

# KANSAS

*Wildlife & Parks*

MARCH/APRIL 2000

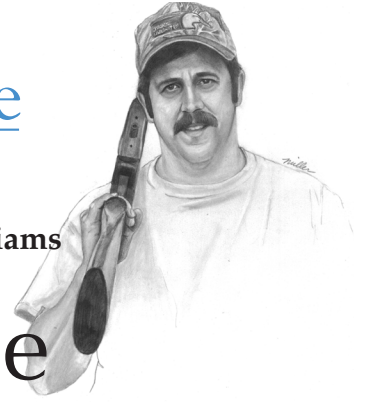
\$2.75





## The View From Here

by Steve Williams



# The Fishing Heritage

I've been preaching the gospel about passing on the hunting heritage for more than a year now. In this publication and in other arenas, the department has taken the lead in drawing attention to the drop in hunter participation in Kansas and around the nation. Not only have we pointed out the alarming trend, but we've also initiated the "Pass It On" program to bolster hunter numbers by recruiting, retaining and reintegrating. Hunting is a treasured heritage, a wholesome family activity, and an important wildlife management tool. Fewer hunters means less dollars for wildlife management, reduced social and political support, and the reality that many youth will never experience hunting in Kansas, or anywhere else.

But, hey, it's spring and time to think about fishing. Right? Absolutely. And before I step off my soap box, let's talk about fishing. Hand-in-hand with hunting, fishing is also a treasured outdoor heritage, a wholesome family activity, and it provides millions of dollars for fisheries management, which, in turn, leads to better angling opportunities for everyone. While angler numbers haven't dipped like those of hunters, we still need to remember that the future of both our hunting and fishing heritage, is our youth. Anglers, like hunters, need to make a conscious effort to get youth involved.

If you need a place to start this summer, contact your nearest Wildlife and Parks office. Fisheries biologists, area managers, park managers, conservation officers, and many civic groups conduct numerous youth fishing events each summer. In 1998, for example, department staff introduced more than 12,000 youth to fishing in more than 400 different clinics. From small fishing clinics at state park ponds, to large events with city recreation departments, the message is still the same: fishing is fun!

The department's goal is to provide all who take to Kansas waters a quality angling experience. In addition to the more than 45 million sport fish produced annually for stocking into public waters, we provide information. Each year we publish the *Fishing Forecast* (see Page 14) that rates fishing opportunities at our lakes and reservoirs by species. Anglers can use the guide to help them select a place to fish based on the kind and size of fish they desire.

More timely fishing information can be found at our website ([www.kdwp.state.ks.us](http://www.kdwp.state.ks.us)). Each week, beginning in

April, fisheries biologists will compile a fishing report for a variety of public waters across the state. Each report highlights the who, what, when, and where for most popular species. In an effort to make these weekly reports even more timely, we are finalizing a web-based computer system that will allow our biologists to update the fishing reports directly from their field offices. This will not only save the department time and money, it will supply anglers with the most up-to-date information possible. The computer system is being developed by The Information Network of Kansas (INK), the same organization that produced our extremely popular online license system.

KDWP will continue to provide fishing and hunting information through this magazine, our weekly news release, videos, brochures, public presentations, and our website. We hope you can use this information to make your time outdoors more enjoyable. Remember to take a youngster or someone new to fishing whenever you can. The future of outdoor traditions are in our hands. If you're searching for ways to help, we're only a phone call away at (316) 672-5911. You can make a difference in someone's life and help conserve a valued heritage. As the "Pass It On" theme states, "A little of your time . . . the time of their life."

*Steve Williams*

*A little of your time . . .  
the time of their life*



# KANSAS

*Wildlife & Parks*

March/April 2000

Vol. 57, No. 2

**1** The View From Here  
The Fishing Heritage

*by Steve Williams*

**2** Heartland Hoppers  
What's that "reeeep" in the night? It's a frog and toad get-together on the plains.

*by Ken Brunson*

**8** Kansas Bassin'  
Mark your spring calendars now. 2000 is the year for great largemouth fishing in Kansas.

*by Mike Miller*

**14** 2000 Fishing Forecast  
Where, how many, how big — the low-down on fishing in Kansas lakes and reservoirs.

**19** These Blues Ain't Bad  
Blue birds at Pomona State Park benefit from the tireless efforts of volunteers.

*by Jeff Bender*

**23** Animal Damage Control  
Living with wildlife requires cooperation, education, and at times, animal relocation.

*by Danny Martin*

**27** An Outdoor Life Lesson  
A day outdoors allows for reflection on how life's priorities change.

*by Marc Murrell*

**28** U.S. Coast Guard Auxiliary In Kansas  
Volunteers, or "Flotillas," help the U.S. Coast Guard promote boating safety.

*by Jackson J. Gumb*

**29** A Fish Is Worth A Thousand Smiles  
Photo essay.

*by Marc Murrell*

**32** CO Profile  
Continuing series on conservation officers.

*by Mike Ehlebracht*

**33** The Wild Currents

*by J. Mark Shoup*

**45** Backlash  
Fishing Over The Rainbow

*by Mike Miller*



7



21



27

**GOVERNOR**

Bill Graves

**COMMISSIONERS**

John Dykes, Chairman  
*Shawnee Mission*

Gordon Stockemer, Vice Chairman  
*Wichita*

Will Carpenter  
*Towanda*

John Mickey  
*Atwood*

Tom Warner  
*Manhattan*

John Fields  
*Pittsburg*

Adrian Price  
*Deerfield*

**ADMINISTRATION**

**Secretary**

Steven A. Williams

**Ass't. Secretary/Admin.**

Richard Koerth

**Ass't. Secretary/Operations**

Keith Sexon (acting)

**Director of Administrative Svcs.**

Mike Theurer

**Director of Fisheries & Wildlife**

Joe Kramer

**Director of Parks**

Jerold (Jerry) Hover

**Director of Law Enforcement**

Kevin Jones

**MAGAZINE STAFF**

**Chief of Information and**

**Education**

Bob Mathews

**Editor**

Mike Miller

**Associate Editor**

J. Mark Shoup

**Photographer/Associate Editor**

Mike Blair

**Illustrator**

Dustin Teasley

**Staff Writer**

Marc Murrell

**Editorial Assistant**

Bev Aldrich

**Circulation**

Barbara Theurer

KANSAS WILDLIFE & PARKS (ISSN 0898-6975) is published by the Kansas Department of Wildlife and Parks, 900 Jackson St., Suite 502, Topeka, KS 66612. Address editorial correspondence and subscription requests to Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, KS 67124 (316) 672-5911. Subscription rate: one year \$10; two years \$18; and three years \$27. Articles in the magazine may be reprinted with permission. Periodical postage paid at Pratt, KS and additional mailing offices. POSTMASTER: Send address changes to Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt KS 67124.

Kansas Department of Wildlife Parks Website

<http://www.kdwp.state.ks.us>

magazine e-mail — [mikegm@wp.state.ks.us](mailto:mikegm@wp.state.ks.us)

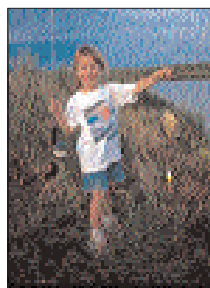
**Editorial Creed:** To promote the conservation and wise use of our natural resources, to instill an understanding of our responsibilities to the land.

Equal opportunity to participate in and benefit from programs described herein is available to all individuals without regard to race, color, national origin, sex, religion, age or handicap. Complaints of discrimination should be sent to Office of the Secretary, Kansas Department of Wildlife and Parks, 900 Jackson St., Suite 502, Topeka, KS 66612.



**About the Covers**

**Front Cover:** A Strecker's chorus frog, listed as threatened in Kansas, interrupts its singing as photographer Mike Blair moves close. Blair used a 105mm lens, f/16, 1/125. **Back Cover:** Marc Murrell used a 35mm lens, f/8, 1/125 to capture Kylie Snelling, of Newton, and the thrill catching a fish can bring a youngster.





# Heartland Hoppers

by Ken Brunson,  
*wildlife diversity coordinator, Pratt*

photos by Mike Blair

*On a spring or summer night, especially after a rain, the countryside gets noisy. In flooded fields, road ditches, and mud puddles, frogs and toads gather to call to prospective mates in the never-ending effort to perpetuate their species.*

It's late spring and the prairie hills are wet from an evening thunderstorm. Night clears to a sparkling, starry umbrella. A soft breeze stirs an incessant, genetically-driven urge — to mate. Daytime flirtations of soft and feathery birds turn to the nighttime calls of wet, slimy, and sex-crazed males. The landscape is now a sensuous world of toads and frogs. Settings include small creeks, temporary pools, and even roadside ditches. Anything that holds water for a few days and is devoid of fish jaws is suitable for mating rituals called "choruses."

And noisy rituals they are! Listen to the spring countryside after a late evening thunderstorm. Shut your eyes and cup your hands behind your ears to focus on the natural sounds. Most of the drone will be an assertive chorusing of male toads and frogs trying to entice coyish females. Kansas is blessed with 22 species of these anurans. The males distinguish their species vocally, based on pace, pitch, frequency, and season of their calls.

The choir changes according to season and location. In early spring, you'll be greeted statewide with chorus frogs by day and night. As altos of the amphibian singers, they make a ratchet sound similar to running one's finger along the teeth of a plastic comb, quickening the pace near the end of the stroke. Chorus frogs are the earliest to initiate the annual romances. Throngs of their short, ascending calls become a raucous cacophony so persistent that individual calls cannot be separated. Hundreds of frogs may be gathered into a very small area.

If lucky enough to be in southeast Kansas early in the year, you might hear the anuran soprano, the spring peeper. Imagine an elf whistling for his dog in short, high-pitched *freeeps*. A collection of such calls represents the noisy tweeting of a group of peepers, one of nature's most beautiful sounds.

A bit later in spring, tree frogs become active at the eastern edge of the state. Two species of this type,



Western chorus frogs are first in the state to begin spring breeding activities. They may chorus from ice-rimmed pools in March. These tiny amphibians are well-camouflaged and difficult to spot in flooded vegetation.



Tiny spring peepers are found in only a few counties of southeastern Kansas. A characteristic "X" marking helps identify this threatened species. The sharp whistles of chorusing peepers are a wondrous nighttime sound.

Cope's and Eastern, look nearly identical and are the only Kansas anurans which can change color to match their surroundings. Their distinctive *breeeps* may bring to mind a somewhat larger elfin dog whistler.

One of the earliest toad species to chime in now is the American toad, *Bufo americanus*. With its continuous, whirring trill, it supplies some of the tenor of the anuran symphony. This species lives in the eastern third of the state, while its relatives, the Great Plains and Woodhouse's toads, control the harems of most of the rest of Kansas. These are the classic "toad-

frogs" that nearly every child has seen hopping along the road or in the yard. Most kids cannot resist picking up these interesting and funny-looking animals while being peed on as the toad attempts escape. After the initial hand-wetting, these temporary pets prompt hours, and sometimes even careers, of nature study.

Other toads which become active in spring include the green toad in extreme western Kansas, the red-spotted toad in the Red Hills of southcentral Kansas, and the plains spadefoot. As weather warms, more frogs and toads chime in to nature's



No other Kansas amphibian has the vocal power of the great plains toad. Its trill can be deafening at close range and is audible for more than a mile. Males sing from rain pools throughout the central and western portions of the state.

night sonata with their own particular harmonies.

May and June brings the deafening trill of the Great Plains toad. This call carries for great distances and may be confused with the sounds of a cricket or katydid. It is deceptive. On a quiet night, it may be heard for more than a mile. You walk toward it and soon find yourself in the next county, possibly giving up to pursue some closer amphibian. But when you do find a Great Plains toad and watch its large throat sack descending as it sings, you'll never forget its ear-splitting volume. If these guys don't find a mate, it's not because they can't be heard!

Somewhat hidden beneath these painful decibels lie the strange chucklings of the leopard frogs. Herpetologist Joseph Collins, on his tape of *The Calls of Kansas Frogs & Toads*, describes this sound as someone rubbing fingers across a balloon. A leopard

frog's call can be imitated by forcing air down your throat with your mouth and nasal passages closed, making a low, squeaking sound. Don't do this in a crowded room.



Leopard frogs are active in early spring, joining with a variety of toads and frogs in chorus. Unlike toads, these frogs have a pointed nose and smooth, moist skin.

Summer welcomes nighttime sounds that remind us of pleasurable outings in Kansas. Campouts are often graced by the rapturous calls of cricket frogs and bullfrogs. Miniature cricket frogs sound like the clicking together of marbles, while the deeper *harrumphs* are the classic bass bellows of the king of the Kansas marsh.

Thunderstorms beckon the bleating of narrowmouth toads, which interestingly look more like classic frogs with smooth skin and pointed noses. Two species occur in Kansas, and both sound like little sheep who have lost their mommas. The Woodhouse's toad, largest in our state at nearly 5 inches long, sounds like a somewhat larger sheep when it trills anxiously for its mate.

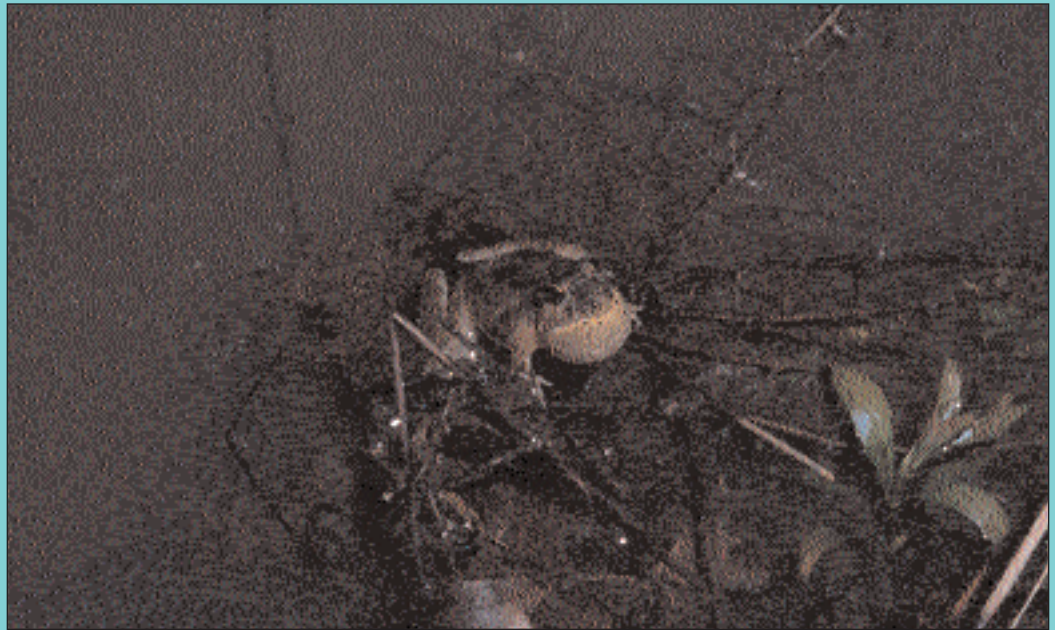
Late spring and summer is the time of the plains spadefoot — a creature of fascinating adaptation. Millions of years of trial and error have pressured this animal to take advantage of the slightest rainfall to quickly gather, mate, and produce eggs and tadpoles. This is necessary on the plains — the dynamic weather demands it. Strangely, when prairie storms sweep the land, spadefoots seem to appear from nowhere as they travel from nearby water holes or extract themselves from earthly retreats. The call of this pop-eyed toad comes closest to sounding like the classic croak — a series of drawn-out *rauwuwks*.

For most Kansas frogs and toads, an extended drought may mean no sex for that year — an unkind but certainly realistic axiom of natural selection. Many years of drought could lead to reductions of ranges and changes in species diversity. A typical year, however, blesses amphibians with adequate opportunities to reproduce. Therefore, as seasons progress, species harken in turn to their genetic urges and call for romance on the plains. All 22 Kansas anurans vocalize under proper condi-

tions through much of the year. Winter is a time for rest and recuperation from the rigors of their mating cycles.

Winter is also a time for us to contemplate the future of these fascinating creatures. Recently, national attention has turned to frog die-offs, abnormalities, and population declines. Several causes have been suggested, including agricultural chemicals and ultraviolet radiation. Most recently, a trematode parasite has been shown as a cause of frog deformities like extra legs. A fungus, chytridiomycosis, is being implicated in major frog die-offs in parts of the country. Evaluations are being conducted to determine if amphibian abnormalities are now occurring at higher than normal rates.

Locally, Eric Rundquist is conducting an investigation on Kansas amphibians. As herpetology specialist for the University of Kansas, he is also one of the Midwest's



The Northern cricket frog, seldom noticed due to its small size, produces a familiar sound. Arising from ponds, creeks, and sloughs, the sound is like that of marbles clicked together.

leading herpetologists. Over the past couple of years, Rundquist has supplied several reports of frog and toad abnormalities to NARCAM, the North American Reporting Center for Amphibian Malformations. This program is operated by the National Biological

Service. There hasn't been much reported in Kansas, but anytime a frog with five legs shows up, it gets attention — and for good reason. Such occurrences can signal possible contamination of drinking water or other pollution. But it may also simply result from a natural parasite attacking the tadpole stage.

Scientists and public alike are interested in finding answers about deformed amphibians. Since toads and frogs are sensitive to environmental contaminants and changes, they supply us with a natural red flag to warn of potential problems related to human health. Studying and containing problems that affect them can possibly help to prevent human diseases and even deaths due to contaminants.

A major role of toads and frogs is the natural control of insects. Their voracious appetites demand nearly constant feeding throughout the night when they are not preoccupied with breeding. Some of the best natural theater available is found near a yard light where a few toads are active. Entertainment continues for hours as sticky tongues retract buzzing June bugs toward their fates. Toads appear clownish, as they squeeze shut their eyes and use their front legs to help force



The plains spadefoot toad is recognized by its unique, pop-eyed appearance. Unlike other frogs and toads, the spadefoot has elliptical eye pupils.



The handsome Northern crawfish frog has a deep voice that carries great distances in early spring. It is found in southeastern Kansas, where it is listed as threatened.

extra-large bugs down their gullets.

Skittish about picking up toads? Don't be. Hold them just behind the front legs while they expend urine squirted in self-defense. This is the only defense they have. Toads don't cause warts, but skin secretions on some toads and frogs can be a bit irritating, especially to eyes.

Therefore, it is always a good idea to wash hands after admiring them — especially if they have expended urine. Toads and frogs should be kept in captivity only temporarily, as they require quantities of live insects for food and this is generally a tough thing to keep up with. They also require wet environments which can lead to eventual buildups of salmonella bacteria threatening to human handlers. However, it's easy to observe toads in their natural settings without risk. To attract them to your yard, supply soft soil in

which to burrow (such as cultivated flowerbeds) and an ample supply of night light to attract bugs. Frogs are attracted to small pools and ponds. Considerable information on attracting amphibians is available from lawn and garden stores, and on the Internet.

Some Kansas toads and frogs are quite rare — enough to be listed on the state Threatened and Endangered Species List. Threatened species in Kansas include the green toad of extreme western Kansas, Strecker's chorus frog in central Kansas, and the spring peeper, green frog, and Eastern narrowmouth toad of southeast Kansas. Additionally, the Northern crawfish frog and red-spotted toad are identified as Species in Need of Conservation. The pickerel frog has not been documented in Kansas for the better part of the last century, but recent efforts have been made to re-establish this handsome frog in the extreme southeast part of the state.

With more than a third of Kansas hoppers in some degree of peril, there is reason for concern. Research efforts and priority programs for amphibian conservation are on the rise. The Kansas Herpetological Society studies amphibians and reptiles, and has for the past 10 years sponsored an ongoing spring herp count. As much a social event for naturalists as a scientific count, this annual 24-hour tally has fostered much interest and provided new



The Eastern gray treefrog (left) uses suction cups on each toe to help it climb. It can change colors to match its surroundings in a matter of minutes. The American toad has a pleasant, melodic trill recognized widely throughout eastern Kansas.



information about our cold-blooded friends. 2000 marks the third year in which the Chickadee Checkoff will sponsor the Kansas Amphibian Monitoring Program, supplying nighttime census data on calling toads and frogs. Joseph Collins, Center for the Study of North American Amphibian and Reptiles at Lawrence, leads this effort. Currently, nearly 100 volunteers monitor 85 routes in Kansas to help establish baseline information on the relative abundance and ranges of these animals. A growing body of data helps determine whether Kansas amphibians are truly in trouble, and if so, what measures will most benefit their recovery.

You can assist in helping find answers. If you observe a malformed frog or toad, collect and keep it alive and contact a KDWP office. If you discover a large frog or toad die-off, wear rubber gloves to collect freshly dead or still-living specimens, and contact a KDWP office as soon as possible. Further instructions can then be provided regarding transfer to authorities.

As I think of Kansas hoppers, my thoughts turn fondly to a nighttime Red Hills prairie a few years back. I

was in search of red-spotted toads, just south of Sun City, in Barber County. This attractive species is picky about its home. It chooses some of the best country the Midwest has to offer — the intriguing canyons of the Gypsum Hills. On that night, I was privileged to accompany Keith Coleman as he sought the final species of Kansas anuran to be recorded for his monumental audio work, *The Calls of Kansas Frogs and Toads*. It was a quiet spring night as we struck pay dirt (pay water, as this episode unfolded). Upon the summons of distant ringing trills, we carried Coleman's microphones and electronic recording gear to the bottom of a small canyon to document amphibian sexual yearnings on tape. For a long time, I watched a calling male perched just above the water line of the miniature stream, whose butt was wedged into the indentation of a comfortable toad chair of red mud. Oblivious to the bright flashlight exposing his ringing clamor, he persisted his quivering reeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeep.

Enjoying my voyeuristic opportunity, I was struck by two deep

thoughts. One was how grateful I am to live in Kansas where such natural treasures can be enjoyed with relatively easy effort. The second was how grateful we all can be that many care about and help promote the creatures of God's great Earth. ♡

## Learn more about the frogs and toads of Kansas:

(audio cassette) *The Calls of Kansas Frogs & Toads* by Keith Coleman, narrated by Joseph T. Collins, available from Kansas Heritage Photography at 1-785-836-2119, wakarusa@chnetworks.com

(Book) *Amphibians and Reptiles in Kansas*, J. T. Collins, third edition, University Press of Kansas, Lawrence, KS 66049





Gene Brehm photo

# Kansas Bassin'

by Mike Miller  
editor, Pratt

photos by Mike Blair

*Get out the jig-n-pigs, Zara Spooks, spinnerbaits, Carolina rigs, plastic lizards, crankbaits, flippin' tubes, or whatever your favorite bass lures are. 2000 will be a banner year for reservoir largemouth bass fishing in Kansas.*

If I told you about catching quality largemouth bass, say, 2 pounds up to 7 or 8, casting to acres of flooded timber, clear water and flooded vegetation, Toledo Bend, Sam Rayburn, or Bull Shoals would come to mind. Right? Then I'd say it was in Kansas, and you'd wonder where my secret watershed pond was. Right? Well, sit down because I'm going to let you in on a not-so-secret secret. The start of this new century might be the best time in 30 years for Kansas reservoir bass fishing.

I'm not going to pull your leg and tell you that you'll catch big bass on every cast, or that these waters are remote and uncrowded. I'm talking about good old Kansas reservoirs — lakes that have been around for awhile. However, a handful of northwest Kansas reservoirs are behaving much like newly-flooded reservoirs, and several old faithfuls are ripe with bassin' opportunities.

Largemouth bass fishing opportunities are as good as they've been in a long time at reservoirs such as Cedar Bluff, Sebelius, Webster and Kirwin in the northwest, and Wilson, and La Cygne farther east. The western lakes experienced chronic water level problems through the 1980s and as a result, habitat for largemouth bass deteriorated and the fisheries declined.

Other Kansas reservoirs, those with dependable water supplies, have also experienced declines in largemouth bass numbers. It's a fact, as reservoirs age, quality bass habitat usually disappears, and the bass disappear with it. Until recent years, most of the largemouth bass caught in Kansas came from privately-owned farm ponds. And with thousands of private farm ponds across the state that have limited access, most bass may still come from those waters. But the balance may shift to public waters in the coming years.

A prime example is Cedar Bluff Reservoir, 45 miles southwest of Hays in Trego County. The lake was built by the Bureau of Reclamation primarily to supply water for agricultural irrigation and flood control. Its primary water supply is the Smoky Hill River. Originally covering about 6,000 surface acres, the water level fluctuated yearly with the demand for irrigation and varying stream flows. When the Smoky Hill flowed dependably, the lake also provided millions of hours of fishing and water recreation annually. However, in the 1970s, the Smoky's flow began to decline. Drought conditions and modern conservation practices such as terracing reduced the amount of runoff the river basin received. By 1992,

Cedar Bluff covered only 990 acres. The former lakebed grew up with timber and attracted deer hunters rather than anglers. State parks and boat ramps were hundreds of yards from the water's edge. Lake use dropped dramatically.

Then in the early 1990s, stream flows in northwest Kansas increased dramatically. In fact, in 1993, near-record precipitation and phenomenal stream flows not seen since the 1950s, began to revitalize northwest Kansas reservoirs. Inflow into these four reservoirs during 1993 was nearly as much as that received during the entire 1980s. Above-average inflows continued through 1994 and 1995, and lakes experienced all-time high water levels. Cedar Bluff reached conservation pool in 1998, which resulted in nearly 6,000 acres of flooded timber, tamarisk, rock outcrops, and gravel beaches.

What all this means in a nutshell is ideal conditions for fish such as largemouth bass. And the fish responded. Huge year classes of largemouths were produced in 1993 and 1994. At the same time, gizzard shad flourished, and that, combined with an abundance of other forage such as worms, insects, and amphibians that washed in, provided a bass buffet.

With the water has come lake



Flooded timber and growing bass populations have highlighted western Kansas lakes in the 1990s.

users. Anglers and recreational boaters have taken advantage of the “new” lakes. Fishing pressure for bass has been high, and bass clubs are known to travel hundreds of miles to hold tournaments on any of these lakes. Fisheries biologists Lynn Davignon (Cedar Bluff) and Steve Price (Kirwin, Webster and Sebelius) are determined to maintain these fisheries as long as the water holds out. However, both know that water shortages could again plague these lakes and want anglers to enjoy the current opportunities. Here’s a breakdown of the largemouth bass populations at these four reservoirs.

#### Cedar Bluff Reservoir

The large bass year classes produced in 1993 and 1994 grew quickly with the abundant food and ideal habitat. These fish are 6 and 7 years old and are providing outstanding trophy fish opportunities. Creel census data show that the number of largemouths caught at Cedar increased by 141 percent from 1996 to 1997. And 590 percent more bass were caught in 1998 compared to 1997. In 1995, Cedar hosted the first two bass tournaments ever held there. In 1999, more than 40 tournaments were held on the lake.

The rebirth of the fishery has also provided biologists with unique management and research opportunities. In addition to annual creel surveys and sampling efforts, several studies may improve fisheries management.

At Cedar Bluff, Davignon started a three-year bass tagging project in 1998. The study will help us learn more about bass age, growth, individual migration, and mortality rates. The study will be completed this year, but preliminary results show that bass relate to certain areas of the lake in response to forage availability, reproduction success, and spawning habitat, and that migration distances may correspond with size.

Initial age and growth data is interesting, showing direct relationships to reservoir changes and habitat availability. Mortality figures are incomplete at this time, but another project has begun to research a specific activity that pertains to mortality.

The rise in bass fishing pressure, primarily through competitive tournaments, prompted monitoring of tournament impacts on Cedar Bluff bass. Three live weigh-in tournaments (spring, summer and fall) were studied in 1999. Bass were collected at tournament weigh-ins and held in cages for seven days after the event. They were compared to control fish, collected the day before each tournament, handled and held similarly. Incidences of mortality (instant and delayed), fungus growth, hooking effects, and general condition were examined on a daily basis. Anglers whose fish were used for the study completed a questionnaire regarding livewell maintenance, use of ice and fish health chemicals, and aeration/recirculation techniques while fishing. A significantly higher total mortality occurred during the spring event (29.5 percent) when compared to the summer (8.9 percent) and the fall (7.3 percent) tournaments. Several fac-

tors combined to create the differences, including varied weather conditions, available manpower to run the specific events, angler care of the bass held throughout the day, and equipment used to conduct the weigh-in procedures. Results of this study will be utilized to develop recommendations that limit bass mortality during future tournaments.

Davignon’s other major concern is preventing a typical decline in bass numbers as the new habitat deteriorates. In 1999, a committee of biologists from across Kansas began to study reservoir vegetation management. Cedar Bluff will be included in a project that will explore enhancing aquatic vegetation. This spring, an emergent plant called water willow will be collected from lakes in eastern Kansas and transplanted in Cedar Bluff. This program holds exciting possibilities for Kansas bass fishing (see sidebar).

In 1999 sampling efforts, Davignon collected 80 largemouth bass per hour of electrofishing. That figured to a Density Rating of 66.9 (fish over 11 inches) in the 2000 *Fishing Forecast* (See Page 14.), ranking Cedar Bluff third among reservoirs. The largest fish sampled weighed 6.2 pounds. The relatively low Lunker Rating of 1.1 illustrates that the population is still growing, size-wise. But the potential for



Mike Miller photo

The big year class of bass produced in 1993 grew fast and are providing outstanding angling.

trophy bass is already evident. Last May, Garden City angler Terry Lawhon caught the unofficial current lake record. His bass weighed 8 pounds, 9 ounces. Scales taken from that fish revealed it was 10 years old. Lawhon took care to transport his fish to certified scales, then released the fish back into the reservoir in excellent shape. Davignon received reports of seven other bass over 8 pounds last year, and more than three dozen weighing more than 7 pounds were reported.

The best time to catch trophy-sized bass at Cedar Bluff is early spring. Several warm days in March can trigger good fishing, but the best fishing will likely be in April and May during the pre-spawn period. Anglers cast spinnerbaits and jig-n-pig combinations in shallow water along the secondary points in major coves. Beaver lodges in upper-end coves are also favorite bass hang-outs. Fishing may get tougher later in the summer as bass move deeper, fishing pressure increases, and bass tournaments get more frequent.

#### Webster Reservoir

Price's sampling efforts for Webster show a very good bass population that may be starting to decline. The size range is wide, with 13-inch to 18-inch fish most abundant. The Density Rating for largemouths at Webster is 32.8, ranking it fifth among reservoirs. The largest fish sampled weighed 4.3 pounds, and no fish longer than 20 inches were sampled.

Since the floods, water level has been fairly stable, and as a result, shoreline vegetation is beginning to decline. For additional habitat, Price built 9 log cribs in coves in 1997, which are still in place and holding fish in the spring and fall. Webster will be included in the vegetation project, and water willow will be planted along shorelines to boost natural bass habitat.

A fair population of smallmouth bass is present at Webster. Fish from the original stock weigh more than 2

Mike Miller photo



Smallmouth bass have been stocked at Webster, and fish from the original stock weigh more than 2 pounds. Additional stockings were made in 1998 and 1999.

pounds, and additional fish were stocked in 1998 and 1999. Price wants to build this population with supplemental stockings. Smallmouths are less affected by water level declines, and a healthy smallmouth population may provide alternative angling opportunities if largemouth numbers decline.

#### Kirwin Reservoir

Numbers of largemouths at Kirwin are excellent, and fish sizes are scattered over a wide range. There are good numbers of big fish. The habitat situation is better at

Kirwin than at Webster, with plentiful smartweed and pondweed, and recruitment has been better. However, subsequent year classes haven't been nearly as good as the 1993 year class when so much terrestrial vegetation was flooded. There was a large year class produced in 1998, but only fair survival rate the first year. Another large year class was produced in 1999, and good growth was documented, which will hopefully result in good survival this year. Kirwin's Density Rating in the 2000 *Fishing Forecast* is 35.3, ranking it fourth. More than 13 percent of the fish sampled were 15 inches long or longer, and the largest fish sampled weighed 4 pounds.

Best times to catch big fish at Kirwin are early spring and fall. Price also added 12 log cribs and cedar trees in the coves, and this structure holds fish in the spring and fall.

#### Sebelius Reservoir (Norton)

Price rates the bass population outstanding at Sebelius, and again found a wide size range of fish. Most bass are 11-17 inches, but there are good numbers of larger fish. Sebelius filled slower than Webster and Kirwin, and it didn't reach full pool until



A flipping angler's dream, the flooded brush in the north-west Kansas lakes provides endless targets.



Many of the largemouths in the western reservoirs measure between 11 and 17 inches, but there are larger fish to be caught, including some weighing more than 8 pounds.

1996, so the shoreline habitat hasn't degraded as quickly. Pondweed and smartweed beds are plentiful in shallow water, and the lake has excellent shoreline habitat with lots of coves and small pockets. Recruitment of young bass has been excellent since the lake refilled, and it consistently ranks near the top in bass density and tournament angler catch rates. This year Sebelius' largemouth bass Density Rating is 129.2, placing it number one. The largest fish sampled weighed 6.4 pounds, and the Lunker Rating is 1.1. Twenty-eight percent of the fish sampled measured 15 inches or longer.

According to creel surveys, anglers caught 39,700 bass in 1999, of which 871, or 2 percent, were harvested. Angler success (bass caught per hour) was higher for largemouth bass than for any other species during the survey period.

Price notes that Webster, Kirwin, and Sebelius reservoirs have also experienced heavy tournament fishing pressure, and bass become harder to catch as the summer progresses, and fish become educated. Best angling opportunities are early spring, especially for big fish. The longevity of quality fishing at these lakes will depend on water level fluctuation and its effect on habitat.

### La Cygne Reservoir

Probably the biggest news this year for bass anglers is the forecast for La Cygne Reservoir. La Cygne, in Linn County, 55 miles south of Kansas City, is a cooling lake for a

coal-fired Kansas City Power and Light electricity generating plant. Because of the warm-water discharge, it provides a unique fishery in Kansas. More than 20 years ago, biologists experimented stocking the lake with Florida-strain largemouths, hoping that they would flourish in the lakes warm waters. In their native habitat, Florida-strains grow faster and bigger than the northern largemouths native to Kansas. Even though Florida fish haven't been stocked since, many bass in the lake still have Florida strain genetics. Each year, largemouths weighing more than 10 pounds are taken from La Cygne, and it has generally maintained a good largemouth fishery. However, this year's sampling results are impressive.

District fisheries biologist Don George reported not only very good numbers of largemouths with a Density Rating of 99.2, second best in the state, but a phenomenal



La Cygne Reservoir, in Linn County, is a power plant cooling lake with a reputation for big largemouths. The largest bass sampled in 1999 weighed 9 1/2 pounds.

lunker rating of 10. No other reservoir approached a Lunker Rating half as good as La Cygne's. The biggest bass George sampled weighed 9.5 pounds, but what should get bass anglers attention is that more than half of the fish sampled were longer than 15 inches, and 10 percent were longer than 20 inches. La Cygne has truly developed into a trophy largemouth fishery.

La Cygne provides good bass fishing year-round, except for the months of July and August, when surface temperatures might reach 95 degrees. In the winter, fish will be found near the warm water discharge. However, the lake has miles of rip-rapped shorelines, submerged water willow, half-cut trees, and brush piles that hold bass.

Boating is allowed only for fishing purposes, so anglers don't have to contend with pleasure boaters. And the fishery also provides quality angling opportunities for wipers, flathead catfish, striped bass and crappie.

#### Wilson Reservoir

Wilson Reservoir, near Russell, has also been a pleasant surprise to bass anglers. Long known for clear water and smallmouth bass, Wilson's rocky shorelines and deep waters aren't particularly known for

largemouth fishing. However, Wilson's largemouths have come on strong since 1993, giving anglers outstanding opportunities for both species. District biologist Tommie Berger noted a resurgence in largemouths in 1994 and 1995, but wasn't optimistic that numbers would hold out this long. However, Wilson ranked eighth among reservoirs for bass fishing this year with a Density Rating of 22. Wilson's Lunker rating is 0.8, and the largest fish Berger sampled weighed 6.1 pounds. Data show that nearly half the largemouths sampled measured between 15 and 20 inches. Wilson's smallmouth density rating is 16.6, ranking it second behind Cedar Bluff. The lunker rating for Wilson smallmouths is 0.3.

Berger has worked diligently establishing brush piles in the reservoir, providing essential gathering places for largemouths, crappie, and anglers, and also notes that flooded vegetation in the inlet creeks is holding out. Most of Wilson's largemouths are caught in the backs of main-lake coves in flooded timber and vegetation and in the mouths of creeks.

Good largemouth fishing can also be found at Big Hill Reservoir, near Parsons, which ranked seventh with a density rating of 24.2. And

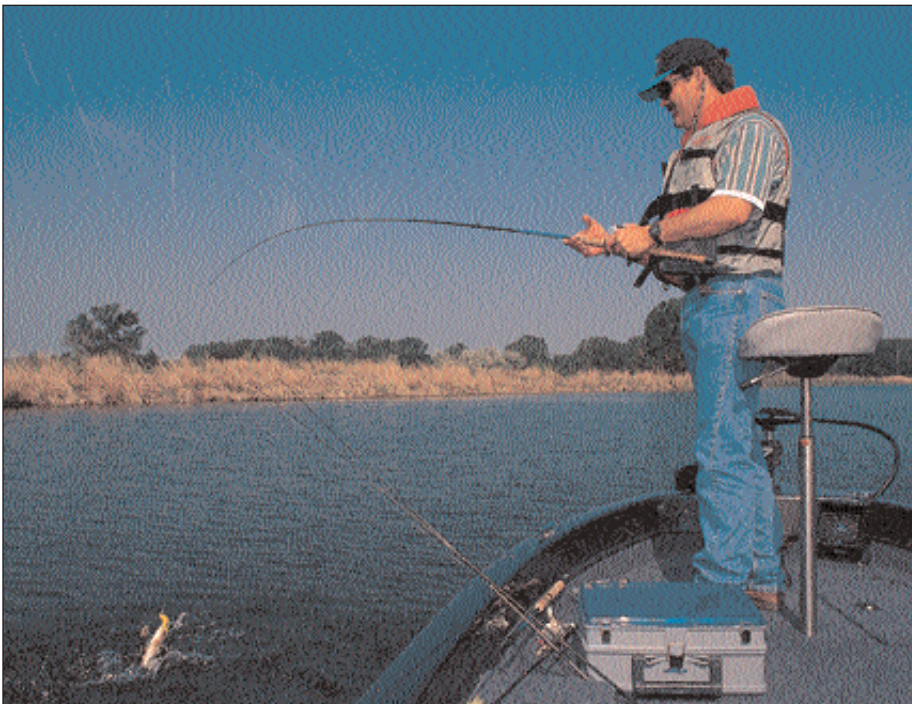
check out the *Fishing Forecast* on Page 14 for the wealth of smaller state and community lakes with good bass fishing. Mark your 2000 fishing calendar for trips to several of these lakes, or as many as you can fit in. Kansas bass fishing opportunities haven't been this good for a long time. ♡

#### Vegetation Project

The Aquatic Vegetation Committee has completed a study on vegetation establishment. Most older Kansas reservoirs have little aquatic vegetation, which is essential to largemouth bass, as well as other sportfish. El Dorado Reservoir is a good example. Several years after it was filled, El Dorado was touted as one of the finest largemouth bass lakes in the Midwest. However, just 10 years later, bass numbers had declined dramatically. Of course the flooded terrestrial vegetation decays in all new lakes, but aquatic vegetation, common in farm ponds, also disappears. Biologists learned that if rough fish and turtles were fenced out of coves, aquatic vegetation thrived. However, it is unrealistic to keep rough fish numbers low enough that aquatic vegetation will survive.

The committee examined other states' vegetation establishment activities and found several alternatives, settling on water willow. Water willow is already in some lakes in eastern Kansas. It grows in water up to 4 feet deep. It emerges from the surface to produce leaves out of the water, enabling it to survive in turbid conditions, and it also is tolerant of drought conditions. Water willow is not palatable to carp and turtles and it will grow on most substrates including gravel. It is easily established and spreads naturally.

An article detailing this program will appear in the May/June 2000 issue of *Kansas Wildlife & Parks* magazine.



# Fishing 2000 Forecast

The Fishing Forecast was first created in 1995. Since then, anglers have learned to use this information to select a reservoir or lake that provides the type of fishing they enjoy. The *2000 Fishing Forecast* brochure is available from the department's Pratt office, or you can access it through the Internet on the department's Homepage at [www.kdwp.state.ks.us/](http://www.kdwp.state.ks.us/)

Here's how it works: The information is formulated from data collected by fisheries management biologists through their annual lake monitoring activities (which include test netting and electroshocking). Not every lake is sampled each year, so some lakes are not included in the tables.

The data is separated into two categories — reservoirs (those larger than 1,000 acres) and lakes (those less than 1,000 acres) — because sampling on small lakes may not be comparable with that on larger reservoirs.

Tables have been created for 19 popular game species and include a **Density Rating**, **Preferred Rating**, a **Lunker Rating**, the largest fish taken in sampling, and a **Biologist's Rating**.

The **Density Rating** is the number of fish that were quality size or larger sampled per unit of sampling effort. Quality size, listed in parentheses at the top of the **Density Rating** column, is the length of fish considered acceptable to most anglers and is different for each species. The higher the

**Density Rating**, the more quality-size or larger fish per surface acre in the lake. Theoretically, a lake with a **Density Rating** of 30 has twice as many quality-size fish per acre as a lake with a **Density Rating** of 15.

The **Preferred Rating** identifies how many above-average-size fish a water contains. For example, a lake may have a good density of crappie, but few fish over 10 inches. The **Preferred Rating** tells you which lake to go to for a chance to catch bigger fish.

The **Lunker Rating** is similar to the **Density Rating**, but it tells you the relative density of lunker-sized fish in the lake. A lunker measures a certain length considered a trophy by most anglers. It also differs with each species and is listed in parentheses at the top of the **Lunker Rating** column. For example, most anglers consider a channel catfish longer than 28 inches a lunker. Many lakes may have a lunker rating of 0, but this doesn't mean there are no big fish in that lake. It just means that no lunker fish were caught during sampling, and they may be less abundant than in lakes with positive **Lunker Ratings**.

You can use the **Density Rating** and **Lunker Rating** together. If you want numbers, go with the highest **Density Rating**. If you want only big fish, go with the **Lunker Rating**. Somewhere in the middle might be

better choice. A lake with a respectable **Density Rating** and a positive **Lunker Rating** will provide the best of both worlds.

The **Biggest Fish** column lists the weight of the largest fish caught during sampling. A heavy fish listed here can give the lunker fishermen confidence that truly big fish reside in that lake.

The **Biologist's Rating** adds a human touch to the forecast. Each district fisheries biologist reviews the data from annual sampling of their assigned lakes, then considers environmental conditions that may have affected the sampling. They also consider previous years' data. A rating of P (poor), F (fair), G (good), and E (excellent) will be in the last column. Sometimes the **Density Rating** may not agree with the **Biologist's Rating**. This will happen occasionally and means the **Density Rating** may not accurately reflect the biologist's opinion of the fishery.

Be sure to keep a copy of the 2000 Fishing Regulations Summary in your tackle box. The pamphlet includes a listing of laws and regulations, as well as a table with all the length limits for the various reservoirs and state and community lakes. The pamphlet also has applications for Master Angler and Catch & Release Awards.

Good luck and good fishing!



## BLUEGILL

IMPOUNDMENT RESERVOIRS	Density Rating (>6")	Proff of Rating (>8")	Lunk or Rating (>10")	Biggest Fish (lbs.)	Bio Rating
La Cysne	30.8	0.8	0.0	0.5	E
Perry	9.1	0.0	0.0	0.4	F
Turtle Creek	0.5	0.0	0.0	0.0	F
<b>LAKES</b>					
Lebo Kids PD	105.6	0.0	0.0	0.5	G
Achison CL #7	85.7	0.0	0.0	0.3	G
Brown SFL	85.5	0.0	0.0	0.5	G
Jones Park Middle PD	72.7	0.0	0.0	0.2	G
Parker CL	68.6	0.0	0.0	0.3	E
New Stream CL	65.6	0.0	0.0	0.4	G
Troy 4-H Lake	60.0	0.0	0.0	0.4	G
Fort Scott Comm. College PD	57.1	2.9	0.0	0.3	E
Richmond CL	56.5	0.0	0.0	0.4	E
Chanute CL	55.3	0.0	0.0	0.4	G
Melvom River PD	51.9	1.9	0.0	0.5	G
Achison SFL	51.5	13.1	0.0	0.5	G
Berens CL	51.4	11.4	2.9	0.7	E
Blue Mound CL	50.0	3.3	0.0	0.4	E
Wichita-Chisholm North Lake	46.4	3.9	0.0	0.4	F
Mound CL	43.7	1.2	0.0	0.5	G
Subetha-Pony Creek Lake	43.3	10.7	0.0	0.7	F

## CHANNEL CATFISH

IMPOUNDMENT LAKES	Density Rating (>16")	Proff of Rating (>24")	Lunk or Rating (>28")	Biggest Fish (lbs.)	Bio Rating
Mound CL	46.0	8.0	3.0	19.8	E
Lebo CL	41.0	0.0	0.0	5.1	E
Subetha-Pony Creek Lake	34.0	3.5	0.5	10.5	G
Bone Creek	32.0	0.0	8.1	8.1	G
Yates Center CL-New	28.0	8.0	6.0	10.0	E
Osage CL	27.0	3.0	0.0	9.9	E
Yates Center-South Owl Lake	26.0	4.0	1.0	12.0	E
Achison SFL	25.0	1.0	1.0	13.7	G
Pleasanton West Lake	25.0	1.0	1.0	13.2	E
Butler SFL	24.0	4.0	0.0	9.6	E
Garnett CL-South	24.0	2.0	0.0	6.8	G
Horton-Banner Creek Lake	23.5	8.0	1.5	13.3	G
Gridley CL	22.0	8.0	4.0	12.2	E
Becher SFL-Lower	21.0	1.0	0.0	5.4	F
Brown SFL	21.0	1.0	0.0	8.2	G
Bourbon SFL	20.0	3.0	1.0	17.0	E
M. Plerson SFL	16.5	4.0	2.0	12.9	E
Bourbon Co. Lake	15.0	2.0	0.0	5.7	E
Shenando Co.-Smoky Hill Garden	15.0	0.0	0.0	3.0	E
Melvom River Pond	14.0	3.0	1.0	12.2	G
Ottawa SFL	14.0	0.0	0.0	4.8	G
Osage SFL	13.5	0.5	0.0	7.3	G
Jennore CL	13.0	0.0	0.0	2.1	G

## REDEAR SUNFISH

IMPOUNDMENT LAKES	Density Rating (>7")	Proff of Rating (>9")	Lunk or Rating (>11")	Biggest Fish (lbs.)	Bio Rating
Chesapeake CL-Trunko	30.0	12.0	0.0	0.6	G
Neosho SFL	11.5	0.0	0.0	0.5	F
Monmouth SFL	6.5	0.0	0.0	0.6	G
Achison SFL	4.0	1.0	0.0	2.1	G
Jennore CL	4.0	0.0	0.0	0.5	F
Lawenwith SFL	3.5	0.5	0.0	0.0	G
Gridley CL	3.0	0.0	0.0	0.4	F
Douglas Co.-Lonestar Lake	1.5	1.5	0.0	0.0	F
Butler SFL	1.0	0.0	0.0	0.0	G

## FLATHEAD CATFISH

IMPOUNDMENT RESERVOIRS	Density Rating (>16")	Proff of Rating (>24")	Lunk or Rating (>28")	Biggest Fish (lbs.)	Bio Rating
Webster	9.0	9.0	6.0	27.1	E
Cedar Bluff	4.8	2.8	0.8	10.0	G
Chesney	1.0	0.5	0.5	7.1	F
Kanopolis	1.0	0.8	0.8	19.5	G
Millford	1.0	0.4	0.0	8.2	F
Hilldale	0.8	0.8	0.8	11.5	F
Perry	0.8	0.5	0.5	18.1	F
Clinon	0.5	0.3	0.0	11.1	F
Council Grove	0.5	0.0	0.0	2.8	F
Kiowa	0.5	0.5	0.5	15.5	G
La Cysne	0.5	0.5	0.5	16.1	G
Schellus	0.5	0.5	0.0	8.4	F
Turtle Creek	0.4	0.0	0.0	4.9	F
Big Hill	0.3	0.0	0.0	4.0	F
El Dorado	0.3	0.0	0.0	2.6	G
Glen Elder	0.2	0.1	0.1	9.2	G
Wilson	0.1	0.1	0.1	15.5	F
<b>LAKES</b>					
Chanute CL	2.0	1.0	0.0	6.3	F
Horton-Mission Lake	2.0	2.0	2.0	14.9	F
Clark SFL	1.5	0.5	0.0	6.9	F
Crawford SFL	1.5	0.3	0.0	6.5	F
Council Grove CL	1.0	0.0	0.0	3.9	F
Fort Scott CL	1.0	0.5	0.5	14.1	G
Herington CL-New	1.0	1.0	0.0	9.8	F
Turtle Creek River Pond	1.0	1.0	1.0	13.4	F
Washington SFL	1.0	0.0	0.0	4.3	F
Anthony CL	0.5	0.5	0.0	6.2	F
Jeffrey Eng. Ch. Aux. Makeup LK	0.5	0.0	0.0	3.8	F

## CHANNEL CATFISH

IMPOUNDMENT RESERVOIRS	Density Rating (>16")	Proff of Rating (>24")	Lunk or Rating (>28")	Biggest Fish (lbs.)	Bio Rating
Schellus	14.0	7.0	1.0	10.7	E
Chesney	8.8	2.0	0.0	6.8	G
Glen Elder	7.9	1.4	0.3	16.5	G
Kiowa	7.0	3.5	2.0	21.3	G
Clinon	6.8	0.3	0.0	5.4	G
Perry	6.8	1.0	0.3	11.2	F
Hilldale	6.5	1.8	0.8	15.5	G
Millford	6.4	1.8	0.2	8.7	G
Turtle Creek	4.5	1.4	0.1	8.9	G
Webster	4.5	0.5	0.0	6.0	G
Colley Co. Lake	4.3	0.0	0.0	6.7	E
Council Grove	4.0	1.0	1.0	12.2	G
Love well	3.9	1.6	1.1	13.0	G
Big Hill	3.7	0.3	0.0	4.4	G
El. City	3.7	0.3	0.0	4.9	F

LARGEMOUTH BASS					
IMPOUNDMENT RESERVOIRS	Density Rating (>12")	Prefer of Rating (>15")	Lunker Rating (>20")	Biggest Fish (lbs)	Bio Rating
Sebelias	129.2	43.8	1.1	6.4	E
La Cygne	99.2	70.0	10.0	9.5	E
Cedar Bluff	66.9	39.6	1.2	6.2	E
Kiwa	35.3	28.7	0.0	4.0	G
Webster	32.8	25.0	0.0	4.3	G
Toronto	27.3	10.2	0.0	5.3	F
Big Hill	24.2	17.8	3.7	5.9	E
Wilson	22.0	15.0	0.8	6.1	G
El Dorado	17.7	5.9	0.0	3.1	F
Hillside	7.1	3.3	0.0	4.5	G
LAKES					
New Strawn CL	24.5	27.3	0.0	4.9	G
Lopoli CL	125.0	40.0	5.0	5.3	G
Pleasanton West Lake	120.0	30.0	0.0	3.3	E
Graham Co. - Antelope Lake	114.0	10.0	0.0	4.3	B
LaCrosse-Warren Stone Lake	100.0	37.5	0.0	2.1	P
Sheridan SFL	86.0	27.0	1.0	4.8	G
Clortho-Cedar Lake	83.7	46.7	2.2	6.8	G
Gudner CL	80.7	70.2	1.8	5.0	G
Yates Center CL-New	79.7	29.7	0.0	5.2	E
Achison SFL	76.9	27.7	0.0	3.4	G
Pottawatomie SFL #1	76.5	28.4	1.2	5.3	G
Inhason Co. Shawnee Mission LK	75.9	6.9	0.0	3.0	G
Garnett CL-South	75.4	47.5	0.0	3.5	G
Belle-Ville-Rocky Road	74.0	26.0	0.0	5.1	G
Osage CL	73.9	48.9	2.3	5.6	F
Pleasant Lake	73.8	34.3	0.0	4.3	G
Gridley CL	72.9	45.8	0.0	3.1	E
St. Francis-Kelley Lake	72.7	6.1	0.0	4.5	G
Leavenworth SFL	71.8	6.8	0.0	2.8	E
Severy CL	68.4	23.7	0.0	4.7	E
Crawford SFL	65.2	37.3	3.0	6.5	G
Woodson SFL	64.7	24.5	0.0	3.3	G
Jennore CL	62.5	46.9	3.1	5.6	E
Topeka-LK. Hammond (YMCA)	59.6	10.5	1.8	4.3	G

SAUGER					
IMPOUNDMENT RESERVOIRS	Density Rating (>11")	Prefer of Rating (>14")	Lunker Rating (>17")	Biggest Fish (lbs)	Bio Rating
Metrom	4.9	3.7	0.8	1.9	G
Perry	1.5	0.5	0.3	1.8	G
LAKES					
Leavenworth SFL	1.0	1.0	1.0	2.4	P

SAUGEYE					
IMPOUNDMENT RESERVOIRS	Density Rating (>14")	Prefer of Rating (>18")	Lunker Rating (>22")	Biggest Fish (lbs)	Bio Rating
Sebelias	29.5	6.5	2.0	7.1	E
Kimopolis	24.5	34.0	0.3	4.9	G
Council Grove	4.5	1.5	1.0	5.1	F
Turtle Creek	1.3	0.1	0.0	3.7	F
Ed City	0.3	0.3	0.0	2.3	F

SAUGEYE					
IMPOUNDMENT LAKES	Density Rating (>14")	Prefer of Rating (>18")	Lunker Rating (>22")	Biggest Fish (lbs)	Bio Rating
Marion Co. Lake	16.0	2.0	0.0	4.4	G
Harvey Co. Lake-East	13.0	0.0	0.0	1.4	F
Peovias CL	13.0	0.0	0.0	1.8	G
Washington SFL	13.0	8.0	7.0	9.1	G
Great Bend-Voss Park Lake	12.0	1.0	0.0	2.1	F
Geney SFL	11.5	2.0	0.5	4.2	G
Turtle Creek River Pond	10.0	4.0	0.0	2.6	G
Middle Creek SFL	9.5	0.5	0.0	2.5	F
Sheridan SFL	9.0	0.0	0.0	1.2	F
Chase SFL	6.0	1.0	0.0	1.9	F
Boucken SFL	2.0	1.0	0.0	2.1	F
Salt & Lakesood Lake	2.0	0.5	0.0	2.3	P
Anthony CL	1.5	1.5	0.0	4.1	F

SMALLMOUTH BASS					
IMPOUNDMENT RESERVOIRS	Density Rating (>11")	Prefer of Rating (>14")	Lunker Rating (>17")	Biggest Fish (lbs)	Bio Rating
Cedar Bluff	30.0	2.0	0.0	3.2	G
Wilson	16.6	2.7	0.3	2.9	E
Coffey Co. Lake	13.0	0.0	0.5	2.0	E
Big Hill	7.3	2.7	1.4	3.8	E
Milford	6.7	3.9	0.0	2.1	G
Webster	6.1	3.1	0.0	1.3	F
El Dorado	1.8	0.5	0.0	1.4	F
Glen Elder	1.4	1.1	0.0	2.4	F
Hillside	0.3	0.0	0.0	0.7	P
LAKES					
Jeffrey Energy-Make Up Lake	11.0	2.0	0.0	1.4	G
Gridley CL	8.3	2.1	0.0	1.7	F
Boite Creek	3.6	0.0	0.0	1.2	F
New Strawn CL	3.0	3.0	0.0	1.4	P
Pottawatomie SFL #2	2.0	1.0	0.0	1.5	P
Chase SFL	0.9	0.9	0.9	2.2	P
Fort Scott CL	0.6	0.6	0.0	1.4	P

SPOTTED BASS					
IMPOUNDMENT RESERVOIRS	Density Rating (>14")	Prefer of Rating (>17")	Lunker Rating (>17")	Biggest Fish (lbs)	Bio Rating
Cedar Bluff	74.0	34.0	0.0	1.7	G
Sebelias	4.6	3.1	0.0	1.5	F
El Dorado	1.8	0.5	0.0	1.5	F
Wilson	0.8	0.1	0.0	1.5	F
Glen Elder	0.2	0.2	0.0	1.2	F
LAKES					
Boucken SFL	44.5	5.5	0.0	1.7	E
Chase SFL	28.2	11.8	0.0	2.0	G
Wilson SFL	25.0	5.0	0.0	2.5	G
Crawford SFL	24.9	7.5	0.0	2.0	G
Bareka CL	8.1	1.2	0.0	2.0	F
Fort Scott-Gunn Park East PD	5.7	5.7	0.0	1.8	F
Chanate CL	4.3	0.0	0.0	1.2	F
Marion Co. Lake	2.4	0.0	0.0	1.2	F
Council Grove CL	0.8	0.0	0.0	0.8	F

WALLEYE					
IMPOUNDMENT RESERVOIRS	Density Rating (>15")	Preferred Rating (>20")	Lunker Rating (>25")	Biggest Fish (lbs.)	Bio Rating
Chesney	31.8	0.5	0.0	2.7	E
Lovewell	26.4	4.0	0.6	8.5	E
Kiewit	25.5	2.5	1.5	7.4	G
Glen Elder	19.6	5.7	1.6	10.5	E
Marion	12.9	7.5	2.0	6.4	G
El Dorado	9.0	0.8	0.0	4.8	G
Wilson	9.0	1.6	0.8	7.3	G
Webster	8.5	3.5	0.0	5.2	F
Coffey Co. Lake	8.4	0.0	0.0	2.0	E
Cedar Bluff	7.8	0.5	0.3	6.0	F
Milford	7.4	3.4	0.6	8.3	G
McIvran	4.7	0.3	0.0	4.3	G
Hillsdale	4.5	3.8	1.0	8.3	G
Knopolls	2.5	2.3	0.3	7.3	F
Clinton	2.3	1.3	0.3	6.2	F
Big Hill	1.0	1.0	1.0	7.8	F
Ponona	0.5	0.0	0.0	2.1	P
LAKES					
Griffey CL	20.0	0.0	0.0	1.9	F
Herrington CL-New	15.0	6.0	2.0	6.6	G
Scott SFL	14.0	0.0	0.0	2.0	G
Wyandotte Co. Lake	13.0	0.0	0.0	2.2	G
Jeffery Ing. Cr.-Aux. Makeup	9.5	0.0	0.0	1.3	F
Council Grove CL	9.0	0.0	0.0	1.7	G
Woodson SFL	9.0	0.0	0.0	1.6	F
Achison SFL	8.0	8.0	3.0	7.1	G
Yates Center CL-New	8.0	0.0	0.0	1.3	F
Jeffery Ing. Cr.- Makeup Lake	7.0	4.0	2.0	7.7	F
Leavenworth SFL	6.5	0.5	0.0	4.0	F
Paris CL	6.5	1.5	0.0	4.5	F
Suberba-Pony Creek Lake	6.5	1.5	0.0	5.0	G
Bone Creek	5.5	0.0	0.0	3.2	F
Bradley SFL-Lower	5.0	2.0	0.0	5.0	F
Jewell SFL	5.0	3.5	1.0	8.5	F
Shawnee SFL	5.0	1.0	0.0	4.6	F
Clark SFL	4.5	0.5	0.0	3.9	F
Gunter CL-South	4.0	0.0	0.0	2.4	F
Lebo CL	4.0	0.0	0.0	1.2	G
Centralia CL	3.5	2.0	0.0	3.7	F
Bonabon SFL	3.0	0.0	0.0	1.4	F
Fort Scott CL	3.0	0.0	0.0	1.9	F

WHITE BASS					
IMPOUNDMENT RESERVOIRS	Density Rating (>9")	Preferred Rating (>12")	Lunker Rating (>15")	Biggest Fish (lbs.)	Bio Rating
Marion	80.3	39.3	0.3	1.6	F
Knopolls	57.5	26.3	0.8	1.8	G
Chesney	36.3	26.8	0.5	1.6	G
Clinton	37.8	24.8	0.0	1.4	G
Glen Elder	37.7	9.9	0.1	1.8	E
Wilson	36.9	28.6	0.8	2.3	G
Milford	27.2	6.7	0.0	1.8	G
Tuttle Creek	19.3	13.9	4.3	1.6	G
Fall River	17.9	16.0	3.9	1.4	G
Coffey Co. Lake	16.4	0.0	0.6	1.7	G
Big Hill	15.3	7.9	2.7	1.8	E

WHITE BASS					
IMPOUNDMENT LAKES	Density Rating (>9")	Preferred Rating (>12")	Lunker Rating (>15")	Biggest Fish (lbs.)	Bio Rating
Clark SFL	85.0	29.5	2.0	2.0	G
Jeffery Ing. Cr.-Aux. Makeup	48.0	29.5	4.0	1.9	G
Herrington CL-New	35.0	4.0	0.0	1.0	G
Harvey Co. Lake-East	31.0	21.0	1.0	1.6	G
Jeffery Ing. Cr.- Makeup Lake	28.0	8.0	0.0	1.1	G
Middle Creek SFL	16.5	13.0	0.5	1.7	F
Fort Scott CL	14.5	11.0	8.0	2.9	G
Paris CL	14.5	11.5	2.5	2.5	F
Browning Oxbow	5.0	2.0	1.0	2.4	F
Lyon SFL		(UNDER RENOVATION)			
McIvran River Pond	4.0	1.0	0.0	1.2	F
Council Grove CL	3.0	3.0	0.0	0.9	F
Gardner CL	2.0	2.5	1.5	2.9	P
Shawnee Co.-Lake Shawnee	3.0	2.0	0.0	1.2	P
Yates Center CL-New	3.0	2.0	0.0	1.4	P
Herrington CL-Old	2.0	2.0	2.0	2.3	F
Marion Co. Lake	2.0	1.0	0.0	0.9	P
Centralia CL	1.5	0.5	0.0	0.7	P
Carbonate CL-East	1.0	1.0	0.0	1.4	F
Chase SFL	1.0	1.0	0.0	0.7	F
Tuttle Creek River Pond	1.0	1.0	0.0	0.7	P
Douglas SFL	0.5	0.5	0.5	3.1	P
Osage-Lake Osage	0.5	0.5	0.0	1.4	P

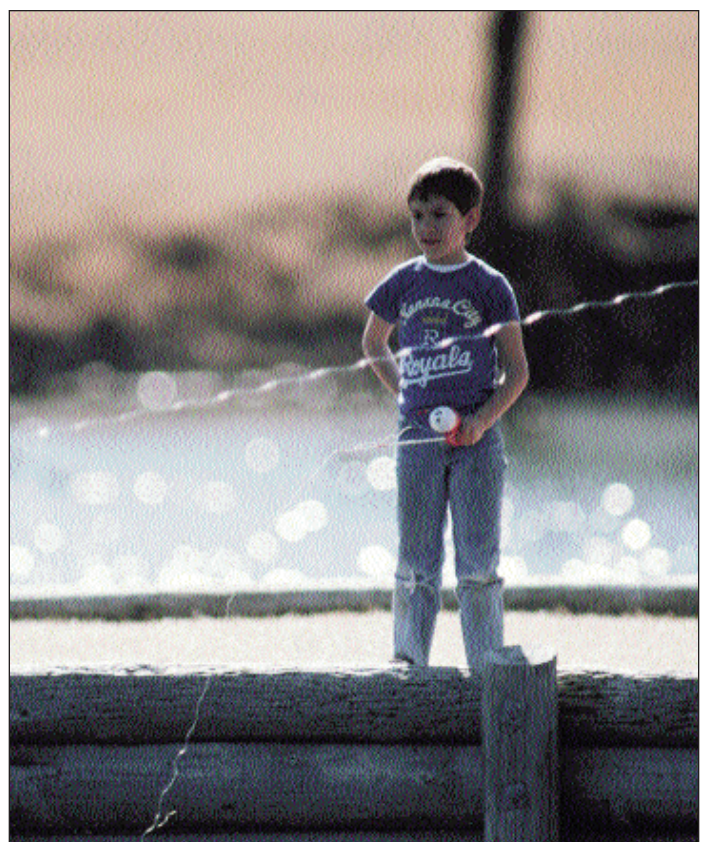
STRIPER					
IMPOUNDMENT RESERVOIRS	Density Rating (>20")	Preferred Rating (>30")	Lunker Rating (>35")	Biggest Fish (lbs.)	Bio Rating
Wilson	5.0	0.5	0.1	18.7	E
Chesney	1.3	0.3	0.3	4.8	F
Clinton	0.8	0.0	0.0	7.3	P

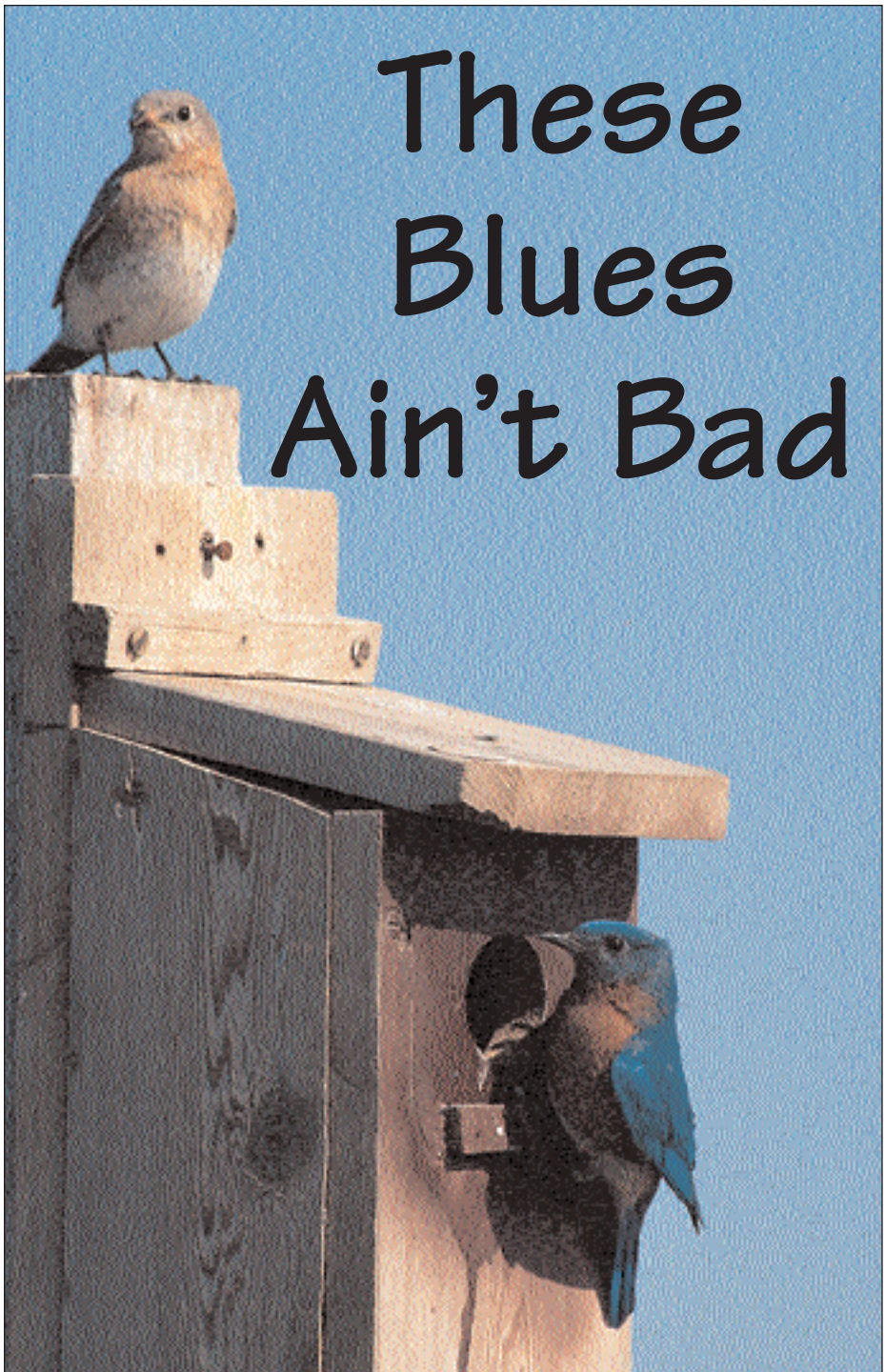
WHITE CRAPPIE					
IMPOUNDMENT RESERVOIRS	Density Rating (>8")	Preferred Rating (>10")	Lunker Rating (>12")	Biggest Fish (lbs.)	Bio Rating
Hillsdale	44.4	19.1	1.1	1.4	E
Marion	33.0	26.5	6.3	1.8	G
Perry	24.6	15.0	2.0	1.2	G
Sebebas	23.4	15.9	1.7	1.0	G
Council Grove	18.0	6.8	1.3	0.9	G
La Cypre	16.3	3.9	0.0	0.9	G
Cedar Bluff	14.8	11.6	1.9	2.0	G
Clinton	12.1	5.3	0.5	1.8	F
Ponona	10.0	9.8	1.3	1.8	G
Milford	6.3	2.4	0.6	1.4	F
Kiewit	6.3	2.3	1.7	2.1	G
McIvran	5.0	2.6	0.7	1.8	G
Coffey Co. Lake	4.7	0.0	1.6	1.4	F
Ek City	4.5	0.9	0.5	1.3	G
Big Hill	3.9	1.4	0.0	0.8	G
Tuttle Creek	3.3	2.1	0.4	1.0	G
Knopolls	2.0	0.8	0.8	1.3	F
Glen Elder	1.7	1.1	0.4	1.5	P
Webster	1.6	0.6	0.2	1.2	F

WHITE CRAPPIE					
IMPOUNDMENT LAKES	Density Rating (>8")	Preferred Rating (>10")	Lunker Rating (>12")	Biggest Fish (lbs.)	Bio Rating
Onawa SFL	126.0	56.5	31.0	1.5	E
Harrington CL-Old	11.5.5	27.5	7.7	1.4	G
Mason Co. Lake	45.5	30.8	2.0	1.1	E
Horton-Mission Lake	45.0	30.3	5.8	1.9	G
Sheridan SFL	36.5	6.8	0.0	0.8	G
Cherryvale CL-Tanko	34.5	2.0	1.0	1.3	G
Browning Oxbow	29.5	11.7	0.7	1.1	G
Scott SFL	28.5	6.0	0.0	0.8	F
Logan CL	28.0	11.3	2.5	1.0	G
Carbondale CL-East	24.0	10.5	0.0	1.0	G
Jeffrey Energy Ctr-Makeup Lake	21.5	3.3	0.0	0.7	F
Anthony CL	18.0	2.0	1.4	1.4	G
Johnson Co.-Heritage Park Lake	17.8	2.5	0.8	1.6	P
Plainville Lake	17.5	13.0	0.8	1.2	G
Baldwin-Spring Creek Lake	16.0	5.5	1.0	0.9	F

BLACK CRAPPIE					
IMPOUNDMENT RESERVOIRS	Density Rating (>8")	Preferred Rating (>10")	Lunker Rating (>12")	Biggest Fish (lbs.)	Bio Rating
Sebelius	19.0	41.3	1.9	1.3	E
Kewin	6.4	3.8	1.2	2.0	G
Webster	6.2	2.1	0.8	1.5	G
Hillsdale	3.4	0.7	0.0	0.8	F
Cedar Bluff	3.4	0.8	0.0	0.8	G
Glen Elder	1.3	0.8	0.5	1.3	P
Mason	0.8	0.7	0.3	1.5	P
Kanopolis	0.5	0.0	0.0	0.4	F
Clinton	0.4	0.1	0.0	0.6	F
Perry	0.2	0.0	0.0	0.4	F
Wilson	0.1	0.1	0.0	1.0	P
Milford	0.1	0.0	0.0	0.4	F
LAKES					
Yates Center-South Owl Lake	48.0	0.0	0.0	0.5	G
Brown SFL	33.0	4.2	0.0	0.8	G
Centralia CL	25.3	12.3	0.3	0.9	G
Bolton-Stanner Creek Lake	19.5	0.0	0.0	0.5	G
Bone Creek	13.7	0.0	0.0	0.0	G
Burley SFL	11.5	0.8	0.3	1.1	F
Logan CL	10.0	0.0	0.0	0.4	P
Plainville Lake	8.8	0.0	0.0	0.5	P
Norsho SFL	7.8	1.3	0.0	0.6	G
Bourbon SFL	7.5	4.8	0.8	1.2	G
Douglas Co.-Lonestar Lake	7.5	0.3	0.0	0.5	F
Baldwin-Spring Creek Lake	6.5	1.0	0.0	0.6	F
Gridley CL	6.0	4.5	3.0	1.3	F
Garnett CL-North	5.5	0.5	0.0	0.6	F
Graham Co.-Antelope Lake	5.5	3.7	1.3	1.1	F
Leavenworth SFL	5.2	0.3	0.0	0.5	F
Garnett CL-South	5.0	4.5	0.0	0.7	F
Montgomery SFL	4.8	0.5	0.0	0.7	F
Cherryvale CL-Tanko	4.5	0.5	0.0	0.7	F
Crawford SFL	4.1	0.0	0.0	0.4	G
Sabetha-Pony Creek Lake	3.6	2.8	1.1	1.1	F
Horton-Little Lake	3.5	0.5	0.5	1.3	F
Achison SFL	3.0	1.5	0.0	0.7	F
Benson CL	3.0	2.0	0.8	0.8	F

WIPER					
IMPOUNDMENT RESERVOIRS	Density Rating (>8")	Preferred Rating (>10")	Lunker Rating (>20")	Biggest Fish (lbs.)	Bio Rating
Sebelius	41.5	35.5	32.0	13.1	E
Webster	35.0	35.0	17.0	14.3	E
Milford	34.4	9.8	6.2	5.1	G
Cedar Bluff	13.8	13.8	8.5	7.1	E
Kanopolis	10.8	7.0	0.0	3.2	G
Lowell	10.4	3.0	0.8	5.8	F
La Cygne	7.5	1.0	0.8	5.9	G
Cheney	7.0	3.5	0.0	2.9	F
Ponoma	6.3	0.0	0.0	1.1	F
Coffey Co. Lake	4.0	0.0	0.4	4.1	F
Marion	0.8	0.8	0.8	5.5	F
Kewin	0.5	0.5	0.5	3.2	F
LAKES					
Lebo CL	53.0	5.0	0.0	1.8	E
Gridley CL	28.0	10.0	0.0	3.1	E
Middle Creek SFL	25.5	1.0	0.0	1.7	G
Shawnee Co.-Lake Shawnee	23.0	7.5	0.5	6.4	G
Jeffrey Energy Ctr-Makeup Lake	20.0	13.0	8.0	4.4	F
Mason Co. Lake	19.0	12.0	6.0	4.8	G
Jennore CL	15.0	15.0	7.0	6.8	E
Padua CL	11.0	7.5	0.0	2.4	F
Great Bend-Stone Park Lake	9.0	7.0	0.0	2.4	E
Johnson Co.-Shawnee Mission LK	8.0	8.0	2.0	6.2	G
Sterling CL	6.1	0.5	5.6		E
Chanute CL	5.0	1.0	0.0	3.0	F
Harrington CL-New	5.0	3.0	1.0	4.2	F
Woodson SFL	4.0	4.0	1.5	4.0	G
Douglas Co.-Lonestar Lake	3.5	1.0	0.0	3.4	P
Yates Center-South Owl Lake	3.0	3.0	0.0	3.0	F





# These Blues Ain't Bad

By Jeffrey Bender  
*park manager, Pomona State Park*

photos by Mike Blair

***Bluebirds are getting a free ride at Pomona State Park,  
thanks to volunteers who build, erect, and maintain  
nesting boxes***

What do you get when you expose one dedicated park volunteer to *Sialia sialis*? Answer: 705 new bluebirds at Pomona State Park. That's how many Eastern bluebirds (*Sialia sialis*) that Tonilee Rhoades has helped into the wild by providing them rent-free housing at the park during the last four years. Tonilee, together with her husband Dusty and volunteers David and Grace Selman, began volunteering at Pomona in 1996. Taking care of the 39 bluebird boxes is just one of several services they provide. Tonilee has been the leader of the "bluebird pack" and has accumulated some interesting knowledge and tips on caring for bluebird boxes and ensuring nesting success.

The Rhoades' were regular campers at the park for many years, and when Tonilee retired from her job as an art digitizer, she began improving and managing the bluebird boxes at the park. The Rhoades' were camping volunteers at the park for three years. In 1999, they built a retirement home near the lake and quit camping, but they continue to volunteer their time taking care of the the nest boxes, to the delight of the park staff, visitors, and the bluebirds.

The Bluebird Pack started their multi-year project in 1996 by refurbishing the existing bluebird boxes and installing several new ones. In 1997, the group built and added more boxes, and the late Ann Martin built several to donate to the park after hearing of the group's efforts. Together with another volunteer, Ray Lassetter of Ottawa, the group also built and repaired 13 purple martin houses, which were erected in the park. CMI Lumber, and Town & Country Supply, both of Ottawa, helped by donating some lumber for the houses and stove pipe and wire mesh for predator guards.

Historically, bluebirds used natural cavities in trees or old woodpecker holes, but Man's activities have reduced the availability of these habitats. Now, they are given more nesting site opportunities by

the addition of man-made boxes.

There are as many designs of bluebird boxes as there are builders of them, but some features are necessary for convenient maintenance. The opening into the box should be a round hole 1 1/4 inches diameter. Some boxes are built with a slit across the top front for the birds to enter, but Tonilee has noticed that this design may not prevent cowbirds from entering. Cowbirds and starlings can't get into a 1 1/4-inch hole. A design which allows the side to open is the most convenient, allowing for inspection of active nests without disturbance and easy access for cleaning out old nests and droppings. Top-opening boxes are more difficult to inspect and clean.

In the past, some bluebird boxes at the park were made of 4-inch PVC pipe. The bottom of the PVC pipe boxes dropped out for cleaning, but this did not allow for inspection of active nests. Mounting height of boxes on poles did not appear to affect nesting, but boxes should be mounted where inspection and maintenance is convenient. Boxes should be left natural or painted a light color to prevent heat absorption.

Predator guards are critical to nesting success. Tonilee recorded a substantial increase in the numbers

of successfully-fledged birds after the installation of predator guards. These guards primarily keep out raccoons and snakes, which will eat eggs or young. Tonilee uses metal stove pipe to surround the pole with the top securely covered with wire mesh (hardware cloth) snug around the pole. It must be secure and tight enough to keep snakes from pushing through the top of the stove pipe.

The location of boxes can be critical to bluebird use. Boxes set in mowed grass a short distance from taller grass are preferred. When boxes were erected in tall native grass, or a long distance from tall grass, they weren't used as much. Moving unused boxes into mowed areas a short distance from tall grass (10 to 30 feet) attracted bluebirds. The group has learned to experiment



Tonilee Rhoades and friends help Pomona State Park's bluebirds by providing and maintaining nest boxes.

with box location to find preferred sites.

Tonilee suspects the birds are better able to find and catch bugs on the shorter mowed grass. And chiggers and ticks are less a problem for the humans checking boxes in the mowed areas. Tonilee also prefers to keep boxes away from red cedar trees or other dense trees and shrubs because she has noticed house sparrows tend to use those boxes more.

Another concern is the brown-headed cowbird, a parasitic bird which lays its eggs in other birds' nests. The incubation of cowbird eggs is 11-12 days, while that of bluebirds is 13-15 days. Young bluebirds, if they hatch at all, likely won't be able to compete with cowbirds' young.

House sparrows were introduced to Kansas in the 1860s, having been imported from Europe. House sparrows compete with and even kill native bluebirds. They have been known to destroy eggs and kill young, as well as adult bluebirds on



Nest boxes are placed within easy reach in mowed areas near taller grass. Predator guards are essential to prevent snakes and mammals from eating the eggs.



Nest boxes with side entry are easy to clean and check for cowbird or sparrow eggs which are removed. Boxes are checked bi-weekly.

the nest. Tonilee actually witnessed sparrow assault. While on her route, she saw a male house sparrow fly out of an active box. Upon inspection, she found an adult male bluebird on the nest, bleeding on the head and neck. (The bluebird recovered.)

Bluebirds usually start laying eggs around the first of April. The loosely-built nest is made of fine grasses and weed stalks with an inside diameter of 2 1/2-3 inches and is about 2 inches deep. The eggs are pale blue, bluish-white, and occasionally pure white. Tonilee observed what she suspected to be the same female lay pinkish-white eggs for two years. Bluebirds stay very busy through the nesting season — they commonly have two broods and sometimes three in one season. The first brood commonly consists of 4 or 5 eggs, the second 4, and if there is a third brood, it's usually 2 or 3 eggs. The male bluebird rarely incubates, but it does help build the nest, feed the young, and help with nest-keeping, removing droppings and fecal sacs.

Maintenance of the nest boxes is important. Bluebirds will build new nests on top of old ones in the same

box, making it more likely the young will be infected by mites. After a brood has fledged (left the nest), the nest should be removed, the dust and droppings brushed out with an old paint brush, and the box allowed to air out for a couple of hours. Regular inspections are critical to nest success. Tonilee inspects nest boxes at least every other week during the season. When house sparrow nests are found, they are removed. Some house sparrows can be very persistent in rebuilding. Their nests can be described as a “messy” ball of grasses, weeds, trash, feathers, hair, and string with an opening in the side.

House sparrow eggs are white to greenish-white with speckles of grays and browns, slightly larger and more oval than bluebird eggs. Cowbird eggs are similar in size to bluebird eggs, but are white or grayish-white and

dotted in brown. Often the cowbird eggs have heavier markings near the large end. Cowbird eggs should be removed from nests. An excellent reference is *A Field Guide to Birds' Nests* from the Peterson Field Guide Series, which contains photos and descriptions of eggs and nests. Wasps sometimes build their nests in the boxes, too. Tonilee removes the wasp nest and then rubs vaseline onto the wood where it was attached. This keeps the wasps from rebuilding without exposing the birds to pesticides.

Tonilee's records of box activity reveals how weather and predation can affect the nesting, as well as the numbers of eggs and nesting dates. In all four years combined, the first nest from any box averaged 4.55 fledglings. The second averaged 4.16 birds. Third nests in one year were rare and averaged 3.84 birds per box.

In 1996 and 1997, the bluebirds nested late into the year — Tonilee recorded fledglings from about the middle of May into September. The spring seasons of 1998 and 1999 were cold and wet. Some eggs didn't mature, and the mother birds rolled the eggs to the outside of the



Bluebirds are a favorite of campers and birdwatchers. Volunteer work at Pomona has increased the population of bluebirds at the park, providing hours of enjoyment.



Male bluebirds help feed the young, which average about four birds per nest. Volunteers keep careful records of bluebird success at Pomona.

nest, then laid a new batch to incubate. Tonilee recorded fledglings in 1998 and 1999 from late May to the middle of August. During 1998 and 1999, most of the bluebirds quit nesting earlier in the year, many by the end of July. Tonilee suspected this was due to the excessive heat. 1999 was a tough year on the bluebirds. On the morning of June 28, a severe thunderstorm with high wind and rain riddled trees throughout the park. Following the storm, Tonilee found dead babies in several boxes and abandoned nests with eggs in others. In late July and early August, she found nests with large dead babies with no apparent predation. She attributes that to the excessive heat and lack of rain. But even with these setbacks in 1999, she recorded 165 fledged birds.

One strange phenomenon that occurred at the park was an adoption of another species' nest by bluebirds. The box appeared to be used by a chickadee or titmouse because of the small speckled eggs and mossy materials contained in the nest. The bluebirds took over incu-

bation and fledged the young.

Many bluebirds remain in Kansas during mild winters. Sometimes they use the nest boxes as roosts during extreme cold spells. Bluebirds have been known to pack into nest boxes in large numbers to maintain body heat in extreme cold. Tonilee does find boxes in the park used as winter roosts. The boxes used by bluebirds often contain dogwood and sumac seeds while those boxes used by sparrows usually contain lots of droppings. To provide better winter roosts, Tonilee saves some clean nests, dries and sterilizes them in the sun, and puts them in several boxes she has noticed being used as winter roosts.

When asked why she enjoys doing the work with the bluebird boxes, Tonilee says she always enjoyed watching the bluebirds gather at a bird bath she put out by her camper and wanted to help provide more nesting sites and reduced competition from house sparrows, starlings, and cowbirds. In reference to the house sparrows, she says "I

wish the English would have kept them there!" The bluebirds wouldn't have minded that, either.

The Bluebird Pack of Pomona State Park, as well as other volunteers, perform other duties, including restroom cleaning, mowing, tending flower beds, helping with activities and programs, painting, and numerous other small projects and routine tasks. Many Kansas state parks receive thousands of hours of dedicated work from volunteers like these, providing a valuable service to park patrons, including the bluebirds. Contact your favorite park if you are interested in helping. ♡

### Bluebird Program

Organizations may obtain up to ten bluebird houses from the Kansas Department of Wildlife and Parks. These should be ordered through the district wildlife biologist for next season since they should be in place by March 1. They can be placed at 100-yard intervals along county roads, preferably near grassland or pasture. Boxes should be 4-5 feet off the ground to permit easy checking. The cooperater is required to select appropriate habitat (open country with sparse trees), check them through the nesting season (March through July), and evict house sparrows or other unwanted guests. Nesting success records should be reported to Jim Piland, who is the Kansas Bluebird Association Coordinator:

Jim Piland  
 516 US HWY 281  
 Waldo, KS 67673-9252  
 phone: 785-942-3355  
 e-mail jhpiland@yahoo.com  
 For more information on bluebird nest boxes, contact:  
 Ken Brunson  
 Wildlife Diversity Coordinator  
 KDWP  
 512 SE 25th Ave.  
 Pratt, KS 67124  
 316-672-5911  
 kenb@wp.state.ks.us



# ANIMAL DAMAGE CONTROL

by Danny Martin  
*senior wildlife biology student  
Kansas State University*

photos by Mike Blair

***Skunks under the house, squirrels in the attic, raccoons in the trash can – all are complaints animal damage control specialists deal with every day. Education and common sense can solve most problems.***



Two squirrels chased each other around the housetop all morning. They finally entered and fell down a two-story chimney into an open fireplace. Since it was impossible for them to climb back up the smooth face of the chimney pipe, they were trapped inside the Manhattan residence. Afraid to enter the room, they sat on the flue, chattering in fear and confusion. Another Kansas wildlife problem was in progress.

Unsure what to do, the residents climbed to the roof and dropped pebbles down the chimney, hoping to somehow dislodge the animals. It didn't work. For a day and a night, the squirrels stayed hidden, making it impossible to start a fire without risking real trouble. Then a mutual friend told them of my experience with animal damage control, and they called to see if I could help.

I arrived on the morning of New Year's Eve and opened the flue. Rocks and squirrel hair fell out, but no squirrels. I shined a flashlight up into the chimney and saw two

bushy tails hanging from the flue. The animals had no intention of letting go.

Poking and prodding with the coal poker would not entice the animals to jump into the ashes below. They would have to be removed by hand. As a precaution I brought my trusty pair of nuisance wildlife gloves. These super-thick welding gloves had successfully protected me against prairie dogs, a raccoon, and various hawks and owls. Unfortunately, the squirrels were nearly out of reach.

Help was needed. Calling a fellow wildlife student and nuisance wildlife controller who had recently been vaccinated against rabies, I soon had an accomplice. While my buddy climbed into the firebox and grabbed a squirrel that bit down on his glove, I seized the squirrel by the scruff of the neck and hauled it outside. We repeated the operation for the second squirrel and released the two blackened animals where they belonged. The mission was accomplished, and we

logged another wild experience of sorting man and animal into their respective niches.

Every such experience is fascinating, and there is certainly no shortage of potential problems existing where humans and wildlife cohabitate. During the past year, I've worked in animal damage control with both the USDA Wildlife Services program and the Kansas Department of Wildlife & Parks. Problems range from bats to deer, and each seems to have its own particular twist. Most situations are relatively harmless but require knowledge of wildlife behavior and, occasionally, some specialized equipment. For the most part, avoiding wildlife problems is a matter of common sense.

Four years of studying wildlife at the University has taught that a big part of wildlife management is actually people management. Coupled with experience dealing with wildlife problems, it is evident that management of nuisance wildlife is best conducted through education.

This is commonly referred to as the extension approach.

A call received not long ago illustrates how knowledge can help avoid problems. From the other end of the phone line came a near-frantic voice: "I have at least two skunks that come into my backyard every night, and they smell terrible!"

"Well, ma'am, do you have any trash or pet food that is easily accessible to the skunks?" I asked.

"Yes, we have eight cats that we keep food out for," she replied. I explained that the skunks were most likely attracted to the cat food. After a few minutes the woman agreed that keeping the pet food indoors would likely solve her problem.

Chances are that everyone will have a run-in with nuisance wildlife at one time or another. This article will deal with some of the common problems associated with urban wildlife in Kansas.

Moles and pocket gophers spend most of their lives underground. A common problem in urban areas, their burrows and mounds deface many lawns. Both animals can be trapped and destroyed. Fumigants or poison baits can also be used. Chemical insect control may help discourage moles by eliminating their food base.

Armadillos have been increasingly common during recent years in southern Kansas. This wildlife species causes problems in urban and rural areas alike. Armadillos feed on grubs and have a tendency to dig up yards in search of insect larvae. They have poor eyesight and have been known to fall into window wells. If an unwanted armadillo digs in your yard, even a short temporary fence will deter its efforts. Chemical grub control is an option to remove the food base.

Sprawling suburbs often push into prime deer habitat, and urban deer become a problem in Kansas. Aside from the hazard of collisions with cars, deer browse gardens and ornamental trees. Bucks also rub their antlers against young trees, causing extensive damage.

Protecting trees with a springy plastic wrap designed for this purpose is a good idea. Commercial spray repellents are available to discourage browse injury, or an economical electric perimeter fence can be installed in gardens to exclude deer. A single hot wire baited with pinched-on flags of aluminum foil covered with peanut butter deters deer quite nicely. Deer are shocked and repelled when they stop to sniff the flags.

Bats are a beneficial Kansas wildlife species that may become a nuisance when they choose human dwellings as roosting sites. A bat colony leaves guano that is a potential human health risk. The best way to end this problem is to plug the holes by which bats enter a building. Locating entrances can be difficult, as bats can crawl through a crack only a quarter-inch wide. Control is best conducted while bats are gone during winter months, since summer efforts may trap flightless young which remain in the colony. If summer control is needed, one-way entrances can be



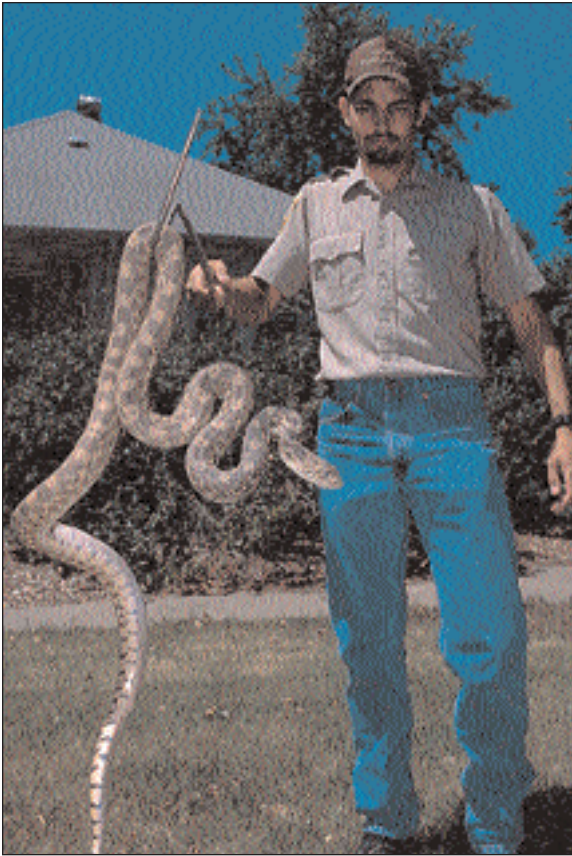
Skunks can be a problem when they dig under a foundation. Live-trapping may be the best answer.

made from hardware cloth by stapling the top and sides so that they bulge away from the entrance hole. When properly constructed, this device will successfully exclude any bat attempting to reenter the roosting area.

The opossum is not known as the smartest of animals, but it often finds respite in cities. Raiding fruit trees, garden, garbage, and pet food dishes, this marsupial will search for anything edible. Keeping trash and pet food behind closed doors is of first importance in resolving conflict with opossums. Live-trapping and removing an animal may be necessary to avoid raids on fruits



Pocket gophers push up large mounds of dirt to deface lawns. Poison baits can be used, but kill-traps placed in burrows are often better choices.



Author Danny Martin removes a large bull snake from an urban premise.

and vegetables.

Raccoons are another common wildlife species within city limits. Curiosity and determination, combined with appetite for a variety of foods, often gets this mammal in trouble with humans. Because raccoons have a surprising ability to open containers, trash and pet food should be sealed and kept indoors if possible. Bird feeders can be protected with shrouds or smooth metal poles which discourage climbing. Gardens can be protected to some degree by a short electric fence, with a hot wire about 1 foot high. Live-trapping is also an option.

Skunks are well known for their strong, musky odor. They are capable of digging their own dens and do not hesitate to use existing crevices or holes in and under buildings. Skunks are largely nocturnal and seldom seen during daylight hours. Their chief problem is odor which permeates the overlying structure. Additionally, they may

spray pets that live nearby. Skunks may dig in lawns, and are also a common vector of rabies. Excluding skunks from their dens will often make them move elsewhere. This should be done after any young are old enough to follow their mother on her nightly excursions. If young are suspected, a trickle of water into the den from a hose will encourage the mother to move the kits in most cases. Live-trapping and removal from the property may be necessary.

Tree squirrels become particularly active in fall and winter, building nests in attics and chimneys. A yearly inspection of the house will locate entrances that can be closed off. Chimney caps that exclude wildlife are also commercially available, or can be easily constructed from hardware cloth.

Red foxes often become a nuisance when they dig in lawns or show increased bravery towards humans. Like all wildlife species, foxes are opportunistic feeders and will eat whatever is available. Increasing the number of

lights in an area may temporarily deter a fox, but this species is quickly adaptable, and removal of attractants is the long-term solution. This may require altering pet feeding activities or keeping pets indoors.

Snakes become a perceived problem many times because of misinformation and learned fear. Of the five species of poisonous snakes found in the state, none are found regularly in urban areas. Be sure to properly identify any snake before handling it. Large constrictors such as bull snakes and black rat snakes can be found in search of rodents. Garter snakes and several other species found in yards and gardens are harmless but will bite if threatened. Many snakes can climb out of a window well if a many-branched tree limb is placed within reach. If snakes are found inside a residence, an open door and gentle encouragement with a broom will free the snake. Also, cloth such as burlap will often entice snakes to hide underneath so that they can be easily picked up and released.

Blackbirds and starlings cause many problems by roosting in residential areas. Flocks can reach incredible numbers in ideal habitat and create a large amount of waste. Built-up waste is a potential health hazard. Thinning out or removing



Though widely feared, most Kansas snakes are harmless. Poisonous reptiles usually don't favor manicured habitats around houses. Even so, snakes of all kinds may be encountered inside and outside of homes, creating a problem.

roosting trees reduces the area available for use. Extreme situations may require devices like pyrotechnics to frighten the birds. Local law enforcement should be contacted for permission before using hazing techniques. Altering historical roosts during winter months before migrating birds return is ideal.

Canada geese may eat lawn grass to the soil line, and goose droppings are usually a problem as well. Chicken wire or electric fencing can be used to keep geese out of yards. Methyl anthranilate (grape flavoring) is available as a chemical aversion when applied to grass but is costly.

Mississippi kites are small raptors that feed primarily on insects. Their habit of nesting in tall trees and defending the surrounding area makes them a nuisance in parks and neighborhoods. Kites can be found throughout southern Kansas and nest from June through August. Kites perceive someone walking beneath a nest tree as a threat to their young. They commonly dive at a passer-by in defense. A swooping kite appears frightening, but seldom causes harm to a pedestrian. Conflict can be avoided by staying several hundred feet from nest sites, or maintaining eye contact with perching kites and waving



Moles are a common complaint best dealt with by trapping.



Deer problems may arise, especially where hunting is prohibited. Deer raid orchards and gardens and may destroy ornamental trees while polishing their antlers.

a hat or hands if they try to swoop. Though many people enjoy and tolerate kites near their homes, steps can be taken to discourage nesting. Pruning branches in trees historically used by kites should be done during winter months while these birds are absent. Kites, as well as blackbirds, geese, and other migratory birds, are federally protected and cannot be harassed or harmed.

It must be remembered that nuisance wildlife problems are often caused by man. Humans may unknowingly create conditions attractive to urban wildlife, or take deliberate actions that lead to wildlife problems. Take, for example, the person who finds a nest of cottontails in the back yard. The mother rabbit is nowhere to be seen. The first thing that may come to mind is to pick up the young rabbits and place them into a cardboard box. Problems immediately arise: what do baby rabbits eat? Don't all baby animals drink pasteurized cow milk? If the juveniles do consume what they are fed, they often become malnourished and may die. This is when Wildlife and Parks gets the call: "What do you feed baby rabbits?"

Since it is illegal to possess wildlife without the proper permit,

a well-meaning rescue is actually a violation of law. Besides this, it is usually harmful and unnecessary. The mother animal is nearly always nearby, ready to care for the young as they need it. Removal of the young imposes great stress on the wildlife family. However, human handling of the young does not ensure abandonment. If quickly returned to the nest, the young will still be accepted by the mother.

Attempting to feed a young wild animal is only part of the problem. Feeding young wildlife requires special knowledge and is exhausting work. Growing wild animals often become dangerous, since they are not tame. They may also harbor diseases which can be transmitted to pets or humans. The bottom line is this: Leave all wildlife in the wild, whatever the circumstances.

The aesthetic value of seeing wildlife in urban areas pleases many, but these animals can become a nuisance and occasionally a health hazard. By respecting our wild neighbors and using proper management strategies, we can enjoy urban wildlife without conflict. This increases our appreciation for the natural world, even in our greatest cities. ♡

# An Outdoor Life Lesson

text and photo by Marc Murrell

staff development specialist, Great Plains Nature Center

*A day turkey hunting in the Flint Hills revives a stressed soul and provides time to reflect on new priorities and changes in life.*

I pulled into a field off an old Chase County road last April. My sweeping headlights caught sight of several deer staring at me with that typical look. I watched as they bounded away. I exited the truck, and the silence, except for an occasional deer snort, was compelling. Minutes passed before I tried the first owl hoot — nothing. A dozen minutes later, another owl call got the same results. It would soon be light, so I grabbed my gun and turkey vest and took off.

As I walked, I felt differently. My pace was more urgent. It seemed like there was something else I should be doing.

In fact, I probably should have stayed home to help my wife, Candace, care for our twin baby boys, who weren't a month old yet. Brandon and Cody arrived 5 weeks ahead of schedule but were doing fine. Mom had adapted well to the enormous responsibility. Dad, on the other hand, was about to hit a 10 on the stress scale. Constant feedings, diaper changes, and lack of sleep had all taken their toll. I needed a day outdoors.



Outdoor activities are extremely important to me. I've been fishing since I was 4 years old and hunting since age 9 (I'm now 35). Some of the most exciting times in my life have been in a tree stand, duck blind, or sitting on the front of my boat. I absolutely love every minute spent outside and didn't think I could enjoy anything more. That all changed when I had children.

The first instant I gazed teary-eyed at my newborn daughter, Ashley, I could think of nothing else. I had never experienced more

joy. Taking a world record buck or fish couldn't touch the feeling of becoming a dad.

Ashley, now 7, hadn't turkey hunted with me yet, but I thought about that as I poked my way around a field and through a low-water crossing into a meadow. I eased down the tree line and placed a jake and hen decoy about 15 yards out from a comfortable tree and settled in.

As night slipped away, the tight-lipped gobblers finally cut loose. I was disappointed, since the nearest bird was several hundred yards away. I answered with a few soft tree yelps on my slate call and hoped they had keen hearing. Sure enough, he and a buddy or two hammered back.

I heard the birds fly down. Unfortunately, they were on the other side of the creek. But turkey hunting luck was on my side as one, two, three, four, and finally, five birds flapped across the creek, the last two going into full strut before both feet hit the ground.

The three hens tried their best to lead the two gobblers away from this other "hen" that sounded so

demanding and easy. It worked for awhile, but the curiosity that killed the cat also works on turkeys. Both birds headed my way, strutting and gobbling.

As they crested a small rise, their notched tail fans identified them as jakes. I wouldn't have much time to commit to filling two tags and reasoned a jake would be just fine. Beard length wouldn't matter anyway, if he put on a show.

The pair butted up to the decoys and tried to look bigger than life. It was comical to watch as each would jump when my decoys twitched in the breeze. Apparently not sensing any good vibes from the boisterous hen, they decided to ease back to their other companions. My gun boomed and only one made the return trip.

As I walked the short 25 yards to the bird, I felt fortunate to enjoy such a terrific hunt and picture-perfect morning. As I picked up the jake, I couldn't help but wonder, "My luck, I'll probably have two major longbeards come in next time with only one tag to fill." Little did I know how right I'd be.

After tagging and hanging my bird in a tree, I made my way out of the river bottom in the direction of gobbling I'd heard earlier. I slipped into a fence row overlooking the scenic creek and plopped down against an Osage orange tree. I let out a few yelps but got no response. Content to enjoy the solitude, I drifted off to sleep.

I awoke minutes later, startled with the thought I was missing something. I turned in time to see three red heads bobbing down the edge of the grass. As they dipped under the fence only 7 yards away, three jakes peered quizzically in my direction before finally walking out of sight.

I turned my attention back to the river bottom and cut loose again with some aggressive cutting and yelping. Immediately, a tom thun-

dered back and my eyes woke up. I hustled down to the edge of the creek and set up. Despite my best attempts the gobbler wouldn't budge from his location.

The day was pleasant so I didn't mind soaking my boots and pants up to my thighs to cross the pristine

**As I left the scenic Flint Hills, my initial emotions were not about the day, but rather anxious anticipation to see Ashley, Brandon and Cody.**

Flint Hills stream. Once in the timber, I stopped to check the gobbler's location with a crow call. I sneaked within 100 yards and laid flat on my stomach at the edge of the timber.

He was in an adjacent field, out of sight. The gobbler would hammer back at each call, but wouldn't make any movement in my direction. It wasn't long until I heard another gobbler approaching his location. A little company was all he needed, and they started my way.

As both birds strutted up to the edge of the field, my heart dropped. A hog wire fence, which many turkeys refuse to cross, separated us. More turkey hunting luck tapped me on the shoulder as both gobblers never missed a beat and slid under the fence through a ditch.

My heart was racing when they stepped into the plowed field. Each bird, standing waist-high, was a mirror image of the other with three-finger-thick beards nearly touching the ground. A couple soft

yelps, and they were back to showing off.


As the birds closed the distance, they veered off course but were now well within range. A quick putt on the call, and both fiery red heads went up in the air.

"Man, if I had two tags this would be awesome," I thought to myself, trying to figure out which one to shoot.

My 12-gauge barked, and the one a step closer lost the coin toss. As the bird flopped, his twin would rush him and start to walk away. I'd call and he'd hammer back and return for another jab at his fallen comrade. I finally kept quiet and the bird eased off into the timber and finally flew across the creek.

My therapy wasn't over. After a brief visit to recount the morning's happenings with the landowner, I was off to enjoy a sack lunch and drown a couple worms in a nearby creek. I barely got my sandwich unwrapped when a fish hit and I set the hook on a fat, 2-pound channel catfish. I didn't expect to catch anything and didn't have a stringer, so I tossed him back into the creek.

As I tossed back the last of a baker's dozen weighing up to 3 pounds, I truly wished I would have kept a couple to eat. The thought didn't trouble me long because I had already decided my daughter and I would soon return and catch a mess for the table.

As I left the scenic Flint Hills, my initial emotions were not about the day, but rather anxious anticipation to see Ashley, Brandon, and Cody. Sure, I knew how fortunate I was to have enjoyed such a day outdoors. It was as day outdoorsmen truly dream about but rarely experience. Someone was looking out for me that day, and also reminding me to get back to the more important things in life. 

# The Coast Guard Auxiliary in Kansas

by Jackson J. Gumb  
*Captain, Kansas Coast Guard Auxiliary*



The U.S. Coast Guard was authorized to start a non-military Coast Guard reserve in 1939. These civilians were to aid the U.S. Coast Guard in promoting small boat safety.

In 1941, congressional action renamed this volunteer group the U.S. Coast Guard Auxiliary (USCGA). The mission of the Auxiliary has remained the same for the past 54 years: public education, safety and regatta patrols, aids to navigation, environmental pollution watches, vessel examination program, and fellowship. However, in 1996, Congress revised the mission to include additional duties such as boat factory visits, environmental patrols, and marine radio communications.

The 80 Kansas USCGA members are divided into four groups, or flotillas, at Overland Park, Perry Lake, Topeka, and Wichita. There is interest for a flotilla in Manhattan an additional one in Wichita, but more members are needed. Each flotilla has a commander that answers to the Division Captain. Members choose the authorized activity they participate in.

Members who want to teach classes must first attend 12 hours of training, draft a lesson plan for their first class, and teach with a qualified instructor. In order to "crew" on a boat, a member must pass a three-part course, which includes on-the-water skills in towing, retrieving an overboard person, and general seamanship. A three- to four-hour oral exam on topics such as radio procedures, first aid, knots, and docking is also required. To be a "Coxswain" or operator of a patrol boat, mem-

bers must first crew on a patrol boat, attend further classroom training on compass and course setting, direct a crew during testing evaluations, and learn enhanced communication skills.

In 1999, the Kansas USCGA taught eight boating classes and certified 95 students. On a national level, USCGA volunteers have taught safe boating to more than 354,000 students over the past five years. In response to more demand for boating education, the Auxiliary offered more Boating and Seamanship Courses and Sailing and Seamanship Courses than in past years. Several of the Auxiliary members have also trained with Wildlife and Parks to be able to teach the state boating course.

*Boating Skills and Seamanship* features a six-lesson program tailored for boaters in coastal areas and second six-lesson program for boaters using inland lakes and rivers. It also has seven optional lessons. The new course focuses on the operation and safety concerns of 16- to 22-foot boats and personal water craft.

The Auxiliary worked with the Kansas Department of Wildlife and Parks to obtain approval for the use of the course *Boating Safely*. This course is recognized by the U.S. Coast Guard, the U.S. Power Squadron, and the National Association of State Boating Law Administrators. It is a six-hour class ideal for the 12- to 15-year-old boaters required to have education.

Patrols are for public safety, not for law enforcement. Auxiliary members help boaters who have run out of gas, have engine trouble,

need emergency assistance, or just need information about boating and general safety issues. Auxiliary members also patrol at regattas. A regatta usually involves congested boat traffic. Auxiliary patrols keep safety a priority at Cheney, Wilson, Clinton, and Perry reservoirs.

New programs include Auxiliaries performing environmental patrols or watches to assist the U.S. Coast Guard in its environmental mission. Environmental concerns on the water include trash and sewage dumping, and oil and fuel spills.

The Courtesy Marine Examination Program, or CME, is a valuable service to the boating public. Auxiliary members inspect boats for safety equipment before the boat is put on the water. This not only saves lives and prevents injuries and accidents, but it can also save the boater from getting a ticket. The 300-500 CMEs done annually in Kansas are usually conducted at boat ramps, although they may be held at a marine dealer or sporting goods store on occasion.

For Auxiliary members, fellowship is an important benefit of belonging. We are all volunteers, recreational boaters, and enjoy many things in common. Our primary motivation comes from the knowledge that we have helped many boaters have safe and enjoyable boating experiences.

If you have a desire to help other boaters, there has never been a better time to join the Coast Guard Auxiliary. Prospective members are encouraged to contact Jack Gumb at 785-286-2922 or Mike Stanley at 785-597-5549. ♡

# *A FISH IS WORTH A THOUSAND SMILES*



photos by Marc Murrell







# Conservation Officer

by Mike Ehlebracht  
*conservation officer, Great Bend*

***Fourth in a series profiling Kansas conservation officers, who patrol the state enforcing wildlife-related laws.***



The western edge of the Kansas Flint Hills is home to a great diversity of wildlife and their habitats. For conservation officer Marv Peterson, this has always been a special place. Peterson grew up in Morris County and was influenced by Willard “Hap” Jones, who was the area’s game warden at the time. Like most boys who grow up with a passion for hunting and fishing, Peterson dreamed of becoming a game warden some day, and he has done just that. Peterson has been the conservation officer for Morris and Marion counties for the past eight years. All of the things he enjoys such as fishing, turkey hunting, and muzzleloader hunting are here. Talk about your dream come true.

Peterson started his career with the department as the wildlife manager for Marion Wildlife Area, where he worked for seven years. Now he is responsible for more than 1,700 square miles of some of the most enjoyable country in Kansas. This along with two federal reservoirs, and the cities of Marion and Council Grove, keep him jumping. While the population of his two counties isn’t large, Peterson’s dis-

trict is within 60 miles of Emporia, Newton, Salina, McPherson and Wichita, which translates into a lot of people. Pinning down a “busiest” season isn’t possible. The Kansas fishing, boating and hunting seasons seem to overlap with no down times.

Like all officers, Peterson spends most of his weekends working, which puts special demands on his wife and three children. He points out that his job requires an understanding family, and he misses some of the weekend activities with them. Still the rewards of his dream career are many. Working with the department’s decoy deer program to reduce trespass and road hunting problems is one of his favorite duties and provides what he considers a form of job entertainment. One of his pet projects for the last several years involves organizing hunts for disabled hunters. Working with the U.S. Army Corps of Engineers, other department personnel, and many volunteers, Peterson has enjoyed the successful program. The first hunts were muzzleloader deer hunts, and this year the program was expanded to

include spring turkey hunts.

On a less enjoyable matter, Peterson echoes the concerns of COs statewide finding illegally killed deer with their heads cut off. With the reputation Kansas has for big-racked deer and the value of these racks, this poaching problem is becoming more common. He is proud of his involvement in a case against a local guide and outfitting service that involved 13 suspects and more than 100 violations charged in state and federal courts. Cases like this one require a great deal of time and effort but are essential to maintain a strong resource and ensure that law-abiding sportsmen have quality opportunities.

Peterson said he is always trying to be in the right place at the right time to catch a violator or help someone in need. He enjoys what he does, he’s working for wildlife, and he’s making a difference. I think Marv Peterson is right where he belongs. ♡

**Editor’s Note:** Marv Peterson was recently named the Shikar Safari International Conservation Officer of the Year Award for 1999.

Edited by Mark Shoup

### ELIMINATE BOW WEIGHT

Editor:

I serve as chairman of the Professional Wildlife Management Committee – a group of eight state wildlife biologists and three wildlife professors who are all bowhunters. We meet once or twice a year and discuss bowhunting problems. Several years ago, we began discussions on state bowhunting regulations, and those discussions culminated in setting up a paper session on regulations that will transpire in March at the North American Wildlife and Natural Resources Conference in Chicago.

Our surveys revealed that many states do not have regulations on bow weights, and here is why. First, the new concentric wheels found on compound bows make the weight listing rather meaningless. I don't understand all the engineering jargon on this issue, but I do know that kinetic energy – not bow weight – is what determines arrow penetration. Modern bows generate much more kinetic energy at the same weight as older bows. Thus, a lighter bow – much lighter – can still provide the same power that an older, say 45-pound, bow could. Thirty-pound bows of today with concentric wheels can have as much power as a 60-pound bow of the past.

In essence then, the 45-pound draw weight requirement [as required under Kansas regulations] is obsolete.

Another major reason for dropping all bow weight minimums is that few, if any, hunters will use a bow that won't get the job done. It has been suggested that if you drop the bow minimum, some hunter might go out with a light bow and wound a deer. I would point out that the wound issue is not one of bow weight but one of arrow placement.

Another really strong reason I support dropping draw weight requirements is because the future of hunting lies in recruitment, and women

are the fastest growing segment of the hunting population – two percent of all hunters in 1992 and 12 percent of all hunters today. With declining hunter numbers, recruiting more kids and women into the outdoors is critical to our survival. Critical.

I appreciate your giving my thoughts, and those of my wildlife committee, your consideration.

*Dr. David Samuel  
Conservation Editor, Bowhunter,  
Morgantown, West Virginia*

### PLANT MORE TREES

Editor:

Conservation tree planting was up last spring in Kansas. K-State's Kansas Forest Service shipped some 20 percent more plants than in 1998. Let's hope this sets a new trend.

The Forest Service also contracted the Docking Institute of Public Affairs, at Ft. Hays State University, to conduct a survey of past users of the Conservation Tree Planting Program. Just recently, we got to see the draft report, and it is very encouraging. They found that 95 percent are satisfied with most aspects of the program. "Plant survival after planting" is the only category not receiving a 95 percent or greater satisfaction rating; however, it still received a very high 86 percent rating. I was surprised at this level of support in that we had rather severe redcedar problems in two of the three years surveyed.

Another surprise, which came in a survey of the general public, was that the public's knowledge of the benefits of conservation tree and shrub planting is rather high, ranging from 72 percent who agree that windbreaks reduce livestock feeding costs to 98 percent who agree that windbreaks attract wildlife. It appears that conservation agencies have done a better job of educating the public than I had realized.

One point that I got from the survey is that support for conservation tree

planting remains high. There are many people who intend to plant conservation trees and shrubs, but it is obvious that we need to keep reminding them of the opportunity for help in technical assistance and low-cost trees and shrubs.

This year, the Kansas Forestry Service is offering 30 kinds of trees and shrubs for conservation purposes. Three special bundles are offered. The Songbird Bundle, with 20 plants, is offered for restricted areas, such as the backyard. The Wildlife Bundle has 130 plants, sufficient for an odd quarter acre. The Wildlife Mast Bundle has 125 nut-bearing trees.

Want to get in on the action? Contact your local county extension office, your county conservation district, or the Department of Wildlife and Parks for technical assistance and ordering information. Your readers may also call the Forest Service toll free at 1-888-740 8733.

*Bill Loucks, Conservation  
Forester, Manhattan*

### DEER ADDRESSED

Editor:

While I abhor the reasoning of the Smith County attorney about poaching, he was right in saying there are too many deer. They are causing lots of costly accidents, including, in a few cases, loss of life. However, I think Wildlife and Parks experts have done a wonderful job managing a beautiful whitetail deer herd. Now would seem to be the time to really liberalize the hunting laws and regulations to allow a substantial, meaningful harvest.

Several possible changes come quickly to mind: 1) Open rifle season at the same time or even before our neighboring states open their seasons. Hunt for six or eight weeks. 2) Quit the unit system; make permits statewide. Also, make them cheap and easily obtainable. 3) make a doe harvest mandatory, before being able to buy a buck permit.

What would be wrong with opening

quail and deer seasons together? I hunted that same system in south Texas several years ago.

Isn't it time to make some drastic changes in the way we hunt deer in Kansas?

*Allan Kimmell  
Topeka*

Dear Mr. Kimmell:

There are diverse and conflicting opinions when it comes to deer management. The department is in the process of gathering and evaluating those ideas. Throughout the next year, we will be holding public meetings around the state. During the meetings, the department will present information on the deer herd and recent management efforts. Those public meetings will also be an opportunity for citizens of the state to list their concerns and opinions about deer and management issues.

People want different things from this resource, and many people hold strong feelings on the subject. Before we address the nuts and bolts type of issues of deer management, like the ones you mentioned concerning permits, season dates, and hunting restrictions, it will be necessary to reach a consensus on goals that the people of the state accept for their deer resource.

Each deer management action that is taken has an influence not only on the deer population but also upon the people of the state who enjoy that resource and upon people who are negatively affected by deer. Therefore, each option needs to be carefully evaluated.

Steps taken by KDWP in the last five years to control deer numbers have been dramatic and unprecedented. No person in the state who desired to hunt deer has been excluded from that opportunity in recent years. Most Kansas deer hunters can recall the situation a few years ago when the opportunity to hunt deer in our home state was restricted to an event that occurred once every two or three years. Last year, a deer hunter could kill six deer in Kansas.

A comparison of our regulations

**among states with similar Midwest habitats will show that Kansas has been one of the most, if not the most, aggressive in addressing the recent growth of deer populations that is occurring throughout the nation. These steps have been carefully evaluated and will continue to be reviewed to ensure that they are adequate, appropriate, and what the people of Kansas desire.**

The deer herd in Kansas at this time is at densities far below the environmental carrying capacity of this area, and therefore, the population has a strong growth potential. It is vigorous and healthy. It has characteristics of age structure and sex ratios that are the envy of deer enthusiasts across the country. At the same time, it has reached population levels that are unacceptable for many people.

*-Lloyd Fox, big game  
coordinator, Emporia*

## SERVICE PLUS

Editor:

I would like to let you know that I have bragged about your organization many times, to so many people. I am impressed with your web site, and I am very impressed with the people you employ. When I request brochures, either by phone or website, I swear that you must run out to catch the mail truck because it gets here so fast. When speaking over the phone, I've yet to find someone who is not professional, courteous, and very service-oriented. When I have questions over the net, you return the answers in a very timely fashion - even for exact directions to specific areas. WOW!

You are really making access to the Kansas outdoors very enjoyable. I especially appreciate the Walk In Hunting Area program. Our busy lives make getting access to land very hard. I was just about ready to give up hunting until you started this program. This would have been a tough decision for me because there have been years when I would make it to the fields at least once a week.

Thanks again and please pass this

message on to any state official who wants to know how well you are doing.

*Warren Vincent  
Tonganoxie*

## THANKS FROM NEBRASKA

Editor:

Just wanted to write and applaud your hard work and efforts on such a successful Walk In Hunting Area program. I'm a native Nebraskan and hunted here all my life. Due to the low quail numbers for several years, I decided to try hunting your state.

I was very impressed with the quality of ground that was enrolled in your program. Excellent stands of warm season grasses, milo stubble fields, creek bottoms, waterways, and edge and ditch cover.

Truly, the keys for good bird numbers are the farming practices and habitat. Over the years, I just didn't realize the absence/removal of this in Nebraska. Thanks again for such a quality hunt for me and my wirehairs.

*Tom Lococo  
Lincoln, Nebraska*

## YOU HAVE IT ALL

Editor:

Just a short note about hunting in Kansas. Over the last few years that my sons and I have enjoyed the hunting season in Kansas, we have created many memories for the future, between father and sons. The management of the deer herds, the increasing turkey population, and the continuing seasons on quail, ducks, and other game are great. I feel that Kansas is a state where you can have it all at a reasonable cost, if you want to look at it that way. Why go to another state when Kansas provides it?

Also, I purchased three lifetime licenses for my three sons when they were first available, and it has been well worthwhile. One of them had to move to the Washington, D.C., area and is always looking to come back and hunt in Kansas. Having this type of license means a lot to him.

Again, thanks for doing a great job.

*Paul M. Shelley  
Jefferson City, Kansas*

## Violations By The Number

At times, it seems that folks just get caught-up in their outdoor activities and forget a few simple things. Other times, people seem to go out of their way to try and get around the rules, to try a shortcut. In either situation, these people may be contacted by a conservation officer of the Department of Wildlife and Parks.

The laws that we all are to abide by were established for various reasons. Some laws are enacted to protect the resource from abuse, such as poaching. Other laws are for public safety, to ensure that what some may think is fun does not endanger others. And still other laws are meant to provide the necessary funding to build and maintain our parks, wildlife areas, boating facilities, and fishing and hunting opportunities. Without these laws, we would most likely have little wildlife, general chaos, and no place to play.

Annually, our law enforcement officers contact thousands of recreationists and provide valuable services by informing people of the opportunities that await them. However, these same officers are sworn to enforce the law and sometimes have to put a damper on somebody's fun. I recently reviewed some of the statistics concerning violations that were formally dealt with by the Department's officers. I asked for a list of the top 10 violations that were cited or issued warnings for 1998. The findings were rather interesting.

Over 51 percent of viola-

tions relate to people not having the proper license, permit or registration. Sometimes people forget until the last minute. When that important week-end rolls around, they take the chance that they won't get caught. In any event, when they are contacted and cited or warned, their trip is often spoiled for themselves and their friends.

Safety equipment violations make up 34.73 percent of all violations. These laws are meant to protect people in very real, life-threatening situations. Many people die each year from drownings, and the potential for death or serious injury from something like a fire onboard a boat is always a sobering possibility. No one wants to have any of these tragedies mar their good times.

Another safety-related violation, possessing an open container of liquor in a vehicle, accounts for 3.06 percent of the top 10 violations. Drinking and driving (whether a car, truck, or

boat) is dangerous business. People having a good time sometimes don't realize the affect alcohol can have on their ability to safely operate a vehicle. This not only puts

keep people away from dangerous areas. They are not meant to keep people from having fun.

All this is to emphasize that if we all want to maxi-

Top 10 Violations in 1998		
Rank	Violation	Citations or warnings
1	No fishing license	844
2	Insufficient or unserviceable life jackets	727
3	No boat registration	408
4	No fishing license in possession	344
5	Children 12 years and under with no life jacket	227
6	No serviceable or unserviceable fire extinguisher	226
7	Vehicle in restricted area	222
8	No hunting license	169
9	Fishing with more than two lines	136
10	Transportation of an open container of liquor	104
	<b>Total</b>	<b>3397</b>

them in harm's way but also threatens the other occupants of their vehicle and other people in the area.

The number 7 violation is operating a vehicle in a restricted area. Vehicle restrictions are enacted to protect fragile areas or to

mize our outdoor experience, then we should pay attention to the rules. A little forethought and planning can go a long way to ensure a safe, pleasurable experience in Kansas' great outdoors.

*-Kevin Jones, Law Enforcement director, Pratt*

## NEW LAW DIRECTOR

Kevin Jones has been appointed the new director of the Law Enforcement Division for KDWP. Jones has more than 24 years experience in wildlife law enforcement and state park management. His background includes extensive work in field law enforcement, investigations (both overt and covert), policy and procedure development and implementation, special project and task force operations, watercraft law enforcement, and training.

Jones is no stranger to Kansas, having earned his bachelor's degree in wildlife conservation from Kansas State University in 1974. In addition to being a federal deputy game warden, Jones has more than 21 years experience working as a criminal investigator in Wyoming. There, he also developed computer database systems that tracked all law enforcement cases, coordinated training, and directed special operations, among other tasks.

The Department of Wildlife and Parks welcomes Jones to this new position, and staff are enthusiastic about his abilities to lead this division in protecting Kansas wildlife resources.

*- Shoup*

## HOME ON THE RANGE

There was a time when antelope, or more correctly, American pronghorn, were a dominant component of the Kansas prairies. Then there was half a century when they were nearly absent from our state. Today, they number less than 2,000 in Kansas, holding precariously to a portion their former home.

Pronghorn are the most intensively-managed big game species in Kansas simply because they are so vulnerable to people with high-powered rifles and to destruction of their habitat. Twice a year since 1963, KDWP has made aerial surveys of the population. During the winter, the flights are made along transect lines spaced about one mile apart. A total herd count is attempted. In July and August, the flights are made to determine the composition of the herd. Bucks, does, and fawns are tallied from the air. Only a sample is classified.

The distribution of where hunters take pronghorn and where we observe pronghorn during the winter surveys reveals trends in the distribution of the species. In recent years, there has been a decline in pronghorn numbers west of Sharon Springs compared to what it was 10-15 years ago. However, there have been increases in pronghorn numbers in the southern management unit and in some pockets along the eastern edge of the species range.

When we survey the population in July, we can easily identify the fawns although by that time they have mastered their running skills and are considered recruited into the population. Last summer, the population had only 35 fawns per 100 does, the lowest recruitment rate since 1964.

Antelope hunting was prohibited for most of the century; however, conditions have changed to allow a limited and regulated harvest. Permit numbers have

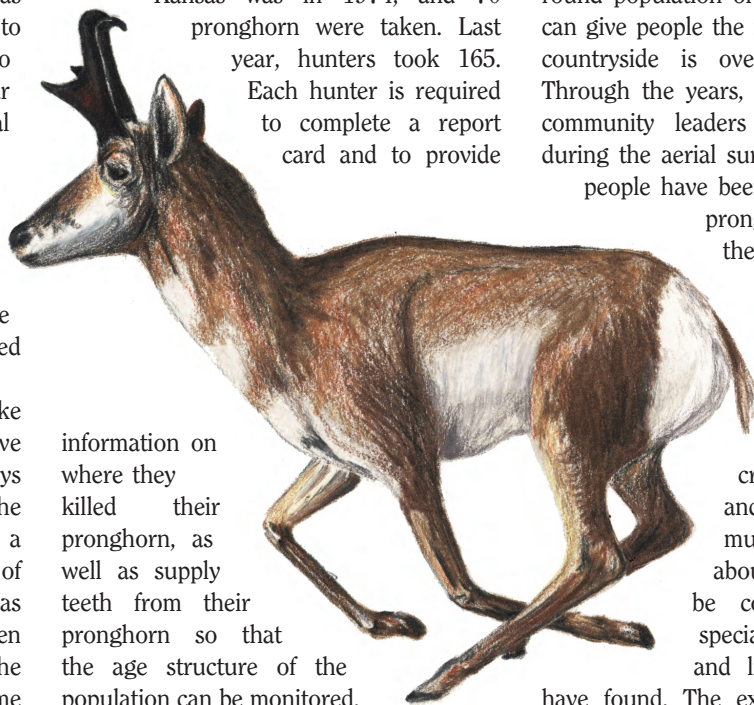
ranged from a low of 80 in 1974 to 540 in 1984. Last year, 194 firearm permits and 146 archery permits were issued. Next year, there will only be 160 firearm permits.

Half of the permits go to landowners and half go to general residents. In recent years, about 1,000 people each year have applied for a firearm permit

There is a preference point system for pronghorn hunting. A hunter may need to apply for 4 to 6 years before he is rewarded with an opportunity to hunt in Kansas. Because of low antelope numbers, nonresidents are not eligible.

The first hunting season in Kansas was in 1974, and 70 pronghorn were taken. Last year, hunters took 165.

Each hunter is required to complete a report card and to provide



information on where they killed their pronghorn, as well as supply teeth from their pronghorn so that the age structure of the population can be monitored.

When you listen to what some people say about this species in meeting places across the high plains, you may be convinced that pronghorn are the scourge of the west. How can a species get such a bad reputation?

Unlike most species of wildlife, pronghorn do not hide, and this is one of the factors that work against them. They congregate in large groups in the winter, and given the opportunity, they will stand in the open all day. If disturbed, they can run for miles. It is not unusual for a group of 60 to 100 pronghorn to spend the whole

day standing on a field of green wheat. That may cause the owner of that field to become concerned. These same animals may have been in small family groups throughout an area with a radius of 10 miles or more during the rest of the year.

Because of these behaviors, most people believe that pronghorn are much more abundant than they really are. As a result, it is the species most frequently associated with a problem if some problem occurs on that land.

A landowner will normally see the herd anytime it is around. If the herd is disturbed and moves, some other landowner may think they have a year-round population of that same herd. This can give people the feeling that the whole countryside is overrun by pronghorn. Through the years, we have taken a few community leaders along as observers during the aerial surveys. Generally, these people have been amazed at how few pronghorn really occur in their area.

A herd of 100-pound animals can cause damage, however, and pronghorn do feed on agricultural crops like green wheat and alfalfa. However, much of what is said about pronghorn needs to be compared with what specialists in range, crop, and livestock management have found. The extent of damage that pronghorn cause by grazing on green wheat, or competing with cattle for forage, or their contribution in the spread of weeds have frequently been overestimated or misunderstood.

Antelope are perfectly adapted to the shortgrass prairies. They are capable of seeing predators; they need only the moisture in plants; they can survive on plants cattle and farmers seldom use.

The beauty, grace and stamina of this species deserves a support group's voice in Kansas to champion its conservation.

--Lloyd Fox, big coordinator, Emporia

# GRASSED TERRACES ARE BACK

The U.S. Department of Agriculture (USDA) has developed an initiative aimed at encouraging farmers to install grass strips in their fields through the Continuous Signup of the Conservation Reserve Program (CRP). When the Continuous Signup was announced in the fall of 1996, many Kansas soil, water, and wildlife conservationists considered it to be potentially the best multiple-benefit program ever offered through USDA.

The conservation practices offered through the Continuous Signup of CRP provide so many benefits that USDA decided to encourage farmers to come into their Farm Service Centers any time of the year to sign up for them. Most of the practices involve placing strips of permanent vegetation, usually grasses, in strategic places in or around crop fields to control erosion. Unlike the regular CRP, erosion would be controlled while leaving most of the field in production.

One of the most attractive features of the Continuous Signup to farmers is that it doesn't require a bidding process or the environmental "points" that farmers have become familiar with under the regular CRP. All croplands are eligible for appropriate Continuous Signup practices, not just highly-erodible land, and acceptance for applicable practices is a virtual certainty. Annual USDA payments for such practices are based on soil type and county averages. Some practices even come with a 20 percent bonus over the normal rate.

Kansas conservationists have been particularly excited about the prospect of installing contour grass strips on terraces. This combination seemed natural because grassing terraces would not only stabilize the structure of the terraces and prevent them from washing out but would also provide wind erosion protection and numerous crop production benefits. By the latter part of 1998, interest in grassing terraces was really starting to take off around the state.

With growing enthusiasm for grassing terraces becoming evident, Kansas conservationists were stunned when, on March 10, 1999, the Washington, DC office of the Farm Service Agency issued Notice CRP-338 that disallowed the establishment of contour grass strips on terraces. Some grassed-terrace systems had already been installed and many more were planned, only needing signatures on the contract. Many farmers had already purchased seed. Notice CRP-338 contended that grassing terraces would not help reduce erosion or control runoff and that it was a doubling up of conservation practices on the same field. Subsequent correspondence from Washington-based Farm Service Agency officials indicated they did not believe that farmed terraces regularly wash out or that grassing them would do much to prevent terrace failure.

Kansas and Nebraska Conservation organizations, as well as national organizations, were quick to dispute the FSA ruling, pointing out the multiple benefits of grassing terraces - including clear-cut erosion reduction and runoff-control benefits. Letters and calls from farmers and conservation districts furnished ample grass-roots evidence that grassing terraces would provide significant practical erosion control. An April 12 letter, co-signed by the heads of 15 Kansas natural resources agencies and organizations - from Farm Bureau to the Audubon Society - further attested to the multiple benefits of grassing terraces.

Last summer, Kansas NRCS and FSA state committees voted, without opposition, to request USDA to reinstate the use of contour grass strips on terraces. Kansas' First District congressman Jerry Moran also authored legislation intended to reinstate the practice of installing contour grass strips on terraces. In addition, the Kansas Department of Wildlife and Parks put together a photo album with the hope of providing a better visual understanding

of the on-the-ground reality of terracing in Kansas. Numerous copies of the album were hand delivered to Washington-based USDA officials and key congressional members by Pheasants Forever staff in September.

Ultimately, it was Kansas Senator Pat Roberts who, with strong grass-roots support, found a successful means of dealing with this issue. He was able to gain Senate Agriculture Committee approval for attaching an amendment to the recent Ag Appropriations Bill that effectively reversed Notice CRP-338. That bill, with the amendment attached, was passed by the Senate and the House, and was signed into law in late October.

As a concession to Washington-based USDA officials, the amendment provides that CRP rental payments for grassed terraces will be reduced by the depreciated amount of any federal cost-sharing that might remain from terrace construction. Revised rules have not, as of this writing, been issued from USDA. However, Kansas conservationists expect very few terrace systems will be affected by the rental payment reduction because most were constructed more than 10 years ago, and many others were not federally cost shared. When final rules are issued from USDA, NRCS district conservationists will again be able to plan and sign up grassed terrace systems into the Continuous Signup of CRP.

Besides erosion control and stopping blowing snow, science has provided many reasons why grassing terraces is a good idea. By slowing the wind speed across adjacent crops, these grassed terraces can actually reduce evaporative losses, leaving more moisture available for the crops to put into growth. Although some farmers have expressed fears that grass strips might become a source of grasshoppers, that hasn't been the case. In fact, studies in Europe and in the U.S. have shown that grass strips increase numbers of beneficial insects that actually help control crop pests.

Now that grassing terraces is again going to be part of the Continuous Signup for CRP, conservationists expect many Kansas farmers to take advantage of all the benefits they provide.

*--Randy Rodgers, research biologist, Hays*

## SUMMER SQUIRRELS

Squirrel season opens June 1 and continues through February 28, providing one of the state's longest-running seasons.

Two squirrel species live in Kansas. Gray squirrels are forest dwellers, found in the hardwoods of eastern Kansas. They tend to be most active at dawn and dusk. Weighing just over a pound, they are difficult to approach. They spend much of each day in their dens.

Fox squirrels can be hunted throughout the state because they live in windbreaks, wooded riparian corridors, and isolated woodlots. They are especially common in the forests of eastern Kansas. Fox squirrels are large, weighing as much as three pounds. They have keen

senses and are quick to spot danger, but their tendency to stay active all day makes them easier to hunt than grays.

Early-season squirrel hunting is made difficult by the jungle-like foliage, but it is usually easier to move quietly through the summer woods than during fall and winter months when fresh dry leaves litter the ground. The leafy canopy that helps hide squirrels also effectively masks hunter movement below, so an alert hunter may have the advantage during this time of year.

The progression of summer fruits and mast provide easy-to-spot squirrel hunting areas. In early June, mulberry trees provide top hunting sites as squirrels gorge on the sweet berries. By mid-June, developing green walnuts attract feeding squirrels. Walnut, hickory, oak, and

hackberry trees all produce desirable mast, but the nuts of walnut and hackberry are particularly favored early on. Young corn is eagerly sought, and squirrels can often be found in cornfields and adjacent timber during summer months. Add a nearby creek to any of these preferred foods, and ideal squirrel habitat is the result.

Although squirrels can be hunted with firearms ranging from air rifles to shotguns, most hunters use .22 rifles.

Squirrel distress calls are quite productive during early summer. Mimicking the squeal of a young squirrel caught by a predator, these calls often elicit excited barking from nearby adults, which may come on the run to provide an easy shot.

-Blair

## Turkeys and Camouflage

How important is camouflage when going afield to hunt wild turkeys in Kansas? Personal experience has shown me that good camouflage can mean the difference between a successful or unsuccessful time in the field.

One of the most important things to consider when determining the kind of camo to use is what kind of habitat you will be hunting. For instance, if most of your hunting will take place during the spring season in eastern Kansas woodlands, you need to look for a pattern that would most closely match that type of habitat. Likewise, a shrubby native grassland draw may require a pattern with more browns than greens.

The key is to cover yourself from head (and hands) to toe. Face masks and gloves are musts because any abrupt change in colors, especially with movement, is readily picked up by a wild turkey's keen eyesight. If you want to check this out, set a hunting buddy in a tree line with camo on everything but his hands. Back off 40 or 50 yards and have him make the motion of mounting his gun to his shoulder. I think you'll see the importance of having hands and face covered during your hunt.



The magic of camouflage was demonstrated to me two years ago on a late spring turkey hunt. The southcentral Kansas woodland edge, adjacent to plowed cropland, was just beginning to leaf out. Dad and I set up just on the edge of the woodland, each with our backs against a different tree. There was nothing in front of us but cropland, and the background was a very narrow wooded draw, leading to the river. Each of us was basically in the open except for the tree behind us.

We called the birds across the river. A jake, a two-year-old tom, and several hens came popping up over the river bank. I had mounted my shotgun just as the birds came over the bank of the river and started towards us. The older tom moved back and forth with the hens for 30 minutes or so before deciding to come in for a closer look. By this time, my arms were visibly shaking from the weight of the gun, even though resting on my knees in a sitting position. I felt that my heavy breathing must have been making me look like a hot air balloon inflating and deflating as the tom came my way.

When I fired and the tom went down, I stepped off 23 paces to pick him up. As I looked back to where we were sitting, I was amazed to see just how out-in-the-open we seemed to be.

That hunt showed me just how much closely-matched camo can add to the hunting experience. Matching clothes to your hunting situation can show you, too, the magic of camouflage.

-Jim Hays, terrestrial ecologist, Pratt



# The Boys Rocket

by Mark Shoup



There are many advantages to living in the country. Walk out your front door and hunt pheasants, quail, rabbits, even deer. Build a pond and fish at home. Take out the trash in your underwear.

Then there's really handy stuff such as growing gardens large enough to feed East Timor for a month. Instead of mowing your lawn, you can swath it, providing forage for the 4-H calf that rousts you out of bed at 6 a.m. so that you, in turn, may roust your future blue-ribbon winning child out of bed to feed it. In winter, there is plenty of wood to cut and split in the event of the next Y2K-like scare, which is likely to enter the solar system any day.

Last winter, my boys Logan and Will (11 and 8, respectively) discovered an outdoor sport that is every bit as dependent upon the country as hunting or trying to feed the world, and often just as exciting.

In November, Rose and I had rented a video entitled *October Sky*, and the four of us watched it as a family. It's an uplifting story about a boy coming of age in a West Virginia coal mining town in the 1950s. Autobiographical (from a novel originally entitled *Rocket Boys*), the story chronicles the efforts of young Homer Hickam and a group of friends who, prompted by the Soviet launch of Sputnik, aspire to build rockets, win the national science fair, and earn college scholarships.

We were so inspired by the story that we even read the credits (an activity I normally rank right up next to window shopping with my wife). The credits indicated that Homer Hickam now works on the International Space Station (ISS) program in Huntsville, Alabama.

It so happens my good friend, Joe, is a human factors engineer on that program. (I've always wondered what "human factors" were and how they are "engineered." Seems like some bizarre afterthought, but I never wanted to insult my buddy by asking.) I immediately wrote Joe and asked if he knew Hickam. His cryptic reply was simply, "He da man."

"What man?" I wrote back. "Do you know him? Might it be possible to get a couple of autographed paperbacks for the boys?"

About a week later, Joe replied, "I don't even know if he's around anymore. If he can be found, I'll get Mitsy (Joe's girlfriend) to bat her baby browns while I stick a pen in his hand."

I heard nothing more for several weeks, so I figured this was just another pipe dream. Then a week before Christmas, we got a package from Joe. Inside were two hardback copies of the original book, *Rocket Boys*, personally addressed to Logan and Will with the inscription, "Aim high, Homer H. Hickam, Jr."

Needless to say, these books were the hit of Christmas morning. Logan was bug-eyed and read the book in a few days. A bit advanced for Will, the book awaits him in a couple of years, but the boys mumbled and discussed and conspired over the books

for several days. As chance would have it, they had also gotten model rocket kits from their grandparents, so they had no difficulty putting inspiration into action.

Problem was, these fancy kits had huge, impressive-looking Star Wars ships attached to them, which left little to the imagination and didn't really fly well. The first launch of a Super Intergalactic Quad-Wing Starfighter blasted off in a distinctly non-orbital direction and exploded above a giant cottonwood in our shelterbelt, flushing a curious redtail hawk perched nearby. The next rocket (something like a Twin Hexagonal Imperial Mega-fighter) leapt into the air and completed a celestial tail-spin over the barn and into a pesky army of blackbirds that had been ravaging my bird feeders.

Not all bad, but hardly satisfactory for aspiring aeronautical engineers.

That's when my sons decided to become rocket boys, an ambition uniquely suited to life in the country. The kits provided the engines and tubing for the rocket bodies. The boys would now provide their own designs, cutting tubing to various lengths, shaping and taping their own fins and nose cones out of materials on hand, using drinking straws for launch-rod guides, painting to suit their own tastes, and improvising engine size and cargo, sometimes with parachutes, sometimes without.

While it was amusing to watch, I was skeptical come launch day. I had the boys place the first rocket - an orange and black shaft adorned with gray posterboard fins taped on with red electrician's tape - in the front yard. The launch cord was strung through a chain link fence, which would serve as command center in case this hybrid creation would somehow become a heat-seeking missile.

On hand for the maiden voyage of the "Lame Duck" were two friends - Austin and Tyler - a group that now comprised the Iuka Missile Agency (or IMA) with Mom and Dad standing by for emergency mission support.

The countdown started at 10, and the tension increased with each descending number until we all cried, "Blastoff!"

And blast off it did. The awkward patchwork of tape, posterboard, and bubble gum shot upward like a miniature Apollo rocket in overdrive until all that could be seen was a small patch of smoke trailing behind. At the rocket's apparent zenith, there was a flash, then nothing. We stood staring upward like rocketry pioneers until a spot of orange finally appeared, falling straight toward us. The nose cone had broken free, but the parachute had not opened, and the craft wobbled to and fro as it plummeted toward Earth.

Well, it was actually plummeting toward the roof of our house, but this fact was lost on us as a flock of geese flew overhead in high V formation, directly across the path of our intrepid rocketeers' creation.

The rocket did, indeed, land on top of the house, fins still intact, nose cone dangling from a thread of parachute elastic. The launch would be the first of many successful - and highly erratic - flights, another dimension to the outdoors that raised further possibilities in the mind of one young boy.

"Dad!" exclaimed Will. "We could have gotten a goose with that launch! It's the season, isn't it?"

"Yes," I answered blithely, "but I don't think we have legal equipment."

## RIVERS RUN WHITE

With spring comes drastic cases of fishing fever. While many anglers seek treatment from a favorite pond or reservoir, those who have discovered the hidden wonders of meandering creeks and rivers find no better place to cure cabin fever, especially those who like catching white bass.

White bass are creatures of habit. As waters warm to 50 degrees in March or April, whites begin their annual run up reservoir tributaries. Often triggered by a rise in water, these runs can take fish many miles upstream. White bass spawn in shallow riffles and stage, sometimes in huge numbers, in deeper pools (4-7 feet deep). Small

males usually move up first, followed by larger females.

Some anglers enjoy casting artificial baits – such as jigs, Roadrunners, Rooster Tails, small spinner baits, crank baits, and spoons – to trick hungry whites. But there may be no better substitute than the real thing in the form of wiggling minnows. A simple crappie hook and enough split shot to keep the bait down in the current works well.

Light- to medium-action rods in the 5- to 7-foot range with a sensitive tip and good backbone to fight fish in the current work well. A spinning reel loaded with 6- to 10-pound test line is the perfect complement and can even handle fish in brush.

Top white bass reservoirs for 2000 include Kanopolis, Marion, Cheney, Clinton, Glen Elder, Wilson and Milford. Anglers searching for fish in these waters can either wade and fish or enlist the aid of a boat. Tributaries that extend out of public areas associated with reservoirs are private property, and landowner permission must be obtained to fish.

White bass have short life spans, and many don't live more than 4 years. As a result, they are prolific and there is no creel limit. There are days when you could fill a truck with them, but common sense says to keep only what you can use.

Catching these silvery river-run whites is a great

way to spend a relaxing day. In a swift current, their battles are intense and second to none. There's no doubt it's therapeutic, a sure way to cure cabin fever.

–Murrell

## FISHING LAKE FIXUPS

Many Kansas state fishing lakes are 40 to 50 years old and at a point where serious repairs are in order. To address this problem, Wildlife and Parks has embarked on an campaign to repair dams at these lakes across the state. The following Kansas state fishing lake dams have had major repairs or renovations in the past few months:

- McPherson State Fishing Lake renovation is nearly complete. This project consisted of repair of slide on the dam and renovation of the spillway. Total cost of these repairs was approximately \$363,000.

- Dam renovations are complete at Ottawa State Fishing Lake. The renovation required repairing slides on the dam and seepage below the dam, as well as repair to the spillway. Total cost was \$850,000.

- Bids closed Dec. 16 for renovation of Miami State Fishing Lake. This includes stabilization of bank and spillway repair. Estimated cost is \$1.2 million, and work began last winter.

- Engineering studies are being conducted on Shawnee, Douglas, and Brown state fishing lakes. After studies are completed, recommended repair projects will be put out for bid.

–Fred Badders, Engineering Section chief, Pratt

## EXPERIMENTAL TROUT STOCKING

**K**DWP, in cooperation with Fort Hays State University, is conducting a one-year pilot study to evaluate the potential for maintaining a seasonal trout fishery in the river above Webster Reservoir. The study area involves a 5-mile stretch of river between the upper end of the reservoir and the Damar Bridge.

Rainbow trout will be stocked twice in three locations within this 5-mile stretch in March 2000. Each stocking will consist of 750 trout (250 per site) with the first release scheduled for the first of the month and the second scheduled for mid-month.

Stocking sites were selected on the basis of trout holding capabilities. Each of these sites offers habitat conditions that are expected to attract and hold trout. Also, work was conducted to improve habitat within a zone ranging 500 yards upstream and 500 yards downstream of each stocking site. Anglers are likely to experience their best success when fishing within the 1000-yard zones associated with the stocking sites. To assist anglers, signs and maps will be posted at each stocking site. Maps will also be available from local KDWP offices and some local bait shops.

Although KDWP has maintained trout programs on several waters for many years, the South Solomon River project marks the first effort to provide a trout fishery in an unconfined river setting. Like most Kansas trout waters, the South Solomon River is not expected to support survival of trout through the summer. This put-and-take fishery would provide angling opportunities during the spring only.

Pilot study results will determine whether this becomes an annual program. Some of the factors being evaluated include effects on native fauna, movement of trout, angler use, and angler success. The South Solomon River within the study area is a fairly wide stream bed that offers fly fishing, spinning, and bait fishing opportunities. Trout permits are required to fish for and/or possess trout within the area during trout season, and statewide creel and possession limits apply. Trout season ends April 15; anglers may fish for trout without a permit after that time.

–Steve Price, fisheries biologist, Stockton

## SHOREBIRD MIGRATION

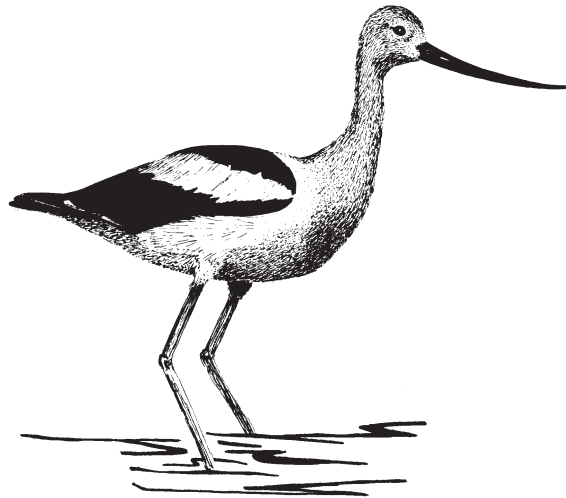
The spring shorebird migration is always a grand sight at Kansas' major wetlands. These birds are in migration toward their nesting grounds in the far north, and historically, Kansas wetlands have served as excellent resting and feeding stops. Thirty to 40 species, numbering in the hundreds of thousands, pass through the state each spring. Unfortunately, many people who want to witness this event must drive many miles to reach such places as Cheyenne Bottoms Wildlife Area or Quivira National Wildlife Refuge.

Ideally, such a trip should be planned in advance and scheduled to coincide with the peak shorebird migration periods. To do this, it is best to call the headquarters offices of these publicly owned marshes to be sure good numbers of birds have arrived. The Cheyenne Bottoms hotline is (316) 793-7730 and is updated each Friday. The Quivira number is (316) 486-2393. Internet users can check on shorebird status at (KSBIRD-L@LISTSERV.KSU.EDU).

Historically, early migrating shorebirds such as greater yellowlegs start arriving in Kansas around the first of April. However a much greater diversity of species can normally be seen during the last two weeks of April. While migration timing varies each year, the third week-

end of April can often be a hot time at Kansas wetlands, with a great diversity of species being present. If you wait until May, you'll see good numbers of later migrants, such as Wilson's phalaropes and white-rumped sandpipers.

To be sure that you don't miss the rush, start calling to check on the migra-



tion no later than the middle of April.

Beginning birders need at least one good bird identification book, and most people have two different publications: one with photographs and one with illustrations. While shorebirds are often quite tame, their small size makes binoculars of

at least ten power magnification a must. Many serious birders use spotting scopes.

There is no question that identifying shorebirds is one of the great challenges undertaken by even the most experienced birders. However, those birders who do a little homework will be rewarded. Before you visit a marsh, use an ID guide to make lists that group birds of similar size and shape. Specifically note the color of each species' legs, the shape of the bill, and feeding characteristics. Thus prepared, identification choices can be narrowed quickly in the field.

The greatest opportunities to learn proper identifications is when viewing multiple species at one time. Such a mixed bag of birds may overwhelm a novice at first; however, by comparing the obvious characteristics, differences may be noted.

For example, if a group of extremely small, short-legged sandpipers are viewed, look to see if the birds have pale green legs or black legs. Those with pale green legs are probably least sandpipers. Additional characteristics must be noted to identify the black-legged birds.

Even if shorebird identification is difficult, you'll find that a visit to one of Kansas' major wetlands during spring migration is a trip to remember.

—Gene Brehm,  
videographer, Pratt

## HUMMERS IN CYBERSPACE

Hummingbirds are all over the net. One of the most awesome sites on the Web devoted to hummers is Hummingbird Hotel, <http://members.aol.com/humerhotel/HummerHotel.html>. This site features video, sounds, photos, and information on this popular little bird.

Billed as the "most complete site about hummingbirds," Hummingbird! (<http://www.hummingbirds.net/>) is packed with information on hummers.

The Hummingbird Society's website, <http://www.hummingbird.org/>, is another great site. If ruby-throated hummingbirds are among your favorites, take a look at the ruby-throated hummingbird site (<http://www.birdsofna.org/excerpts/rth.html>).

For just hummingbird sounds, go to <http://www.naturesongs.com>. Click on "Hummingbirds" on the opening page, and you'll be presented with a list of sounds you can download.

One of the more attractive and informative spots to learn about hummingbirds is the Hummingbird Web Site, [www.portalproductions.com/h/hummersmenu.htm](http://www.portalproductions.com/h/hummersmenu.htm).

—Shoup



## ECO MEET

The first-ever statewide ECO-Meet competition was held at Rock springs 4-H Center on Nov. 10, 1999. Six teams from Wichita, central Kansas, and the Junction City area competed.

ECO-Meet is an award-winning, all-day event consisting of a series of environmental competitions between participating school districts. It is designed to promote and enhance environmental learning, but it is similar to a traditional sporting event in that competition is used as a means to achieve the goal. Each participating team competes in a scavenger hunt, insect knowledge test, general wildlife knowledge test, and an interpretive presentation. Questions for these events are based only on Kansas flora and fauna. Teams are comprised of three to four students from a school, and the top three placing teams from each regional ECO-Meet compete at the state level.

Regional ECO-Meets were held last fall at the Milford Nature Center, Wilson Reservoir, and the Great Plains Nature Center in Wichita. The Milford Lake ECO-Meet began in 1991 but 1999 was the first year for ECO-Meets at Wilson and Wichita. Because three regional

events were held, it was possible to hold a statewide competition with the top three placing teams from each regional competing at the state level.

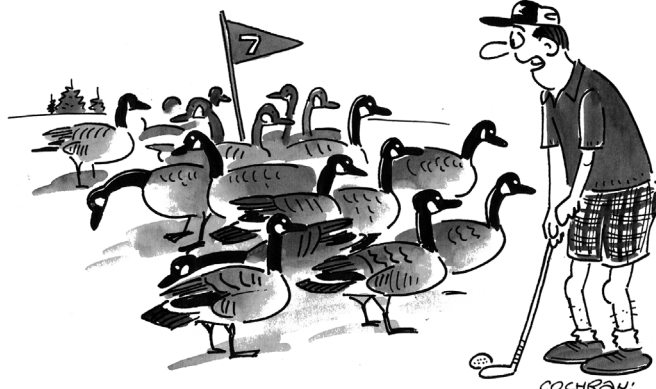
A team from Clay Center Community High School won the state ECO-Meet with a score of 341 out of a possible 400 points. Each member of the team received a complete computer system from ComLink of Wilson valued at approximately \$900. Wakefield High

School took second with 296.67. Each member of the second place team received a \$200 scholarship. Wilson Junior High placed third with a score of 280.67, and each member received a \$100 scholarship. The top two individual scores in the wildlife event and the insect event also took home scholarships of \$200 and \$100, respectively.

-Pat Silovsky, director,  
Milford Nature Center

## WAY outside

BY BRUCE COCHRAN



"MIND IF I PLAY THROUGH?"

## SHOOTING FOR RANGES

To provide improved shooting opportunities for the public, Wildlife and Parks continues to provide funds to organizations and municipalities for construction, development, and improvement of shooting ranges. The department provides 75 percent of the development costs and requires cooperators to provide the remaining 25 percent. The cooperator's match can consist of cash or donated labor, equipment, and materials.

Cooperators are responsible for the maintenance and staffing of the range. They must provide access to the general public and make the facilities available for department-sponsored programs upon request. Summarized below are reports on the program's activity to date.

For information on the shooting range grants program, contact Ross Robins at (316) 672-5911.

### RANGE PROJECTS COMPLETED:

- 1) Lakin Gun Club - Trap range enhancement  
Range projects underway:
- 1) Oberlin Gun Club - Trap range enhancement
- 2) Bear Creek Gun Club (Ashland) -  
Trap range enhancement
- 3) Michael Murphy and Sons (Augusta) -  
Sporting clays range enhancement
- 4) Ninnescah Valley Archers (Pratt) -  
Archery range enhancement

### APPLICATIONS RECEIVED BUT NOT YET UNDER CONTRACT AS OF JAN. 1:

- 1) Hays Sportsman Club - Rifle range enhancement
- 2) City of Horton - New rifle range
- 3) Powder Creek Shooting Park (Lenexa) - Sporting clays range enhancement
- 4) Cedar Hill Gun Club (Baldwin) - Sporting clays range enhancement
- 5) Gypsum Valley Sporting Clays (Lindsborg) - Sporting clays range enhancement
- 6) Lakin Gun Club - Trap range enhancement, second application
- 7) City of Garnett - Renovation of rifle and pistol range

-Ross Robins, Education Section chief, Pratt

# AT THE Movies

From *Star Wars: Episode One* to *Indian In the Cupboard*, most kids love the movies. But did you ever consider getting a movie made by the Kansas Department of Wildlife and Parks? Did you even know the agency made movies? Well, they do. Whether you're interested in learning how to identify the birds at your feeder, conserve a wetland, or learn more about wild turkey or deer, Wildlife and Parks has a nature movie for you.

These video movies were photographed and edited by Wildlife and Parks videographer Gene Brehm of Pratt. And all were shot right here in Kansas. All these videos can be checked out by your teacher or group leader (such as scouts, 4-H, church organizations) FOR FREE. You may also purchase some of them for your home video library.

So the next time you want to go to the movies, check out these Wildlife and Parks selections. Then fix a big bowl of popcorn and relax at home. (Titles in bold may be purchased by calling [316] 672-5911.) Order one or several.

*Floor of the Sky: The Shortgrass Prairie* is a 24-minute video that highlights the stunning geology and habitats of the high plains of Kansas. While many wildlife species are highlighted in the program, the status of the swift fox and the black-tailed prairie dog are discussed in detail.

*The Channel Catfish Story* is hot off the editing machine and details the hatchery processes that result in the production of catfish stocked

into Kansas' public waters, a process that was developed more than 60 years ago in Kansas. This short video lasts 13 minutes.

*Pheasants In Croplands* promotes farm practices that are friendly to wildlife, especially pheasants. The main focus of this program is on the wheat-growing regions of western Kansas. Program length is 25 minutes.

*Kansas Waterfowl: The Puddle Ducks* has been produced in two versions. A public program



version is 20 minutes long. The long version lasts 50 minutes and includes both natural history and identification of Kansas ducks.

***The Birds In Your Backyard: A Video I.D. Guide*** gives you a close look at most birds commonly seen at bird feeders. This 20-minute program is offered for sale and also makes an excellent public program.

Two programs that help people manage or understand our natural resources are *Farming CRP Lands Wildlife Friendly* -- 23 minutes and -- *The Use of CRP Food Plots as Fire Guards on CRP Lands* -- 18 minutes.

*Wetland and Riparian Areas of Kansas* is an entertaining look at the different types of wetlands in Kansas and their value in the water cycle. This video is 25 min-



utes long.

Programs from the natural history series, include ***Deer In Kansas*** and ***The Wild Turkey Story***. Both of these videos are for sale. *Deer In Kansas* is a 43-minute video that details the natural history and behavior of deer. *The Wild Turkey Story* is a 43-minute video that recounts the reintroduction of the wild turkey into Kansas. Turkey natural history, trapping and transplanting, and important research programs are highlighted.

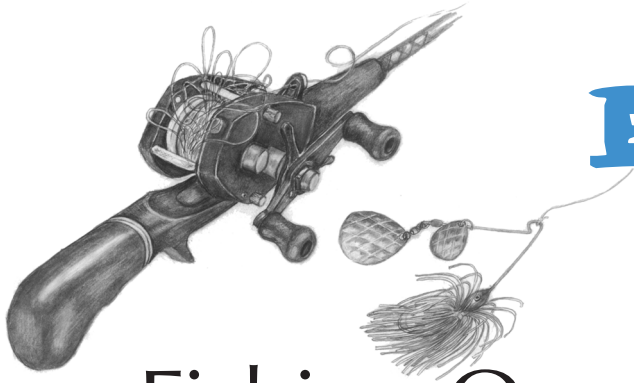
*Cheyenne Bottoms: Building For The Future* details the renovation of Cheyenne Bottoms. This 28-minute video highlights the value of this great marsh to waterloving birds and mammals. It also outlines changes that have tremendously improved the water storage and handling capabilities available to managers of this special marsh.

*The Grasslands Of Kansas* is a 25-minute movie that identifies the tall, mixed, and short grass habitats of Kansas.

*Walleye For Tomorrow* is a 10-minute show that displays the entire process of walleye egg collection and hatching, from biologists working to collect walleye eggs to the processes that hatch the eggs.

*A Boaters Guide to Kansas* describes the rules and procedures of safe and legal boating on Kansas waters. Proper registration, legal equipment, and operating laws are all included in this 25-minute production.

For more detailed information on the movies for sale here, visit Wildlife and Parks' website at [www.kdwp.state.ks.us](http://www.kdwp.state.ks.us) and click "Outdoor Store."



# Backlash

by Mike Miller

## Fishing Over The Rainbow

It was a perfect fishing trip. Which goes against some law of physics because I was with Lennie and Stub. Our fishing trips are never perfect — trailer lights quit working, an unforecast wind storm blows in, rain muddies the lake, or the boat motor won't start. And when we avoid such common pitfalls, the fish will decide to go on a hunger strike.

We know what we've missed since we have acquaintances who love to tell us of their most recent *perfect* fishing trip. We listen amazed, soaking in every detail, then make plans for a trip to the same lake the next day. Of course, we'll drive through a record late-spring snowstorm, only to hear "You should have been here yesterday."

But this trip was different. To begin with, Lennie didn't oversleep. In fact, he was ready early! And the drive to the lake was so smooth, I don't even remember it. Conditions at the lake were ideal — no crowds, light breeze, comfortable temperature. Usually we expect the worst when we run into these conditions because good things are bad omens for us. But for some reason, we weren't worried.

Lennie was a little suspicious, though, when he saw the empty boat ramp parking lot. "Where's everybody at?" he worried. "Either they closed the lake and forgot to put up signs, or there was a *yeeuge* fish kill here yesterday."

"Naww. We'd have heard about that," Stub argued. "Maybe, just *maybe*, today is the day when fish that haven't bit for weeks decide they're ready to eat like pigs. Like those days what's-his-name is always talkin' about. Maybe, we're here yesterday!" he added optimistically.

We launched without a hitch, and the outboard growled to life on the first crank. We all stared unbelieving at the rumbling motor, shrugged off yet another bad omen and headed for fishing paradise. Just a short distance from the ramp, the serenely-rippling water began to churn violently.

"There!" Lennie yelled and pointed. "I told you. Some deadly chemical has spilled into the lake. Look at her boil. Let's get out of here before the boat melts."

"Those are fish," I said, not believing it myself. "It's a feeding frenzy!"

For a moment, we stood in stunned silence, watching big white bass and wipers slash through a school of gizzard shad. Then, at the same time, we realized we should be casting into the mayhem. In Keystone Cops fashion, we stumbled around the boat, untangling fishing lines, stepping on poles and frantically trying to get a lure into the water. It was painfully obvious that this was a new experience for us.

Stub's lure hit the water first, and he immediately hooked a fat, 2-pound white. As I worked furiously to unhook my lure from my pant leg, I heard Lennie's drag slip. I looked up to see Lennie holding his doubled rod with both hands.

"This must be a giant wiper — don't know if I can turn it," he grunted happily.

I finally cast, landing my jig in the middle of the churning froth. A second after the lure hit, I leaned back into a heavy fish. In the clear water, I could see the broad, silver back of a big wiper. The drag ripped as the fish headed for a submerged tree I hadn't seen. I swung my rod to the right and actually turned the fish away from the snag.

"It is yesterday! There's no place like yesterday. There's no place like yesterday," I howled.

Then I felt a hard push on my back.

"Mike, are you going to get up and go to work, or just lie there mumbling in your sleep?" my wife muttered as she turned and walked out of the bedroom.

I squinted at the harsh hallway light that washed my paradise away, my hand still clutching an imaginary fishing rod. It wasn't yesterday after all. I closed my eyes tightly and tried to force myself back into the dream. I couldn't.

As I sat up and pried my eyes open, I noticed our old Lab lying at the foot of the bed, still sound asleep. His legs were twitching like he was running, and he was making happy "yippling" sounds. "Probably chasing a really slow rabbit with no human around yelling at him to stop," I said to myself. I tip-toed my way to the bathroom, making sure not to wake him. At least one of us would finish the dream. 