timed calls and a short game of hide-and-seek, he came in. That day turned out to be one of my more enjoyable hunts. Sitting quietly, I enjoyed the beautiful spring day as I watched the woods come alive around me.

As you gain more experience with turkeys, you'll find situations where specialty calls are needed. Any caller can get an old tom to gobble, but it may take more skill to bring him into gun range. One excellent call is the excited cackle. The cackle is a fast series of seven or eight yelps that imitates an excited hen. Try the excited cackle when a tom is responding and obviously interested but won't come into range. The call can really fire a tom up and might even bring him across a barrier such as a creek or fence.

Another good tactic is to make a tom believe the hen he's gobbling to is leaving. Turn away from the bird and call softly. Or some hunters will even get up and move away from the bird, if they can do so without being seen. The bird may get anxious and rush in.

The best calling teacher is experience. Every tom you call to will teach you something. As a general rule, call softly and sparingly. But no rules are etched in stone. Stay versatile and open to new techniques. And always listen closely to hens you observe when hunting.

Another of my turkey hunting friends had great success last year with an unorthodox calling method. He was calling to 13 young toms in an alfalfa field. The birds were responding to his calls but staying at least 100 yards away. As a last resort, my friend began calling frantically while imitating the sound of flapping wings with his coat-tails. He was trying to re-create a squabble among a group of hens, and it worked. The jakes, thinking a new flock of hens was in the area, rushed in to investigate.

The challenge of spring turkey hunting is addictive, and early spring is one of the best times of the year to be in the woods. The thrill of calling in a big tom runs adrenalin levels high. Kansas Spring Gobbler Fever is an affliction we Kansans will have to learn to live with.

W&P

# In Search Of Worms

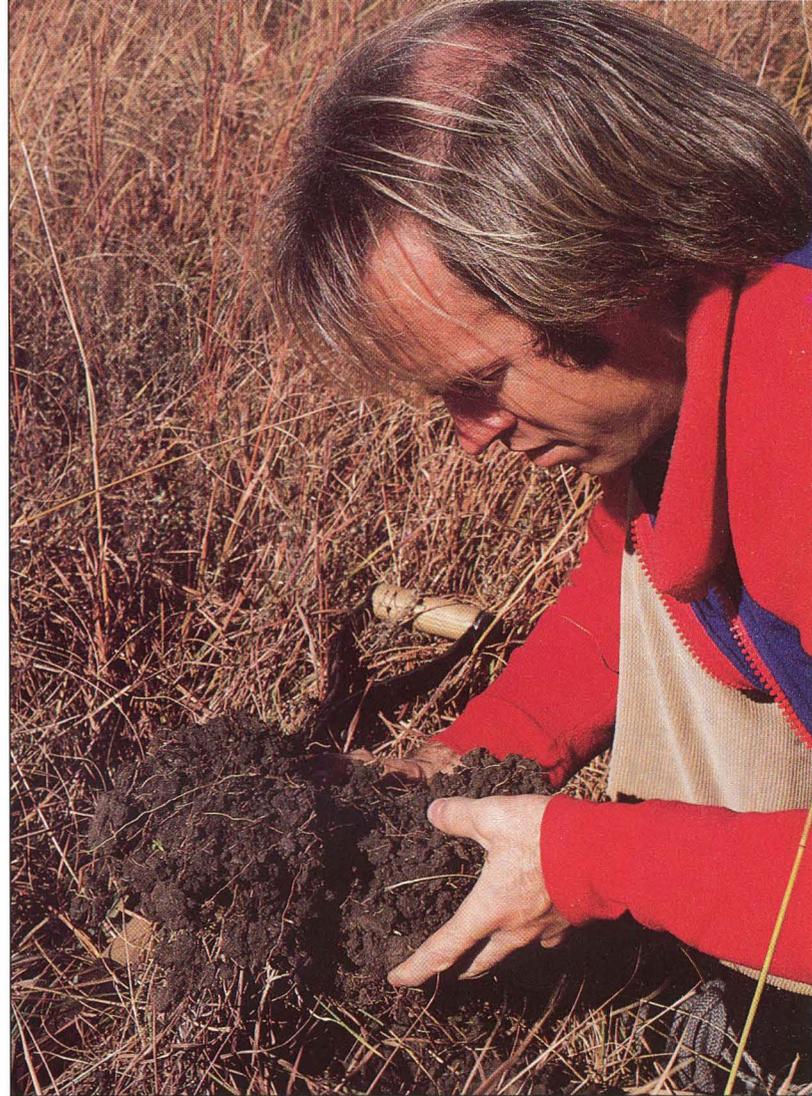
K-State researcher Sam James discovered two species of worms in the early 1980s. Digging up worms is still in his game plan.

by Gisele McMinimy  
Topeka  
photos by Mike Blair

Sam James was studying the effects that prairie burning has on earthworms when he discovered a 2-inch earthworm with a bright yellow ring around its middle and a flesh-colored earthworm with two ridges on its underside.

The Kansas State University biology research associate tried to identify the two worms but found that neither worm matched a description of any of the recognized members of the worm's genus — *Diplocardia*. That's when he began to suspect he'd found two previously undetected earthworm species.

James, 34, found the two species at the Konza Prairie



*Diplocardia rugosa* (worm at left) and *Diplocardia hulberti* are shown next to a dime for size comparison. Above, Sam James, the discoverer.



Research Natural Area near Manhattan in 1980 and 1981. He believes the two may have been observed before but went unreported in the scientific community.

"To most people, these small worms may just appear to be baby worms, not even big enough for bait," James says. "There was just no perceived practical value."

Because little attention has been paid to earthworms in Kansas, James applied for and received a \$4,000 grant from the Kansas Department of Wildlife and Parks (Chickadee Checkoff Program) to study the earthworms of Kansas. Wildlife and Parks officials want to know what earthworm species exist in Kansas and have funded James to travel across the state with a shovel and bottles of preservative, digging up earthworms.

James named the first earthworm he found (the one with the bright yellow ring) *Diplocardia hulberti* after Lloyd Hulbert, Konza Prairie's former director and the first person to look for earthworms on the Konza Prairie.

James named the second worm *Diplocardia rugosa* because once the worm is preserved, two definite ridges can be seen on its underside. *Rugosa* is a descriptive name meaning ridges.

*Diplocardia hulberti* is 2 inches long in the adult stage. The worm's bright yellow band, called the clitellum, occurs 12 segments back from the head of the worm (as seen under a magnifying lens). *Diplocardia hulberti* lives in a grassland environment that contains soils with a high clay content. James has rarely found this worm in lighter soils. He believes the worm is native to the Kansas Flint Hills and may be found as far north as Nebraska, as far south as Oklahoma.

*Diplocardia rugosa*, shorter than *hulberti*, is pale and flesh-colored with a clitellum that's more pale than the rest of the body. The clitellum is hard to see when the worm is alive, making the worm hard to identify. There are no distinctive features on the entire body, when both species are young.

*Diplocardia rugosa* is most commonly found on the upper half of grassland hills. These soils tend to be more silty and higher in organic matter.

In order for James to have *Diplocardia hulberti* and *Diplocardia rugosa* officially recognized, he had to provide a detailed description and write an article for publication in a scientific journal. The article has been accepted and will be published later this year.

Next, James selected a specimen from each species to represent the species type. These specimens were preserved and sent to the Smithsonian Institution.

The native *Diplocardia* species do not seem to tolerate plowing and tilling, so the species are rarely found where the ground is disturbed. In wheat fields, the soils can get so hot during the summer that the worms may not survive. The earthworms may eventually move back to a field that's been reseeded to grass after the area has been undisturbed for a while, James says.

One distinctive characteristic of these worms is that they'll ooze a milky fluid when they're irritated. James says it's possible that this is a defense mechanism to prevent shrews, moles and other predators from eating them.

**M**ost *Diplocardia* species including *Diplocardia rugosa* lack a well-developed flight-type response. "If you put them in your hand, they'll just roll around a little bit," James says. "They may wave their heads and tails back and forth. It may take them a little bit to get organized and start crawling away."

*Diplocardia hulberti*, however, usually starts crawling away fairly quickly. James speculates that part of this

speedier locomotion may be due to the fact that *Diplocardia hulberti* feeds slightly more on surface-derived materials such as decaying grass leaves.

"My guess is that speedy locomotion in worms is part of the lifestyle of worms that live near the surface," James says. "They would have to get away from the surface soil quickly because there might be something up there walking around that might want to eat them. Worms that stay below the surface more frequently would tend to have less need for rapid escape."

Although it's not known what worms that feed underground more frequently eat, James said that *Diplocardia rugosa* probably eats decayed root matter.

One theory that James hopes to experiment with is that these worms may feed on soil around roots, where the soil may be richer in bacteria and other microbes.

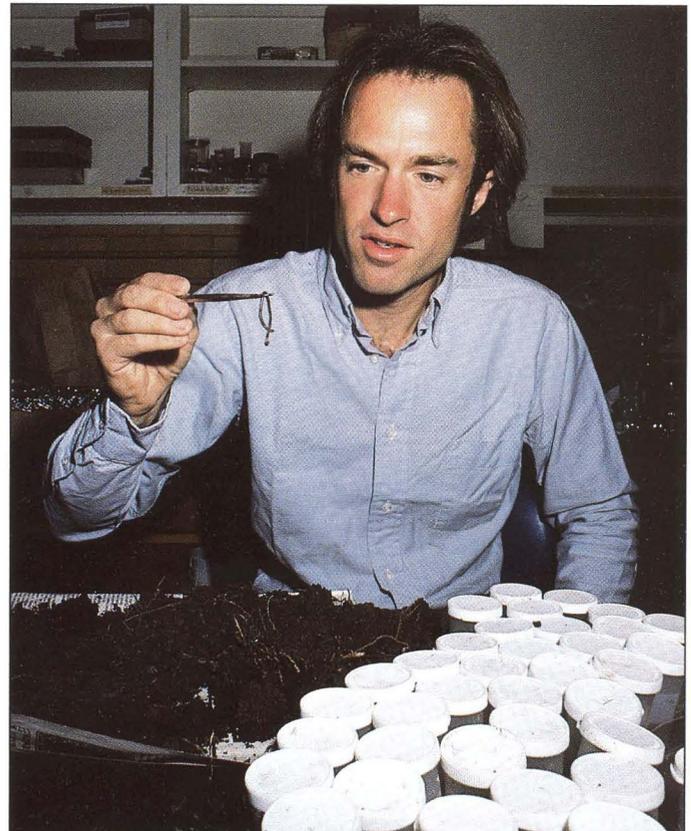
Several *Diplocardia* species have some role in maintaining soil fertility in grassland areas throughout the state, James says. This could have a larger environmental effect because increased soil fertility may affect plants, which may in turn affect animals that depend on those plants.

It's generally agreed that earthworms increase the pore volume of the soil to provide better water infiltration and retention. In addition, earthworms cause an increase in the availability of soil nutrients because these species break down nutrient-holding organic matter.

James begins documenting Kansas earthworms this fall. He plans to construct a map detailing the worms of Kansas as well as a key for identifying those species. W&P

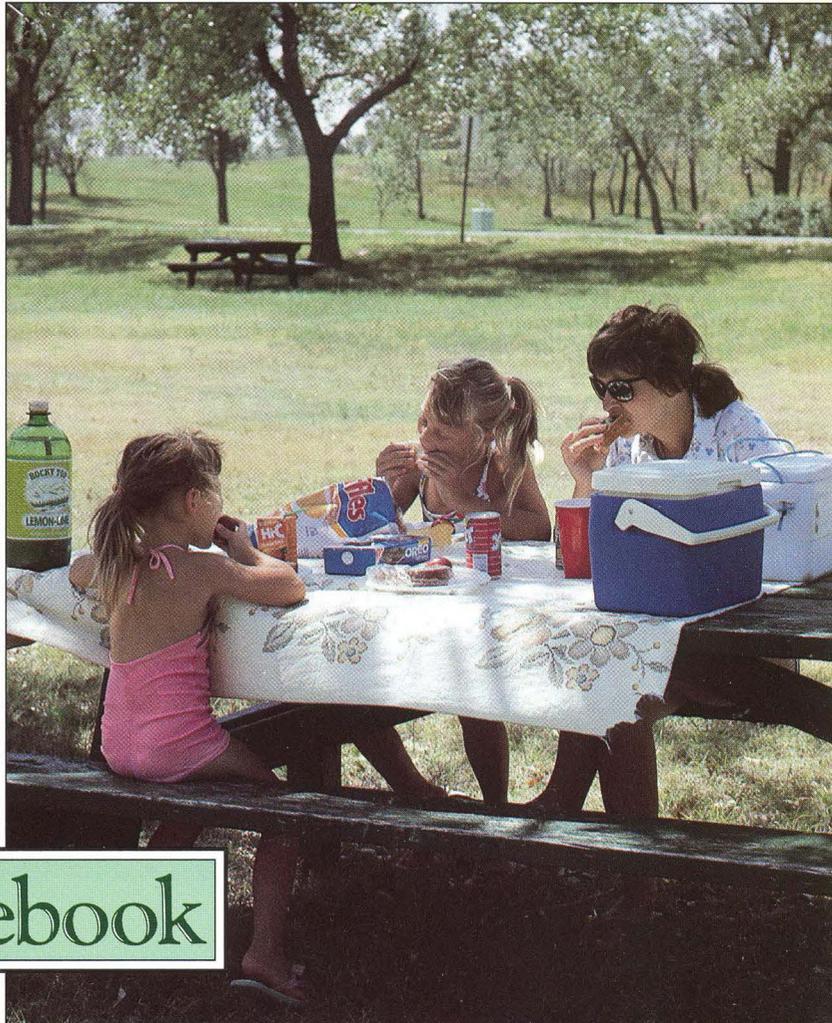
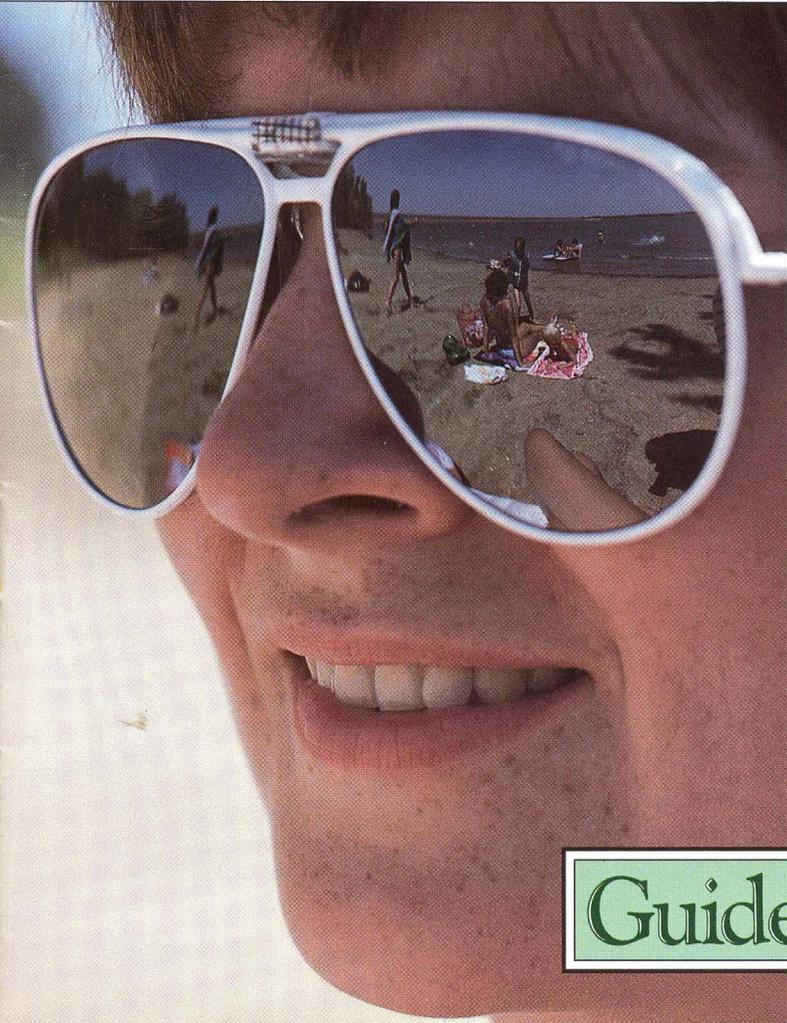
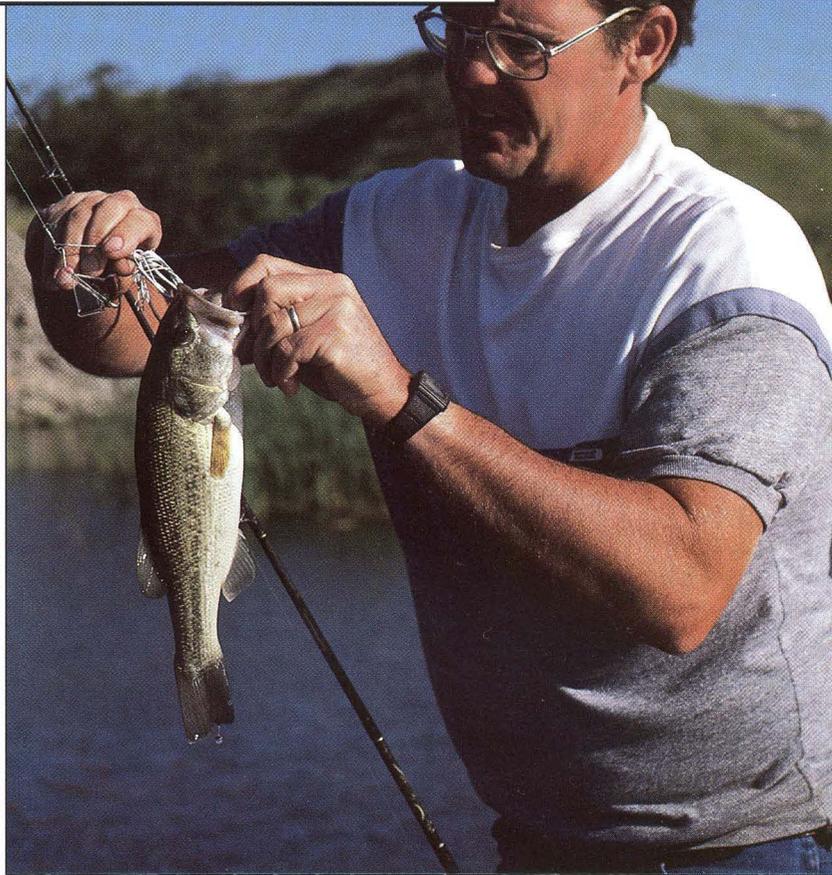
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*The author recently earned a BS degree in agriculture journalism from Kansas State University.*



Sam James displays one of the two species of worms he discovered on the Konza Prairie Research Natural Area near Manhattan.

# KANSAS STATE PARKS



Guidebook

# Welcome To Your Kansas State Parks

by Verne Hart  
Acting Chief of Parks

**From preceding page:** The Kansas state parks system has it all — everything you, your family and friends need to enjoy a day, a weekend or a long vacation. So what's available? Camping and boating (upper left), fishing (upper right), swimming and sunbathing on the beach (lower left), or a family picnic (lower right).

Looking for a place to spend your next vacation? Someplace that's picturesque, away from the crowds and still offers good camping, fishing or just relaxation? Then remember the Kansas state park system — 24 of the state's best-kept secrets. Whether cultural, historical, scenic or just a plain fun area, the Kansas state parks provide a variety of recreation activities.

From the first state park at Kanopolis Reservoir (started in 1958) to the latest and most modern park at El Dorado Reservoir (completed in 1986), you'll find a variety of outdoor activities awaiting you at these 24 locations.

The park system encompasses more than 34,000 acres that adjoin 18 federal flood-control or irrigation reservoirs and three state-owned lakes. Twenty-two of the 24 areas are developed and provide modern conveniences for camping or picnicking (including areas for large groups), to name just a few activities.

In the highly developed areas you'll find camping pads with electricity, hot-water shower buildings, picnic shelters, playground equipment, boat ramps and courtesy docks. Several of the parks have fishing docks or piers. All of the areas include a roped-off swimming beach. Lifeguards, however, are not provided. Commercial lodging is available in nearby towns. And for those wanting to get off the beaten path and pitch a tent on their own, the parks provide primitive camping areas. Other less-publicized interests include bicycling, hiking, wildlife and scenic photography and nature study, in addition to fishing and camping. Several parks have a well-

marked nature trail.

Eleven of the parks have commercial marinas where boaters can get supplies and services. Special events may include music festivals, powerboat races, fishing tournaments, sailboat regattas as well as racing and camping club rendezvous. These events must be OK'd by a free special-events permit available from the park manager. The parks are also used as a campsite for persons who attend the nearby cultural events as well as state county fairs.

The parks also host a state park day, sponsored by that park's staff and the state park advisory board. These events, open to the park-user, may include the following activities: mud volleyball, fishing contests, square dancing, beer gardens, horseshoe pitching contests and other events sponsored by the concessionaires and local town vendors. Check dates and times of these events with each state park office.

Most of the campgrounds have a host who may be a volunteer worker. These hosts greet the park-users, collect fees and do light maintenance work in return for their park campsite.

The park season generally runs April 15 through Oct. 15, or until the water pipes start freezing. That's when we close the buildings, but the electric sites remain open for avid campers and other sportsmen. Both daily and annual permits are available. The annual permits are good at all state parks for the entire season.

Looking for a secluded vacation hideaway or a spot for a weekend outing? I'm sure you'll find the Kansas state parks to your liking. **W&P**

A couple enjoys a day of riding motorized bikes at Wilson State Park near Sylvan Grove in Russell County.





El Dorado State Park in Butler County is the park system's most visited facility and is known for its spacious campground.

This leaping youngster is an instant away from cooling off in Kanopolis Reservoir.



Mike Blair photos

### Cedar Bluff State Park (near Ellis)

**C**edar Bluff State Park, on the north and south shores of Trego County's Cedar Bluff Reservoir, offers a sweeping view of the Smoky Hill River valley as it winds through prehistoric, fossil-rich chalk beds. Castle Rock, a chalk spire rising some 70 feet above the valley floor, is visible for miles. The reservoir is a Bureau of Reclamation irrigation project with a surface area ranging from 2,125 to 3,700 acres and a shoreline of 50 miles. The state park (about 1,715 acres) comprises two areas.

### Cheney State Park (near Cheney)

**C**heney State Park is located on the Cheney Reservoir in Reno County. Prevailing winds of the warm season and spacious waters attract sailboat enthusiasts from surrounding states, making large-scale regattas a featured part of the lake's



After putting a move on the defensive player, the ballcarrier breaks sharply to the left . . .



. . . and cuts upfield. A lone fan looks on and so, it turns out, does the defensive player.

varied activities. Reserved for fishing in summer, the upper half of the lake also serves as a waterfowl refuge on the international flyway during the migratory season. Traversed by continuously flowing sand bottom streams, the state park is shaded by large cottonwood trees. The reservoir is a Bureau of Reclamation project for flood control and water supply functions. The reservoir has a water surface area of 9,500 acres and 67 miles of shoreline. The state park has 2,495 acres of land and 4,696 acres of water.

*Other Activities:* Concession facilities are provided by a full-service marina. The Ninnescah Yacht Club providing facilities for sailing-oriented boaters.

### Clinton State Park (near Lawrence)

**C**linton State Park is located on Clinton Reservoir in Douglas County. The reservoir, a U.S. Army Corps of Engineers flood-control project, has a water surface area of 7,000 acres and 72 miles of shoreline. The state park encompasses about 1,455 acres.

*Other Activities:* Concession facilities are provided by a full-service marina, which in November 1986 moved from the Corps of Engineers-area on the lake to the state park.

### Crawford State Park (near Farlington)

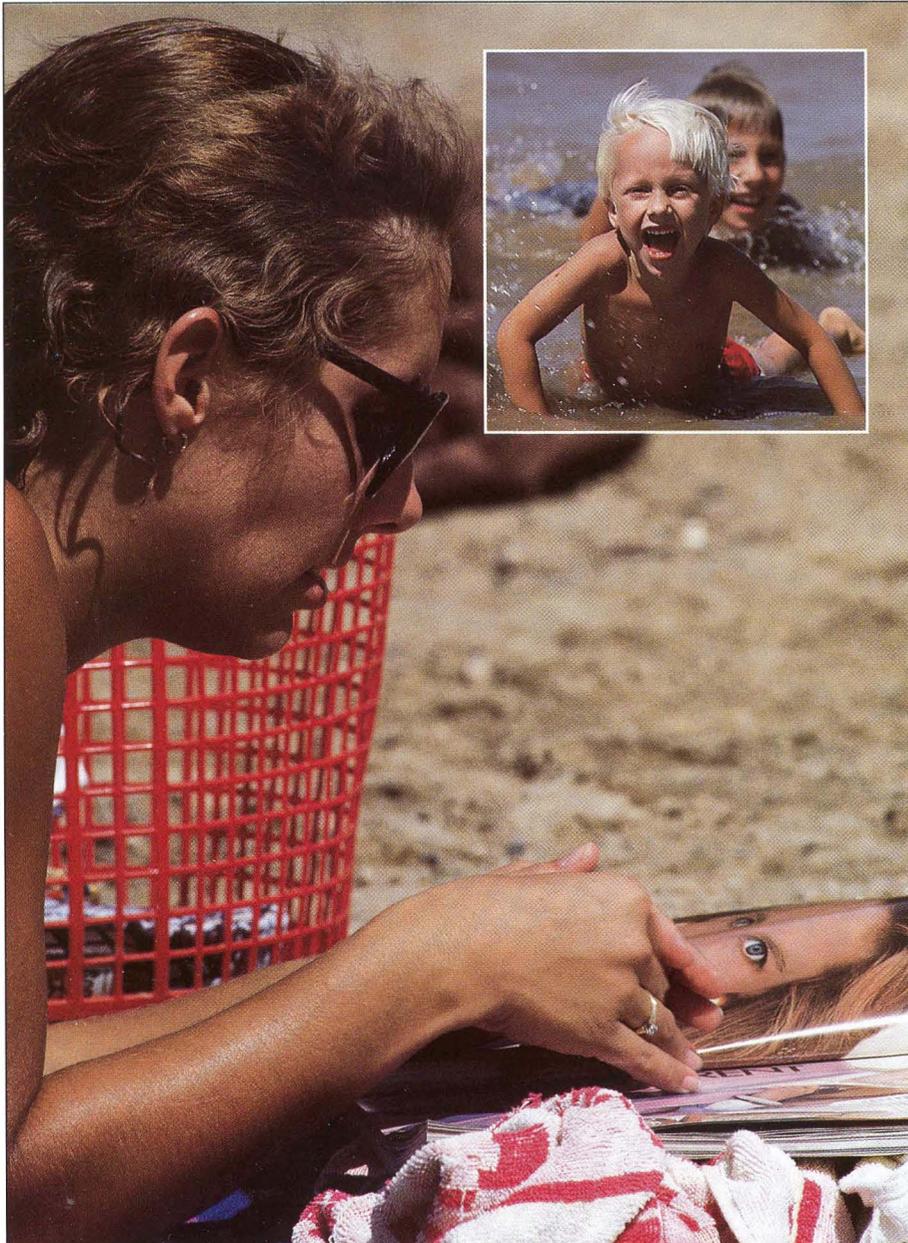
**C**rawford State Park lies in the heart of the strip-coal mining area. The park is a tiny piece of the Ozarks and is unsurpassed in beauty, featuring flowering trees and rebuds in the spring and brilliant autumn color in the fall. The lake has been in operation since the 1930s and is known primarily for its excellent fishing. A fish hatchery located below the dam is open to the public. The park's total land and water area is 439 acres. Privately owned cabins are located on both sides of the lake.

*Other Activities:* Concession facilities are provided by a full-service marina/restaurant operation.

### El Dorado State Park (near El Dorado)

**E**l Dorado State Park is located on El Dorado Reservoir in Butler County. The lake is a U.S. Army Corps of Engineers flood-control, water-supply and recreation project. The federal and state government signed a contract so that recre-

Mike Blair photos



What to do on a state park beach? Read a magazine (above), horse around in the sand with a buddy (inset) or sneak up on some rafters and let 'em have it (below).



Mike Blair photos

ation development could be part of the project. The lake has 8,000 acres of water surface, and the state park acreage is estimated at 3,880. El Dorado, with its spacious area and varied facilities, is the most heavily used park in the system.

*Other Activities:* Concession facilities are provided by a full-service marina.

### Elk City State Park (near Independence)

**E**lk City State Park is located on Elk City Reservoir in Montgomery County. Elk City Reservoir, an excellent area for camping, swimming and boating, is a U.S. Army Corps of Engineers project with flood control as the primary function. The reservoir has 3,550 acres of water surface and 50 miles of shoreline at conservation pool level. The state park encompasses 857 acres. East of the park is a regional landmark, widely known as Table Mound, which overlooks the historic Elk River valley. One of the last Osage Indian villages (before the tribe was moved) was located on the Mound. Arrowheads and other artifacts are still found.

### Fall River State Park (near Toronto)

**F**all River State Park occupies a distinctive setting in the densely wooded hills surrounding Fall River Reservoir. This park operates as a single unit with Toronto State Park. Well-known for its excellent fishing, the 2,500-acre lake is appealing in all seasons and host to good populations of squirrels, rabbits, deer and quail. Fall River State Park comprises 917 acres of land leased from the U.S. Army Corps of Engineers. The park is situated on Fall River Reservoir in Greenwood County. The reservoir's primary function is flood control. There are 40 miles of shoreline, and the surface area of the lake is 2,450 acres at conservation pool level.

*Other Activities:* Concession facilities are provided near both Toronto's and Fall River's bathhouses.

### Glen Elder State Park (near Glen Elder)

**G**len Elder State Park is located in Mitchell County, about 12 miles west of Beloit on the Solomon River. This area is an early Indian historical site; the reservoir inundated Waconda Springs. This was a mineral pool, once the site of Kansas'



Many of the Kansas state parks offer special attractions on summer weekends. At left, a jet skier takes his craft airborne on El Dorado Reservoir during one such event. The state parks also offer the chance for man and boy (right) to get off by themselves or for man (below) to get off by himself.

only health spa. It was here that Margaret Hill McCarter penned some of her well-loved tales of Kansas. The lake is one of the fastest-growing fishing and recreation areas in the state. This Bureau of Reclamation reservoir has a water surface acreage of 12,602; park acreage is 1,250. The park is located on the north shore of the reservoir.

*Other Activities:* Concession facilities are provided by a full-service marina.

### Hillsdale State Park (near Hillsdale)

**H**illsdale Lake was authorized by Congress in 1954 as part of a comprehensive flood control plan for the Osage and Missouri River Basins. Construction was started in 1976 and completed in 1982. The 1981 legislative session included Hillsdale State Park in the state park system although an agreement with the U. S. Army Corps of Engineers had not been reached as this went to press. State funds for development of recreational facilities have not been appropriated, with the exception of boat ramps with parking lots.

The lake has 51 miles of shoreline and the surface area of the lake is 4,580 acres at multi-purpose pool. There are 3,625 acres of recreation land in five areas.

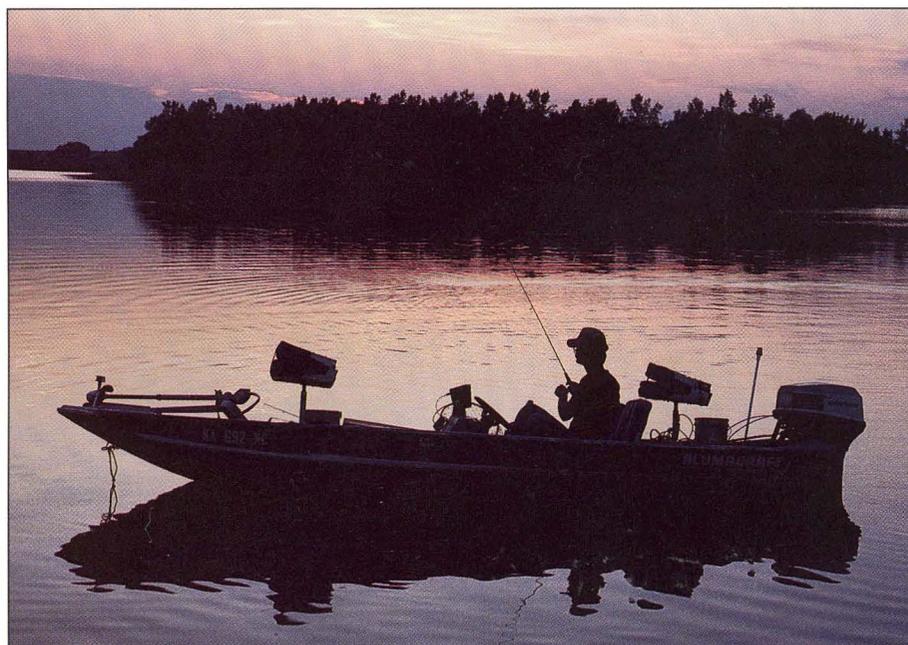
### Kanopolis State Park (near Marquette)

**K**anopolis State Park, the first park to enter the state park system, consists of about 1,585 acres of land leased from the U.S. Army Corps of Engineers. The park is situated on Kanopolis Reservoir in Ellsworth County. Lake Kanopolis has 3,550 surface acres at conservation pool level with a shoreline of 30 miles. An additional 4.65 acres, known as Mushroom Rock State Park, (with a unique rock formation) was donated by the Ellsworth Historical Society in 1962. (see Mushroom Rock State Park entry.)

The park includes a nature trail in rugged and precipitous Horsethief Canyon, famous for the 150-foot high Inscription Rock. Three Indian cul-



Mike Blair photo



Gene Brehm photo



Mike Blair photo

Unusual rock formations are what bring visitors to Mushroom Rock State Park near Ellsworth.

tures are represented in the petroglyphs that cover the face of the cliff.

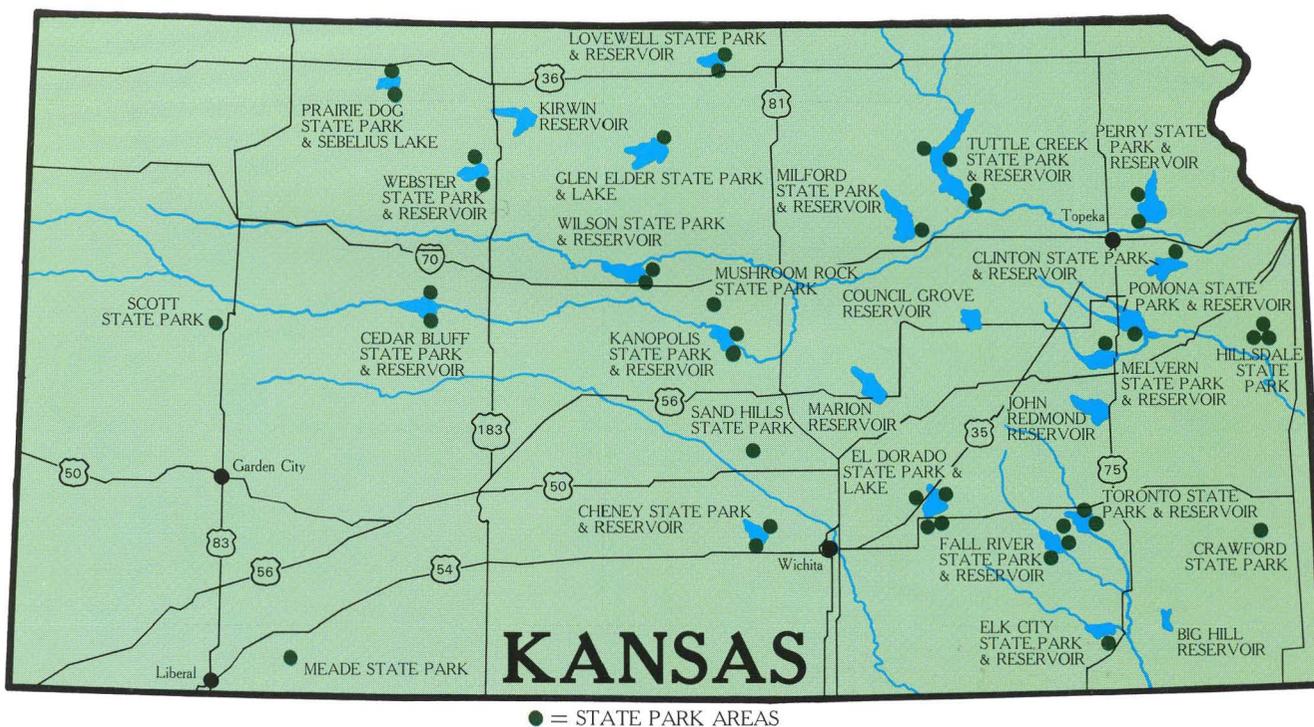
*Other Activities:* Concession facilities are provided by a full-service marina. The Salina Coyotes Motorcycle Club holds sponsored motorcycle meets.

### Lovewell State Park (near Courtland)

**L**ovewell State Park's dense growths of cedar and burr oak furnish shade around the 3,000-acre Lovewell Reservoir in Jewell County. Massive loess deposits measuring to 100 feet deep have been altered by water and wind. Much of the loess plain eroded to form rounded hills with sharp breaks delineating green and fertile valleys. The state Historical Society's Pawnee Indian Village and Archaeological Museum is just a few miles east of Lovewell Dam. The parks consists of about 1,126 acres. The reservoir is a Bureau of Reclamation irrigation and flood control project and has 2,986 acres of water surface area and 44 miles of shoreline.

*Other Activities:* Concession facilities are provided by a full-service marina.

# KANSAS STATE PARKS



Patti Murphy map

# the center section

Edited by Mike Miller

## LETTERS

### BAMBI SYNDROME

Editor:

I've seen the anti-hunting comments printed on your Letters pages recently. As a biology instructor, I can sympathize with your frustrating position. I also continually wrestle with the "Bambi Syndrome." Each person must be dealt with in hope of education instead of intimidation. Unfortunately, most of the "concerned citizens" that write and gripe about hunting haven't taken the time to learn the facts about wildlife management, hunting and fishing laws, conservation or even basic ecology. And they don't want to know the facts. Facts tend to ruin irrational arguments!

I sarcastically suggest that you equip each issue with a warning: armchair experts should educate themselves before reading this material. The people who are ready to cancel their subscriptions due to a hunting article will happily consume hundreds of pounds of animal flesh each year and contribute thousands of dollars to habitat destruction (highways, construction, etc.). The vegetarians promote habitat and wildlife destruction in the name of agriculture.

Your standard reply about revenue generated by hunting and game population increases is excellent, but there is another important aspect of hunting. Before "white man" took over America, wildlife populations were in good natural balance with the native human populations. Due to his negligible understanding of natural laws, European man rapidly extirpated or greatly reduced most large predator populations. The sooner people understand hunting as a predator-replacing management tool, and a necessity in the modern world, the sooner we will be able to more efficiently rebuild and support our environment.

Michael S. Rush  
Osawatomie

### BLAZE ORANGE

Editor:

Does blaze orange save lives? Yes. Does an effective hunter-safety program save lives? Yes. Do more laws complicate compliance? Yes.

Kansas hunters have already been saddled with the ridiculous burden of possessing only steel shot in situations where a mixed bag of upland game and waterfowl are possible. Another ingredient, required blaze orange for upland bird hunters, will only complicate matters more for the mixed bag hunter.

Perhaps the education staff for the Kansas Department of Wildlife and Parks would do more for upland bird hunters by concentrating on blaze orange education, rather than attempting to fill program inadequacies with legislation. Take a look at your own publication. In the November/December 1987 issue of KANSAS WILDLIFE there is not a single hunter wearing blaze orange.

I wear blaze orange voluntarily in most upland bird situations. Everybody should; voluntarily.

Bryan Schanze  
Prairie Village

Dear Mr. Schanze:

**Department of Wildlife and Parks officials understand concerns surrounding overregulation of sportsmen. That is perhaps the central reason why Kansas has no law requiring blaze orange for small-game hunters. Though such a rule would surely prevent many hunting accidents, the Department relies on a quality hunter education curriculum to reach this goal. Students completing the Hunter Education Program receive considerable information regarding the importance of blaze orange clothing. It is unfortunate that many adult hunters ignore the facts about this life-saving color.** Rob Manes, education coordinator

### CHICKEN FAN

Editor:

While reading the November/December issue of KANSAS WILDLIFE, which I really enjoy, I came across Gerald Horak's article on prairie chickens. The article was very enjoyable.

I grew up west of Matfield Green in Chase County, and during this time a study was done on prairie chickens. I learned a great deal about the birds as a result.

Hunters who have not had a chance to hunt prairie chickens just don't know what they are missing. It is an experience they will never forget. I am an avid upland bird hunter, and prairie chickens are my favorite.

Lyle W. Widler  
Ottawa

### ART AID

Editor:

Several years ago my husband started receiving KANSAS WILDLIFE magazine as a Christmas present. Since we're transplanted Kansans, it seemed like a perfect gift. Over the past few years it has been just that, and I wanted to let you know how much I enjoy it.

I look at the magazine for different reasons than my husband does. He enjoys the hunting articles since he makes several trips each year to hunt in Kansas. I look at it for the illustrations and photographs of wildlife. I teach eighth-grade art in a rural community where hunting and wildlife are part of existence. My students use this magazine for reference when drawing animals. I use the illustrations as motivational tools to keep them working harder at their talent. The illustrations show them a real-life application of their ability. I hope neither of these features change with the new format.

Kansas will always be special to me and KANSAS WILDLIFE helps bring home a little closer.

Kathleen Cuning  
Weatherford, Texas

## IN AGREEMENT

Editor:

I would like to commend Mike Miller for his response to Ms. Sutton and Ms. Heckenbach in the January/February issue. He clearly stated the facts about sportsmen paying their way with taxes and license fees.

As a lifetime Kansan, I have seen vast improvements in numbers of wildlife. Good sound wildlife management will become more important in the future. Ms. Sutton's opinion that wildlife does not need us is illusory.

I feel sorry for Ms. Sutton and Ms. Heckenbach, because they are misinformed or maybe they just don't get out much. If they or others like them want to help wildlife, I suggest they buy a hunting and fishing license each year.

Dwain G. Rice  
Winfield

## GIFTED MAGAZINE

Editor:

I thoroughly enjoy your publication and find the articles in it to be very informative and enjoyable. I also find that the magazine makes a great gift for Christmas and birthdays. I look forward to each issue.

Lloyd A. Watts  
Spring Hill

## PROUD KANSAN

Editor:

I have only hunted greater prairie chickens for two seasons but have already made them my second-favorite gamebird, next to bobwhite quail.

I'm very proud that Kansas is the No. 1 greater prairie chicken state. I lived in Washington state for 1½ years and never figured I could miss this state and its wildlife as much as I did. This year I got my limit of prairie chickens on both the Saturday and Sunday of opening weekend by walking them up in the bluestem pastures of the Flint Hills. It was one of the greatest hunts I've ever been on.

Keep up the excellent work. I'm convinced that the Kansas Department of Wildlife and Parks is on a scale with or above most other state agencies.

B.A. Higgs  
Wichita

## DISSERVICE TO BIRDS

Editor:

On Nov. 17, a disservice was done to birds of prey of Kansas. The sport of falconry was legalized by the Kansas Department of Wildlife and Parks.

It is the pinnacle of human arrogance to legitimize the robbing of nestling falcons for the amusement of falconers. To my mind, the lifetime caging of once-wild raptors for diversion is ignoble indeed. I decry this wrongful step in wildlife management in Kansas. It is without justification.

Paul Weidhaas  
Manhattan

## SPELUNKER

Editor:

Although I am not a fisherman or hunter, I love to read your magazine. I enjoy watching, photographing and studying Kansas wildlife. I found the January/February issue particularly exciting, because it included several cave-dwelling animals: the cave salamander, the dark-sided salamander and the gray bat. I enjoy exploring and studying Kansas caves.

Kansas has 583 caves in 43 counties. These range from small shelter caves to stream caves more than a mile long. Almost all of these caves are used by some type of wildlife.

Public education about these animals may provide the best protection for them. A greater awareness of the delicate non-renewable nature of these caves and their ecosystems may help protect the caves and wildlife that depend on them.

Anyone interested in the conservation of Kansas caves can call or write the Kansas Speleological Society at Rt. 6, Box 344, Lawrence, KS 66046. The phone number is (913) 842-3528.

Jim Young  
Lawrence

## TEMPORARY LICENSE?

Editor:

Why doesn't Kansas have a temporary small-game hunting license for nonresidents? The \$50 nonresident license fee is outrageous.

There are many nonresidents who would like to hunt only a few days when vacationing or

visiting relatives, but they are faced with purchasing a \$50 license. Why not have a temporary license that's good for one week?

Rudy Cebula  
Weirton, W.Va.

Dear Mr. Cebula:

**The Kansas Department of Wildlife and Parks depends largely on the revenues generated by license sales. A significant amount of that money is paid by nonresident hunters. Offering a temporary nonresident small-game hunting license would mean losing a large chunk of funding. The \$50 nonresident fee is comparable to what surrounding states charge.**

**However, a 48-hour nonresident waterfowl hunting permit will be available for \$20 this year. The new license will allow nonresidents to hunt waterfowl for two days without purchasing the \$50 license.** Miller

## TRIBAL LAW

Editor:

After reading the article "Illegal Artifacts," on Page 19 of the January/February issue, I felt it was my place to address this issue.

Besides the federal laws that protect these birds, there are tribal laws that are considered the "supreme law of the land."

It is always a shame when the ruthless behavior of some individuals gives the rest of the people a bad image. In this case, the ones getting the bad image are Native Americans. American Indians have respected and sought wisdom from the eagle long before pilgrims ever came to this great nation. According to custom, eagles were caught by hand and one tail feather and one wing feather were plucked. After given a prayer or blessing for safety and long life, the bird was immediately released. These feathers have long held meaning and respect in many Indian tribes. To think that anyone would harm these majestic birds is beyond comprehension.

The facts still remain that there is a proper use of eagle feathers in traditional ceremonies, but only through the hands of our tribal elders. Any other means of possessing these feathers, by causing harm, should indeed constitute treason, and offenders should be punished to the full extent of the law.

Dennis L. Rogers  
American Indian  
Topeka

# THE LAW

## GAME THIEF CHARGE

An Operation Game Thief (OGT) call gave Garnett wildlife conservation officer (WCO) Doug Sonntag enough information to obtain a search warrant. He and Pleasanton WCO Mark Johnson, Chanute WCO Charley Ward and an Allen County Sheriff's deputy went to the suspect's La Harpe home to check out the tip.

The officers found two deer, a raccoon and a coyote in the suspect's deep-freeze. The man was charged with illegal possession of deer, taking deer without a permit, no hunting license, no furharvester's license and possession of a furbearing animal during closed season. After plea bargaining, the man pleaded guilty to illegal possession of deer and possession of a furbearer during closed season. He paid \$300 in fines plus \$29 court costs. *Miller*

## BACKDATED LICENSE

On Dec. 5, the opening day of firearms deer season, Pleasanton wildlife conservation officer Mark Johnson received a call from the sheriff's dispatch. A man had called the sheriff's office wanting to know if it was legal to shoot a bobcat. Johnson told the dispatch that the furbearer hunting season was open, that a Kansas furharvester's license was required and that the pelt must be tagged before it could be sold.

Fifteen minutes later, Johnson got a call from a man who wanted a bobcat pelt tagged. If it was the same man who called the sheriff's office, Johnson reasoned, the man probably didn't have a license before he shot the bobcat. When Johnson met the Paola man, he asked to see his hunting license, as the man had been hunting deer. The 1987 license had been purchased in December 1986. But Johnson noticed that the man's furharvester's license had been purchased only the day before, Dec. 4, 1987. Most furharvesters buy their licenses in January when there's still a month of the trapping and hunting season left. Or they at least buy the license before the furbearer trapping and hunting season opens in November.

Another fact that made Johnson suspicious was the time of purchase listed on the furharvester's license: 1600. That's military time for 4 p.m. So Johnson questioned the man, suspecting that he'd bought the furharvester's

license after he shot the bobcat and backdated it to Dec. 4. Finally, the man confessed to doing exactly that.

Johnson cited the man for taking a bobcat without a furharvester's license and backdating a license. The man paid a total of \$306 in fines. *Miller*

## HOW MANY?

Garnett wildlife conservation officer Doug Sonntag was on patrol during the 1986 quail season when he spotted two quail hunters. He watched the hunters from a distance and saw them shoot two birds as they came to the end of the field.

Sonntag drove over to check them and found they were from Oklahoma. "How many birds have you got," he asked. One of the hunters said "I'd guess we've got 10, 12 or 15 birds." "Well, I'll play your game, which is it?" Sonntag returned. Well, they honestly didn't know, so Sonntag suggested they count the birds. Whoops. It turned out the two hunters had a total of 18 quail, two over the limit.

Sonntag wrote them a ticket for exceeding the daily bag limit. The two forfeited the \$250 bond the Anderson County judge set for them. *Miller*

## DOUBLE TROUBLE

During the 1987 firearms deer season, Salina wildlife conservation officer Greg Salisbury received a tip that a Salina man was hunting with both an archery deer permit and a firearms deer permit. Salisbury contacted Karen Beard in the Licensing Section at the Department of Wildlife and Parks Pratt office. On computer records kept in Pratt, Beard found that the man had indeed applied for both permits.

Salisbury then checked at the local locker plant and found the man had brought in a nice buck during the firearms season. A search warrant was obtained and the deer was seized. Salisbury then charged the man with applying for two deer permits, taking a deer without a valid permit and misrepresentation on a state document. When the suspect applied for the archery permit (he had already applied for the

firearms permit), both permits became invalid. Thus he shot the deer with an invalid permit. He also signed a sworn statement on the archery permit that stated he had not applied for another permit that season. This gave Salisbury grounds for the misrepresentation charge.

The charge of applying for two permits was dropped in plea bargaining, and the man paid \$350 in fines on the other charges. *Miller*

## FALSE RESIDENCY

When Ft. Scott wildlife conservation officer Doug Whiteaker received a call about two deer carcasses hanging in a yard in Franklin, he and Missouri conservation agent Terry Daughtery went to investigate. At first they had trouble finding the man at home; he never seemed to be there when the officers arrived. They didn't find the deer either. A woman at the house told the officers that the deer were taken in Missouri, but had since been taken to the taxidermist. Finally, the officers' persistence was rewarded and they caught the man at home. He showed Whiteaker and Daughtery Missouri check-in deer tags, but there was still a problem. He said that his brother-in-law and sister, both Kansas residents, had killed the deer during the Missouri season. The tags were for Missouri residents.

Whiteaker charged the two Franklin residents with one count each of taking deer illegally, fraudulently obtaining a resident license and unlawful possession of game animals taken outside of the state. *Miller*

## OPERATION HARRY

Wildlife conservation officers in southeast Kansas enlisted the services of "Harry" last deer season. Harry is a full-bodied mount of a white-tailed buck. Officers were getting excessive complaints about road hunting and trespassing in certain areas and Harry turned out to be a big help.

The stuffed deer was placed a distance off the road on posted land, while officers hid nearby. Some hunters just couldn't pass Harry by without stopping to take a shot at him. In just 16 hours in the field, Harry was responsible for 35 violations. Officers wrote offenders for shooting from a roadway, hunting without permission and shooting from a motor vehicle.

The program has been used in other states, and has proved an effective deterrent of road hunting. Kansas Department of Wildlife and Parks law enforcement officials are pleased with this program and plan to use it in future seasons.

*Miller*

# HUNTING

## NEW PUBLIC AREA

### FOR WHAT IT'S WORTH



by Mike Miller, associate editor

#### A Perfect Match

I remember an excited smile coming over my face as I watched the five-week-old puppy stumble over my feet. He resembled what I thought a baby polar bear would look like: nearly snow-white with short, thick legs, a round, fat belly, a stubby nose and bobbed tail. I was a gangly teenager, and we were a perfect match.

Sam was a Christmas present from Mom and Dad. One-half Brittany spaniel and one-half black Lab, he was the bird dog I had wanted for so long. I remember my cousin calling to find out what I had received for Christmas. "It's in the garage," I said matter of factly. "Did you get a car?" he asked excitedly. My cousin was a little let down when I proudly held up the fat little bundle of fur. But in my mind, Sam was a much better gift than a car.

I remember how thrilled I was when the little puppy pointed the pheasant wing I dangled in front of him. I remember hours spent building a large dog house. "If he grows onto those feet," Dad said, "he'll need a big house." Sam eventually grew into his big blocky feet, and he grew to be much more than a bird dog.

When I wasn't playing football or basketball, I was with Sam. We spent hours exploring and "hunting" in the vacant lot across the street. We played imaginary football games in the backyard at night. And there were endless games of fetching the ball. Sam never tired of retrieving. I threw tennis balls, kicked footballs and hit golf balls, and Sam chased them all down like an out-of-control freight train.

Sam and I spent many happy hours hunting pheasants and quail, too. Sam wasn't a great bird dog, but I overlooked those flaws as he did mine.

Sam loved to hunt, but he probably loved fishing even more. He would take a position belly-deep in the water and stand statue-still, watching every cast intently. When I caught a bass, he usually waded out to try and pick

it up, ignoring my hollering for him to get back.

When I went away to college, Sam adopted Mom and Dad with the same loyalty he had for me. Instead of hunting and fishing trips, evening walks with my folks became Sam's love.

When I called home from school, one of the first questions was, "How's Sam?" Dad's usual reply was, "The big lummo is fine. He's just sitting here breathing up all our air." Dad said as soon as I graduated and had a place to keep Sam, I would have to come get him. But when that day came, Dad wasn't as excited as I was. "Are you sure you want to take him?" he said, hesitating. "You haven't really got settled in yet."

Sam was showing his age by then. But his eyes still sparkled when I got out the shotgun, and we spent some enjoyable hunts together that winter. It was Sam's last winter. I remember noticing the light in his eyes fade. I remember agony as I listened to him cough in the mornings. The vet felt Sam's enlarged lymph glands and guessed it was cancer. There was no cure.

Then came one of the toughest days I've known. As the cancer grew worse, I knew Sam was in pain and that a quick end would be best. But those thoughts didn't make it an easy thing to do. As I carried Sam into the vet's office, I was saddened at how light he'd become. In his prime, he weighed a solid 80 pounds. I put Sam on the examining table, and my hands lingered around his neck as I took off his collar. Then I said goodbye under my breath. I remember a lump in my throat growing to almost choke me as I hurried through the waiting room. I got into the pickup, hung the empty collar on the gun rack and felt tears spill over my eyelids. The reality of losing much more than just a bird dog hit me, and it hurt.

That was four years ago. I have another dog now. He's a bright-eyed Brittany that leans against my leg and makes my troubles fade away. But Sam's collar still hangs on the pickup gun rack, and I'll never forget the big loveable lummo that helped me grow up. If I ever have a boy of my own, he'll get a puppy one Christmas. I hope I can find a dog just like Sam.

An agreement was reached last December between the state and KPL Gas Service Company to open land at the Jeffrey Energy Center to public hunting and fishing. "I'm very pleased to announce this agreement generating additional recreational opportunities for Kansas." Gov. Mike Hayden said.

The concept for opening the acreage at the Jeffrey Energy Center was first discussed by Hayden at a meeting with KPL Gas Service Chief Executive Officer David L. Black last summer. "I certainly appreciate his quick response and willingness to work with the state in expanding outdoor recreational opportunities," Hayden added.

Black said the company looks forward to extending the use of the area that surrounds the plant. "For a number of years we've demonstrated that the lands surrounding Jeffrey Energy Center could be used compatibly for industrial and agricultural purposes, including soil and water conservation projects. Now, after careful review, we have determined we can also add fishing and hunting under controlled conditions and are delighted to be able to do so."

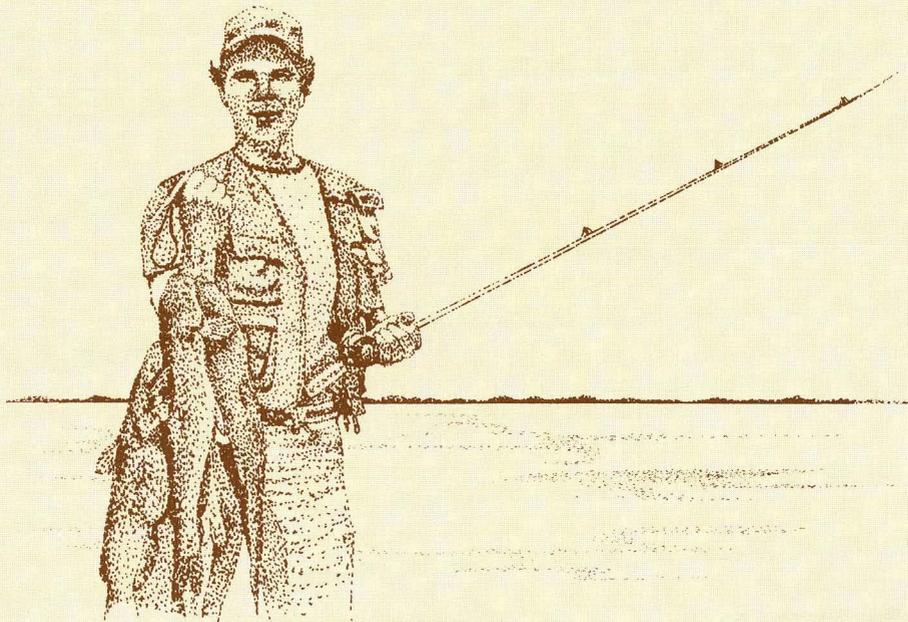
Under the terms of the agreement, the first unit opened at the plant will include nearly 1,400 acres of prime wildlife habitat. This unit will be open to the public without reservation, and the boundaries will be posted. The location of Unit 1 is 3½ miles north of Belvue on Lost Creek Road (Lost Creek Road forms the eastern boundary of the unit). All boundaries will be clearly marked with Kansas Department of Wildlife and Parks public hunting signs. This unit will be managed and maintained by the Department.

The second unit is scheduled to open this summer. Unit 2 offers hunting and fishing opportunities on approximately 5,200 acres. Wildlife and Parks biologists will study the area, develop a management plan and recommend to KPL Gas Service the optimum number of parties that can use the area. The utility will manage the second unit and control access by reservation.

The third segment of the property surrounding the power plant will be designated as a wildlife refuge.

Wildlife and Parks Secretary Robert Meinen said, "I'm excited about the opportunity this will generate for Kansas sportsmen. Our Department is committed to working with KPL Gas Service Company to ensure that the project is successful." Miller

# FISHING



## CATFISH CRAZY?

Why should black bass and crappie fanciers have all the early spring bliss, while channel catfish worshippers stay their rod-and-reel wrangling until May? Will the wily speckled catfish warm to an angler's offerings when the water is still far from tepid?

You bet your sweet *Ictalurus punctatus*.

A few crafty catfish catchers find chow-ready channels well before the water is wading warm. Unable to bridle their angling anguish, they take to their fishing holes in early March, armed with nose-hair-curling shad sides. Other lures will turn the trick, too — sponge baits, blood baits, anything with a high stench factor — but shad sides are Numero Uno. The apparent reason, at least in some waters, is linked to the shad winter die-off, which fill lakes with mushy little morsels much to the catfish's liking. When the water temperature finds the 45- to 50-degree range, channel cats abandon their winter lethargy, seeking sustenance. Though opportunistic eaters, these whiskered fish seem particularly partial to putrid shad carcasses.

Remaining for a while in tight gangs, early-spring catfish frequent submerged channel edges in lakes and reservoirs. In ponds, they may also gather at the edges of deep water. The few anglers who have discovered this little-known catfishing season say ponds with clear water and dark bottom sediments warm first.

The channel's early-spring affinity for congregations often affords the catfish hunter a quickly crowded creel. One fish caught may tell the location of many more.

So there's no need to wait for warm waters. With a coat and hat to fend off winter's leftover winds, some trusty tackle, and a stinking alm for the Great Skin Fish Spirit . . . champions of channel cats . . . Charge! *Rob Manes, education coordinator*

## FISHERIES UPDATE

It's time to fill your reels with new line, straighten out your tackle boxes and make plans for fishing trips. All it takes this time of year is a few days of warm, sunny weather and the fishing can be hot. And this year looks like a good one for Kansas fishermen. High water conditions last summer in many of the state's lakes provided fish abundant food and prime spawning habitat. Here are some notes from fisheries biologists around the state:

Council Grove Reservoir biologist Tom Bowman is predicting an excellent year for crappie fishing there. Fall test nettings revealed a strong year-class of fish with an average weight of more than 1 pound. He also reported good numbers of 2-pound fish and even some 3-pounders.

According to Cheney Reservoir biologist Gordon Schneider, 500 tons of gravel has been delivered to the reservoir. The rock will be used

to make a spawning bed for walleye and could significantly improve the lake's walleye production.

After taking biweekly oxygen and temperature profiles at a southeast Kansas Mined Land Wildlife Area strip pit, biologist Rob Friggeri predicted the pit could support trout year-round. Trout were initially stocked in December 1986. The prediction was confirmed when rainbow trout showed up in the test nets in October 1987. The strip-mined lake received two more stockings of trout last winter.

Biologist Bruce Zamrzla is optimistic about the fishing in Kanopolis Reservoir. His work has shown that a fishable population of wipers (white bass/striped bass hybrids) is available. Several 11-pound fish were caught in test nets, and anglers have reported catching some of the monsters. He also recorded a large number of young-of-the-year walleye in Kanopolis last fall. Those fish should provide angling by 1989. Zamrzla also recorded large numbers of young walleye in Wilson Reservoir. In fact, the 1987 net sample was more than double any previously recorded sample. The high production of walleye is attributed to the high water levels in spring and early summer at both reservoirs.

Tuttle Creek fisheries biologist Chuck Bever is optimistic about the reservoir's fishing opportunities this year. Bever collected moderate numbers of crappie weighing between three quarters of a pound and 1 pound along with an occasional 2-pounder. He also recorded good numbers of 6- to 8-inch crappie, which could mean good crappie fishing in 1989. Bever rated the white bass fishing as fair to good. Anglers will have a good chance to catch 1- to 2-pound fish and maybe even a 3-pounder. Catfish may be the biggest draw for Tuttle Creek, however, as Bever rates fishing for both flathead and channel cats good to excellent. *Miller*

## RECORD FISH

Catching a big fish is the highlight of any fishing trip. But catching a state-record fish would have to be the highlight of a lifetime. Each year, stories are told about someone catching a potential state-record fish only to clean and eat the fish before its record status can be verified.

If you ever catch a truly big fish, there are a few things you must do to keep from losing a place in the record books. First, weigh the fish. The Kansas Fishing Regulation brochure has current listings of all state-record sportfish.

If your fish is heavier than the listed state record, have it weighed immediately on a certified scale. Most grocery stores, butcher shops and a few bait shops have certified scales, which are checked and adjusted periodically for accuracy.

It is important, for your sake, that the fish be weighed soon after it is caught. If kept on a stringer or in a live well, the fish will lose valuable ounces, especially if it dies. Don't freeze the fish. Frozen fish will not be accepted.

Next you must contact a Kansas Department of Wildlife and Parks employee to identify the fish. Wildlife and Parks personnel can provide you with an official Kansas Fish Record application form. This, along with a photo of the fish, must be sent to the Wildlife and Parks Pratt office. *Miller*

## CRAPPIE CATCHERS

Each spring, crappie are usually the first fish to enthuse fishermen. As the water temperature approaches 50 degrees crappie begin moving into shallow water to prepare for spawning. On small, murky farm ponds, crappie fishing may start as early as late February. Generally, though, crappie fishing is good from April through May. But don't sit at home this spring just because the calendar says it's too early for the crappie to be spawning. Pick a warm spring day and use some of these hints to catch a mess of crappie.

The hardest part of crappie fishing is finding the fish. Once you find one, you've probably found a bunch. Start looking near any kind of underwater structure especially submerged treetops. If trees aren't available, fish around cattails, weeds, docks, man-made structures or brush blown into the water.

In early spring, start fishing in water 15-20 feet deep. If the fish aren't there, gradually fish into shallower water. But always fish around and in even brush or cover.

When the water temperature is still cool, a very slow jig action is best. In fact, you may even want to lower your jig down to the desired depth and hold it still. Boat movement and normal rod-tip action may be enough. Or, attach a bobber and simply let the jig drift through the structure. Minnows, if you can find them, work well for early-season crappie, too.

If you're fishing with jigs, start small—one-eighth-ounce or smaller. And change colors until you find one that works. In clear ponds and lakes, color may be important. In murky water, color will be less of a factor, but a darker color may show up better.

You can fish right in a brushpile or treetop by dropping the jig straight down. Work the jig gently. If you bump a tree limb, lower the jig and raise it slowly again. If you work the jig too fast or raise it too quickly, you'll snag.

When playing a fish in the brush, try to raise the fish straight up. Crappie will come up through the tree limbs if you can turn the fish's head up and keep the pressure on. *Miller*

## LAKE PROGRAM

Yates Center is finalizing plans to construct a 200-acre multi-purpose lake. This will be the first lake built through the state's new Small Lakes Program. The new lake will provide municipal water, flood control and recreation.

Construction costs are being shared by the city of Yates Center, the State Conservation Commission and the Soil Conservation Service. The Kansas Department of Wildlife and Parks also awarded the City a 1987 Community Lake Assistance Grant for construction of a boat ramp, parking area and access road.

The lake plan is an ideal blueprint for fisheries management. The watershed is small and consists of native grass rangelands, which should result in low flush rates and clear water. With only a small stream and several small ponds existing in the watershed, biologists will be able to renovate those fish populations before impoundment.

Most of the timber will be left standing in the lake basin. Trees that need to be cleared will be made into brushpiles for fish habitat. Six ponds will be located above the fingers of the lake to provide erosion control and individual species management. Two small ponds located in the borrow area below the dam can be used for handicapped anglers and fishing clinics. Facilities will also include rock fishing piers and a floating dock.

Through the cooperative efforts of the governmental agencies and the City of Yates Center, this lake has the potential to provide excellent fishing opportunities. *Leonard Jirak, fisheries biologist, New Strawn*

## HOOKEED ON FISHING

The Future Fisherman Foundation, founded by the Berkley Company, started a program called "Hooked On Fishing — Not On Drugs." The idea began when the Foundation received a letter from teenager Mathew Deakins

who said that fishing helped keep him away from drugs and that he believed it could do the same for other teens.

The Foundation wants people to look at fishing as a fun, wholesome activity that can provide youth with an alternative way to spend their time and release stress. The program is being used by schools, drug prevention programs, sheriff and police departments, service and youth organizations and state and federal agencies.

A five-minute video is available to teachers and parents. The video introduces children to an alternative to drugs. For more information on the program and video, write: Future Fisherman Foundation, Hwy 9 & 71, Spirit Lake, Iowa 51360. *Future Fisherman Foundation*

## CURE FISHING FEVER

Avid fishermen are usually nursing a severe case of fishing fever this time of year. The long winter has kept them from their favorite fishing hole, and they spend their time organizing their tackle boxes and waiting for warm weather. Well, there is an early cure for fishing fever, and it lies in farm ponds.

As soon as the weather warms up, try your nearest farm pond. These small bodies of water that dot the Kansas countryside warm up amazingly fast. And in early spring, the aquatic vegetation hasn't grown up and the water is still quite clear. March and April are two of the best months to catch farm pond fish, and chances of catching a lunker largemouth are excellent.

Keep one rule in mind when fishing early spring: fish slowly. The fish are still sluggish, and a fast lure won't draw much attention. Also, start fishing in deep water, say 10-20 feet, and always look for submerged structure.

A favorite early-spring bass lure is the jig-and-pig. The jig-and-pig is meant to be fished slowly. A large chunk of pork rind will add some buoyancy to the lure and allow it to fall slower. It also makes the bait bigger. Large, slow-moving baits are attractive to big bass, because they don't have to expend much energy to get a large meal. Spinnerbaits with tandem blades or even willowleaf blades can also be deadly to big bass if the baits are worked very slowly.

If the big baits don't produce strikes, switch to small spinner jigs. Use light line, and again, fish them slowly. Cast the jigs around submerged trees or drop-offs and let them fall. Most fish will hit the jig on the fall, and you'll have to pay attention to detect the light strikes. *Miller*

# ISSUES

Here are the facts:

## MAKING BIG BUCKS

The presidents of the Humane Society of the United States and of the Animal Protection Institute each earn about \$100,000 a year. The figures come from another anti-hunting group, Trans Species Unlimited, which recently published a pamphlet titled "What You Should Know About Animal Welfare Fraud."

The pamphlet also revealed that the Massachusetts Society for the Protection of Animals has assets of \$67 million.

The pamphlet exposes a great deal about animal welfare fraud and points to the large national animal rights groups as the villains. *The Wildlife Legislative Fund of America*

## LAND CAMPAIGN

Closing public lands to hunting has been a priority of anti-hunting groups for 10 years. Their campaign has reached its zenith this year with assaults coming from many different directions.

The Wildlife Legislative Fund of America (WLFA) has already launched a campaign to counter the anti-hunters' efforts to ban hunting on public lands. One bill in Congress would, in one swoop, stop hunting and trapping on federal public lands. Another would stop hunting and trapping on all national wildlife refuges. Reclassification of public lands and acquisition of new lands by federal agencies pose numerous threats to hunting and trapping.

"Public lands in all sections of the country provide prime hunting areas," said WLFA Senior Vice President James Goodrich. "More than 1 million American hunters depend on public lands for most, if not all, of their hunting opportunities."

Anti-hunters who would take away hunting on federally owned land would have the public believe that government land does not constitute a large portion of America's hunting opportunities.

More than 550 million acres of federally owned land is open to hunting, affording 30 million hunter visits annually.

The amount of federally owned land open to hunting is greater than one-fourth of the land mass of the entire United States.

There is open hunting on federally owned land in 47 states. Hawaii, Rhode Island and Connecticut are the exceptions.

Hunting for virtually every legal species in the U.S. is available on federal land open to public hunting.

Anti-hunting groups would have Americans believe public land offers little hunting to Eastern sportsmen. It's a fact that more than 150 federally owned areas are open to hunting east of the Mississippi. It's also a fact that these areas provide much of the East's best waterfowl hunting.

The anti-hunters are using misrepresentation of these facts to attain their goal of "no hunting" signs on all federally owned land. Legislators sympathetic to their cause have sprung into action.

A long-time foe of American sportsmen, California Sen. Alan Cranston is sponsor of Senate Joint Resolution 12. If passed, it would have full force law and would "prohibit the taking of predatory and scavenging mammals and birds on federal public lands."

While that alone would be a dangerous precedent, the definitions used in the legislation are written so loosely that they could be interpreted to include virtually any game species.

At least as damaging would be Cranston's resolution that would strip state wildlife agencies of the authority to manage federal land within state boundaries. State wildlife management on federal lands would, in effect, be turned over to the federal government.

Another attempt to ban hunting in Congress is more direct. Sponsored by Rep. Bill Green (R-NY), H.R. 2724 would ban all hunting and trapping in the nation's 86 million-acre National Wildlife Refuge System.

The language of the measure is similar to a lawsuit filed by the Humane Society of the

United States (HSUS) in 1984. In that case, the WLFA intervened on behalf of all American hunters. The case was dismissed as the court ruled that HSUS lacked standing. The anti-hunting organization has appealed the ruling.

Rep. Green, HSUS and other animal rights groups such as Friends of Animals, the Animal Protection Institute and Cleveland Amory's Fund for Animals argue that national wildlife refuges are meant to be "inviolable sanctuaries." *Wildlife Legislative Fund of America*

## COURT BATTLE WON

In a decision that conservationists are calling a major victory, a federal appeals court has upheld a lower court decision involving efforts by the Bureau of Land Management (BLM) to open 180 million acres of public land to development, including mining.

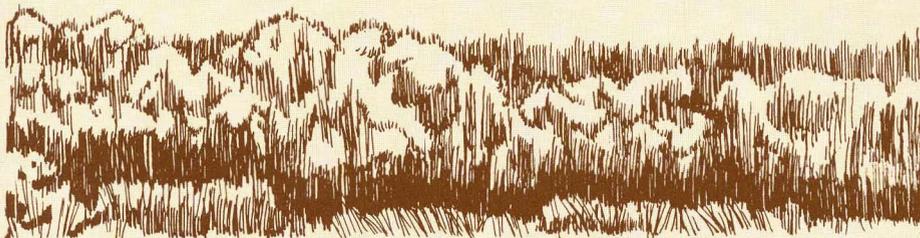
The ruling came on Dec. 11, when the U.S. Court of Appeals for the District of Columbia refused to lift a preliminary injunction issued two years ago that halted BLM's efforts to withdraw protection for public land in 17 western states. The injunction was issued in connection with a lawsuit brought by the National Wildlife Federation (NWF).

In its lawsuit, filed in 1985, NWF charged that BLM violated the Federal Land Policy and Management Act (FLPMA) and the National Environmental Policy Act (NEPA) in its "Withdrawal Review Program," a controversial legacy of the James Watt era at the Interior Department. NWF claimed that the withdrawal program was a sweeping plan to develop previously protected public land without land-use plans or public participation, as required by FLPMA.

In its suit, NWF submitted that unless the court issued an injunction to halt development on these lands, NWF and its members would suffer irreparable harm, a key consideration in decisions to issue an injunction. In granting NWF's motion for an injunction in 1985, U.S. District Court Judge John H. Pratt noted that BLM had "removed the only absolute shield against private exploitation of these federal lands."

In the ruling supporting the district court decision, the appeals court dismissed BLM's contention that the Federation lacked legal standing to bring suit in the case. NWF attorneys said the decision will reinforce previous legal rulings that environmental groups may bring suit on behalf of their members. *National Wildlife Federation*

# NATURE



## WILDLIFE HERITAGE

Conservationists and outdoor lovers across Kansas will be celebrating Kansas wildlife resources again this March during Kansas Wildlife Heritage Month. Activities sponsored by wildlife organizations will focus on the celebration's theme: Forests: More Than Just Trees.

Perhaps the thought of Kansas "forests" brings a smile to your lips. After all, Kansas is much better known to the world as a prairie grassland. Yet Kansas has its share of trees, and many wildlife communities depend on woodland habitat.

Woodland wildlife exists in hundreds of forms. Compare the possible living arrangements available to wildlife in a tallgrass prairie, where maximum growth might reach 10 feet, to a Kansas woodland where some trees such as sycamores and cottonwoods reach 80 feet. Interspersed among these giants grow oaks, hackberry and black walnut trees that reach 40-60 feet. Beneath that canopy live the red-buds, Osage orange, willows and Russian olive trees that give way to understory species of rough-leaved dogwood, elderberry, coralberry and poison ivy.

Even dead trees contribute as they provide homes to cavity-nesters such as woodpeckers, bluebirds, wood ducks and squirrels. Dead trees also harbor wood-eating insects that provide food for nuthatches, flickers and brown creepers.

Deer, turkey, bobcat, opossum and many primarily ground-dwelling species depend on the shelter, cover and food that woodland habitat supplies. Underfoot, earthworms, moles, snakes, rabbits and beetles burrow into the rich soil.

It's no surprise that most Kansas forest communities tend to concentrate along rivers, streams, natural springs and runoff pathways such as draws and canyons. Trees are big water drinkers. For some, it takes 200 pounds of water flowing from roots to leaves to photosynthesize one pound of food that fuels their

growth. Only in eastern Kansas is the rainfall sufficient to support extensive woodland tracts.

Kansas forests also provide real and often unsung benefits through streambank stabilization, watershed protection, microclimate modification and erosion control. Yet riparian habitat is still being destroyed, and shelterbelt planting is inadequate. Wind erosion continues to strip 80 million tons of soil from cultivated cropland annually, an average 2.9 tons per acre. Properly designed windbreak systems can reduce wind velocity by half, creating longer growing seasons by keeping soil in place and increasing soil moisture and temperature.

Kansas now has 3.1 million acres of forest wildlife habitat in woodlands, parks, shelterbelts, rural homesteads and urban backyards. Kansas woodlands provide wildlife with banquet and housing facilities unequalled by the finest human creation. Forest ecosystems are a network of relationships so complex the human mind can comprehend only small parts of the network at one time. Kansas forests are truly more than just trees. Take time in March, and all year long, to celebrate the value and the beauty of Kansas trees.

You can participate in Kansas Wildlife Appreciation Day on March 23. Conservation organizations, businesses and other interested groups will have displays related to forests and forest benefits at the State Capitol in Topeka. For more information contact: Elmer Finck, Biology Department, Kansas State University, Manhattan, KS 66506, (913)532-6620; or Kathy Brown George, RR 3, Box 36A, Junction City, KS 66441, (913)238-8565. *Jan Garton, Manhattan*

## WILDLIFE WEEK

March is a big month for conservationists as March 20-26 is recognized as National Wildlife Week. Like the Kansas Wildlife Heritage Month, the national event will focus on woodlands through the theme: Forests: More

Than Just Trees. In observance of this week and its theme an educational packet is available through the Soil Conservation Service (SCS) offices. For more information contact your local SCS office or the Kansas Wildlife Federation, P.O. Box 5715, Topeka, KS 66605. *Miller*

## CHEYENNE BOTTOMS

The Cheyenne Bottoms Wildlife Area, located just north of Great Bend, is a unique and amazing wonder. Thousands of Kansans have birdwatched or hunted on the marsh over the years, but many take this wetland for granted. Few people know that Cheyenne Bottoms is the most important ecosystem in the state and the most important migration point for shorebirds in North America.

Recognizing these facts, the Kansas Department of Wildlife and Parks will place strong emphasis on management of the Bottoms. In the past, the 19,857-acre marsh has endured problems, one of those being an unreliable water source. But just routine maintenance of such a large and complex area requires an immense amount of manpower, equipment and funding.

The wheels are already turning as environmental studies have been completed and management plans formulated. Wildlife and Parks will be working with the Kansas Legislature, federal government as well as national, state and local conservation organizations to gain the commitment and funding necessary to properly manage the area. Cheyenne Bottoms is a state treasure that future generations of Kansans should be able to enjoy. *Miller*

## KIWANIS & KIDS

The Wichita Downtown Kiwanis Club wants children to care about nature. The group has organized an education program called Kids CAN (care about nature) Day. The program's purpose is to create an awareness in youth that natural resources are important in their lives, and it teaches them to appreciate and care for these resources.

Last October, 1,000 fourth-graders participated in Kids CAN Days at the Energy-Ecology Center in Wichita. Each class spent a day participating in five 25-minute programs. The programs are taught by environmental specialists and assisted by Kiwanis Club members. Each program teaches kids about the importance of soil, air, water, plants and wildlife.

The classes are only the first phase of the program. Each teacher is given a packet of hands-on activities that's designed to reinforce the environmental concepts taught.

For more information on Kids CAN Day, call Ron Gores, the agricultural chairman of the Wichita Downtown Kiwanis Club. His address is 712 Biting Bldg., 107 N. Market, Wichita, KS 67202. Or call Ron at (316) 265-4451. *Miller*

## SAVING SEA OTTERS

The U.S. Fish and Wildlife Service has begun to capture California sea otters for a reintroduction program. The otters will be released in another part of their historical range on the Pacific Coast. The California sea otter is listed as a "threatened" species.

The program's goal is to capture 70 otters in the existing central California range and release them at San Nicolas Island off the Southern California coast. Biologists hope that these reintroduced otters will form a reserve breeding colony.

The California sea otter was listed as threatened under the Endangered Species Act in 1977 and is therefore classified as "depleted" under the Marine Mammal Protection Act. Historically, some 16,000 to 20,000 sea otters existed along the California coast. In the 18th and 19th centuries, commercial fur hunting brought the otter to near extinction. Only a small remnant population survived in the coast's rugged Big Sur area. Since hunting ended in the early 20th century, the otter has slowly repopulated about one-tenth of its former range. Approximately 1,650 otters were counted last spring along a 220-mile stretch of coast.

Even though the otters have done well, the small population and reduced range make them vulnerable to disasters such as oil spills. The reintroduction program will attempt to disperse populations so that a local disaster will not wipe them out. *Department of the Interior*

## SATELLITE WATCH

For the past 25 years, satellites have helped meteorologists track thousands of storms, allowed billions of people to watch sporting events simultaneously and peered far into the depths of the Universe. They are also helping man explore the mysteries of the Earth and its inhabitants. According to an article in *Inter-*

*national Wildlife* magazine, scientists are using these "eyes in the sky" to study wildlife in a way never before possible.

One of the pioneers of this exciting technology is Bruce Mate, a scientist at Oregon State University. In 1983, Mate was charged with investigating the potential impact oil and gas development off the coast of Newfoundland would have on endangered whales. During the course of the investigation, satellite tracking was born.

Using a tiny transmitter attached to a humpback whale, Mate tracked the animal for 450 miles. Over a six-day period, the tagged whale taught Mate about its feeding habits. The tagged whale swam directly from one feeding area to the next, showing an impressive display of navigation.

Since then, Mate and his colleagues have used satellites to learn more about whale habits. Mate reports that they've discovered humpbacks actually round up their quarry much the same way cowboys round up cattle. Some, for example, drive capelin (a herring-like fish) down to a thermocline that acts essentially like a box canyon. The capelin don't like the cooler water so they stop, only to be scooped up by a waiting humpback.

The satellites provide information on many different animals currently tracked as well. For instance, the 2½-pound transmitters attached to humpback whales not only report the latitude and longitude of the whale, but also how deeply it is diving, how long it remains underwater and the temperature of the surrounding water. With so much information, scientists can often describe the activity of a whale swimming thousands of miles away.

Similar devices on Porcupine caribou in the Arctic are giving researchers a clearer picture of this animal's annual migration. Scientists have learned that the migration distance is 1,800 miles, twice what was originally estimated.

Using the Tiros weather satellites of the U.S. National Oceanographic and Atmospheric Administration, scientists are also tracking sea turtles, polar bears and manatees. Future plans include tagging feral camels, kangaroos and saltwater crocodiles in Australia and elephants and gorillas in Africa. Since many African nations bar researchers, satellite tracking will allow researchers to maintain contact with the animals throughout the continent.

In addition to providing important scientific data, satellites have given researchers a few surprises, too. On one occasion, biologist Larry Koltz was shocked to find a sea turtle transmitting from Salina, Kan. It turned out that a farmer had brought it home from the Texas coast for his kids to play with. Other animals have amazed scientists with their speed and

endurance, such as the polar bear who traveled more than 300 miles in three days. *National Wildlife Federation*

## BATTY BRITONS

Nature-loving Britons received considerable publicity recently when they launched a campaign to prevent toads from being crushed by automobiles. Now, according to the *International Wildlife* magazine, they have found another much-scorped creature on which to focus their affections — bats.

For centuries, Britons have despised these flitting, crepe-winged mammals. But now, Her Majesty's subjects have gone batty over bats. Scores of Brits are hanging bat roosting boxes in their gardens. Many more have joined one of the 60 bat-conservation groups around the United Kingdom. Others are buying bat guano for the enrichment of flower beds. And armed with a tough bat-protection law, British conservationists are starting to reverse a longstanding decline in native bat populations.

British sympathies for bats were decisively hooked in 1986, when National Bat Year was declared and conservationists began telling the public how bats have suffered centuries of misunderstanding. The cause caught the attention of the press, and the first six months of the year saw 10,643 column inches printed on bats. Almost all of the publicity was pro-bat.

A favorable press profile for bats is a departure from the old days, when the creatures were universally associated with midnight and witchcraft. Shakespeare certainly saw no percentage in boosting bats. Macbeth's three witches concocted their brew from "eye of newt and toe of frog, wool of bat and tongue of dog." And until early in this century, rural Englishmen would nail live bats upside down to barn doors to ward off evil spirits.

Although nailing is no longer popular in the British countryside, bats face other threats. Modern farming methods have reduced insect populations, thereby lessening the amount of food available to bats. All of Britain's bats are insect eaters. The tiny pipistrelle, with a weight about equal to 10 paper clips, can consume 3,000 gnats per night. Development continues to destroy bat roosts, whether caves or trees, and vandals have been known to set fire to hibernating bats. A far worse problem is the chemicals sprayed by roof-timber treatment firms, which have poisoned countless bats. Under Britain's new-protection law, however, the tide may have turned. The law makes it a crime to harass bats in any way. *National Wildlife Federation*

# NOTES

## PARK DONATION

Cheney State Park rangers will communicate better this year thanks to the Southern Kansas Striper Association and the Cheney Marina. The two held a striped bass fishing tournament last September, and the profits were used to purchase two walkie-talkie radios, which were donated to the Cheney State Park. The radios will help with law enforcement at the park. *Miller*

## DUCK STAMP WINNER

Minnesotans took the top three places in the annual Federal Duck Stamp Contest last November. Daniel Smith of Eden Prairie, Minn., took top honors with a striking painting of a single lesser snow goose flying over a marsh at dawn.

Second- and third-place winners were decided after a three-way tie was finally broken, following three rounds of tough judging. Second place was awarded to James Meger of Edina, Minn., for his acrylic painting of a pair of blue-phase lesser snow geese flying over water. Third place went to Jim Hautman of St. Louis Park, Minn., for his pair of buffleheads flying over water.

The federal government offers the winner no prize money or award other than a sheet of the following year's duck stamps bearing his or her design. The stamps are autographed by the Secretary of the Interior. Commercial wildlife art dealers, however, are usually eager to market limited-edition prints under private agreements with the winner. Through this contest, the reputations of previously unknown wildlife artists have been established and those of professionals considerably enhanced.

Waterfowl hunters 16 years and older must purchase the federal duck stamp each year. The stamps are also purchased by many stamp collectors and non-hunting conservationists who support wetland acquisition through the Migratory Bird Conservation Fund. More than 94 million duck stamps have been sold since 1934, providing more than \$325 million for the purchase of 4 million acres of prime wetland habitat. *Department of the Interior*

## HOME ON THE RANGE

Gov. Mike Hayden helped the University of Kansas Museum of Natural History open a new exhibit last November. The display titled "Who's at Home on the Range?" was of particular interest to Hayden because it noted progress in wildlife management in Kansas.

The display was prepared by museum staff in cooperation with the Kansas Department of Wildlife and Parks and Kansas State Historical Society. It traces changes in variety and numbers of wildlife brought about by the changes Kansas has endured over the years. A series of displays, each titled after phrases in the Kansas state song, show how some animals vanished, how some benefited from agriculture and conservation efforts and how others, once depleted, are making a comeback.

Also featured is a 20-minute videotape that details the comeback of many wildlife species. The display can be viewed through June 19. The museum is open from 8 a.m. to 5 p.m. Monday through Saturday and from 1 p.m. to 5 p.m. on Sunday. Admission is free but donations are accepted. *Miller*

## QU AND WILDTRUST

The Marshall County Quail Unlimited (QU) chapter recently donated \$172.71 to the Kansas Department of Wildlife and Parks Wildtrust program. The group raised the money to be used for upland bird habitat improvement.

QU is an organization that promotes management and conservation practices to benefit bobwhite quail. QU and other similar organizations such as Pheasants Forever, The National Wild Turkey Federation and Ducks Unlimited, all raise money that is used in conservation. Often, a portion of this money is donated to the Department's Wildtrust Program for specific management programs. Wildtrust is set up to receive donations of land, money or other property. Persons wanting more information on Wildtrust can contact the program's coordinator, Bill Hanzlick, at the Parks Operations Office. The address is 900 SW Jackson, Suite 502, Topeka, KS 66612. *Miller*

## ART SHOW

The Greater Kansas City Committee of Ducks Unlimited will sponsor the 16th Annual National Wildlife Art Show March 18-20. The show will take place at the Kansas City Merchandise Mart, 115th St. at Metcalf Avenue in Overland Park. Seventy of the nation's finest wildlife artists will sell and exhibit their work. The show benefits Ducks Unlimited.

Joe Garcia of San Marcos, Calif., will be the featured artist. And four Russian wildlife artists will be exhibiting as the Art Show's special guests from the Union of Soviet Artists in Moscow.

For show information, call the Art Show office at (913) 339-6927. *Miller*

## MILFORD CENTER

Having a conservation education center located at the Milford Fish Hatchery is nearly a reality. In fact, construction of the building facility is slated to be complete sometime this summer.

It has taken two years of effort to raise the funds needed to build the \$350,000 building. Visitors at the Milford Conservation Education Center will learn about the state's first intensive fish hatchery but there will be much more. Terrestrial and aquatic dioramas will teach people about ecological interactions of Kansas' diverse wildlife. A theater will also allow visitors to view video and slide programs on conservation.

Funding for the center's displays is not complete. It is estimated that an additional \$200,000 is needed to construct the dioramas and displays. Persons wishing to contribute to the educational facility can make donations to the Department's Wildtrust Program. *Miller*

## GUIDES GUIDE

As interest for guiding increases in Kansas, the Department of Wildlife and Parks would like to hear about it. If you guide hunters or fishermen for pay, write us. We'd like to know where you're at, how you're doing and how long you've been in business.

Send information to: Department of Wildlife and Parks, I&E Division, Rt. 2, Box 54A, Pratt, KS 67124. *Miller*

# NATURE'S NOTEBOOK

by Joyce Harmon Depenbusch, Wildlife Education Coordinator

## Faster Than A Speeding . . .

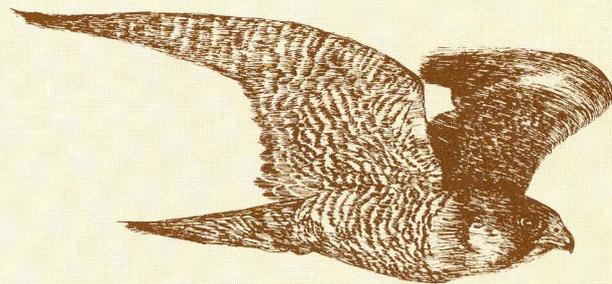
How fast an animal can move is not always easy to determine. Scientists have made speed estimates of some animals with a stop watch and a pre-determined distance.

Below is a chart of the approximate speed of several animals. Compare these speeds by placing at least 15 of the speeds on a bar graph. (\* Some of these speeds are maximum speed for short distances.)

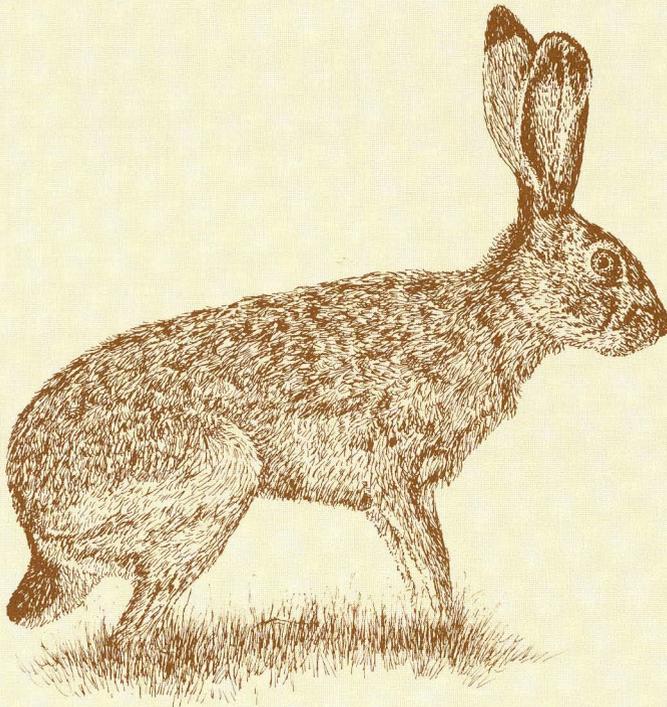
Name of Animal	Speed in Miles per hour*	Name of Animal	Speed in Miles per hour*
pronghorn antelope	70	American woodcock	13
peregrine falcon	200	killdeer	55
jack rabbit	45	pintail	70
gray fox	40	ruffed grouse	22
sidewinder snake	2	kestrel	25
golden eagle	120	pheasant	40
housefly	5	bobwhite quail	30
running human	20	mourning dove	55
nighthawk	22	Canada goose	72
belted kingfisher	36	red-tailed hawk	22
Herring gull	36	turkey vulture	21
redhead duck	45	green-winged teal	60



Golden eagles are able to fly at speeds up to 120 mph. Their prey are small mammals, especially jack rabbits. Adult golden eagles can carry an animal that weighs nearly 12 pounds, and can drag a heavier animal for short distances.



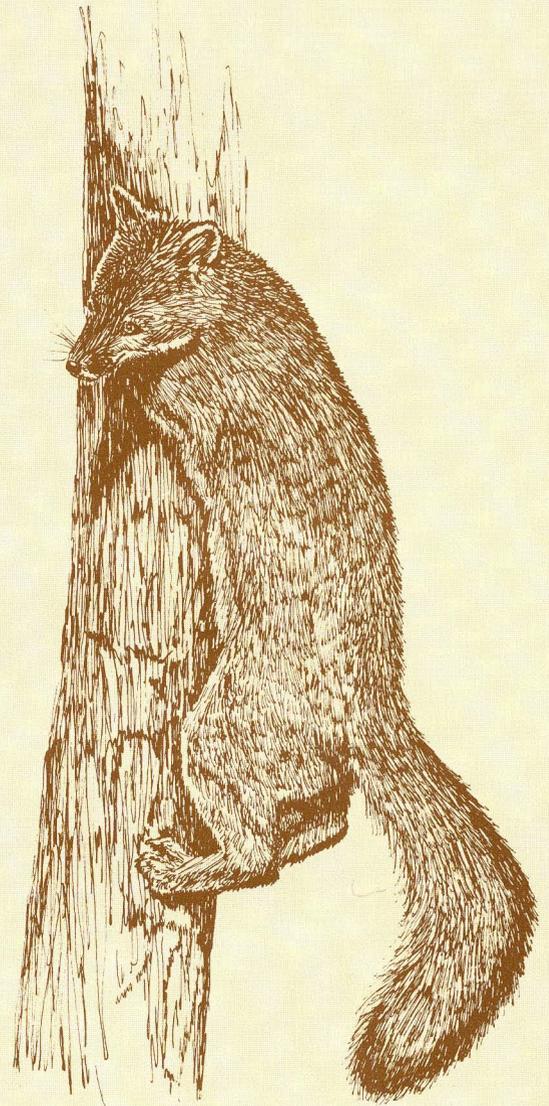
Peregrine falcons catch their prey by dropping from great heights at incredible speeds. This endangered species has an estimated flight speed of 80 mph and a maximum pursuit speed of 200 mph.



Jack rabbits can rapidly accelerate to escape predators. They leap across the open prairie at speeds up to 45 mph. Some leaps are over three meters long. Jack rabbits “spy-hop” by alternating regular running gaits with springing up about a meter in the air to get a good view of things.



Pronghorn avoid danger by being able to run quickly for short distances. They’ve been clocked at 70 mph. When frightened, the white hairs on their rump patch are raised.



Gray foxes not only are able to run at 40 mph for short stretches, but they are also able to climb trees. They can run up sloping and vertical trees by wrapping their forelimbs around the trunk and pushing with their hind feet. Their claws help them keep their grip. Climbing helps the gray fox find food, elude predators, and reach their dens.

**Meade State Park**  
(near Meade)

**M**eade State Park was carved out of the Turkey Track Ranch in 1927. Extensive tree planting has made a beautiful, pleasantly shaded park — an oasis in the treeless grasslands. The world's largest volcanic ash mine is located near Meade, which also is the home of the Dalton Gang Hideout and Museum. The total land and water area of the park is 443 acres.

*Other Activities:* Some concession facilities are provided.

**Melvern State Park**  
(near Osage City)

**M**elvern State Park, located on Melvern Lake, features ever-growing facilities and wide boat ramps. This area is ideal for camping and boating. The park, which consists of 1,785 acres, is leased from the U.S. Army Corps of Engineers. The primary function of Melvern Reservoir is flood control. The reservoir has 6,930 surface acres of water at conservation pool level and 64 miles of shoreline.

*Other Activities:* Limited concession

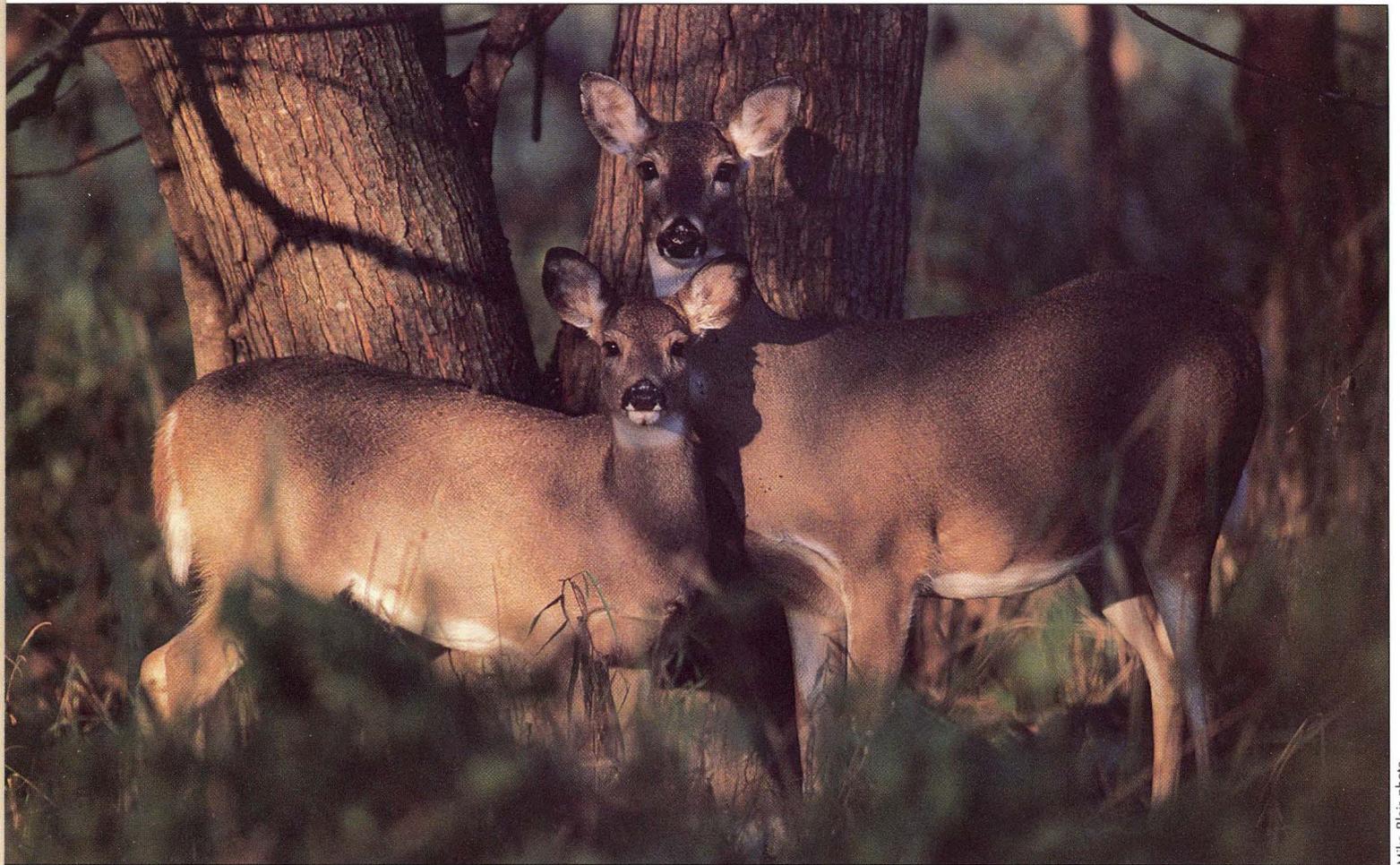
facilities are provided by a concessionaire. The concessionaire operates the state park facility as a satellite from the marina in the Corps of Engineers area.

**Milford State Park**  
(near Junction City)

**M**ilford State Park, known as the lake of blue water, is Kansas' largest man-made lake. Native red cedars border the shoreline, and large wilderness areas remain untouched for nature and hiking trails. East of the reservoir is Fort Riley, rich in frontier lore, the first

**Kansas State Park Facilities**

STATE PARK	Park Land Acres	Number of Acres	Sewer, Water, and Electrical Hookups (B)	Electrical only (B)	Bathroom & Beach	Boat Ramp Lanes	Courtesy Docks	Boating	Boat Rental	Marina	Dumping Station	Trails	Historic Landmark	Motel Nearby
Cedar Bluff	1,715	2	10	81	•	13	2	•			2	•	•	
Cheney	2,495	2		185	•	20	1	•	•	•	2	•		•
Clinton	1,455	1		205	•	16	8	•	(F)	(F)	4	•		•
Crawford	439	1		60	•	2	2	(C)	•	•	1		•	•
El Dorado	3,900	4	128	352	•	16	4	•	•	•	3			•
Elk City	857	1		60	(D)	3	1	•			2	•		•
Fall River	917	2		45	•	4	2	•			1			•
Glen Elder	1,250	1		140	(D)	4	2	•	•	•	2			•
Hillsdale	1,475	3				12		•						•
Kanopolis	1,585	2	15	113	•	5	3	•	•	•	2	•	•	•
Lovewell	1,126	2		63	•	4	1	•	•	•	1		•	•
Meade	443	1		32	•	1	1	(E)			1			•
Melvern	1,785	1		202	•	18	2	•	(F)	(F)	4			•
Milford	1,084	1	17	138	•	10	3	•	•	•	1	•		•
Mushroom Rock	5	1										•	•	•
Perry	1,597	2		104	•	10	3	•	(F)	(F)	1	•		•
Pomona	490	1	47	109	•	7	2	•	•	•	4			•
Prairie Dog	1,578	2		42	•	3	1	•			1		•	•
Sand Hills	960	1										•		•
Scott	1,120	1		61	•	1	1	(E)	•		1	•	•	•
Toronto	1,075	3	15	47	•	6	2	•			1	•		•
Tuttle Creek	1,156	4	12	128	•	11	3	•	•	•	3	•		•
Webster	880	2		70	•	4	1	•			1	•		•
Wilson	927	2		104	•	3	1	•	•	•	1	•		•



Mike Blair photo



Gene Brehm photo

The Kansas state park system is home to many species of wildlife. The chance to view a whitetail doe and her fawn or a nearby squirrel are two more reasons to spend some of your free time in one of the Kansas state parks.



A wood rat peeks out from its rocky hiding place in Mushroom Rock State Park.

Cardinals are one of a variety of bird species you can find in the Kansas state parks.



Mike Blair photos

territorial capital and still a major military reservation. Milford State Park consists of about 1,084 acres and is located on Milford Reservoir in Geary County. This reservoir has a water surface area of 16,180 acres and 135 miles of shoreline. Because of its location, Milford Reservoir has attracted a large number of visitors.

*Other Activities:* Concession facilities provided by a full-service marina. The Southwind Yacht Club provides facilities for the sailing enthusiast.

### Mushroom Rock State Park (near Ellsworth)

**M**ushroom Rock State Park is maintained as a satellite park by nearby Kanopolis State Park officials. Mushroom Rock, about 10 miles east of Ellsworth, consists of about five acres of prairie containing unique rock foundations.

Mushroom Rock State Park and the surrounding area was a major landmark during the 1800s. Some of the more notable persons known to have visited the area include Wild Bill Hickcock, John C. Fremont during his expeditions's return from Wrattan Pass in 1848, and Kit Carson, who was reported to have said that Mushroom Rock was his "... favorite little place." Mushroom Rock also was a meeting place for Indians and white traders.

Picnicking and toilet facilities are provided.

### Perry State Park (near Perry)

**P**erry State Park features camping, boating, swimming, picnicking and other outdoor activities. Perry State Park is located on Perry Reservoir in Jefferson County. The reservoir has 70 miles of shoreline and 12,200 surface acres of water. The state park acreage is 1,600. The reservoir is ideally located for easy accessibility and is considered to have one of the highest recreational potentials of any reservoir in Kansas.

*Other Activities:* Concession facilities are available in the adjoining Corps of Engineer areas.

### Pomona State Park (near Vassar)

**P**omona State Park is situated on 110 Mile Creek and Dragon Creek in the Marais des Cygnes River Valley. Nearby is a summer stock playhouse as well as golf and tennis opportunities. Pomona State

# State Park Offices

PARK	ADDRESS	OFFICE PHONE NUMBERS
<u>CEDAR BLUFF</u>	Box 47 Ellis, KS 67637-0047	913-726-3212
<u>CHENEY</u>	R. R. 1, Box 167A Cheney, KS 67025-9405	316-542-3664
<u>CLINTON</u>	R. R. 1, Box 120E Lawrence, KS 66044-9801	913-842-8562
<u>CRAWFORD</u>	Farlington, KS 66734-9999	316-362-3671
<u>EL DORADO</u>	Box 29A, R. R. 3 El Dorado, KS 67042-9803	316-321-7180
<u>ELK CITY</u>	P. O. Box 945 Independence, KS 67301-0945	316-331-6295
<u>FALL RIVER</u>	(See Toronto listing)	
<u>GLEN ELDER</u>	Box 298 Glen Elder, KS 67446-0298	913-545-3345
<u>HILLSDALE</u>	900 SW Jackson, Rm. 502 Topeka, KS 66612	913-296-2281
<u>KANOPOLIS</u>	R. R. 1, Box 26D Marquette, KS 67464-9619	913-546-2565
<u>LOVEWELL</u>	Box 293 Courtland, KS 66939-0207	913-753-4305
<u>MEADE</u>	Box 1 Meade, KS 67864-0001	316-873-2572
<u>MELVERN</u>	R. R. 2 Osage City, KS 66523-9802	913-528-4900
<u>MILFORD</u>	Rt. 3, Box 192 Junction City, KS 66441-8702	913-238-3014
<u>MUSHROOM ROCK</u>	(See Kanopolis listing)	
<u>PERRY</u>	Box 129 Perry, KS 66073-0129	913-289-3449
<u>POMONA</u>	Vassar, KS 66543-9999	913-828-4933
<u>PRAIRIE DOG</u>	Box 431 Norton, KS 67654-0431	913-877-2953
<u>SAND HILLS</u>	3002 E. 30th Hutchinson, KS 67502	316-663-7411
<u>SCOTT</u>	Route 1 Scott City, KS 67871-9721	316-872-2061
<u>TORONTO</u>	R. R. 1, Box 44 Toronto, KS 66777-9715	316-637-2213
<u>TUTTLE CREEK</u>	804 Brockman Circle Manhattan, KS 66502-4408	913-539-7941
<u>WEBSTER</u>	Box 293 Stockton, KS 67669-0293	913-425-6558
<u>WILSON</u>	R. R. 1 Sylvan Grove, KS 67481-9801	913-658-2465

Park consists of 490 acres situated on Pomona Reservoir in Osage County. The reservoir is known for its good crappie fishing. There are 4,000 acres of water surface acres at conservation pool level and 52 miles of shoreline.

*Other Activities:* Concession facilities are provided by a full-service marina.

## Prairie Dog State Park (near Norton)

**P**rairie Dog State Park is located on Keith Sebelius Reservoir known for its good wiper fishing in Norton County. An old sod house in the park is restored and furnished with articles of the homestead era. Stage Station 15 is in Norton, a replica of the original, where legend says Horace Greeley, Pat Garrett, Roy Bean and Mrs. William Bonney once stopped over together. The reservoir has a water surface area of 2,200 surface acres and a shoreline of 32 miles. The state park comprises 1,578 acres.

*Other Activities:* Limited concession facilities are provided.

## Sand Hills State Park (near Hutchinson)

**S**and Hills State Park is located in Reno County, 30 miles northeast of Hutchinson. The park consists of 640 acres transferred from the Hutchinson Reformatory and 320 acres contributed by the Dillon family in 1977. An additional 263 adjoining acres was purchased from private owners in June 1981 using Land and Water Conservation Funds (a federal grant). The park has been leased to Reno County since July 1982. The county takes care of park maintenance and operations at no cost to the state. Two popular state park activities include hiking and birdwatching.

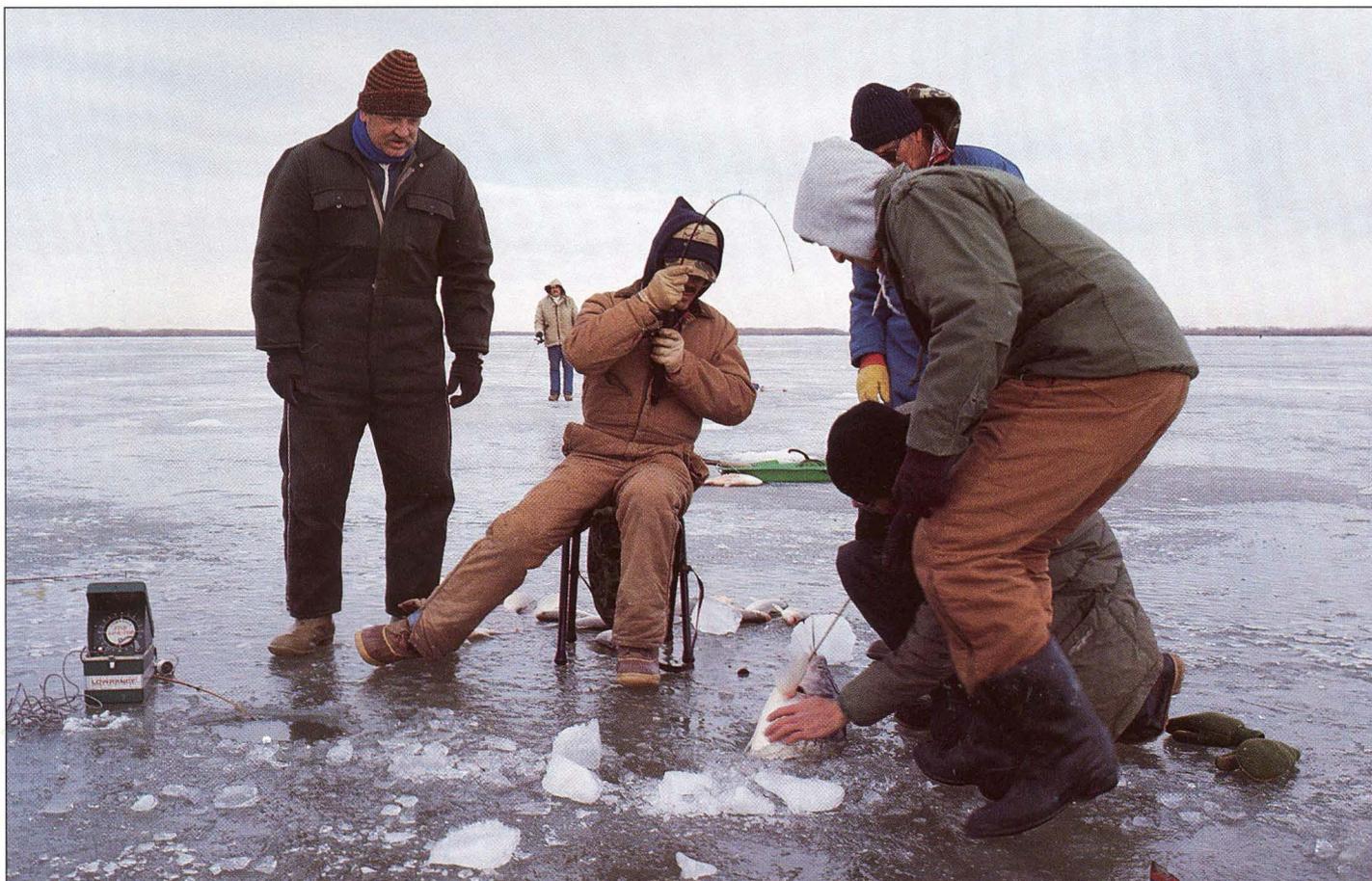
## Scott State Park (near Scott City)

**S**cott State Park features a memorial marker that notes the 17th century pueblo ruins of El Cuarteletejo. The old Steele home is also open for viewing. The park is found after an abrupt descent from the prairie through rocky cliffs on Ladder and Timber Creek Canyons. Four hundred-gallon-per-minute springs feeds the lake, which is bordered by willow, spruce, elm, pine and oak trees. The total land and water area of the park is 1,120 acres. A recently completed lake renovation (dredging) project was funded with local contributions. State funds and a federal grant have revitalized the lake, providing greater recreational and fishing possibilities for western Kansas.

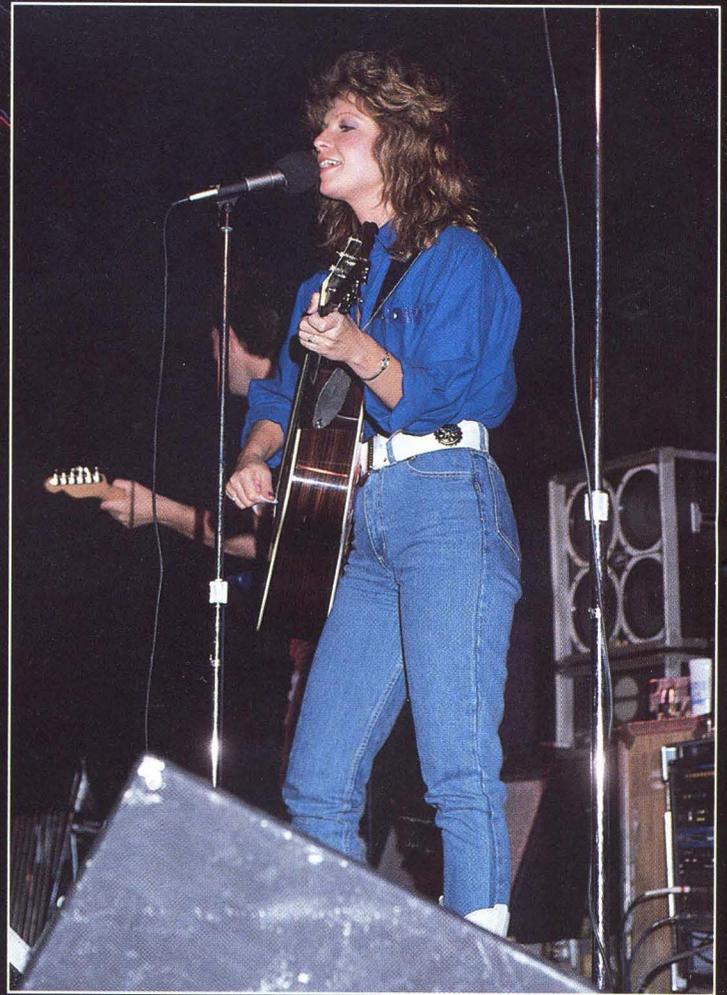


Mike Blair photo

Staying at Prairie Dog State Park? Don't forget about the fishing in adjoining Keith Sebelius Reservoir. It's in this lake that the wiper (a cross between a female striped bass and a male white bass) flourishes. The angler at left displays a keeper wiper from Sebelius Reservoir. But what to do when the water freezes? Fish through the ice. Below, a 21-pound striped bass draws a crowd on Cheney Reservoir.



Gene Brehm photo





Mike Blair photo

*Other Activities:* Concession facilities are limited. The concessionaire operates from a privately owned building on state property.

### Toronto State Park (near Toronto)

**T**oronto State Park overlooks Toronto Reservoir, which shows a rugged example of nature against stone and plant life. Limestone outcroppings weathered by rains and flood are topped with black oaks on the Verdigris Valley. Toronto State Park consists of about 1,075 acres in Woodson County. There are 2,800 acres of lake surface at conservation pool level and 51 miles of shoreline.

*Other Activities:* Concession facilities are limited (bathhouse, concessions).

### Tuttle Creek State Park (near Manhattan)

**T**uttle Creek State Park overlooks Tuttle Creek Reservoir, which measures a mile wide and 17 miles long. The reservoir encompasses 15,800 surface acres with four developed and well-shaded areas. Picnic sites on high elevations permit distant views of the Blue River Valley and Randolph Bridge, the longest in Kansas. The Kansas State University crew team houses their racing shell on the lake. The park itself consists of four separate areas leased from the U.S. Army Corps of Engineers. The four areas are River Pond Area, 438 acres;

Randolph Area, 200 acres; Spillway Area, 152 acres; and Fancy Creek Area, 364 acres.

*Other Activities:* Concession facilities are unavailable except in the River Pond Area.

### Webster State Park (near Stockton)

**W**ebster State Park is located on Webster Reservoir in Rooks County. The park comprises 880 acres. The 3,445-acre reservoir has 27 miles of shoreline. Webster Lake is located near Twin Mounds and Sugar Loaf Mound, which were used by Indian lookouts during Kansas' pioneer days. The lake is noted for fine walleye, catfish, bass and crappie fishing.

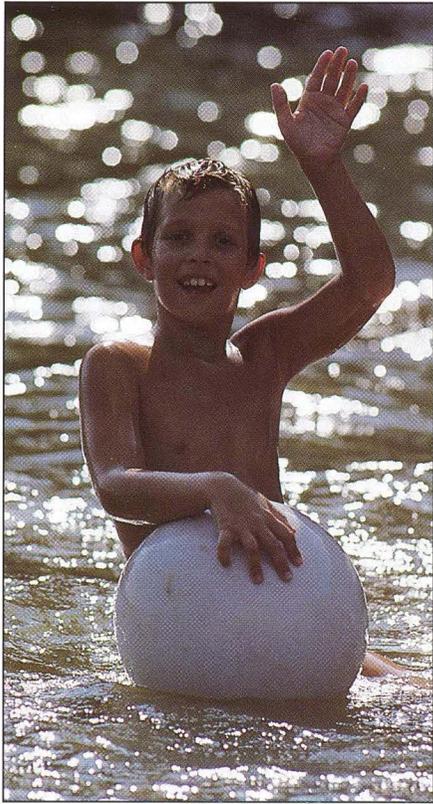
### Wilson State Park (near Sylvan Grove)

**W**ilson State Park, on the Saline River in Russell County, is home to deep canyons and steep hills devoid of trees and brush. Rugged chimney rocks and arches rim the 9,000-acre lake on Hell Creek Canyon. All boats enjoy this large blue-water lake with a large marina. In the winter, Wilson is home to thousands of migratory waterfowl. The park comprises about 927 acres. Lake Wilson has approximately 9,000 acres of water at conservation pool level and 51 miles of shoreline.

*Other Activities:* Concession facilities are provided by a full-service marina.

**On adjoining page:** Nighttime is the right time for entertainment in the state parks. Fourth-of-July fireworks or a musical concert (inset) are two of several ways to spend a summer evening at a Kansas state park. Check with the park offices for scheduled weekend events.

**Above:** While captaining a fishing boat or a ski boat is for grownups, this youngster seems perfectly content to take his own ship out to sea.



Mike Blair photo

## KANSAS STATE PARK MOTOR VEHICLE AND CAMPING FEE SCHEDULE

### Motor Vehicle Fees

One-Day Temporary Motor Vehicle Permit (valid only in the park where purchased; expires at 10 a.m. on day following purchase)	\$3
Annual Motor Vehicle Permit (for calendar year)	\$20
Second Car Permit (with Annual Motor Vehicle Permit)	\$5
Duplicate Permit (to replace lost, stolen or damaged Annual Motor Vehicle Permit)	\$1

### Camping Fees

Overnight Camping (per night, per unit)	\$2
Overnight Camping with utility charge for electricity (per night, per unit)	\$5
Overnight Camping with utility charge for electricity, water and sewer hookup (per night, per unit)	\$6
Annual Camping Fee for calendar year (in lieu of \$2 Overnight Camping Fee)	\$30
Duplicate Annual Camping Fee (to replace lost, stolen or damaged Annual Camping Permit)	\$1
Utility charge for electricity (per night, per unit) with Annual Camping Fee	\$3
Utility charge for electricity, water, and sewer hookup (per night, per unit) with Annual Camping Fee	\$4
Shelter Reservation	\$25

From the hustle of a state park beach (above) to the serenity of a hiking trail (below), the Kansas state park system is your ticket to outdoor enjoyment.



Gene Brehm photo

# Don't Be A Fish'Awg!



**Keep only what you can use**

**Kansas Department Of Wildlife & Parks**

**DIVISION OF FISHERIES**

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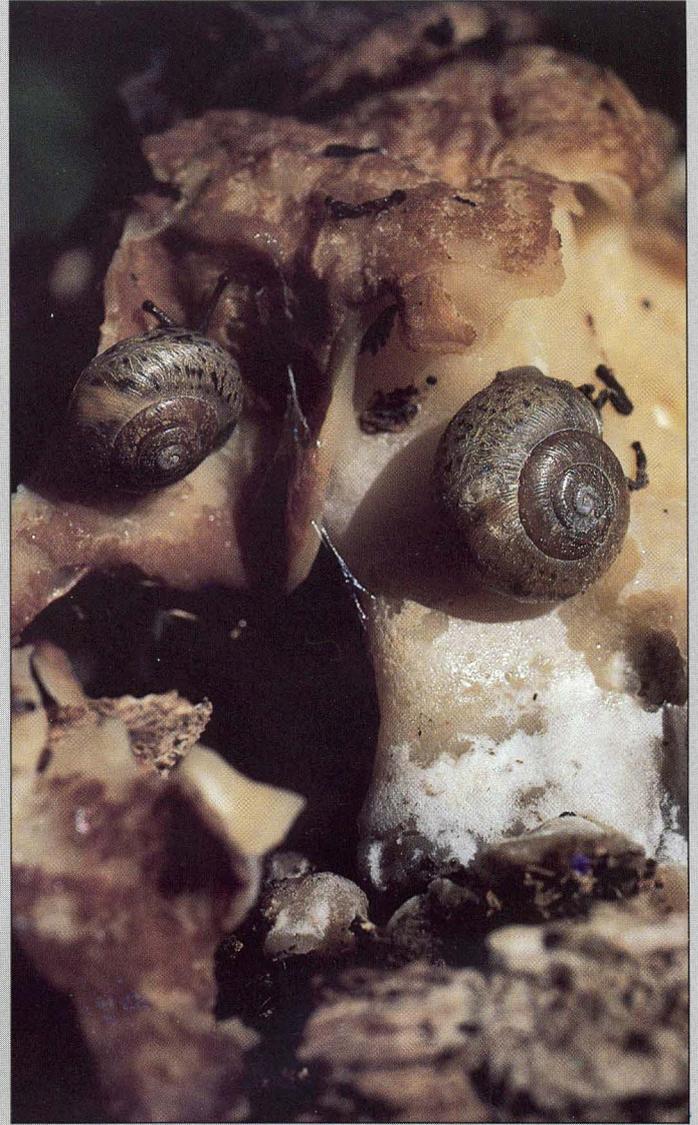
**Editor's Note:** Look for this poster wherever anglers gather. Fishing ethics start and end with you.

# outdoor Gallery

by Mike Blair

Heavy summer rainstorms sometimes encourage the overnight growth of fairy rings, once believed to spring up wherever fairies had danced the night before. Produced from mats of fungal roots called mycelium, these umbrella-like mushrooms push up at the outer edges of the constantly expanding circle. Some fairy rings are known to be almost 400 years old and stretch more than 50 feet in diameter. Several species of mushrooms may be found in a fairy ring. The photo of this fairy ring was shot with a 28mm, f/16, 1/15. The inset closeup was shot with a 28mm, f/16, 1/30.





The morel mushroom (left) is one of spring's finest treasures, sought by many for its delectable flavor. Morels flourish as redbud trees bloom, usually mid- to late April. False morels, which resemble true morels but appear both earlier or later than the real McCoy's, are poisonous. When picking mushrooms, always be certain of the species; don't take any chances. Shot with 105mm, f/8, 1/125. Morels decay quickly, attracting other decomposers that speed the process. Two snails (right) feed on a drying morel. Shot with 105mm micro, f/16, 1/15.

The oyster mushroom (left) is one of Kansas' best edible species. Growing in the fall, oyster mushrooms prefer cottonwoods and willows as a host. The overlapping fans are shaped like oysters, hence the name. Shot with 105mm, f/11, 1/125. Looking like an orange octopus (right), the telial horns of cedar apple rust appear on cedar boughs in April and May during rainy periods. This tree disease has a complex life cycle, damaging apple crops during the summer then moving to cedar trees where it overwinters as an unobtrusive knot on twigs. Shot with 55mm, f/11, 1/125.



# The Spinners

Spinners are easy-to-use baits that should be in every fisherman's tackle box. A discussion of the baits and their uses.

by **Tommie Berger**  
*District Fisheries Biologist  
Dodge City*

*This is the first article in a three-part series on fishing baits. In coming issues the author, an avid fisherman, tells how to fish with crankbaits and plastic worms.*

**W**hen we talk about artificial lures, many fishermen immediately think of bass. This is because the black basses are readily caught on lures and because many of the bass tournaments allow the use of artificial lures only. But lures will take all gamefishes, although some species are pretty particular about the type of artificial bait they'll take. Crappie, bluegill, walleye, white bass, wipers and stripers can all be caught using offerings other than live bait. Even some roughfish such as freshwater drum will readily take a crawfish- or minnow-imitation lure.

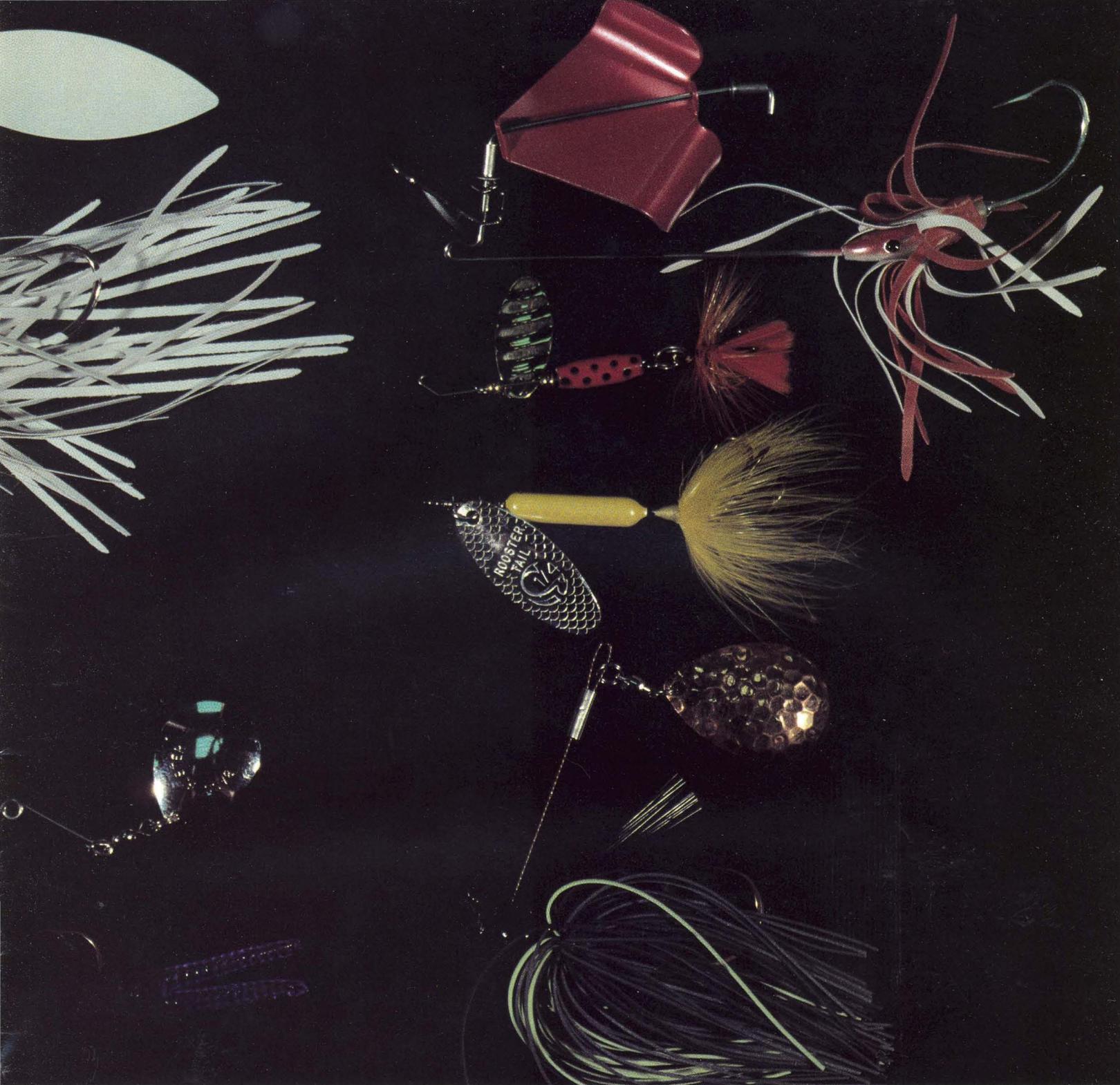
So let's take a good look at spinners. Not just spinnerbaits, but all types of spinners including Beetlespins, in-line or main-line spinners, the true spinnerbaits (or safety-pin type spinners) and buzzbaits.

Spinners are defined as just about any bait that has some form of rotating or whirling blade or blades in association with a hook. A spinner generally contains some form of weight in addition to a piece of wire that holds the whole bait together. Spinners are made to imitate minnows, baitfish or insects as they move through or on top of the water. These artificial lures appeal to a fish's senses of sight, sound and feel.



Spinners are among the most versatile and productive of all baits and will catch most freshwater gamefishes. Several styles of spinners and fishing techniques are designed for both shallow and deep water, muddy and clear water, in heavy cover and in open areas as well. They can be ripped through the water for actively feeding fish or they can be crawled slowly along bottom for inactive ones. Spinners can be cast, flipped, buzzed, pumped or fished vertically.

Spinners are popular not only because they catch fish, but



Spinners comprise a variety of baits. Some of those baits (beginning at top left and working down the page) include: willowleaf spinnerbait, Mepps spinner, Road Runner, Beetlespin, (and beginning upper right): buzzbait, Shyster, Rooster Tail and a singlespin spinnerbait.

also because they're the easiest lures to use, are relatively snag-proof and come in just about any size or shape. They'll work during all seasons and can be used in lakes, ponds, reservoirs and streams.

### Beetlespins

Beetlespins are the midget variety of the popular spinnerbait. They consist of a hook molded into a small lead head; a thin, semi-stiff wire that runs up and out from the

nose into a V and extends back over the head; and a small spinner attached to the end of the wire. The configuration is similar to that of an open safety pin.

Beetlespins are generally small, starting at about one-thirty-second ounce and running as large as one-quarter of an ounce. The hook is usually adorned with a marabou body, a soft plastic grub or twister-type body, or a small plastic or rubber skirt. These little lures are made for light tackle, usually an ultralight open-faced spinning outfit. But many

Beetlespins are retrieved with a trusty spincast outfit and 8- or 10-pound test line.

These little spinners, designed for panfish fishermen, work extremely well on bluegill and other sunfish species found in farm ponds and small lakes. They'll also take a small largemouth bass, and I've seen 4- and 5-pound bass caught on one-sixteenth-ounce Beetlespins. These baits are effective for crappie early in the spring and up through the spawning season. They'll also catch walleye on the dam faces during the walleye run and are effective for stream-spawning white bass as well.

I regularly use Beetlespins to catch small, overpopulated largemouth bass from farm ponds for restocking in state lakes. One day two summers ago, my summer aide and I caught more than 300 small bass in about three hours on one-thirty-second ounce black-and-green Beetlespins. I caught more than a hundred myself. That's almost a bass every minute.

The dark Beetlespins work best. I've had good success with yellow and chartreuse, but the hot color for bluegill and farm pond bass seems to be a black grub-type body with yellow or green stripes or polka dots. Keep the lures small for panfish, one-sixteenth-ounce or smaller. Bass, walleye and white bass may prefer one-eighth-ounce baits.

And a note to you parents, grandparents and guardians out there: Beetlespins should be the main lure in every youth's tackle box. These little artificial baits will catch more fish than any other bait short of a live worm and will keep youngsters interested in fishing. The hook on a Beetlespin rides up, so the lure doesn't snag easily. A good supply of Beetlespins is the best insurance you can buy for a young one's fishing enjoyment.

### In-line Spinners

In-line or main-line spinners are simply lures that have the hook, lead body and spinner all connected on a straight wire. Perhaps mention of Mepps, Rooster Tail or Shyster spinners will give you the right idea. Generally in-line spinners have a treble hook (the common three-pronged hook) on the end, with a lead-type brightly colored body and a spinner that rotates around the main shaft.

In-line spinners also come in a variety of sizes: small one-thirty-second ounces for panfish on up to one-quarter or three-eighths ounce sizes for bass and walleye. Some of the smaller spinners have propeller-type spinners while the larger ones usually contain teardrop-shaped spinners. The hook is often covered with hair, feathers or a plastic skirt. Some in-line spinners designed primarily for walleye are made to be fished with a minnow or nightcrawler.

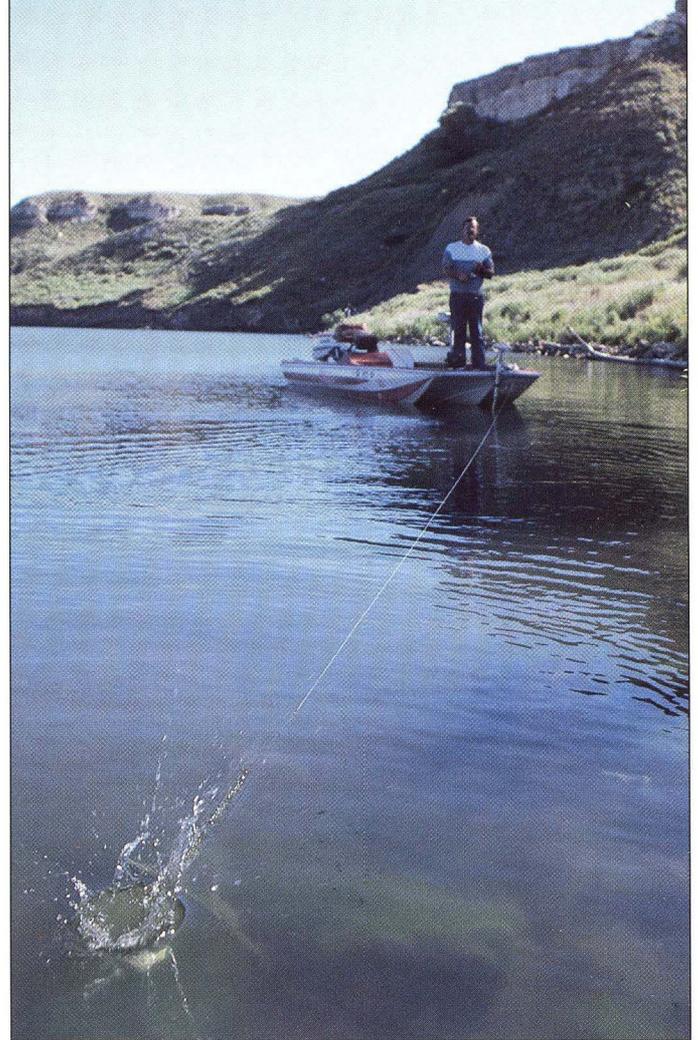
The small in-liners such as Rooster Tail and Panther Martin probably already have a place in most tackle boxes. These baits are especially effective on bluegill, crappie, smaller bass and are extremely deadly on trout. (Trout aren't really a Kansas fish, but I sure wouldn't go to Colorado or anywhere else trout fishing without a handful of Panther Martins.)

Large in-liners such as Mepps spinners seem to be a bit more effective in farm ponds than lakes or reservoirs. I've got several uncles who used these lures to consistently catch big bass and catfish from Kansas ponds.

I remember one particular evening years ago when I saw my Uncle Frank with three largemouth bass, each more than 5 pounds, and two channel catfish, each one weighing more than 8 pounds. All fish were caught on a bucktail Mepps spinner. That evening I caught my first bass ever using his lure.

### Spinnerbaits

When bass fishermen talk about spinners, they're usually talking about the big, flashy whirling blades and billowing



Spinnerbait splashdown (above) often culminates in a feisty largemouth bass at the side of the boat (adjoining page).

skirts of the spinnerbait. Earlier I described a Beetlespin as a hook molded to a lead head, a V-shaped thin wire running out and over the hook and a blade or series of blades attached to the wire's end. Enlarge a Beetlespin and you have a spinnerbait. Well-known fishermen such as Roland Martin and Jimmy Houston say that spinnerbaits are the most effective artificial lure for catching shallow, active bass.

Spinnerbaits appeal to the fish's main senses: sight, through the bait's movement and flash in the water; hearing, through the sound of turning blades; and feel, through the bait's vibration as detected through the fish's lateral line. The blades or spinners are the action part of the lure and they come in three basic styles: Colorado, Indiana and willowleaf. Colorado blades are oval in design while willowleaf blades are long, thin and pointed at both ends. Indiana blades are teardrop-shaped. All three blade styles are slightly cupped to catch water and produce spinning motion, vibration and flash. The willowleaf blade is rapidly growing in popularity.

The size of the bait generally refers to the weight of the head. For bass fishing, three-sixteenths, three-eighths, five-eighths and 1-ounce are standard sizes. The one-quarter, three-eighths and one-half ounce baits are probably the most popular and versatile. Spinner sizes vary also. A standard rule is, "clear water, small blades; dingy water, big blades." The blades should also match the baitfish size as closely as possible. Spinnerbaits with a single blade are aptly named singlespins while double blades are called tandem spins.

The spinnerbait wire is also important. The length of the bait's upper arm will determine the weedlessness of the



bait. Baits with arms extending back over the hook will be more weedless. Short-armed spinnerbaits are preferred by anglers who “helicopter” the bait (let the bait free fall) as they pull it through brush or weeds.

Most spinnerbaits have vinyl or rubber skirts that flow back over the hook. Some anglers attach trailers on their spinnerbaits by rigging a plastic worm, grub or pork rind onto the hook. In my tackle box you’ll find the two basic colors I use for spinnerbaits — chartreuse and white. The pro fishermen generally say: “Getting the lure to where the fish are is much more important than picking the right color. Usually, if you pull a spinnerbait past an active bass, he’ll hit it regardless of the color.”

Spinnerbaits are effective at catching both largemouth and smallmouth bass. But they’ll catch other fish, too. I’ve caught a few walleye and some white bass on them. Even a channel cat will take a swipe at a spinnerbait.

### Buzzbaits

Speaking of big, flashing spinnerbaits, that’s just what a buzzbait really is. Instead of the one or two round or willowleaf blades, put on a propeller-shaped, three-bladed piece of plastic or aluminum and you have a buzzbait.

This type of bait is designed to ride on top of the water with the propeller blade gurgling and splattering water everywhere. You need a fairly fast retrieve to keep them on top so spinning and baitcasting reels (because of the higher gear ratio) work better than the spincast outfits.

Buzzbaits come in a variety of sizes with one-quarter-ounce being the smallest and about five-eighths-ounce the largest. Color isn’t critical because of the speed of the bait. You’ll find only white and chartreuse in my box, however, but most colors will work.

The buzzbaits are primarily a bait for black bass. These baits can be fished in and around the brush, through the vegetation and just about anywhere you can throw it. They seem to work a little better on calmer days and early mornings before the wind comes up, but don’t be afraid to throw them when the water’s choppy. I was amazed one day last spring at Wilson Reservoir when the smallmouths continued to bust our buzzbaits off points where the waves were rolling

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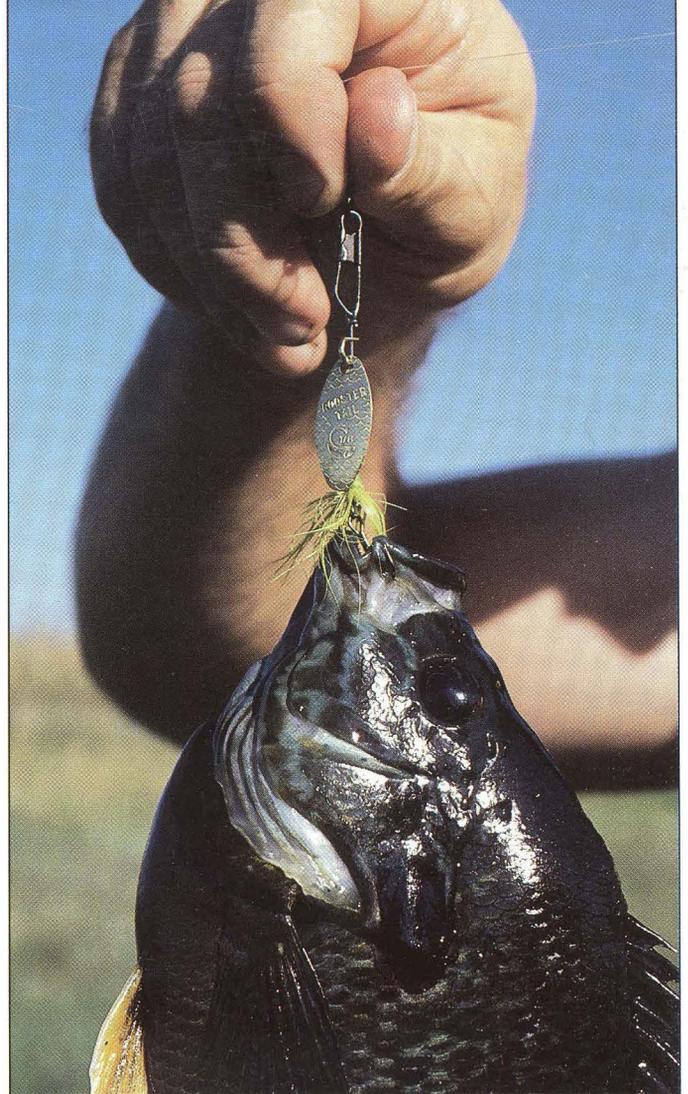
Spinnerbaits can be fished many ways. Some fishermen use them with a steady, medium-fast retrieve. Others find spinnerbaits effective with a pumping action or maybe even a slow crawl along the bottom.

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in 2 feet high. Sometimes white bass, when chasing shad, will take the smaller one-quarter-ounce buzzbaits. I’ve never heard of a walleye or a crappie taking one off the surface. So buzzbaits are primarily a bass lure.

When we talk about spinners, we talk about a variety of lures that can be used in many fishing situations. The Beetlespins and the in-line spinners fill the smaller end of the spinnerbait spectrum while the true spinnerbaits and buzzbaits make up the larger portion.

Beetlespins and small in-line spinners, then, are quite effective on panfish species and smaller bass. Every tackle box, whether it belongs to a veteran angler or a young one, should have a tray of these versatile little lures. Most are made to work correctly on a steady retrieve. Beetlespins occasionally may be more appealing if they’re pumped a bit or allowed to free fall as the bait nears the edge of vegetation or brush.



Small in-line spinners such as this Rooster Tail are valuable little baits when bluegill are what you’re after.

Graduate up to the true spinnerbait or the buzzbait, and you’re restricting yourself to catching larger and more aggressive fish. When you move up to larger fish, it probably means more casts per strike as there are fewer larger fish. That means you’ll have to be patient as you throw a spinnerbait or buzzbait and gain confidence in the bait.

The buzzbait is a steady-retrieve bait as it must be kept moving to stay on top of the water. But some fishermen retrieve it as slowly as possible while keeping it riding on the surface. Others rip the bait through the water so fast it seems impossible that a fish could catch it. The experts say you can’t pull a bait away from a bass that really wants it. I’ve found this to be true.

Spinnerbaits can be fished many ways. Some fishermen use them with a steady, medium-fast retrieve. Others find spinnerbaits effective with a pumping action or maybe even a slow crawl along the bottom. When the fish are really active, some fishermen will work spinnerbaits just under the surface so that the blade bulges or gurgles the surface. Bass are often caught by slow-crawling spinnerbaits over downed logs or by throwing past a stump and actually bumping the stump with the moving bait. Spinnerbaits can be fished in the thick brush by flipping them back into pockets that might hold fish.

Every tackle box in Kansas should have a good supply of spinners (unless you’re strictly a catfish fisherman). Spinners? I wouldn’t leave home without ’em.

W&P



by Lloyd B. Fox

## Cuckoos & Databases

**A**thletes fear torn ligaments. I fear claustrophobia — a career-ending ailment for a professional wildlifer. Stacked about me are the tools of my trade. At times I feel they have a life of their own and are closing in on me.

The journals on my bookshelves grow an inch each month. Three file cabinets surround my desk, and one of the drawers refuses to close. Is it stubborn or could it be suffering from indigestion? Maybe I've been feeding it the wrong things lately. Invariably when I organize the stuff that accumulates here, I find a stray graph, table or idea jotted down on yellow note paper. These orphans huddle together on my desk. When I clean house again, the idea may be fleshed out, and the graph and table may have found suitable mates. Then, lo and behold, another file is born.

Alongside the file cabinets are boxes of questionnaires. Some people feel compelled to answer questions I forgot to ask. The questionnaires yell out to me: "Stock game where I hunt!" or "Your seasons are all wrong!" and "You charge too much for the license!" Here's an interesting one: "This was my most enjoyable season." I stop and ponder for a moment whether cloning humans — those who regularly say nice things — will ever become fashionable. Never, I hope. Without honest opinions, how would we know which of our messages have been heard?

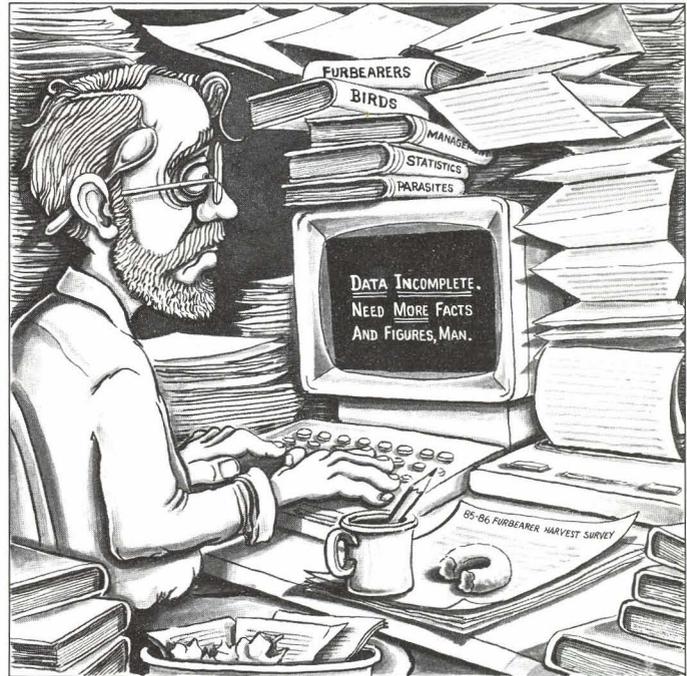
To the right of the questionnaire boxes is an area filled with computer printouts. They lurk in boxes, shelves, everywhere. One is trying to hide among my books. They have come to life and they're trying to block the doorway. I'll be entombed! Easy now, I tell myself, it's just a bad dream.

I wasn't always this way. That is why I feel obliged to warn youngsters of the hazards of becoming a wildlifer.

As a youngster I lived for outdoor experiences. No fish, fowl or furry beast was safe from my hooks, guns, traps and dogs. So it was logical that I would choose a career in natural resources. But during my school years, things went awry. In fact, I can trace the problem to a single event.

As an undergraduate I accompanied graduate students on a canoe trip through the Everglades. Until that time I classified bird life under my own system. Birds with webbed feet were brought to me by a Labrador. A pointer assisted with the other useful species. And then there were dickies, those nondescript and unknown feathered creatures. No dog was needed for these birds. But about this time I wanted to learn more about birds in general, so I picked up binoculars and a field guide and headed into that huge swamp.

The place was a blizzard of birds. I don't know why it happened, but a long-tailed bird about the size of a mourning dove caught my eye. I thumbed through the field guide, then glassed the bird again. Finally I confirmed that I was watching a mangrove cuckoo. A cuckoo? I didn't know we had cuckoos. I thought they lived in Switzerland. Then I found out that we had yellow-billed cuckoos on the family farm, and I hadn't bothered to learn about them. I traveled 1,500 miles only to have my eyes opened to what lived down the lane. I was hooked. Limits on wildlife had been expanded and restrictions lifted.



Gary Davison cartoon

We pursue wildlife for various reasons. They are exquisite on the table and magnificent on the wall, mounted or photographed. Lately I've tried to capture them on computers. I can assure you they evade that device also. A computer lets you piece information together, as in a collage. A picture emerges, but as with abstract art you see something more each time you look. A drawing is 2-dimensional, sculpture is 3-D and nature is n-dimensional. No wonder it is so fascinating.

There are no Pope-and-Young scoring procedures for data, but one measure is their usefulness to the next generation. Databases — facts and findings — are the grist from which hypotheses are formed and new experiments are designed. From this, science and management emerge. Wildlife professionals are trained to manage the resource as factors change. The best way I know to prepare for those events is to accumulate knowledge. That often means collecting piles of paperwork.

At quitting time, I say "good night" to my inanimate office companions. Nudging aside a box of printouts, I find that the door still closes. Looks like there's room for work tomorrow. Maybe I'll have help. Somewhere boys and girls of all ages are encountering their own cuckoos, nurturing their own databases. Truly, life is rewarding in the asylum we call field natural history.

W&P

*The author is the furbearer project leader for the Kansas Department of Wildlife and Parks.*

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