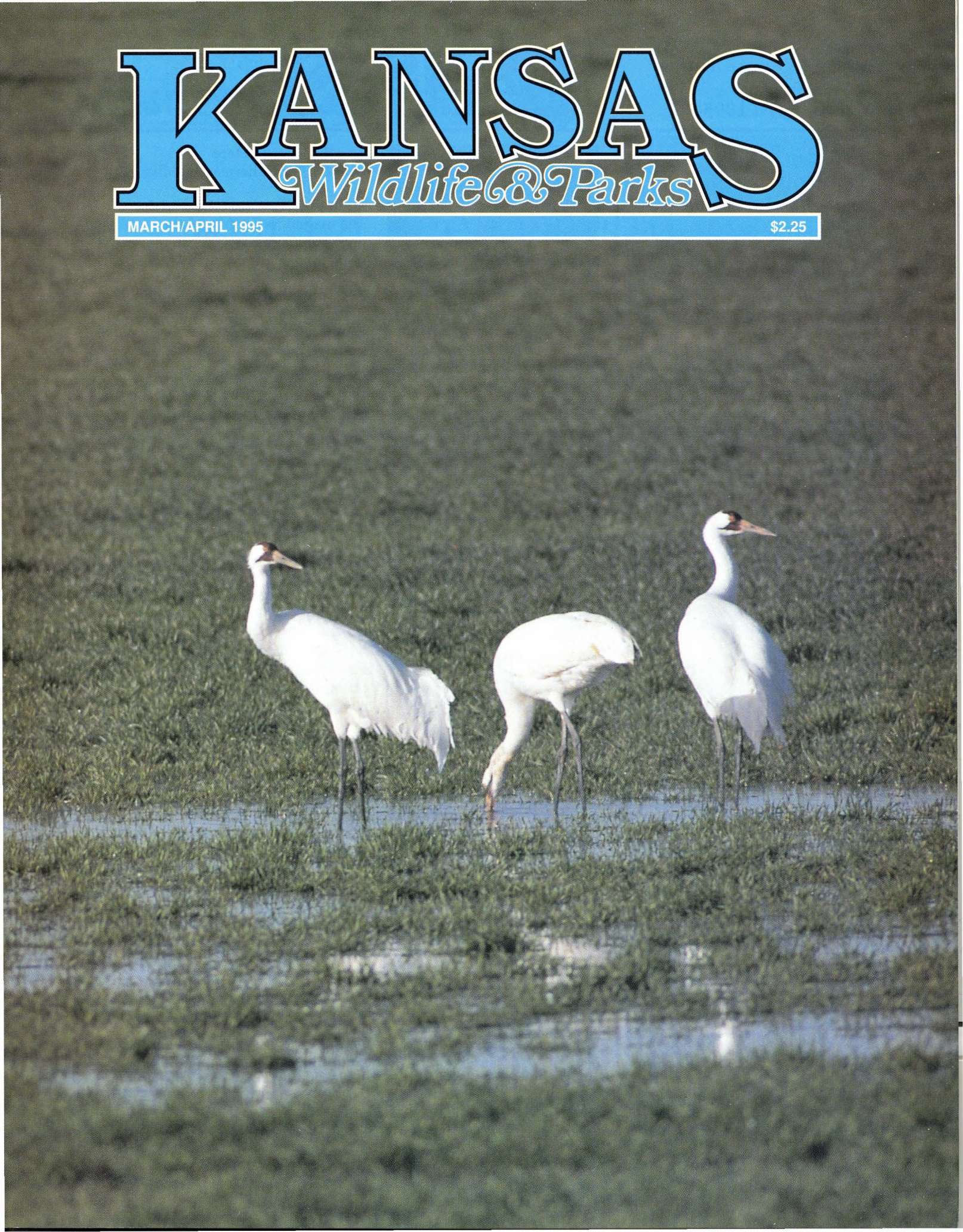


# KANSAS

*Wildlife & Parks*

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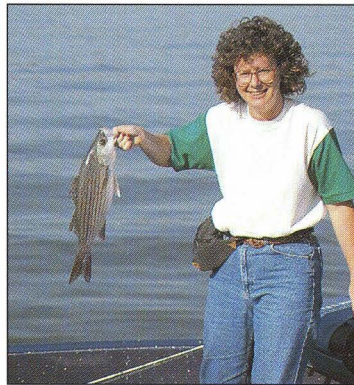
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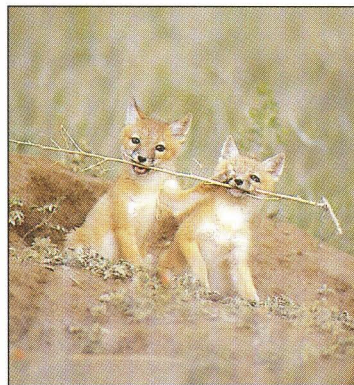
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**Front:** Three whooping cranes rest in a Kansas field before resuming migration. Mike Blair filmed the birds with a 600mm lens, f/9.5 @ 1/500.  
**Back:** A male bobwhite responds to a hen's call in early spring. Mike Blair shot the photo with a 600mm lens, f/8 @ 1/250.

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

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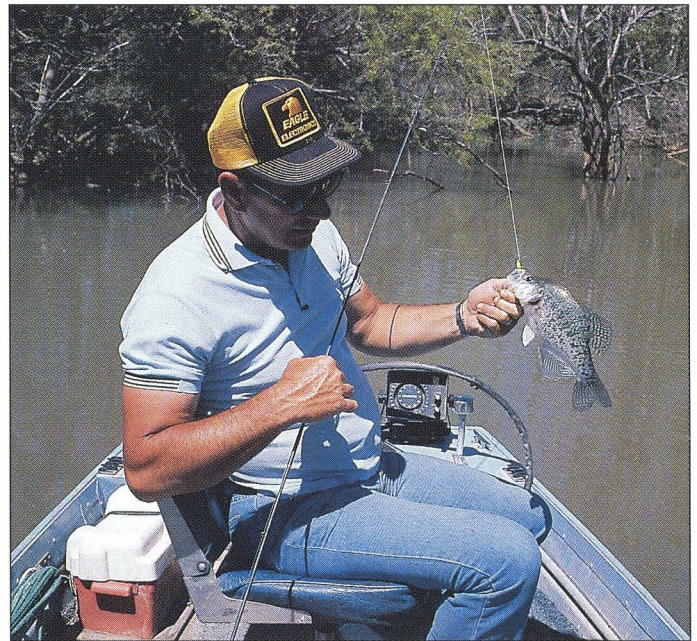
## Year Of The Fisherman

I suppose it's human nature to remember the good and forget the bad. It allows us to carry on in the face of adversity. Although the floods and high water that ravaged many reservoirs in northern Kansas happened only a year-and-a-half ago, it seems like long ago. You can still see the damage, if you look. The water mark is still amazingly high on surrounding trees — trees that will never leaf out again. They are still grim reminders of Nature's disdain for man's attempts to control her. You might also see remnants of some damaged park facilities, however, most have been either repaired or cleaned up. Hardest hit state parks included Glen Elder, Wilson, Kanopolis, Perry, Milford and Tuttle Creek.

Life goes on. With help of hardworking friends groups and other concerned citizens, park and wildlife area managers have worked tirelessly to replant habitat and rebuild the once inundated facilities. Groups like the Kansas Bowhunters Association spent countless hours planting thousands of new trees on Glen Elder's wildlife area. The facilities may not be the same as before, but the opportunities to enjoy the areas are still there. And perhaps the silver lining to the dark clouds that once drenched our state is the fishing.

Many of the reservoirs that held high water for an extended period in 1993 may offer fantastic fishing in the years to come. Some are already yielding great catches. Some reservoirs in the northwest have been returned to former glory, as the high inflows raised water levels that had become dangerously low. For example, Cedar Bluff Reservoir was nearly 60 feet below its conservation pool level prior to 1993. Over the past two years, the lake has risen 30 feet. That is substantial when you consider that at its low point only 1,000 acres of water were available to boating and today nearly 3,300 acres are available. This influx of water can have amazing impacts on the fisheries.

High waters flooded vegetation, providing ideal spawning habitat for both sportfish and their prey. The situation at many reservoirs was much like that of a new



Gene Brehm photo

lake or reservoir. Fertile waters and ideal nursery habitat allowed record production. High density of prey species such as gizzard shad allow sportfish to grow at surprising rates. For prolific species such as the white bass and crappie, conditions have been ideal, and fishing for them should be very good. For other species like the walleye and channel catfish, the abundant food may have allowed accelerated growth rates.

Don't let any of the grim reminders of the 1993 floods keep you from visiting your favorite state park or reservoir this year. Parks managers are still rebuilding and replanting, but facilities are quite enjoyable. And if you like to fish, this is your year. Fishing for some species may never be better. *Miller*



# Flying In The Face of Extinction

text and photos by Mike Blair  
staff photographer, Pratt

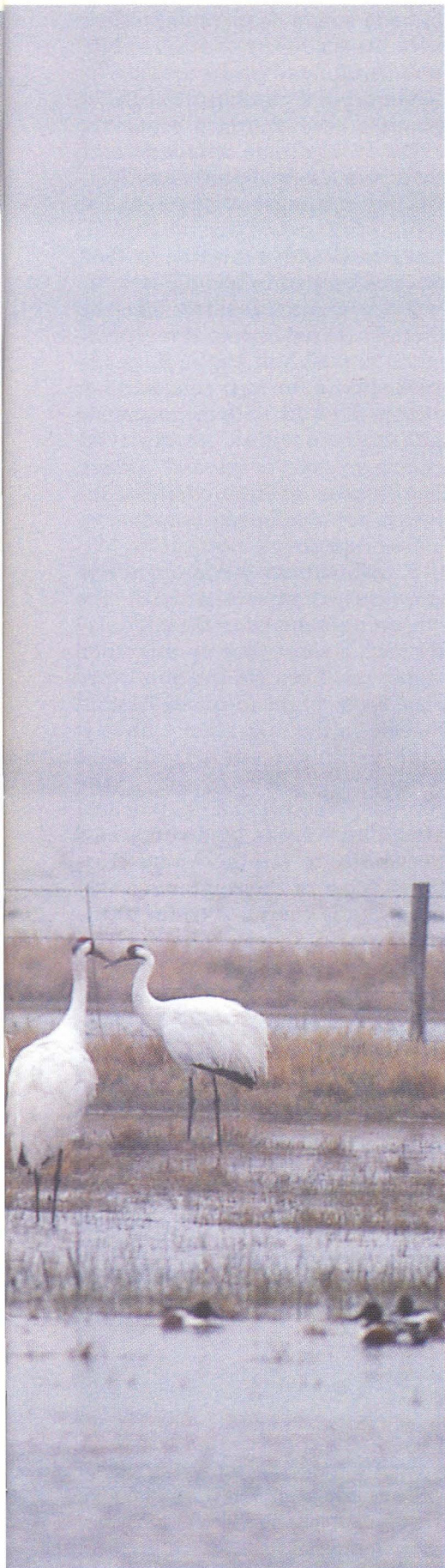
***Nearly 140 whooping cranes migrate through Kansas each spring and fall. While still quite rare, the current population is much better than the low of 16 birds in 1941.***

In this day and age, nearly everyone has some appreciation for the term “endangered species.” No living thing is guaranteed survival, and those with narrow habitat tolerances or an inability to adapt to human crowding simply disappear. Recent environmental awareness has helped to identify troubled species and spawn regulations to protect them, but action was too late for some and may be too little for others. Today, endangered populations are in jeopardy of joining some 500 kinds of American plants and animals forever gone. Those near the vanishing point are of keen interest to wildlife observers and are the objects of serious restoration efforts.

History now holds its breath for the whooping crane. This handsome white bird, known for its vibrant, trumpeting call, migrates through Kansas twice each year. On a tenuous comeback from the brink of extinction, about 140 whooping cranes are expected to fly north this spring from wintering grounds in Aransas National Wildlife Refuge in Texas, to nesting sites at Wood Buffalo National Park in the Northwest Territories. Flying in small family groups, some of the birds will stop to rest and feed on Kansas soil, staying perhaps several days before moving on. Those that stop, provide a rare opportunity for us to witness one of nature’s closest brushes with disaster in recent times.

As early as the mid-1800s, whooping cranes occupied a small niche among North American wildlife populations. At that time, only about 1,300 birds existed. No one knows their historical peak population, but there are reports of a time when “thousands” of white cranes migrated in singular passages that continued through a whole night.

Whooping cranes were hunted indiscriminantly through the 1800s, but due to their wariness, it is doubtful that hunting had a great impact on their numbers. Universally, whoopers were described as being far more alert and much wilder than sandhill cranes, a species also noted for its hunting challenge. Richard Kleberg, naturalist and owner of the famous Texas King Ranch where whoopers wintered during the early 1900s, described the difficulties of hunting the birds at the time as follows: “They are the most wary creatures I have ever tried to approach. One does well





Whooping cranes commonly stop for rest and food in Kansas on their long journey between Aransas National Wildlife Refuge on the Texas Coast to their nesting grounds in Wood Buffalo National Park in Northwest Territories.

if he can come within 300 yards of them; so, as they frequent country which is flat and entirely open, there is not much danger of their being shot."

Rather than hunting, it was loss of habitat and the whoopers' unwillingness to nest in proximity of man that hastened its decline. Early ornithologists reported that nesting whoopers were so nervous that they would arise from eggs if a human was seen within a mile of the nest. Arthur Cleveland Bent, in his treatise on American birds, wrote: "[Whooping cranes] retreated before advancing civilization, farther west and then farther north, for it is one of our wildest birds, it can not stand human companionship, and it loves the great open spaces in primitive solitude." This, coupled with the draining of marshes from Nebraska to Illinois and northward, left traditional nesting sites abandoned by the 1890s. The resulting loss of production resulted in a serious decline of whooping crane numbers.

Whooper numbers continued to

drop until 1941, when only 16 birds remained. Given their rate of decline, small clutch size and the inherent hazards of long migration, the few remaining pairs held little hope for averting catastrophe.

But wildlife managers responded, and the U.S. and

Canada began cooperating to help save the whoopers. Critical habitat was designated and set aside for wintering and nesting. Though the process was ongoing since the 1940s, it was some time later until there was a formal process for identifying endangered species. The whooping crane was listed as threatened with extinction in 1967, and endangered in 1970.

Fifty years of slow rebound brought the whooping crane population to a high of 290 birds in July 1994. Just over half this number exist in the wild, with the remaining 122 birds divided in captivity among six zoos or research centers. The story is far from over, but the future for whooping cranes now looks brighter.

Kansans have little chance to acquaint themselves with the whooping crane, since the birds stay for such a short time on migration stopovers. Even so, the Sunflower State is one of the fortunate handful that lie in the migration pathway. Eighty-six percent of all wild whoopers live in the Aransas/Wood Buffalo population, affording Kansas birdwatchers a possibility to see these rare creatures. Most of the migrants travel through the central corridor of the state.

Whooping cranes are regal birds,



Stops are usually short -- generally overnight -- if they stop at all. When tail winds are favorable, the birds may skip Kansas entirely. Whoopers usually migrate in small family groups, unlike sandhill cranes which usually migrate in large flocks.

both in flight and on the ground. The adult is snow-white with black wingtips and a red forehead. Juveniles are somewhat mottled with rusty brown, but are otherwise like the adults.

Whoopers are the tallest birds in North America, standing five feet. Their long legs are adapted for wading in the marshy habitats they prefer. Though not particularly graceful walkers, they have a long stride and can move quickly through boggy conditions. Since they usually spot danger at long distances, they often try to escape by walking, rather than taking flight.

Adult whoopers weigh 14-16 pounds and have 7-foot wingspans. The wings beat slowly in flight — about one beat per second. The

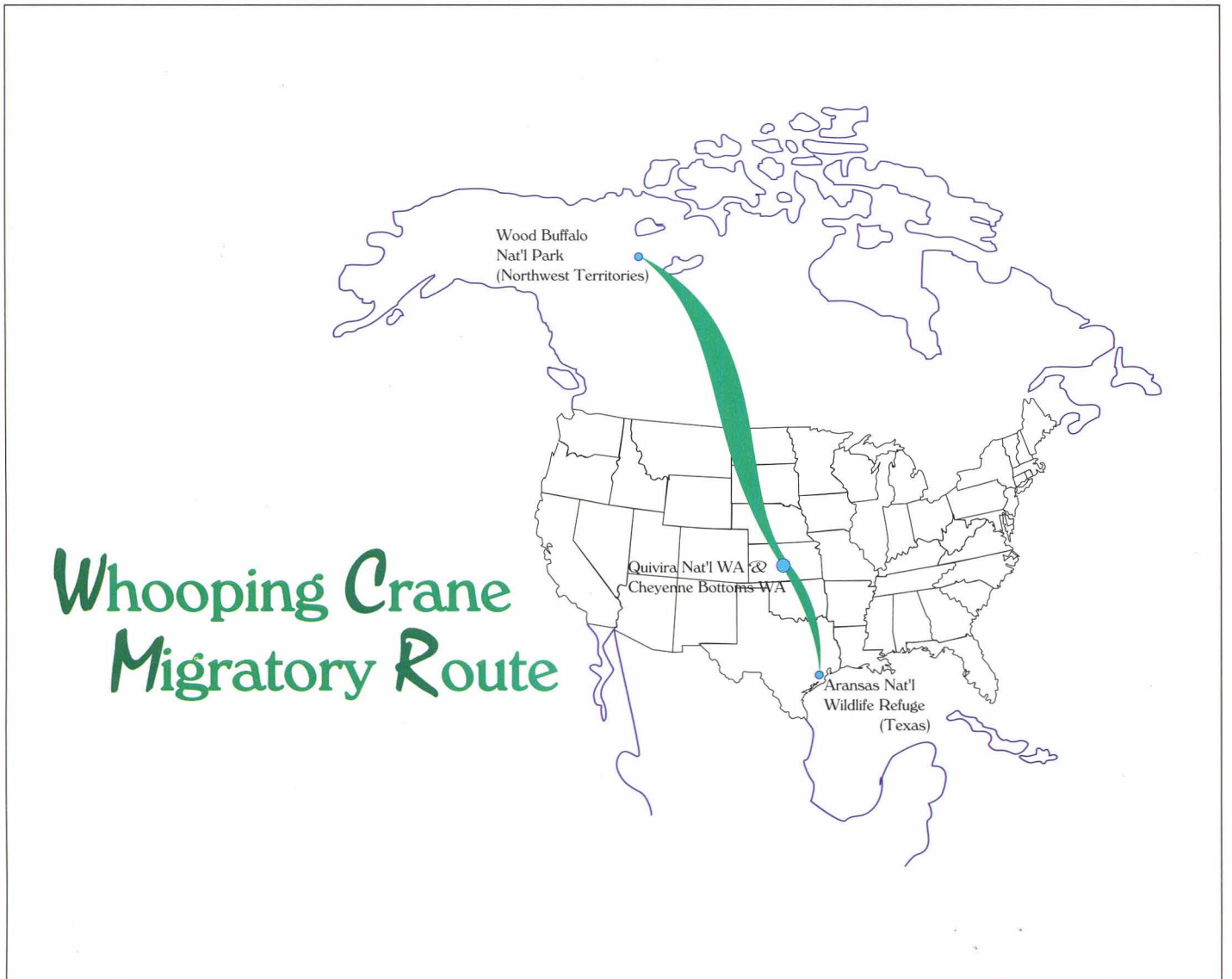
flight profile is characteristic of cranes, with the head outstretched and the legs trailing behind. For their large size, these birds are quite buoyant and appear to fly effortlessly. Migrating family groups travel in small Vs, or in single file.

Whooping cranes eat a variety of plants and small animals, depending on season and location. The birds occupy wetland habitats during summer months, feeding on crabs, crayfish, frogs, large insects, mice and other small rodents. They seldom eat fish. During migration periods and winter months, whoopers often feed in upland habitats where small grains, acorns and berries are eaten.

Whooping cranes may live more than 20 years in the wild, a long time compared to most birds. They

don't reach sexual maturity until 4-5 years old and this contributes to the species' slow comeback. As with many long-lived animals, reproductive rates are low. The average clutch size is just two eggs, but only one typically survives to flight age. This low fecundity barely keeps pace with natural mortality, as illustrated in the fall whooper populations of 1993 and 1994. In Sept. 1993, 143 birds (including 16 young) left Wood Buffalo National Park for Texas. One year later, 146 cranes (including 10-12 young) made the trip. Net gain for the year was only three birds.

Courtship of whooping cranes involves an elaborate dance that is often performed on northward migration stopovers. The birds face each other and jump high in the air,





Most of the mating behavior takes place after the birds arrive at the nesting grounds in Canada, but occasionally, lucky Kansas observers get a glimpse of the awkward jumping mating display as birds start the ritual a little early.

flapping their wings and sounding the whooping note for which they are named. The dance bears some resemblance to the courtship of the prairie chicken, with a good deal of bowing and capering between leaps. The raucous trumpeting can be heard for several miles on a still day, produced by a windpipe that is fully as long as the bird, but coiled into the breast bone.

Nests are built on small islands of bulrushes, cattails or sedges. The surrounding vegetation is clipped off for nest construction, leaving a moat of open water directly around the nest. The nest protrudes about a foot above the water's surface, and is flat with a concave depression for the eggs. Eggs are about four inches long and cream colored with brownish blotches. There are usually two, but sometimes three eggs. Incubation lasts 29-31 days. New chicks are downy and buff colored.

Eggs hatch a day or two apart, so the oldest chick is dominant in size and strength. In periods of drought-related food shortage, the dominant chick gets most of the food and is extremely aggressive toward its weaker sibling. The younger chick often dies in the nest. Predation and other factors may also cause the deaths of one or both chicks before fledging occurs, but it is normal for one to survive. Successful rearing to two juveniles is rare — during a 25-year period from 1939-1964, only one of every 12 whooper families arrived on the wintering grounds with two young.

Juveniles are capable of sustained flight at age 80-100 days. By late October, they are ready to join their parents in migration. The distance from Wood Buffalo National Park to Aransas National Wildlife Refuge is 2,500 miles, and the trip is usually made in 12-15 stops over a several-

week period. Migrating cranes average 250-300 miles a day. Fall whoopers typically arrive in Kansas the first week of November and return in spring during April.

Migration accounts for two-thirds of all whooping crane mortality, and serious measures are undertaken to protect them during the long flights. As whoopers leave a stopover, wildlife managers call ahead to warn subsequent areas that birds are coming. If a flight stops to rest on private land, conservation officers may set up round-the-clock vigils to prevent observers from approaching and scaring the birds into flight. The most common loss factor of migrating whoopers is fence or powerline strikes on takeoff, especially when the birds are pushed.

Traditional stopover marshes like Quivira and Kirwin national wildlife refuges and Cheyenne



Bottoms Wildlife Area are also closed to hunting while whoopers are in the area, to avoid any possibility of an accidental shooting.

Because of their endangered status, harassment or killing of whooping cranes results in federal charges. Jail time and stiff fines can be levied for any action that results in the death of a whooper, including disturbing birds while observing or photographing them. Generally, the safest way to observe them is from a vehicle, with binoculars or a spotting scope.

A banding study was conducted from 1975-1988 at the Wood Buffalo nesting site, so many whooping cranes wear colorful identification markers. Young birds were banded with plastic bands of several widths, along with a standard aluminum U.S. Fish and Wildlife Service band. Though some plastic bands are fading and deteriorating now, band information is valuable. Anyone seeing a whooping crane is asked to report the time, place, band color and other details to local wildlife officials.

The Aransas/Wood Buffalo population represents the bulk of wild whooping cranes, but efforts are underway to establish other flocks. In 1993 and 1994, 33 captive-raised whoopers were released in the Kissimmee Prairie (south of Orlando, Fla.) in hopes of establishing a nonmigratory population. This was done to provide a reservoir of whoopers that won't suffer the normal losses associated with migration, while providing a wild site where captive whoopers can be reintroduced. Bobcat predation accounted for high mortality in the original releases, but steps are underway to diminish this problem. Twenty-four more

whooping cranes are planned for release at Kissimmee in the near future.

In the past, whooping crane eggs have been placed in the nests of wild sandhill cranes for hatching and rearing. It was hoped that this would teach young whoopers new migration routes and develop a new wild breeding population. This experiment, called cross-fostering, worked as far as migration was concerned, but the whooping cranes did not recognize their own kind as appropriate mates. Instead, whoopers reaching sexual maturity attempted to pair with sandhill cranes. Due to this problem, cross-fostering has been discontinued.

The experiment was a partial success, in that it resulted in a small whooper population that summers in Idaho and Wyoming and winters in the Middle Rio Grande Valley of central New Mexico. Eight adult whooping cranes comprise this flock, and though no reproduction is taking place, it is being used to test techniques for introducing captive-reared whoopers into a migratory situation. This may yet lead to

a new breeding, migratory population.

History does hold its breath for the whooping crane, but thanks to ongoing management, there is reason for optimism. A Whooping Crane Recovery Plan calls for maintenance of the Aransas population at more than the current 40 nesting pairs, with the eventual growth of the flock to 1,000 individuals. Additionally, two more populations must be established with at least 25 nesting pairs each, and all goals must be maintained for 10 consecutive years, before the species can be downlisted from endangered to threatened. After that, goals for eventual delisting will be set.

It is unlikely that targets for downlisting can be met before the year 2020. Even so, that would spell an amazing recovery for a bird once close to extinction. This April, keep an eye on the sky. If you're fortunate, you may see for yourself the white cranes that returned from the edge of disaster. ❖



While birds occasionally stop and stay on flooded farm fields, traditional wetlands are critical to the species' overall health. Without quality wetlands such as Cheyenne Bottoms (pictured above) and Quivira National Wildlife Refuge, the long migration might take a much larger toll.

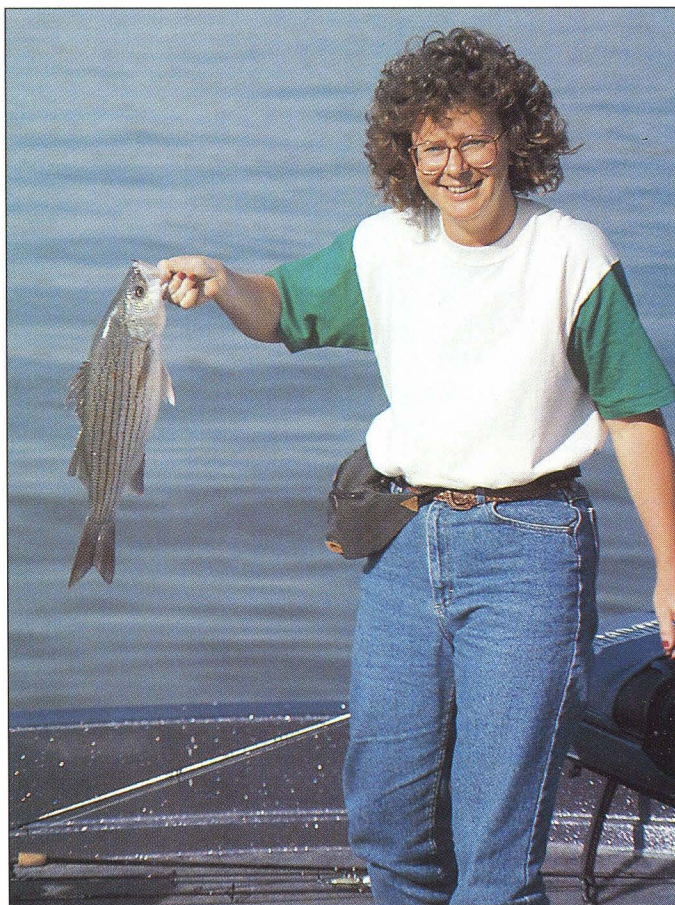
# Becoming An Outdoors Woman

by Becky Johnson

*Becoming An Outdoors Woman program coordinator, Emporia*

photos by Steve Stackhouse  
*chief of Education Section, Pratt*

***Could a workshop that provides women the opportunity to learn about outdoor activities in a fun, nonintimidating atmosphere be successful? YES, say those who attended Kansas' first such program.***



The rainbow drifted just beneath the surface of the cold, clear water. A young woman in neoprene waders skillfully cast a fly to the pool, however, there was no response to the tiny black dry fly she offered. The fish had rejected each of her offerings. A few more roll casts and the saturated fly no longer floated. She grasped it carefully between her fingers and pressed it against her flannel shirt. As she rejuvenated the fly, three young men approached the pool. The newcomers carried ultralight outfits and small, fluttering spoons. The woman watched intently.

One of the young men cast into a small school of fish — splash, his pole danced, then suddenly the line recoiled sharply toward him. The young woman noted the color of the lure the trout had struck — hot pink. She hadn't tried hot pink. Quickly, she tied a tiny gold hook to her tippet, threaded it with a piece of hot pink, cheese-scented worm

and cast into the pool. The rainbows fought for the worm, and when a fish struck, the woman set the hook. All eyes were on her as she reeled the keeper-sized trout to the net and added it to her creel, looking as matter-of-fact as possible.

Her next cast was fouled when the young man's spoon snagged her floating line. Embarrassed, he waded toward her, untangling the line as he approached. "Sorry," he offered weakly, tossing her line back toward the pool. "No problem," she responded. Smiling confidently, she collected her line and executed a perfect roll cast back into the pool. She got a strike immediately. This fish, smaller than the first, was carefully released. She caught my eye, beaming with excitement and pleasure, then cast again.

I was enjoying this as much as she was — she's my daughter, Amber. A child precariously perched on adulthood. As high school graduation looms, I wonder what life skills I might have over-

looked. What more will she need to learn before daring to pursue her own adventures? What values and traditions of mine do I want to see mirrored in her? Sometimes I feel I'm running out of time — sometimes I think I've covered everything. I'm sure I'll never know.

Amber's favorite fishing water runs through Bennet Springs State Park in Missouri. She's not a purist . . . she's a senior in high school. Reigning factors in her life while thigh-deep in a trout stream are: 1) rainbows begging to be caught, 2) sparkling water, and 3) social opportunities — not necessarily in that order. Bennet Springs offers all three components.

I was feeling philosophic that day, pondering life and watching Amber fish. She was as intrigued with the shimmering trout and the art of flyfishing as she was with the young men. She especially enjoyed the ratio of teenage girls (1) to teenage boys (a bunch). It caused me to wonder about other teenage girls, then about women in general.

Wouldn't other women enjoy a splashing rainbow at the end of their tippet? Amber might prefer to keep the odds as they were, but who is she going to fish with when I'm not available? Who is going to protect our privileges to hunt and fish is only a small percentage of the population understands how it feels to challenge a river, a rainbow or a turkey in the woods?

Research conducted by various sources consistently indicates women do want to participate in outdoor recreation. Dr. Christine Thomas, University of Wisconsin, apparently viewed the lack of outdoor recreation in a woman's life as a significant void. In 1990, Dr. Thomas coordinated a seminar entitled "Breaking Down the Barriers to Participation of Women in Angling and Hunting." Sixty-five participants and speakers contributed to this effort; their goal was to identify the obstacles preventing women from pursuing outdoor sports. Of the 21 barriers recognized through this workshop, two-thirds related to the fact that women have few opportunities as children to learn outdoor skills.

Once the issues were brought to light, the solutions seemed embarrassingly obvious; provide opportunities to learn basic outdoor skills. Within days of the workshop, Dr. Thomas' office began receiving calls and letters from women seeking opportunities to learn outdoor skills. These requests, accentuated by the previously identified barriers, inspired the creation of a program that is currently offered in 24 states and one Canadian province: "Becoming an Outdoors Woman."

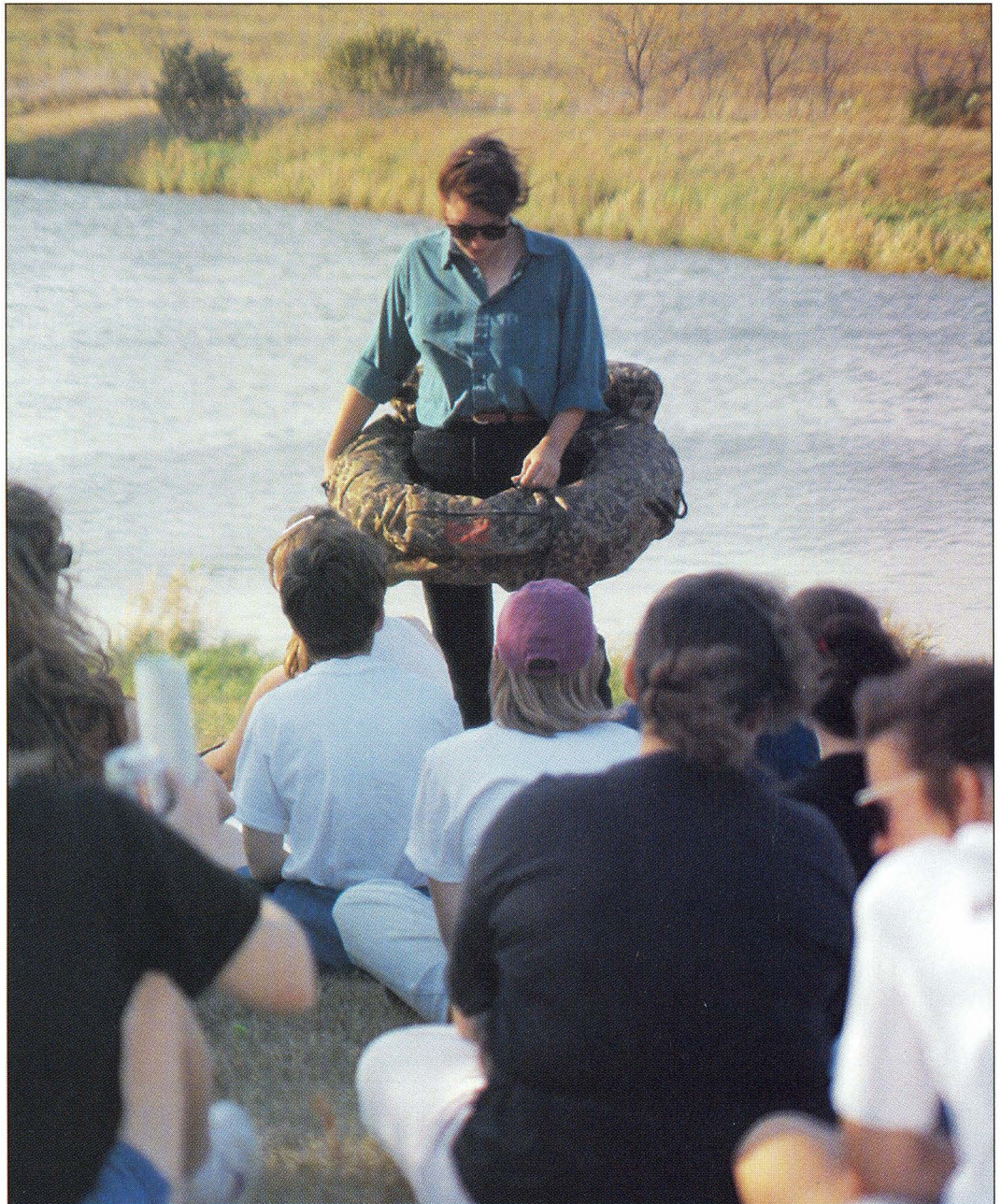
When the "Becoming an

Outdoors Woman" was proposed in Kansas, women from Kansas, Illinois, Oklahoma, Nebraska, South Dakota, Missouri, and New York responded enthusiastically. Nonresidents were referred to programs closer to home, but several chose to attend the Kansas workshop with family or friends. A full month before the Sept. 30 program date, registration closed with the targeted 100 participants.

Fifteen three-hour courses, three six-hour courses and 11 one-hour

demonstrations provided an intense, often challenging weekend agenda. Even at this pace, women have expressed a desire for more.

A longer weekend or more programs during the year were requested from participants. Courses offered at the first program included shooting sporting clays; orienteering; fishing; upland bird, turkey and deer hunting; botany; birdwatching; basic boating; outdoor photography; archery; horseback trail riding; and many more.



The courses, which included fishing (pictured), wingshooting, archery, turkey hunting, botany, orienteering, birdwatching, basic boating, photography and more, appealed to a variety of interests.



A wide variety of instructors volunteered their time to be a part of this first workshop. Most had considerable experience in the area they taught.. Emphasis was on hands-on experience such as shooting 3-D targets during one of the archery sessions.

As popular as the courses were, comments from participants indicate that the instructors made the program a success. Forty-five of Kansas' best outdoor educators volunteered their time, energy and resources. Jennifer Roy of Wichita certainly enjoyed her experience, "Instructors that I had — every one of them — were just terrific — patient beyond words. They were enthusiastic about their sport and genuinely interested in passing

information on to those of us whose exposure has been so limited." Other workshop evaluations echoed this sentiment.

Comments received from instructors were as zealous. The appreciation and eagerness to learn exhibited by the students provided a sense of fulfillment for instructors exceeded by few educational encounters. When thanked for his outstanding efforts, Tommie Berger, who taught Introduction to Fishing,

replied, "It was an honor." This mutual respect and appreciation fostered an environment students described as "comfortable," "non-intimidating," "supportive" and "encouraging."

In his opening remarks, Steve Stackhouse, Education Section chief for the department, encouraged participants to ask questions. Sue Popejoy, Wichita, took his words to heart. "I can't believe how wonderful the instructors were and how nice, I mean truly nice, they all were to us. Steve said there was no such thing as a stupid question and that's how I felt I was treated — with patience and kindness. And talk about enthusiasm . . ."

Equally critical to the success of "Becoming an Outdoors Woman" was the overwhelming generosity of the contributors. Forty-three businesses, associations and individuals from across the country donated equipment, money and services to the Kansas program. These gestures of support demonstrate an undeniable dedication to providing outdoor recreation opportunities for women. "It was good to see the encouragement from the press, companies and people who are experts in natural resources. The door prizes and free information handed out were wonderful and made us feel we are being encouraged to get involved," noted one pleased participant.

Society has imposed obstacles preventing women from experiencing the challenges, potential for self-discovery and a sense of stewardship created by developing a personal connection with nature. Corrective strategies are currently being implemented to reverse this error. The future of outdoor recreation seems a little brighter, knowing more women are pursuing an active roll in perpetuating outdoor recreation and protecting our natural resources. Soon Amber will have friends to share adventures with and "new traditions" will be passed along to future generations of women.

With the experience gained from surviving one workshop, great sug-

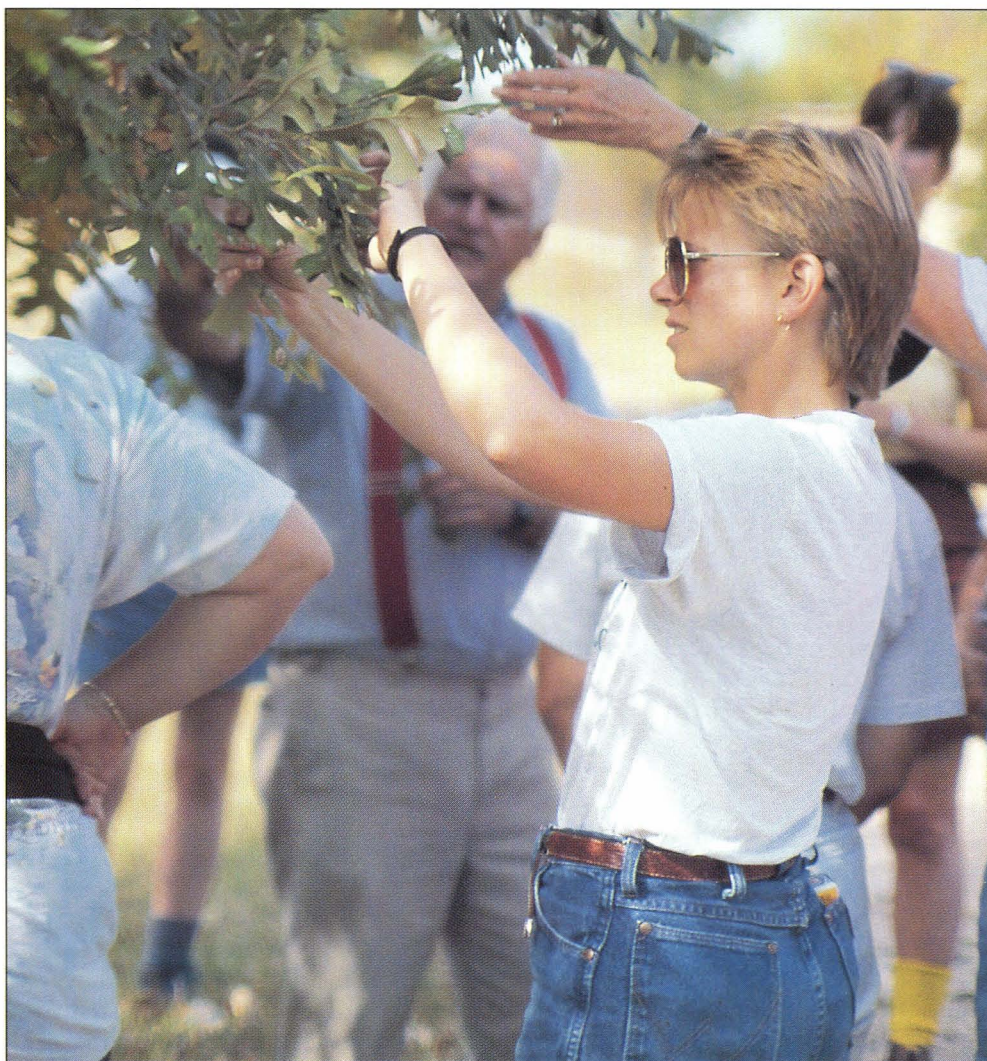
gestions from the participants plus some new courses and instructors, the 1995 "Becoming an Outdoors Woman" workshop promises to be even more exciting than the first. If you would like to receive 1995 registration information, contact Becky Johnson, Kansas Department of Wildlife and Parks, P.O. Box 1525, Emporia, KS 66801, (316) 342-0658 or Steve Stackhouse, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, KS 67124, (316) 672-5911.

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Instructors for the first "Becoming an Outdoors Woman" included: Ed Augustine, Tommie Berger, Gene Brehm, Carolyn Britton, Kevin Church, Connie Elpers, Steve Field, Rick Frevert, John Garrard, Rick Hammond, Steve Harper, Hon Hawkinson, Dan Heskett, Jerry Horak, Bill Hughes, Becky Johnson, Jan Kissinger, Roy Kuertzel, Jane Laman, Jim McDiffett, Theresa McGuire, Paul Miller, Tom Mosher, Dan and Marlene Norris, Chris Ogburn, Michael Pearce, Ernie Peck, Ed Phelps, Craig Phillips, Alan Riniker, Ross Robins, Steve Robinson, Terry Rupe, Keith Sexson, Patricia Silovsky, Steve Stackhouse, Cheri and Tom Swayne, Spencer Tomb, Roger Wells, Sally Wilk, Bob Wood, Gary and Ranae Wyatt. ♡



Most of the participants were thrilled with their experience, and many commented that they would be interested in attending a similar course in 1995. The positive atmosphere excited organizers, instructors and participants, and all are looking forward to the second workshop.

# Kansas' Toothy Trio

by Marc Murrell

public information officer, Valley Center

**Anglers love walleye, but unfortunately, they don't prosper in some Kansas reservoirs. To fill this void, biologists are experimenting with walleye look-alikes, the sauger and the hybrid saugeye.**

This fish has mysterious light-reflecting eyes, needle-sharp teeth that will slice your finger, and is highly prized as the best tasting of fish that swim. You know which fish I'm referring to; a walleye, right? Not so fast. In Kansas a fish by this description could be a walleye, but it might also be another member of the perch family. At first glance they all look similar, but Kansas waters also hold sauger and saugeye, close cousins to the walleye.

Walleye have the widest distribution and are found in fishable numbers in large reservoirs, state fishing lakes and community impoundments across the state. First recorded in eastern Kansas rivers in the 1800s, walleye soon disappeared, and all early reintroductions failed. However, walleye

stocked into Clark State Fishing Lake in 1949 prospered, and the toothy member of the perch family has since been stocked in lakes and reservoirs throughout the state.

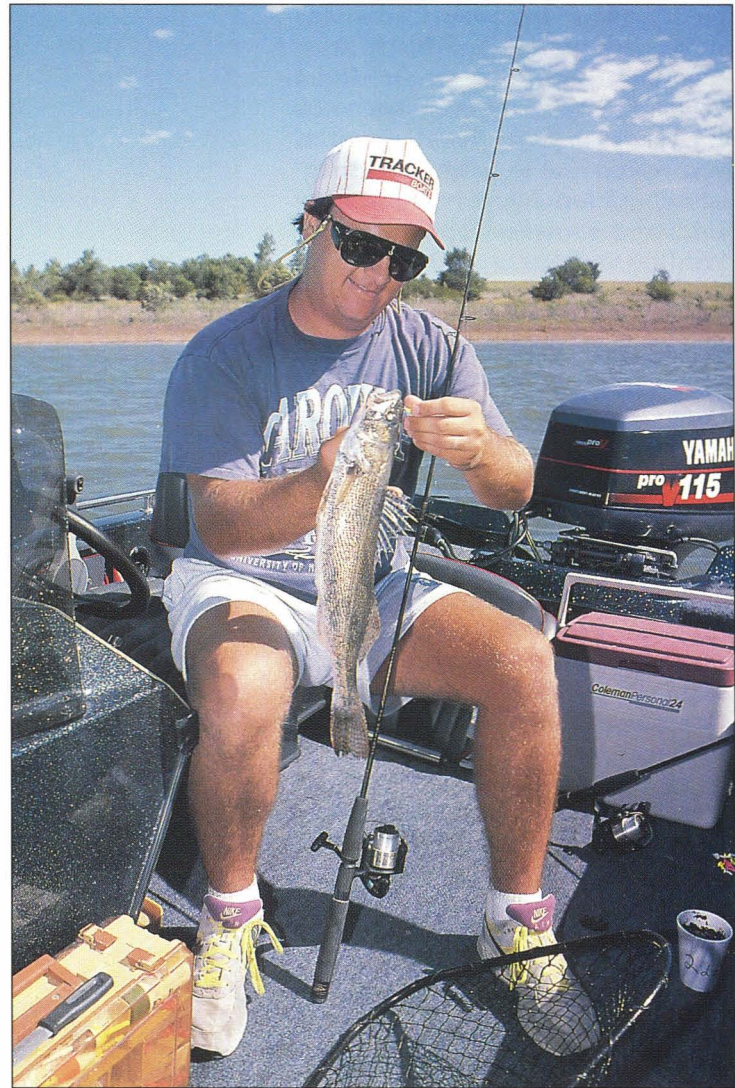
The sauger was once common in the Missouri River and was occasionally found in its tributary, the Kansas River. The sauger interested biologists who were trying to fill a niche in Kansas reservoirs where walleye had failed. Melvern Reservoir was first to receive sauger in 1988 when just more than 1 million fry were stocked. Melvern's neighbor to the north, Perry Reservoir, was the latest to receive sauger with nearly 100,000 fingerlings stocked in 1994.

"One of the reasons that we did put sauger in Melvern is that they had been indigenous to that system because they are in the Missouri

River," said Jim Stephen, conservation specialist with the department. "And then we needed them for a brood fish source to make saugeye [a walleye/sauger hybrid]. If we wanted to stock saugeye, we needed to develop some kind of reliable brood source so we could make our own [hybrids]. We have the available walleye population. It [the sauger population] has for the most part done a lot better than we thought it might. We're taking a couple hundred of adults a year out of that Melvern population to assist in the production of saugeye."

Melvern's population of sauger has flourished, and anglers are enjoying the results. Biologists are pleasantly surprised.

When asked about the future of sauger in other lakes, Stephen answered with guarded optimism,



"I think it's got some potential. We've only got one case scenario [Melvern], but I think we have some candidates in this state that might also work well with sauger."

Hand in hand with the sauger program came saugeye. In 1988, 40,000 fingerlings were stocked in Council Grove Reservoir. They have been since stocked in Keith Sebelius (Norton) where the current state record was caught, and Elk City reservoirs, Chase and Washington state fishing lakes, Great Bend Community Lake, Marion County Lake and Anthony and Parsons city lakes. The hopes for saugeye are similar to those for other hybrids.

"It's the hybrid vigor you're looking for," said Stephen. "We've got some impoundments that we've tried to put walleye in for years and either they didn't take at all or they were okay until we got high water and they flushed through. We found that those reservoirs with high flow-through rates won't maintain walleye populations. Some of the literature suggested that the hybrid may not be quite as influenced by high flow-through and remain in the reservoir, or in those situations when they do pass through the system, they remain in the tailwater. You've got the advantage of providing a fishery in both places, whereas walleye have the tendency to just go clear through."

The saugeye is the target of an intensive five-year study being conducted by the department, and several factors of the hybrid perch management are being considered.

"We're looking at them as a substitute for walleye because the walleye aren't staying in some of the lakes. We couldn't get walleye recruitment at all in some of our reservoirs," said Tom Mosher, fisheries research coordinator for the department. "And we're also looking at saugeye as a control for stunted crappie populations."

The study was started in 1992 and will continue through 1996. It's too early to see reduction in the year-class strength of stunted crappie populations, but the survival rates of saugeye have biolo-

gists optimistic.

"They've done tremendous at Chase State Fishing Lake," said Mosher. "We tried to stock walleye there for several years and didn't have any success. We have three good year classes established at Chase with the saugeye. There is good size distribution, and we're really looking for good things there."

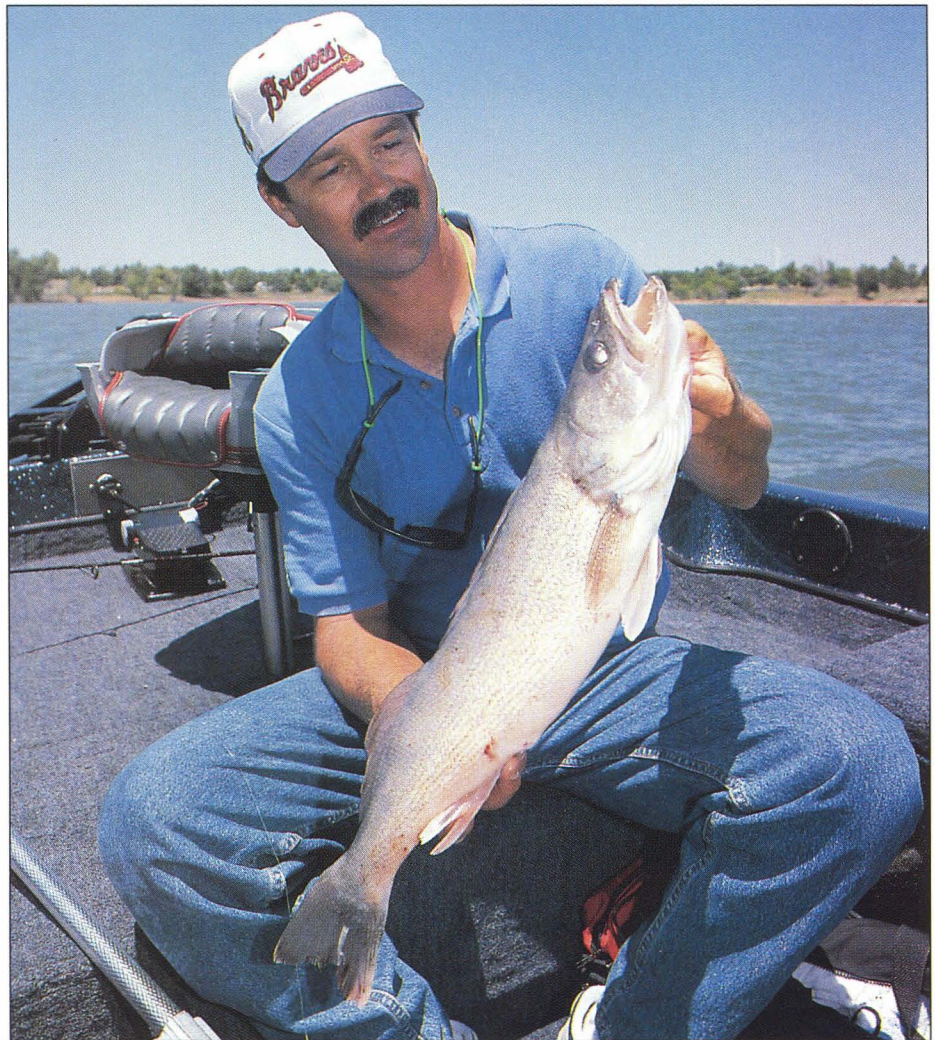
Preliminary estimates from Anthony City Lake and Marion County Lake lead biologists to believe that the saugeye are catching on there, too.

Habitat requirements of the three fish in Kansas are similar except for water clarity. The best lakes provide a variety of habitat, including shallow mud flats, rocky shorelines and deep water. Walleye prefer

clear water, while sauger and saugeye do well in turbid water. In addition to the differences to water clarity, Stephen has noticed one distinction of sauger and saugeye concerning depth or water they prefer.

"I do know from some of the sampling I do that for the most part of they day, they're [sauger or saugeye] closer to the shoreline than walleye are."

Identification of the three species may require some practice, but it is important since length and creel limits may be different. A quick look at markings on the side of the fish, scales on the cheek patches, the spiny dorsal fin and the tail will provide clues for positive identification (see Page 15 for details). The walleye's spiny dorsal has indistinct blotches and a dark spot near the



Marc Murrell photo

The walleye gets larger than either the sauger or saugeye, although saugeye may reach weights of 8 pounds or more. Walleye tend to flush out of reservoirs with high inflow.



Anglers should learn to tell the difference between these close cousins as length limits may be different. This angler measures a sauger taken from Melvern Reservoir, where a 15-inch minimum length limit is imposed. The length limit on walleye is 18 inches.

rear base. Its cheeks are smooth with few scales and blotches on the side are indistinct or nonexistent and generally don't extend down past the lateral line. The sauger's spiny dorsal is marked with distinct black spots and no blotch or spot at the fin's rear base. The cheeks are rough and scaly. Distinct black splotches on the side extend well past the lateral line. Color will be darker than the walleye. The saugeye takes characteristics of each parent and the spiny dorsal is marked with bars, often with one or two rows of distinct spots at the base and an indistinct blotch at the rear base of the fin. The cheeks are rough and scaly. Dark blotches on the side extend down past the lateral line. Although sauger and saugeye will look similar, they probably won't be stocked in the same impoundment. The biggest problem may be telling the differ-

ence between walleye and sauger or walleye and saugeye, especially at lakes where people expect to catch walleye.

"I think there is a problem with identification," Stephen admitted. "I think in the case of Council Grove, people are catching fish thinking they're walleye when they're probably saugeye. If people aren't aware of the two being in the same body of water, they just assume the fish is a walleye.

"We've been doing a creel census on Council Grove and the numbers reported are not what I would expect based on the ratios of fish we sample. The dominant fish in terms of numbers in Council Grove would be saugeye, and I would expect that same ratio in the harvest. We're not seeing that," he said.

To make it even more confusing, the same techniques used to catch walleye will catch sauger and

saugeye. One of the most productive walleye patterns occurs in May and June. The fish move up on the mud flats off of points and main-lake river channels and are caught in 6-15 feet of water on jigs and nightcrawlers. In lakes where more than one species is present, you never know which one you're going to catch. If you want to increase the odds of catching a sauger or saugeye, try drifting or trolling closer to the bank adjacent to traditional walleye areas.

The next time you catch one of these toothy perch, take a closer look. It might be a sauger or saugeye. Not matter which one, consider yourself fortunate. No many anglers can honestly say they've tangled with Kansas' newest aquatic residents. If you haven't caught one yet, keep trying. They're waiting. ♡



# Identification of Walleye, Sauger, and Saugeye

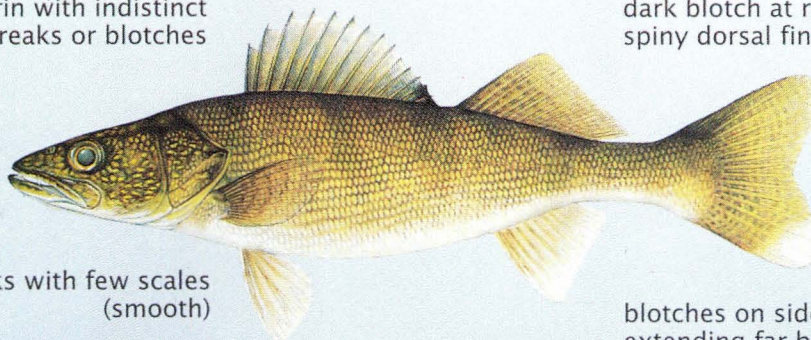
The Kansas Department of Wildlife and Parks has experimentally stocked sauger and saugeye (a hybrid of the walleye and sauger) in federal reservoirs where walleye have not flourished. The sauger is native to large rivers like the Kansas and Missouri. Both sauger and saugeye are better adapted to high flow and turbid water than the walleye; saugeye establish fishable populations below impoundments when flushed. Saugeye have also been stocked as an additional predator in small lakes with stunted crappie.

It is important that anglers be able to identify what type of perch (the family of fishes that includes walleye and sauger) they catch because length limits on walleye, sauger, and saugeye can differ in a given body of water. This poster portrays the key characteristics needed to identify these three fish.

## WALLEYE

spiny dorsal fin with indistinct streaks or blotches

dark blotch at rear base of spiny dorsal fin



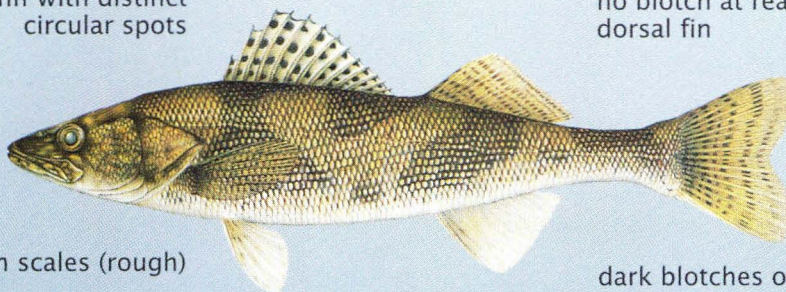
cheeks with few scales (smooth)

blotches on sides indistinct and not extending far below lateral line

## SAUGER

spiny dorsal fin with distinct circular spots

no blotch at rear base of spiny dorsal fin



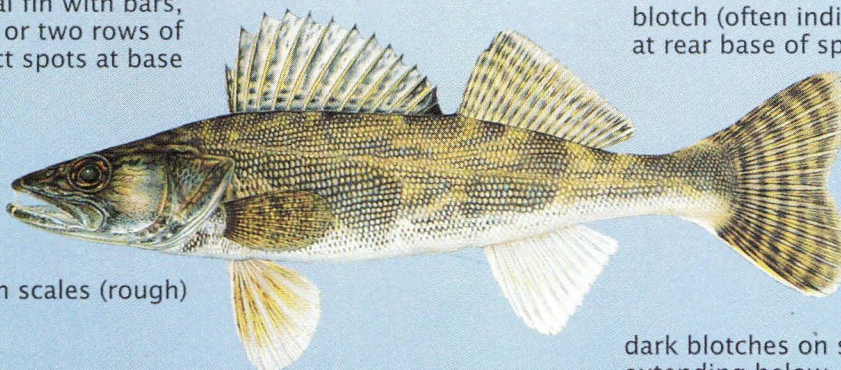
cheeks with scales (rough)

dark blotches on sides extending below lateral line

## SAUGEYE (hybrid)

spiny dorsal fin with bars, often with one or two rows of distinct spots at base

blotch (often indistinct) at rear base of spiny dorsal fin



cheeks with scales (rough)

dark blotches on sides extending below lateral line





# Tornado!

by Jennie Blair  
*9th grader, Pratt High School*

photos by Mike Blair

*Feared, respected and studied, tornadoes are a phenomenon of the Kansas spring weather. Individual tornadoes vary greatly in size and strength with the largest flexing awesome power and wind speeds of more than 300 miles per hour.*

**I**t was a day for chasing storms. Outside my school, small cumulus clouds grew as they moved eastward. Between classes, I anxiously checked the sky and watched them form. Soon the cloud tops were high and their bottoms dark. By the final bell of midafternoon, the unstable springtime air was churning, and tornado warnings were being issued.

I ran home, knowing my dad would soon be there. Both of us are avid storm chasers: my interest comes from a fascination with Kansas weather; my dad's is in photographing nature.

I flipped on the TV to check weather radar, and the screen showed a gigantic red mass approaching the area. Excitedly, I packed our video gear and arrived back upstairs just as my dad pulled into the driveway. Immediately we drove west, as radio reports announced tornado funnels within 30 miles of town. One reporter, inside a storm shelter directly in the storm's path, telephoned the station with a live report of heavy rain and hail. Though somewhat scary to drive into the hazardous area, it was also exciting.

Then we saw the wall cloud, hanging ominously over the countryside. The cloud was black and ragged, accompanied by thunder and lightning. Behind it was clear, pink air, typical of the dangerous zone in a thunderstorm cell where tornados form. The threat was real as warnings continued to crackle over the radio.

We pulled to the side of the road as a peculiar "knot" began to grow at the base of the cloud. It quickly swelled and dipped earthward, suddenly tapering and spinning into the dreaded trademark of a prairie storm: Tornado!

The black rope twisted downward, creating a dust cloud as it scoured the open farmland. We were just three miles south of the storm, which was



This tremendous destruction was in the path of the Andover tornado of 1991, which was rated at F5. F5 tornadoes are the biggest and baddest, being up to a mile wide, staying on the ground for hours and featuring winds in excess of 300 mph.

moving safely away. I could hardly hold my camera steady from the excitement. It was the first tornado I'd seen, and I'll never forget its eerie form wandering across the open landscape.

Actually, as tornadoes go, this was a small one that lasted only several minutes before disappearing harmlessly into the cloud. But Kansas has the reputation for occasional monster tornadoes that cause widespread destruction of life and property. Among the more infamous twisters are the Udall storm of 1955, the Hesston tornado of 1990 and the Andover tornado of 1991.

Tornadoes are measured

according to a scale developed in the 1970s by Dr. Theodore Fujita of University of Chicago. Known as the "F" scale, it estimates approximate wind speeds of a tornado based on the extent of damage left behind.

The tornado we witnessed was small — probably an F1. An F1 tornado has moderate wind speeds, rotating from 73 mph to 112 mph. These winds can push cars off roads, destroy roofs and overturn mobile homes. In open country, they do crop damage.

Some tornadoes are even smaller, designated as F0 or gale tornadoes. These have wind speeds from 40-72

mph. Strong dust devils can be placed in this category. Little damage occurs, usually in the form of broken branches or damage to sign boards.

Tornadoes of F2 or greater cause significant damage. F2 tornadoes pack winds of 113-157 mph, uprooting trees and destroying mobile homes. F3 tornadoes are more severe with winds up to 206 mph. Trains and heavy cars are destroyed by these winds. F4 tornadoes (winds to 260 mph) level well-built houses and blow structures off foundations.

F5 tornadoes are true monsters with wind forces between 261 and

318 mph. Less than 2 percent of all tornadoes reach this size. Both the Hesston tornado of 1990, and the Andover tornado of 1991 were rated F5 (The Hesston tornado may be the largest ever recorded.). F5 tornadoes are commonly between one-half mile and one mile wide. Large, strong houses can be picked up, disintegrated and blown long distances. Huge trees are uprooted and debarked. Car-sized objects are hurled through the air at more than 100 mph by F5 tornadoes.

The average Kansas tornado lasts only about 10 minutes and stays on the ground for six miles. But large tornadoes may live much longer. The Hesston tornado stayed on the ground for two-and-one-half hours, travelling more than 100 miles.

Fortunately, tornados move slowly, averaging only 30-40 mph. An approaching storm just one mile away allows several minutes to reach safety. But never delay in seeking shelter from these deadly storms.

Technically, a tornado is a violent twisting updraft of air associated with thunderstorms. If winds are a tornado's fuel, it is temperature differences that start the engine.

Thunderstorms form when warm, moist air is lifted, cooled and condensed. Lifted air is called an updraft. Updrafts form in several



Damage to manmade structures is devastating, but the damage to the mature timber along this stream shows what the tremendous power can do in isolated areas. Large trees are literally twisted and ripped to shreds.

ways. A common one is by uneven heating of the earth's surface. A plowed field, for instance, gets much hotter than an adjacent meadow. Air above the plowed

field becomes hotter and rises more quickly than surrounding air. To replace the rising air, an inflow is created. This feeds the updraft.

Small tornadoes, or "landspouts" as they're sometimes called, usually form in these small storm cells. They may develop rather quickly, have limited force, and then die rapidly.

More powerful updrafts may form when a cool front meets a mass of warm, moist air. Springtime in Kansas is often marked by south winds carrying moisture from the Gulf of Mexico. Cool fronts slide beneath this air mass, lifting it so that large thunderheads develop. Many individual cells with strong updrafts and inflows are created when this happens, spawning potentially violent weather.

Large tornadoes are more likely under this conditions. When air masses of different temperature and wind direction slide together, layers called wind fields are formed.



From the air, the tornado's path is easy to follow even where no structure or timber damage is visible. Here oil storage tankers were destroyed, leaving an oily path.



Even small tornadoes must be respected. Storm chasers must have a thorough knowledge of weather and current radar information of the storm's speed and path.

Developing updrafts ascend through these variable layers and are "twisted as wind direction changes between the layers. This sets up a natural rotation of the updrafts that can form tornadoes.

The biggest tornadoes usually occur in late spring, when arctic cold fronts are stronger and winter jet streams push them into the southern midwest. Later, summer jet streams typically shift to the Canadian border, whisking cool fronts east and blocking them from entering Kansas. The threat of severe weather is renewed in fall, though to a lesser extent given milder cool fronts.

Though these are normal trends, large tornadoes can occur in Kansas

during any part of the storm season.

Scientists are gradually unlocking the secrets of tornadoes, but much remains mystery. The forces of wind are unpredictable, and unusual events are frequently associated with the storms.

The raw power of tornadoes is evidenced in many ways: straws are commonly driven into tree trunks; horsetanks and even livestock are sometimes seen high above the earth; cars are deposited in tree tops; large trees are mangled; and buildings and debris are blown for miles.

Following the Kansas Hesston and Andover tornadoes, identifiable belongings were sometimes found 70-100 miles from their origins. Once canceled check from the Andover storm was found in Iowa, more than 300

miles away!

But more fascinating are the strange irregularities often seen in the storm's path. In the midst of devastation, sometimes the most fragile items are left untouched by the powerful storms. One family that survived a Kansas storm told how their house was completely destroyed except for a refrigerator that still contained seven dozen unharmed eggs.

During the Andover tornado, one restaurant was nearly demolished, and utensils and food covered the floor. A clock still hung on a standing wall, but its face had been sucked off. On the counter where four baskets of candy were sitting before the storm, three were gone,

but the fourth remained in place. Similarly, a McConnell Air Force Base duplex was leveled except for the dividing wall. On it, a kitchen cabinet hung open with 10 crystal wine glasses still intact. In Marion county, a tornado sucked several blouses from a closet in a farmhouse, while leaving the rest of the clothes undisturbed. The blouses were eventually found in a distant pasture. East of Wichita, the big tornado hit a small catfish pond that had a duck nest on it. The tornado sucked water from the pond and scattered catfish over the surrounding land, but amazingly the duck and its nest remained unharmed.

Interesting as they may be, tornadoes are feared for good reason. Since 1990, Kansas tornadoes have claimed at least 15 human lives and caused an estimated \$250 million in property damage. Countless lives have no doubt been saved by modern early warning systems that allowed potential victims to escape the recent Kansas storms — some of the largest tornadoes in U.S. history.

Though safety precautions are well-known, they should be reviewed and followed at the approach of a storm:

- 1) If time permits, shut off electricity and fuel lines. Open doors and windows on the side opposite the approaching storm.
- 2) Stay away from windows.
- 3) Take shelter in a basement or storm cellar, preferably under heavy furniture.
- 4) If a basement isn't available, seek a ground-floor hallway, closet or small room away from doors and window. Take cover under heavy furniture.
- 5) Get out of trailers, mobile homes or vehicles.
- 6) If caught in open country, lie flat in a ditch, culvert or under a bridge.

Although tornadoes will always be a part of Kansas weather, most Kansans will never see one firsthand. But these storms should never be taken lightly. On muggy spring days, when the cumulus rise and skies darken, tune in for weather information. Don't be surprised by these strange and deadly Kansas visitors. ♡



# Season Of Birth

by J. Mark Shoup  
*associate editor, Pratt*

photos by Mike Blair

***Spring is a great time to observe wildlife and a chance to see young animals. However, remember that all wild animals should be left as they were found -- in the wild.***

**A**h, spring. It's a time of renewal, when all God's creation springs to life again after the long dormancy of winter. We are energized by the season. Crocuses and wildflowers crack the earth. Trees suddenly offer mild

hues of green, and birdsong fills the air with renewed vigor and a tempo humans liken to romance.

Of course, the romance — the mating instinct — that we humans often attribute to this time is shared by only a few species. Still, for

many species of wildlife, spring is the time for birthing. Deer, rabbits, foxes, waterfowl, songbirds and many other species bear their young in the blossoming months of the year, though they may have mated many months earlier.



The first days of a fawn's life are spent motionless in a safe hiding place. The mother is usually nearby. Spotted camouflage and lack of scent protect the fawn from predators.

Perhaps the most endearing and charismatic of all young wildlife are the deer. Everyone has seen idealized versions of young wildlife in the movie *Bambi*, and the deer is the most, well, endearing of these cartoon characters. The real critter, while very different, is no less interesting. While the mating season (called the rut) for both white-tailed and mule deer takes place in the fall, most deer in Kansas are born in May or June, after a 200-day gestation period. Yearling does have only one fawn, but mature does commonly have twins. Triplets are much less common.

Weighing a mere 3 1/2 to 4 pounds at birth, the newborn fawn spends its first week in hiding while the doe grazes. During this time, the

fawn is virtually scentless. This, combined with its spotted coat and instinct to remain motionless whenever danger nears, protects it from predators such as coyotes and bobcats. During the first two weeks of the fawn's life, the doe visits only three or four times a day for feeding. In this way the doe's scent is also kept to a minimum, making it difficult for predators to find the fawn. In just a few days, the fawn is agile and fast enough to outrun a man, and by two weeks, it is faster than a dog. Rapid growth continues for the young deer, and by

autumn it will be weaned and capable of living on its own.

Contrary to the image portrayed in *Bambi*, young deer are not helpless, spotted fawns come hunting season. Does usually wean the fawns in September or October, and often drive them away in November as the rut approaches. In areas of quality deer habitat, it isn't uncommon for doe fawns to be bred their first winter.

Another favorite young critter is the eastern cottontail rabbit, which is common in both rural and urban settings. Unlike deer, cottontails breed several times a year. With a gestation period of only 28-30 days, a cottontail can produce six or seven litters from March through September. Naked, blind and helpless, the 4-inch kits are born in a nest of grasses and fur built in a slight depression. Although they are much less developed at birth than fawns, young cottontails grow more rapidly. Within a week, they have hair. Within two weeks, they can leave the nest, and by the time they are four or five weeks old, the mother has kicked them out of the nest. Fully mature at four or five months, some females (called does) born in early spring, may have a litter of their own by late summer of early fall.

One of the most fascinating and unusual mammals in the state is the swift fox, which is found only in the High Plains of western Kansas. The adult swift fox is not much larger than a jackrabbit, and true to its



Cottontails are born in a nest of grass and hair in a small depression and can leave the nest in five weeks.



name, rivals the jackrabbit in speed and agility.

In January or February swift foxes mate. After a 51-day gestation period, four or five whelps are born in an intricate, multi-entrance den. The swift fox whelp is born blind, and its ears are closed. Like most canines, its eyes open in about two weeks. In six or seven weeks, the young are weaned, but they stay near the den until midsummer. Like most predatory mammals, swift foxes must learn to hunt, so the remainder of the summer and early fall is spent learning to catch prey. Thirteen-lined ground squirrels and other small rodents make up the bulk of the diet. By fall, the young foxes can make it on their own.

For me, one of the most familiar sounds of spring is the plaintive coo of the mourning dove. In terms of reproduction, the dove is the rabbit of the avian world. Although they only lay two white eggs per clutch, breeding pairs (which often remain monogamous throughout a breeding season) begin breeding in

early spring and don't quit until fall, raising two or three broods.

Mourning doves will nest anywhere — from lawns to crop fields to woodlands — and nests may be on the ground, in trees, or on buildings. The chicks hatch after a 14-day incubation period, and the parents feed the helpless young by regurgitating crop milk — a mixture of partially digested food consisting of water, protein and fat. After two weeks, the young leave the nest, or fledge. The parents usually continue to feed the young for several days



Mourning doves are quite prolific, raising up to three broods each summer. The young doves fledge at just two weeks old.

after fledging. At three months, the birds are mature and often begin raising their own clutch.

While most ducks in the Central Flyway are produced in the prairie pothole region of northcentral U.S. and southcentral Canada, the gregarious mallard breeds throughout the flyway, including Kansas. Its preferred nesting habitat is a thick cover of reeds and grasses surrounding a shallow pond or marsh, but it may nest one-half mile away from the nearest water. Nesting can occur from mid-April through mid-July, but usually peaks in May. Ten to 12 green or pink eggs are laid in a nest lined with grasses and down. When the clutch is complete, the drake will abandon the nest in search of other females to breed with.

After 26- to 30-day incubation period, the yellow and black, downy covered ducklings hatch. When the down dries, the hen leads the brood to the safety of water. Like most waterfowl, young mallards can feed themselves shortly after hatching. Once on water, they "dabble," or feed just beneath the water's surface by tipping up and dipping their heads down, gathering seeds, aquatic insects and an



Mallards commonly nest in Kansas, building a nest that may be one-half mile from the nearest water. Ducklings hatch after a 26- to 30-day incubation period.



Swift fox are common on the arid planes of northwest Kansas. The young are born in a large burrow with several entrances. They will stay near the den until midsummer.

occasional tadpole or even fish egg. In about two months, the young ducks will fly, and by fall, many will migrate south.

Canada geese are also common nesting waterfowl in Kansas. As Canada goose numbers have increased throughout the state, both urban and rural wildlife watchers have enjoyed seeing these magnificent birds nest and raise their young. Many city park departments, as well as private pond owners, place artificial nesting structures in the ponds to attract breeding pairs. These pairs often return to the same nesting site year after year.

A natural nest is much like the mallard's, vegetation lined with down. However, Canadas are likely to choose a site protected by water, or they'll readily take an abandoned osprey, raven, owl

or heron nest. In Kansas, Canadas usually lay five to six dull white eggs in April or May. With the male standing guard, the female incubates the eggs for about 28 days.



Kansas has a growing population of nesting Canada geese, and many landowners place artificial nest structures on ponds to aid in this comeback. Young geese commonly return to the site where they fledge (learn to fly) to nest and raise their own young.

Like mallards, newly-hatched Canadas take to the water as soon as possible. The parents usually move the young away from the nest site. The young fly at 65-85 days of age.

A Canada goose family unit will stay together for an extended period. Both parents raise the young, the family will migrate together and may stay together until the next nesting season comes around. Canadas mate for life, unless one of the pair is killed, when the remaining bird will readily take another mate.

For most people, the most welcome harbinger of spring is the American robin (actually a member of the thrush family). They arrive early and in great numbers and fill the lonely air of late winter with cheerful song that just promises spring. No matter that temperamental March may still bring snow, even blizzard. The robins have arrived. Spring is just around the corner.

Although robins may arrive with the first hint of warm weather, they usually don't nest until mid-April. Using everything from grass and plant stems to string and Christmas

tree tinsel, robins cement their familiar cup-shaped nests with a layer of mud. Three to five sky-blue eggs are usually laid, and the chicks hatch in 12 -14 days, featherless and blind. Both parents feed the young. Two weeks after hatching, the young fly, but they may stay with and be cared for by the parents for several more days. When the par-

ents begin building a second nest for the next brood, the young are on their own. Young robins are commonly seen in groups, foraging in backyards for insects, berries, and yes, worm. Contrary to popular belief, robins don't locate earthworms in their burrows by hearing them, they see them just beneath the grass.

Take advantage of the wonderful viewing opportunities this spring, and enjoy the wildlife in your area. But remember, wild animals should stay in the wild. No matter how hopeless the situation appears for a wild animal, it will have a better chance to survive on its own than it will if you pick it up. ♡

#### "ADOPTION" CRUELTY

The "baby" raccoon you assumed orphaned last summer was really cute as a baby. You raised it innocently but now it's too large and ornery to handle. It's chewing on the furniture and displaying aggressive behavior. If you just let it go on its own, it may not have a good chance because it is imprinted on humans and dogs. As such, it will be killed fairly quickly or become a major nuisance to someone else. What do you do?

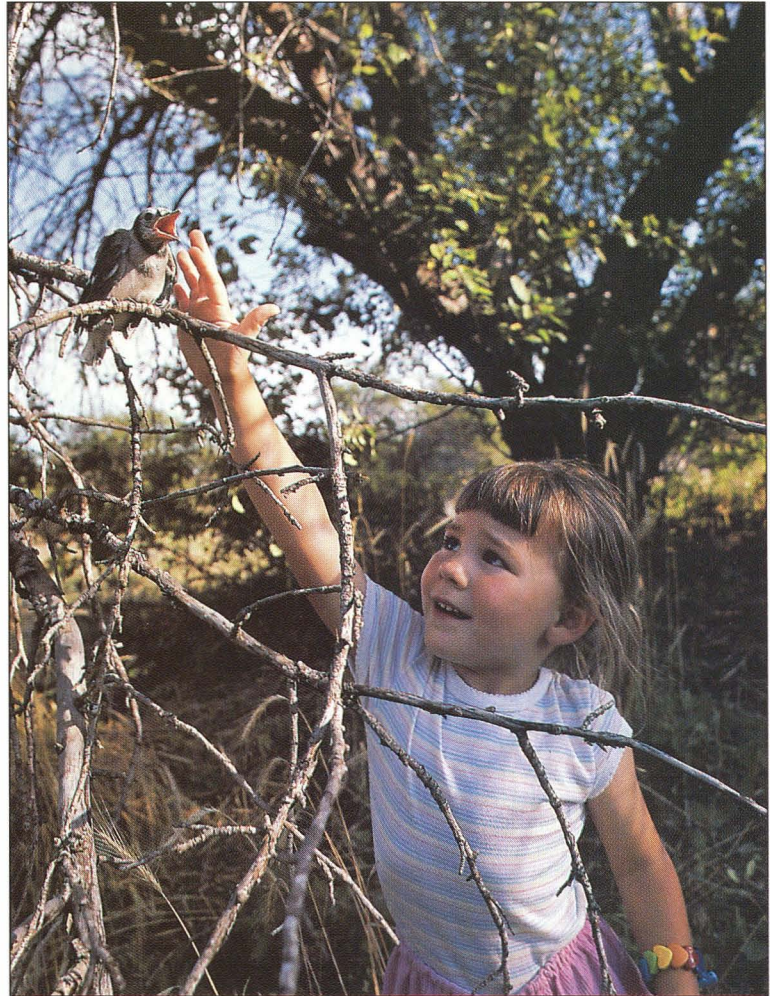
Each year in Kansas, there are many cases of well-intentioned people who find that they have ended up doing the wrong thing for an animal. Fortunately, there is a better option for raising wildlife young. The Kansas Department of Wildlife and Parks licenses certain people who have special qualifications for wildlife rehabilitation. There are 83 permitted facilities in Kansas. These experienced people have knowledge in the proper ways to raise wild animals in order to give them their best chance for survival in their natural habitat.

It is not only illegal for wildlife to be kept under unlicensed conditions, but it is unwise. Wild animals carry diseases that can be transmitted to humans. Mammals such as raccoons, skunks, and squirrels can carry rabies. Raccoons also carry a parasitic roundworm that infects the brain and can kill humans.

A wild animal belongs in the wild even though it might have been raised in an artificial setting. Wildlife rehabilitators have the skills and knowledge to help train such animals for their best chance of survival. Maure Weigel is the acting president of the Kansas Association of Wildlife Rehabilitators. He stresses the importance of getting wildlife young to proper care facilities as soon as possible.

"Wildlife rehabilitators should be the ones to rely on for giving these animals their best shot," says Weigel. "If, in fact, they are deemed non-releasable, there are better places where these animals could be used, such as zoos, aviaries, or other educational institutions."

Weigel addresses the problem this way: "The desire to have a wildlife pet is not only tremendously selfish but totally unjustified when the animal could be reha-



bilitated or trained to live a free and wild life. People who do such things are not acting in the best interest of the animal. Laws against keeping wild animals are designed to protect those animals, not to be cruel to people."

If you know of someone who has a wild animal, it may not be too late to give that animal a chance to live the natural, wild life that it deserves. Our state's dedicated wildlife rehabilitators can help. To find a licensed wildlife rehabilitator in your area, contact the Operations Office of the Kansas Department of Wildlife and Parks (316) 672-5911 or the nearest KDWP regional office. —Ken Brunson, non-game program coordinator, Pratt



# New Concern For An Old Friend

by Scott Taylor

*research assistant, University of Wisconsin-Madison*

photos by Mike Blair

***While Kansas bobwhite quail numbers have remained stable, the popular game bird hasn't fared as well in other states, especially those in the southeast U.S. Study projects are underway to help biologists develop better management programs.***

If a poll was taken among wildlife enthusiasts to name the most studied, managed for, avidly pursued and widely popular wildlife species in the U. S., chances are the northern bobwhite quail would be among the top vote-getters. From Madison, Kan. to Madison, Fla., this rather nondescript little bird not only funnels millions of dollars into local

economies through hunting-related purchases, but also, as anyone who has watched a hen with her brood of tiny fluffballs in tow will attest, is important to wildlife watchers. Moreover, even at high population densities, bobwhites cause virtually no crop damage or other significant problems of any kind. In short, it is difficult to name another wildlife species whose abundance is so uni-

versally celebrated.

Unfortunately, there has been little cause for celebration during the past 30 years. Despite the bobwhite's widespread popularity, numbers have declined throughout most of the species' range. Ironically, the decline has occurred in the face of more than 60 years worth of research and management aimed at providing abundant quail

populations. We thought we had bobwhites figured out by the 1960s, however either we don't know as much as we thought we did, or we are not applying our knowledge effectively, or both.

Although local population declines have been noted for years, only recently has the magnitude and scope of the loss been realized. The wake-up call was provided by independent analyses of two types of nationwide bird censuses. The North American Breeding Bird Survey has been conducted each spring since 1968 to tally the occurrence and abundance of all bird species breeding across the country. About 3,000 routes are annually censused by biologists and volunteers, and the results of the survey are tabulated by the U.S. Fish and Wildlife Service. The other survey, the Christmas Bird Count, is sponsored by the National Audubon Society. For more than 30 years, local chapters of the society of have organized late-December birding trips and compiled the species and numbers of birds seen. By analyzing both of these long-term indices of species abundance, researchers are able to track broad-scale bird population trends and identify which species need more attention.

Both surveys indicate a precipitous downward slide of bobwhite populations. Since the 1960s, quail have declined in 27 of the 30 states within their geographic range. Some rather unlikely regions have been particularly hard hit. The Southeastern states, where tradition-bound hunts on stately, intensively managed plantations were once the epitome of quail hunting, now harbor less than half the birds they once supported. Midwestern states in the Mississippi Valley have fared no better. In terms of quail harvested, the Plains states have supplanted the Southeast as the most productive, with Kansas, Oklahoma and Texas topping the list.

Why has this widespread bobwhite population decline occurred? Most authorities point to changing land use. Hedgerows, fencelines

and other uncultivated areas in the Midwest were lost when crop field sizes increased to accommodate larger, more efficient farm machinery. As a result, bobwhites lost the critical nesting, roosting, brood rearing and escape habitats these idle areas provided. Pesticide use has also increased. Although their impact on bobwhite populations is not fully understood, the negative effects of agrochemicals on other similar species such as ring-necked pheasants have been convincingly demonstrated. Also, in the Southeastern states, many small fields that were once farmed have now been converted to stands of pine for lumber production. These dense stands typically provide little in the way of quail habitat.

Hunting is also being examined as a possible player in the bobwhite decline. Although the effects of harvest on overall populations were often negligible 30 years ago, no one is certain how hunting affects current populations that are often fragmented — meaning coveys may be

separated by miles of unsuitable habitat. Fragmented populations are also thought to be more vulnerable to predation and disease, making local extinctions possible. Again, land use changes are the driving force behind these potential problems.

In the Plains states, cropland intermingles with native grass rangeland to produce a diverse, quail-friendly landscape. Not immune to the problems faced by bobwhites elsewhere, many coveys in this region have access to both the energy-rich winter food provided by crop fields and the nesting and escape cover provided by pastures. Compared to other parts of the bobwhite range, land uses (and thus quail populations) within this region have been relatively stable during the recent past.

Researchers at the Kansas Department of Wildlife and Parks and the University of Wisconsin-Madison are studying how landscape composition affects bobwhite populations. During 1991-1994,



Bobwhites are first captured in traps baited with food, and transmitters are attached. Researchers can then locate transmitted birds at night, and with a net, catch the entire covey so all birds can be fitted with radio transmitters.

radio-tagged quail have been monitored on rangeland- and cropland-dominated study areas south of Emporia. By comparing survival, habitat use, movements and productivity of tagged birds between the two areas, we will be able to identify and manage for landscape components that are most important to quail. Our results are also providing an unprecedented look at the basic dynamics of Kansas bobwhite populations.

Each year of our study begins by capturing and radio-tagging quail on our study areas. Starting in early march (when the quail are still in coveys), we set bait traps in likely looking quail habitat. These devices operate much like a minnow trap, consisting of a wire box with funnels leading to the milo bait inside. Bobwhites are apparently weak puzzle-solvers, for once inside the trap they rarely find their way back out through the small end of the funnel. Each captured bird is tagged with a quarter-ounce radio transmitter that rides between its wings like a backpack. The signal can be detected with our receiving equipment from about a half-mile away.

If we do not catch an entire covey by bait trapping, we use a technique called nightlighting to capture the remaining untagged birds. We find the covey's roost at night using the



Birds are placed in a holding device so that the tiny transmitter can be attached.



In the spring, male bobwhites can be captured with the aid of a pen-raised female. Eagerly coming to the calling female, males are caught when they enter the cage.

radio signal of a bird previously tagged. A spotlight is centered on the tightly-bunched covey and, if all goes well, they are captured with a long handled net. The entire covey can be fitted with transmitters this way.

A third trapping technique is used in the spring to catch males. Once coveys break up and pairs begin forming, we listen for whistling males along roadsides within the study areas. When a likely candidate is heard, a trap baited with a live, pen-raised bobwhite hen is placed on the road within earshot of the male. If the decoy is in a cooperative mood, she will give an assembly call. Judging from the reaction of the males we've trapped, the female's assembly call is quite an attention getter. The male generally acts as if he's been shot out of a cannon toward the female, oblivious to the researcher in the vehicle only a few yards away. The cage holding the female has an entrance with a spring-loaded door. When the male steps on the pan, he's caught, tagged and

released.

We locate each radio-tagged quail about once a day during our mid-March to mid-August study period. For each location, we record the positional coordinates of the bird on the study area, the habitat type in which it was found and



Weighing a quarter of an ounce, the transmitter is fitted over the bird's head.

whether it was alone or with other quail. If a tagged bird is found dead, we examine the condition of the carcass to determine the cause of death. During the breeding season, reproduction parameters such as nest success, clutch size and egg fertility are noted. We also measure the height, thickness and composition of vegetation at nests and sites used by broods to provide a more detailed description of these important areas.

During the first three years of the study, we have radio-tagged almost 200 bobwhites and recorded more than 6,000 of their locations. Although this volume of data will take some time to analyze, a preliminary calculation of survival rates has yielded some interesting insights into how populations on our study areas differ. On the cropland study area, where about half of the land is used to produce wheat, milo and soybeans, survival of adult quail from mid-March to mid-August was about 17 percent. Survival on the rangeland study area, where only 5 percent of the land is cropped, was about 46 percent. The causes of death were similar between the two areas, however, with mammalian predators (mostly coyotes) and birds of prey (mostly red-tailed hawks and great horned owls) taking about equal shares.

At this point, we can only speculate why there is such a difference



Nests are located then monitored to determine success rates and nesting habitat preferences.



Throughout the summer, birds are located so that nesting sites and movement patterns can be monitored. The signal can be received from up to a half-mile away.

in spring-summer survival between our areas. It may be that the birds on the cropland area are concentrated in relatively small "islands" of suitable breeding habitat, and are therefore easier for predators to locate than those living in the extensive grassland area. In the months to come, once all the 1994 data are collected, we hope to assemble a more complete picture of how survival is related to the habitats quail use and the movements they make.

It should also be noted that we have only studied the birds during the breeding season, and that how quail fare during the fall-winter period must be considered before we can fully understand how landscape composition affects them. Another research project began in 1993 to examine this critical period. The results of this three-year study will be used to determine fall-winter survival, habitat use, and the effects of hunting on our same two study areas. Together, the two studies should provide a fairly complete picture of the life history of

the Kansas bobwhite.

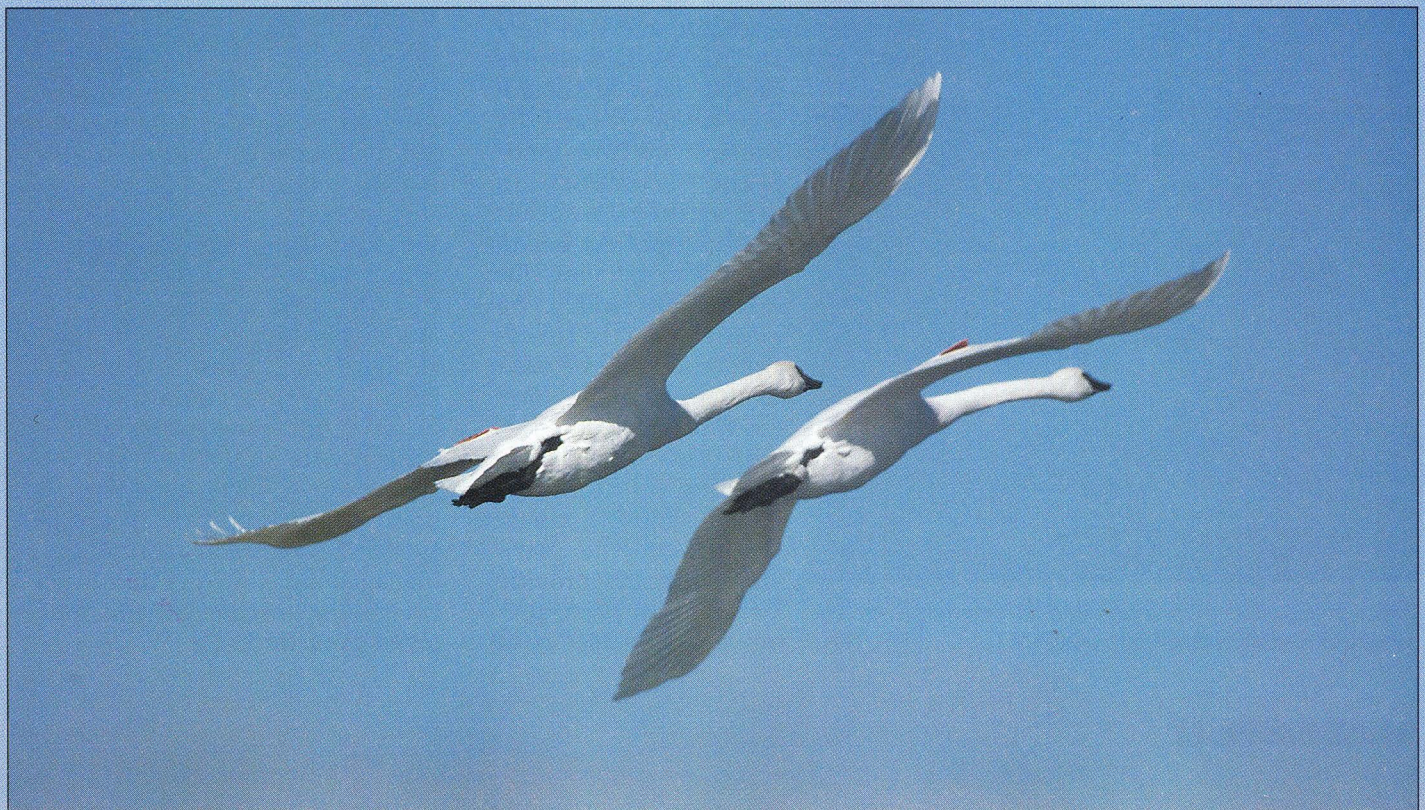
Our project is part of a growing renaissance of quail research arising recently in several states. Many wildlife professionals are more than a little disturbed that despite the enormous economic, cultural and scientific values of the species, bobwhites continue to decline. Not only is this a loss in itself, but it does not bode well for the successful management of other species with no less biological significance, but far less political support.

The basic tenants of quail management, most of which were devised to enhance pre-World War II landscapes, may change considerably as researchers learn more about the problems quail face in today's environment. It is increasingly clear we cannot afford to make quail management decisions in the 21st century based on data that have past their expiration date. Unfortunately, "facts" from the 1940s sometimes became the unquestioned dogma of the 1990s, and we must now methodically try to separate the wheat from the chaff. Hopefully, in the information gleaned from the new crop of studies will lead to more effective management strategies and hence a reversal of fortune for this much-loved game bird. ♡



# Spring Fancy

photos by Mike Blair







The spring migration is one of splendor and excitement. Waterfowl are plentiful on wetlands across Kansas – some species merely stopping for a rest before resuming their long migration north, and some selecting suitable nesting sites here. Breeding flights where several males court a single female provide the observer ample opportunity to view these birds. And all are in their stunning spring plumage.

Some species will begin passing through Kansas in late February and March, but the migration will peak in April. During wet years the numbers of birds and variety of species is absolutely mind boggling. Many dedicated birdwatchers will travel to traditional stopover sites like Cheyenne Bottoms or Quivira National Wildlife Refuge, but wherever suitable marsh habitat exists can be just as good.





Carry a good set of binoculars and a reliable field guide to the field with you. Keep track of the different waterfowl species you see and note the unusual breeding behavior. There may be no better time to be in the Kansas outdoors to enjoy both the pleasant spring weather and the beautiful migration show.



Edited by Mark Shoup

### GREAT DEER

Editor:

I feel I should let you know that deer hunting in Kansas in 1994 was the best ever. The weather was right; the rut was strong, and the deer were there to see and shoot.

My first draw in Kansas was in 1974 or 1975. I remember we had a ranch in Barber County in the fall of 1973. My son Bill got a permit, but I didn't. However, I have had a permit for almost every year since – most, but not all, in Barber County. We moved to Topeka in 1985, and I have been hunting some in this area. Nonetheless, I still like to go back home for deer season.

This year, my wife went along. She was there and saw the buck cross under my tree stand. Now, she thinks she needs her own gun, her own tree stand, and, of course, her own permit.

I am interested in how many deer are road killed in both the state and in Barber County each year. Could it be as many as the firearms season?

I am also pleased to see some out-of-state hunting permits. I understand the concern of those near the Kansas City area, but the Oklahoma state line area needed to be opened years ago.

Thanks again for a little earlier season. Let's do it again next year.

Allan T. Kimmell  
Topeka

Dear Mr. Kimmell:

**I'm glad you enjoyed your hunt and hope you take your wife up on her new-found interest.**

**As for roadkills, they come no where near the harvest. In 1993, hunters killed 39,500 deer, and 3,482 were killed on the highways. While I have no harvest figures for Barber County, 15 deer were killed on Barber County roads in 1993.**

–Shoup

### DOWNSIDE OF LEASES

Editor:

I wonder if you've ever heard of a problem like this. On Nov. 26, my son and I took our first opportunity to go quail hunting on 80 acres we own in eastern Lyon County. I knew of at least three coveys we could expect to find. As we hunted deeper and deeper into the area and found no birds, I began to wonder what the heck was wrong. Then I began to see fresh footprints, human and dog.

Soon, I saw two pickups parked on the east road, right next to a sign stating "No Hunting or Trespassing Without Written Permission." There were two hunters with three dogs working the north end of my property. I headed for the trucks, muttering under my breath about what I would say to those two.

They must have seen me and turned back towards their vehicles, and I walked to meet them. I asked them if they were having any success, and they replied that they weren't and then asked if I was from TPH [not its real name]. My first thought was that they were asking me if I was some sort of law enforcement officer. When I replied I wasn't, they said, "We've got all this land leased."

I wasn't sure I was hearing correctly. When I informed them that they were standing on my property and that it certainly wasn't leased to anyone, the two hunters still weren't convinced. They had maps from their hunting club showing my land in their lease! I knew the property to the north of mine was leased several years ago, but the signs were long gone, and I had assumed the lease had ended. Apparently, the maps sent the TPH members (a hunting club from the Kansas City area) had been in error for years because the two hunters told me they'd been coming to this area to hunt for three or four years and always had good luck.

The map not only included the prop-

erly leased ground, but mine and another neighbor's to the south. In all, TPH members were hunting an additional 160 acres not included in the lease.

I must say that the two hunters, once they learned of the misinformation under which they'd been hunting, were embarrassed and apologetic. I don't believe they were intentionally trespassing but were under the assumption that their map was correct. I'm sure their day was spoiled; I know my son's and mine was. I got the address of TPH from the hunters and let them know that I intended to write a letter voicing my displeasure. The hunters assured me TPH would hear of the errors long before my letter reached them. I was out of town for a week after the incident, so before I could get that letter written, I received a letter from TPH, and of course it was very apologetic, stating the errors had been corrected.

I am writing because leased land is becoming more and more common in Kansas. As this happens, more and more hunters are being restricted from areas they had historically been granted access to. As land is leased, it becomes only those who can afford it who will be able to hunt private land. Pressure on public areas will increase. I'm sure you've heard all the arguments and griping before.

What I don't understand is why some hunters are willing to spend money to lease an area that may or may not be managed to increase wildlife habitat and numbers, but are unwilling to spend money funding the purchase of additional public lands that would be properly managed for wildlife. If there is one glaring fact facing the average hunter in Kansas, it is that before long, without additional public areas in which to hunt, merely finding a place to hunt will hardly be worth the effort due to crowding, overhunting, and travel distance. I would like to see Wildlife and Parks work towards acquiring more lands.

I certainly find no fault with landowners who lease their property to

hunters, but it hurts those who can't afford it, and it can cause problems for landowners adjacent to leased land.

Tom Peterson  
Emporia

**Dear Mr. Peterson:**

**Thanks for your letter. You make some very important points. I, too, would like to see more public land, but not only are funds for acquisition short, some groups are philosophically opposed to public land ownership. Perhaps our greatest hope in this regard is that those private conservation organizations dedicated to purchase of wildlife habitat will grow. We welcome any ideas on the subject.**

*—Shoup*

## HUNTERS AND WHOOPERS

Editor:

By Dec. 1, the whooping cranes finally left and moved south. These particular cranes were at Cheyenne Bottoms for the first 25 days of goose season. As a result, Pool 2 and the firing line were closed to hunting and scouting until the cranes left.

I have talked to many birdwatchers, scouters, and hunters about the inconvenience that these birds are causing, and everyone seems to think that something needs to be done about the future of hunting at Cheyenne Bottoms.

I know that the reason that hunting and scouting are not allowed on Pool 2 or the firing line is so the whoopers are not disturbed in any way. I think everybody realizes that hunting should be restricted on Pool 2 while whooping cranes are there. However, I do believe that the firing line should stay open.

I have asked many people what we could do to keep the firing line open when the cranes are here and still not disturb the whoopers too much. Some people have said that an identification test should be taken to understand the difference between geese, ducks, sandhill cranes, and whooping cranes. If the person passed the test, a license would be issued to hunt the firing line. If the person failed, a license would not be given, and they would not be able to

hunt at Cheyenne Bottoms until they passed the test.

One of the biggest concerns for hunters is that if Kansas has a really mild winter, the whooping cranes might stay at Cheyenne Bottoms the whole hunting season. Another thing to look at is that the whooping crane population is going to get bigger, which of course is good. However, this means that more of these cranes will be able to stop at the Bottoms and keep the hunting season closed for more periods of time.

I think everyone believes that Cheyenne Bottoms was not made only for bird habitat but also for the men and women who want to go out and watch or hunt the wild animals. I hope in the future that game officials give special consideration to the whooping cranes, as well as the hunters and bird watchers. I hope that a solution will be found to allow hunting on Cheyenne Bottoms in the future.

Jason Haselhorst  
Great Bend

**Dear Mr. Haselhorst:**

**You express the mixed emotions I'm sure that many hunters had concerning the whooping crane visit last fall, which lasted 48 days (see Page 41). It was an unusual opportunity to see these rare birds, but it essentially eliminated the duck season at Cheyenne Bottoms.**

**The important thing to remember is that the whooper visit was a wonderful rarity. There will be many other duck and goose seasons.**

**As for the department's response to the whooper visit, I can only say that it is better to err on the side of caution. In 1987, Wildlife and Parks and the U.S. Fish and Wildlife Service drew up a contingency plan for an extended whooper visit. Some members of the public thought that the entire area should be closed during such a visit, but the department and the USFWS agreed that that was unnecessary.**

**The problem was that we had never had to deal with such a situation before. It was obvious that any pools with whoopers should be closed.**

**(Unfortunately, Pool 2 was the only pool with significant water this year, which compounded the problem for hunters.) To cover our bases, we also decided to close the firing line against the possibility of misidentification.**

Area manager Karl Grover tells me that much was learned in dealing with this situation last fall and that the contingency plan will be re-evaluated. Misidentification may not be an issue in light of the fact that in all the years of sandhill crane hunting in the U.S., no sandhill crane hunter has ever killed a whooper. I think we could also give goose hunters credit for equal judgement. Grover tells me that the behavior of hunters during this time was commendable. At no time did anyone try to harass the birds off the area, which could have easily happened.

**I really see this as an opportunity for hunters. To continue such supportive behavior and make it clear that we welcome the arrival of these rare creatures can only help improve the hunter's image. After all, these visits are special, as are the birds, and there are other places to hunt if we take the time to look.**

*—Shoup*

## EMMIGRANT ADMIRER

Kansas is my home state, but I moved to Arizona in December. I had lived in Kansas more than 50 years and am very familiar with your magazine.

You have a beautiful magazine with excellent photography thanks to Mike Blair. I particularly enjoy his special portfolios and his tips on photographic techniques. Photography is a hobby that I am constantly trying to improve, so I especially appreciate the help.

Your new illustrator [Dustin Teasley] is quite talented and is a fine addition to your staff. Your articles are always well-written, interesting and factual, too.

My husband is also a Kansas native and hunter who enjoys your excellent magazine.

Evelyn James-Vincent  
Yuma, Arizona

## 1-800 POACHERS

Last year, more than 200 Kansas residents helped conservation officers by reporting fishing, hunting, and public lands violations via a toll-free telephone call. The Outdoor Alert hotline (1-800-228-4263) offers Kansas residents a simple way to get a quick, efficient response to any illegal activity they see or hear about. All calls received through the Outdoor Alert line are immediately relayed to the conservation officer nearest the violation. Callers remain confidential. The line is available anytime of the day or night, year round.

"Without Outdoor Alert, we would miss a lot of violations," says Richard Harrold, chief of special operations for Wildlife & Parks' Law Enforcement Division. "With only a limited number of conservation officers to patrol the state, we rely heavily on citizen involvement."

Outdoor Alert calls have resulted in arrests and convictions on violations ranging from public lands vandalism to deer poaching. In many cases, calls have resulted in

the apprehension of violators within minutes from the time the call is received.

People who see a violation should get as much information as possible, adds Harrold, including vehicle descriptions and license tag numbers, descriptions of people involved, locations, and the time the incident occurred. The more specific the information is, the easier it is for conservation officers to investigate the case. But don't confront the violators.

Kansans interested in protecting their fish, wildlife, and state park resources a convenient way to assist the state's conservation officers. Just call **1-800-228-4263**. But remember, the hotline is for reporting violations, **not for requesting information**. (See "Don't Call Outdoor Alert?," Page 42.)—*Shoup*

## MILFORD FISH POACHERS NABBED

In a special undercover operation that began last May, law enforcement officials from the Kansas Department of Wildlife and Parks and

Clay County arrested three men in mid-November for poaching and illegally selling fish taken from Milford Reservoir.

The three were arraigned the first week in December and were to go to trial in January.

The men were allegedly taking fish from Milford Reservoir throughout the spring, summer, and into the fall. One man was charged with sale of game fish and possessing more than the state's possession limit allows. A second man was charged with over-possession, over creel limit, and littering. (They were allegedly processing the fish at a state park picnic area and leaving fish carcasses scattered about the area.) A third man was charged with more than 20 counts, including illegal sales of game fish, no boat registration, and over creel and possession limits.

After the arrests, officials seized 500 pounds of catfish fillets and two boats.

While the possession and creel limit charges could be misdemeanors if the aggregate value of the fish is less

than \$500, sale or possession of wildlife in aggregate value more than \$500 is a felony. If convicted, the men could face fines as high as \$500 and as much as six months in jail for each misdemeanor charge. Felony charges for commercialization of wildlife are even more severe.—*Shoup*

## LANDOWNER POACHERS

Two Marion County landowners were cited for several hunting violations last December after allegedly firing at a decoy deer. The two were charged with hunting deer without a valid permit, firing from a vehicle, and failure to wear hunter orange. They were also issued a warning for hunting without written permission.

The operation was requested because of problems the landowner was having with poachers.

Val Jansen, regional law enforcement supervisor for the department, said the warning was issued for failing to have written permission because the landowner didn't want to press charges against the men, who he said are his neighbors. The land was posted "Hunting by Written Permission Only."

Both men were required to surrender their Hunt-Own-Land permits.

Jansen said the media attention about the decoy deer program during the past two years has reduced arrests, but the lack of media attention this year may have contributed to an increase in deer poaching activity.

"Hunting complaints have been overwhelming this year," said Jansen.—*Steve Harper, Wichita Eagle*

## FED Land Poachers

Several people made a series of mistakes recently that cost them a large amount of money. The first mistake was the decision to illegally take a deer out of season; the second was to do it on a national wildlife refuge, and the third was to do it in front of a citizen who wasn't afraid to get involved.

The deer was a nice 10-point buck; the refuge was Kirwin NWR, and the citizen's name is unimportant, except to say we all owe him a tremendous "Thank you."

The incident occurred in the early evening of Nov. 21, 1994, on Kirwin, in Phillips County. The individual who actually shot the deer has paid fines totalling \$792 and for-

feited his rifle, valued at \$550. His companion has paid fines totalling \$342. Additional federal charges have been filed under the provision of the Lacey Act for the transportation of illegally taken wildlife, which carries maximum penalties of \$100,000 in fines and up to one year in prison.

The illegal taking of wildlife cheats all people, including those who have purchased the proper license to hunt game legally and those who simply want to view and photograph wildlife. Growing citizen involvement is having a positive impact on curbing this type of illegal activity. People have come to realize that getting involved is the only way to keep "slobs" from impacting their lives.

—*U.S. Fish and Wildlife Service release*

CRP  
UPDATE

In the Jan./Feb. issue of *Kansas Wildlife and Parks* (Page 21), we outlined the status of the Conservation Reserve Program (CRP) and the possibilities for continuation of this important conservation legislation. At the time of that writing (November), it was uncertain whether then-Secretary of Agriculture Mike Espy would extend all contracts, as he was given the authority to do in the 1990 Farm Bill. However, Espy did extend the contracts just before Christmas.

During the 1995 calendar year, the U.S. Department of Agriculture (USDA) will consider requests from CRP participants to be released from their CRP contracts or to modify their current contracts to reduce the amount of acreage subject to it. USDA will also request and consider bids from farmers to enroll new acreage in the program subject to new 10-year contracts. Only the most environmentally beneficial acres would be selected for new contracts.

In addition, current CRP participants will be offered the chance to modify and extend contracts once they expire.

This is good news for wildlife, the environment, and farmers. However, at this writing (mid-January), incoming Senate Agriculture Committee Chairman Richard Lugar (Indiana) was disgruntled by the action. A Wichita Eagle article quoted the senator as saying "his 'suspicion' was that the USDA planned to use some CRP funding" to support other farm programs. The senator's opposition could spell trouble for CRP, which must still be added to the Congressional Budget Office's "baseline" spending to ensure funding for the program.

Hopefully, this will have happened by the time this issue of *Kansas Wildlife and Parks* is delivered, and the program's future will be ensured. We'll keep you posted.

—Shoup



## OAK LEAF HONOR

Ed Martinez, a member of The Nature Conservancy (TNC) from Great Bend, was recognized with the Oak Leaf Award at TNC's national annual meeting last September in Tucson. The Oak Leaf Award is TNC's highest honor for a volunteer.

He was recognized for his tireless efforts at Cheyenne Bottoms, including many hours banding shorebirds. Before Martinez began banding, only 349 shorebirds of 16 species had been banded in all of North America. From 1966 to 1978, Martinez set his nets at the Bottoms two hours before sunrise, then took them down an hour after sunrise. During this period, he banded 58,159 shorebirds of 32 species. The resulting large data pool was of singular importance in the recognition of Cheyenne Bottoms as a wetland of international importance.

Martinez also contributed numerous hours to the International Shorebird Survey conducted by the Manomet Bird Observatory in Massachusetts. As a result of his work, along with the work of other volunteers, the Survey concluded that of the 200 wetlands studied, Cheyenne Bottoms was the top shorebird staging area during spring migration in the 48 contiguous states. The Bottoms attracts almost one-half of all North American shorebirds whose paths of migration are east of the Rockies.

Martinez has also donated many hours to battling the invasion of musk thistle onto TNC's Cheyenne Bottoms preserve. Musk thistle, legally classified as a noxious weed, would have to be controlled with powerful herbicides — posing a threat to shorebirds, waterfowl, and other creatures — if it could not be controlled by manual means. But to dig up just a few musk thistle requires a great deal of muscle power. In 1991, Martinez's efforts led to the removal of more than 500,000 musk thistle. In the following years, he helped remove more than 130,000 more.

In every way, Martinez has been a tireless volunteer and a major benefactor to all the winged travelers of the Great Plains.

—The Nature Conservancy

## Heartland NETWORK

Developed by farmers and rural leaders, the Heartland Network brings farmers together to improve their farms and communities through development and practice of farming systems that balance farm profit with resource conservation. The network seeks to develop partnerships between farmers and institutions that advance quality of life, profitability, neighborliness, and conservation.

Over the past 80 years, the marketing and input sectors of agriculture have dramatically increased at the expense of the farming sector. Today,

there is less money to be made in farming than in 1910. These two sectors have squeezed both profits and farm families out of agriculture. If farmers take back 20 percent of the profits from these two sectors, net farm income would double.

This can be done in two ways — by reducing off-farm expenditures on agricultural chemical and fertilizers and by adding value to farm products. Currently, eight “farm cluster communities” that make up the Heartland Network are working to accomplish these goals throughout Kansas. They seek to reduce off-farm expenditures through crop rotations that break pest cycles, green manure crop, biological and cultural control of pests, integration of livestock with crop systems, and switching livestock over to forage-intensive systems with methods such as rotational grazing.

To add value to farm products, they feed raised grain through livestock, direct market to the consumer, grow for value-added markets such as organic and fresh foods, and develop cooperatives that collectively pool products to improve market access and encourage bulk purchasing.

The Heartland Network is sponsored by the Kansas Rural Center and funded by the W.K. Kellogg Foundation. For more information, contact Jerry Jost, 2002 East 1600 Road, Lawrence, KS 66044, (913) 841-7044.

—Kansas Rural Center

## TEAM WACONDA

“A church on the move.”

Betty Fitzgerald, president of Waconda Heritage Village, Inc., whispered it many times on Nov. 18. Fitzgerald was watching and filming the former Hopewell Presbyterian Church as it was being moved to Glen Elder State Park, a distance of about 15 miles.

The church will become a functioning building at the state park. It will be used for church services held at the park during the summer. Its basement, with restrooms and a small kitchen, is designed as a storm shelter for campers. Wildlife and Parks will have an office in

the upstairs Sunday school room, and there will be space for ecological displays in the back of the church. The church will be rented for family reunions, weddings, or similar activities.

With the promotion of tourism in mind, the non-profit Waconda Heritage Village, Inc., came into being in 1990 with the goal of designing a pioneer heritage village at Glen Elder State Park. Almost immediately, the Hopewell Church was offered.

Other proposals included a log cabin, small rock house, windmill, stores, saloon, and a full-scale replica of a sacred meeting place for Indians called Waconda Springs.

Once the church is firmly on its basement foundation, preparing it for continued service to all comers will begin.

—Beloit Daily Call & Post

## AGENCIES STUDY FISH DRUGS

According to the U.S. Fish and Wildlife Service (USFWS), the federal government and 39 states have joined in an \$8 million study of eight drugs that might be used to enhance state, federal, and commercial fish production throughout the nation. The study addresses the current lack of approved drugs to reduce disease-related mortality in fish production.

The International Association of Fish and Wildlife Agencies and its state mem-

bers, including the Kansas Department of Wildlife and Parks, are conducting the study in cooperation with the USFWS and the National Biological Survey. Wildlife and Parks has agreed to provide \$20,000 a year for five years, which will be matched by the Fish and Wildlife Service.

The goal of the research is to give fish and wildlife agencies, as well as commercial producers, the tools to grow fish more effectively while ensuring the safety of humans and the environment. At least 40 fish species are produced commercially in the United States.

“It’s not that we requested additional chemicals,” says Wildlife and Parks Fish Culture Chief Jim Beam. “But about two years ago, the FDA [Food and Drug Administration] said that many of those we were already using were no longer approved.

“They are working with us,” Beam adds. “They’ve loosened up on some of their regulations. But we have a greater demand than ever to stock fish while at the same time, we’ve lost some of the tools we need to produce them.”

Bans such as that on copper sulfate (used for years to control fish diseases) remain in effect although copper sulfate is still approved to control algae in the ponds where fish are raised. Results of the new study should reveal whether this, and other drugs may once again be used by fish culturists.

—Shoup

## CLEAN ENVIRONMENT = JOBS

The Durham-based Institute for Southern Studies released a report last Oct. 12 that, after separately determining each state’s environmental and economic ranking, concludes that “states with the best environmental records also offer the best job opportunities and climate for long-term economic development.”

State economic rankings were based on 20 economic indicators, including annual pay, job opportunities, business start-ups, and workplace injury rates. Toxic emissions, pesticide use, energy consumption, and spending for natural resource protection were just a few of the 20 measures contributing to a state’s environmental ranking.

Hawaii, Vermont, New Hampshire, Minnesota, Wisconsin, Colorado, Oregon, Massachusetts, and Maryland rank among the top 12 states in each category while Louisiana, West Virginia, Alabama, Mississippi, Texas, Tennessee, South Carolina, Kentucky, Oklahoma, Indiana, Arkansas, and Ohio rank among the worst 14 on both lists.

—Land Letter, from River Crossings

## PATTERN TIME

Turkey season is almost here, and if you haven't yet patterned your shotgun, it's time. Every shotgun is individual and throws its own pattern. And every shotgun reacts differently to different loads.

To determine which load provides the best pattern density and most even pellet distribution, it is necessary to pattern a variety of loads at different distances.

To determine the pattern of your shotgun, mark an aiming point on a large piece of paper. Then, following all the appropriate safety procedures, fire a round at the distance that you normally hunt turkeys, using the same load you plan to hunt with. (Only shotguns 20 ga. or larger and shot sizes 2-9 are legal.) Draw a circle around the densest part of the pattern. Make the center of the pattern the center of the circle.

Analyze the pattern. Is it uniform? Is it dense enough to knock down the game you're hunting? Repeat the process at different distances. This will give you a good sense of how your gun patterns at those distances.

—Federal Cartridge Company

HANDICAPPED  
SPORTSMEN SAVOR  
DEER HUNT

Two days before the hunt, Bill Raux's gut was churning with nervousness over his December whitetail hunt at the Quivira Scout Ranch. Like Bob, his 42-year-old brother, 40-year-old Bill had

never been deer hunting before; and, like Bob, he spends most of his waking hours in a wheel chair, a victim of muscular dystrophy.

The Raux brothers (pronounced "rue") and their father, Bob Sr., had signed up for a special hunt for handicapped sportsmen sponsored by the Boy Scouts' Quivira Council and Wildlife and Parks.

The Rauxs arrived at Quivira's rustic lodge on Friday evening, December 2. They joined about a dozen other handicapped hunters and their assistants for a pre-hunt briefing. Hunters came from as far away as Dodge City.

Raux and his brother woke at 4:30 a.m. Saturday, dressed, and mounted their wheelchairs. Their father joined them and the other hunters for breakfast. By 5:30, the hunters were on their way to the blinds.

It was not yet light when Bill Raux unloaded his motorized chair from the van Bob Sr. parked near the blind. Jostling across the semi-rough terrain in the pre-dawn drizzle, he maneuvered the chair behind a crude blind of dead tree limbs. Bob set up in another blind not far away.

About 8:30, a young white-tail buck ambled perfectly into his zone of fire. He eased the iron-sighted .30-06 to his shoulder, balancing steadily on his seat. With his aim held carefully, he squeezed the trigger. The blast of the rifle surprised both deer and hunter. The deer reared and disappeared through the oak timber. In less time than it took Bill to exhale the breath he'd been holding, it was over, and the woods were silent.

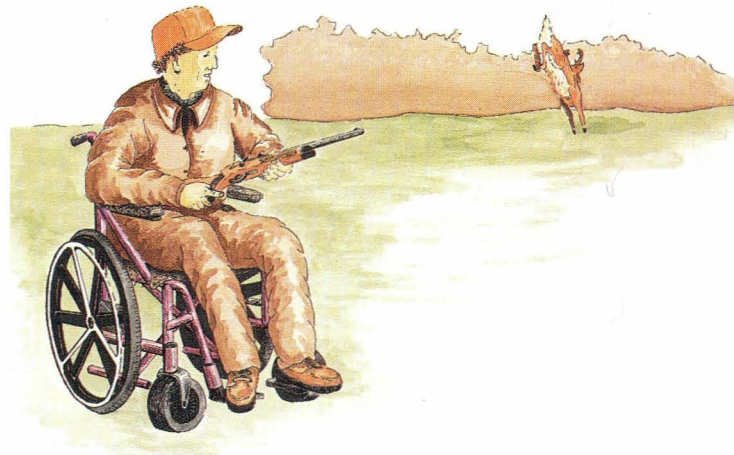
Shortly, Bob Sr. appeared at Bill's blind. "Heard you shoot," he said in an anxious half-whisper. Bill reported the events in words rushed by adrenalin.

But the deer was nowhere in sight.

Bob looked at the spot where the deer had been standing when Bill shot. There were tufts of white hair but no blood immediately visible. When Bob didn't locate the animal after a short

About 75 yards down the trail, the deer's path was easy to follow, even in the damp conditions. About 150 yards from where Bill fired on the deer, they spotted the young buck, collapsed and dead. At the panicked pace of a white-tail, it had probably died less than 10 seconds after Bill had fired.

The trackers left the deer undisturbed and went back to get the hunter in a golf cart, one of several on loan from



search, he went back for help.

Experienced trackers searched the site on hands and knees for sure signs of the deer's whereabouts.

After more than half an hour's futile search for more sign in the hardwood timber, the trackers found the first spot of blood. Bending low to scan the dripping wet leaves and grass, Conservation Officer Bill Ramshaw found another spot of blood, nearly the same color as the red-tinted leaves and rusty grass stems. Then Scout leader Jim Banks found another 15 feet away. The deer had changed its course where they had previously lost the trail. It had turned and headed to more dense brush. The mood of the hunter and his trackers brightened with the new sign.

Kansas Mini-Power Equipment in Wichita. Bill was ecstatic; so was his dad. It culminated what Bill, beaming, termed an "excellent" experience.

The trackers then field dressed the deer, and they all returned to the Scouts' dining hall. Bill found that five other hunters had taken deer that morning -- two nice bucks, two smaller ones, and a doe. Spirits at the lunch table were high.

After a deer chili lunch, the hunters with unfilled permits rested briefly and returned to the woods. By nightfall two more deer were added to the take. Men who might otherwise have never experienced wild Kansas so intimately were immersed in one of its richest traditions.



Pre-dawn Sunday found many of the hunters and their companions again dressed and ready for the field. The weather remained unseasonably mild, alleviating concerns about keeping paralyzed legs and torsos warm. With his deer bagged, Bill waited around the lodge and shared stories with a few other successful hunters.

Four more whitetails came to camp by Sunday's end. In all, 20 hunters took 12 deer during the two-day hunt. Even

those few hunters who didn't harvest deer were rewarded with wild experiences and the unique fellowship of people with a common passion for the outdoors.

By now the deer are ready for the table, and the stories of this hunt are being carefully polished for future telling and retelling.

Already, there is talk of a second annual deer hunt for outdoors people with special physical challenges. With the

generous synergy of the Boy Scouts, Wildlife and Parks, and numerous private contributors – Product Specialists, the Coleman Company, Wichita Sports, TransUnion Corporation, Olston Staffing, Star Lumber, Kansas Mini-Power Equipment, Richard Williams, and others – the abundant Kansas deer resource will yield itself for many such hunts to come.

—Manes

## UNDER CURRENTS

# DISNEY

## SCRIPT GANGSTERS

by Mark Shoup



Movies reviews are not normally the subject of outdoor magazines, but at the risk of being labeled a curmudgeon for invading sacred territory, I'm going to critique a bastion of sweetness, an American institution – The Walt Disney Company.

Like most Americans born after the Great Depression, I was raised on a steady diet of Disney, wonderful renditions (seldom true to the original) of classic fairy tales such as *Snow White*, *Cinderella*, and *Sleeping Beauty*, as well as other animated classics like *Fantasia* and my favorite, *Dumbo*. When *Mickey Mouse Club* graced the boob tube in the 1950s, like every other kid in town, I waited anxiously with my Mouseketeer ears on for those corny lyrics, "Meeska, mooska, Mouseketeer, mouse cartoon time now is here!" Annette and Tommy and even little Moomie turned the dial that sparked (anesthetized?) the cultural imagination of a generation.

With the exception of the subtle anti-hunting sentiment of *Bambi*, the messages in these films promoted universal values – kindness, loyalty, honesty, fairness, good conquering evil.

Today, the themes and messages of some Disney films are not so benign, and the values not so universal. The animation is still stunning, and the story lines tightly crafted. *Aladdin* was a delightful film, due in large part to the talents of Robin Williams.

In 1991, however, Disney took a classic fairy tale, *Beauty and the Beast*, and turned it into an ugly polemic against both hunters and small towns. Like all Disney films, the story line is tight and all the right emotional buttons are pushed, but it doesn't take long to see where the Hollywood scriptwriters are taking us.

After a synopsis of the Beast's plight, the opening introduces us to the heroine, Belle, and the small, quiet village in which she is doomed to live. From the very outset, Belle is portrayed as the embodiment of good in the movie, so we must see the movie's message through her eyes. And to her, small town means prejudice and provincialism. The local

townsfolk are so backward, in fact, that they all think Belle is strange because she likes to read. It is, in Belle's words, a "little town" full of "little people," and she's not referring to their physical stature.

The next character we are introduced to is Gaston, the most admired person in the village. He is immediately described as "the best hunter in the world" but also as "brainless" and a beer guzzler. In a musical number featuring the breathtaking (albeit comically-intoned) operatic baritone of Richard White, Gaston sings his own praises while the townsfolk back him with the refrain, "No one's slick as Gaston, No one's quick as Gaston, No one's neck is a thick as Gaston's," as so on through at least two dozen such superlatives.

I admit, the comic overtones of this song are seductive. One line has the crowd singing, "No one spits like Gaston," to which he responds proudly, "I'm especially good at expectorating." Yes, it is funny, but it is setting the audience up to loath this man, whose primary identity is that he is a hunter. Spurred on by this often dubious praise, Gaston brags that "Every last inch of me is covered with hair" (obviously he's sub-human) and "I use antlers in all of my decorating."

From there, the plot is fairly predictable. Belle meets the beast and discovers that he is not really a beast inside. Gaston has Belle's father put away as insane, seeing this as a way to get her to marry him. When Gaston finds out about the beast, he incites the dimwitted small-town folks to storm the Beast's castle, declaring that "The Beast will make off with your children. We won't be safe until his head is mounted on my wall."

And off they go, the simple rustics chanting, "What we don't understand scares us." The same could be said for much of Hollywood's attitude toward the rest of the world, from which they are often perversely isolated.

The message in the original story, of course, is that beauty and even brains are superficial qualities when compared to compassion, honesty, kindness, and loyalty. Unfortunately, the Disney Gang has chosen to obscure this old-fashioned message with their clouded political perspective.

Disney has been a great entertainer over the years and, hopefully, will be for many more. But when *The Lion King* comes out on video, you can bet I'll be sitting beside my kids when they watch it. I hope it's as good as the real reviewers say it is.

**WALLEYE BREWING**

While the walleye is most commonly thought of as a fish of the cool lakes and streams of the northeastern United States and Canada, they existed in the Missouri and the Kansas rivers until the mid 1800s. In the 1960s, they were re-introduced in Kansas reservoirs.

Today, walleye spawn in Kansas in March and April when water temperature reaches 45 to 50 degrees Fahrenheit. Walleye usually spawn at night in rocky areas such riprap along dam faces and deep, rocky shorelines. A large female may broadcast as many as 300,000 eggs. Fluctuating water levels and temperatures, wave action, and siltation destroy about 80 percent. For this reason, artificial spawning and hatching are widely practiced to increase egg survival rates.

Artificial spawning in Kansas is timed to coincide with the natural spawn. Field biologists set trap nets along dams and shorelines in selected reservoirs to collect broodstock. Crews waiting on shore sort the fish and begin collecting the spawn. Eggs are milked from the females into shallow pans containing about an inch of water. Within seconds, the milt or sperm from a male is added to the eggs and the mixture is thoroughly stirred. Sperm life is only about 30 seconds, and unfertilized egg life is one minute, so timing is critical.

After several minutes, Fuller's earth, a type of clay, is added to the eggs. This clay sticks to the eggs and absorbs water. This treatment reduces the natural adhesiveness of

the eggs and prevents them from sticking together, a crucial factor in the later stages of the artificial hatching process. After five minutes, the excess clay is washed from the eggs. If left undisturbed at this time, the eggs will absorb water through their shells and begin to swell. This action is called water hardening and protects the embryo.

The resulting embryos are bagged and boxed in styro-foam containers for shipping to the Pratt and Milford hatcheries, where water is added to each bag. This allows the eggs to gradually warm up to the temperature of the hatchery water. The eggs are then placed into specially-designed hatching jars.

After five days, the eyes of the fry become visible in the eggs. At 60 degrees, hatching generally occurs on the eighth or ninth day. As the fry break out of the egg case, they swim and are carried upward by the water and flow out into troughs, which lead to large circular tanks. The fry are held in these holding tanks until their mouth parts are fully developed, which usually takes two to four days. They are then ready to be stocked into Kansas lakes and reservoirs. Some fry are stocked in hatchery ponds to be raised to fingerling size.

—Gene Brehm,  
video photographer, Pratt

**FISHIN' TIME!**

The first days of spring typically cause fishermen to dust off their equipment and dream of lounging on a boat or bank, waiting for the big one to bite. As water temperatures rise, so does the blood pres-

**SPECIES  
NATURAL FOODS****Largemouth Bass**

Crayfish, fish, insects, amphibians.

**Crappie**

Minnows, shad, crayfish, mollusks, insects.

**Channel Catfish**

Crayfish, worms, fish, insects, decaying animal matter, mollusks.

**White Bass**

Shad, minnows, crustaceans, insects.

**Panfish (bluegill, redear, green sunfish)**

Insects, crustaceans, larvae, snails.

**Walleye**

Insects, larvae, nightcrawlers, crayfish, snails, fish.

**SPAWN  
TEMP, AREA**

62-75° Nest, shoreline gravel, 18-36" deep

55-68° Nest, brush, and gravel shoreline, 2-8' deep

75-78° Nest, shoreline ledges, holes, and roots, 18-48" deep

50-55° Eggs, broadcast over sand, rip-rap, lake points, or gravel feeder streams 2-8' deep

72-78° Nest, sand and gravel shoreline, 1-10' deep

45-55° Eggs, broadcast over sand, rock or gravel, 1-5' deep

—Murrell

sure of most anglers.

But what really makes fish bite? Is it just water temperatures, or are other factors involved? In fact, springtime is spawning time, and water temperature, habitat, and food supply are critical to the success of spawning fish and itchy anglers.

Fish are poikilothermic — or cold-blooded — meaning their body temperature is similar to that of the water surrounding them. Increases in water temperature and changes in day length cause fish to move to different areas to prepare for spawning, one of the most active times of their lives. The temperature

at which fish spawn varies dramatically among species, as does the distance fish range. The area in which a fish chooses to spawn is also species-specific.

During spawn, fish are extremely susceptible to angling by many methods. Fisheries biologists estimate that 75 percent of all fishing pressure occurs during the months of April, May, and June. This is also when many Kansas fish spawn.

While time of day, weather, and fish density also affect how fish bite, the above information should prove useful to Kansas anglers.

—Murrell

## BATS AND RABIES?

**F**ourteen species of bats can be found in Kansas, all of which are insect eaters. For this reason, bats are especially beneficial in the Sunflower State.

An individual gray bat, for instance, may gobble up as many as 3,000 insects in one night. The storm drains of Pittsburg, Kan., are home to a colony of 2,500 gray bats that consume 7.5 million insects per night, or 1.5 billion from April to October. Now that's mosquito control.

Despite such statistics, many people still fear bats, and the most common phobia is that they are primary carriers of rabies. It's true that, like all mammals, bats can carry the disease, but they are less likely to be infected than other animals, such as raccoons or skunks. Studies in California have revealed that about one in every 1,000 bats contracts rabies. Of these, no more than three percent will become "furious" enough to make an unprovoked attack. In the past 40 years, only 10 people in the U.S. and Canada combined have contracted rabies from bats.

Most bat bites occur when people pick up animals that have fallen to the ground from illness or injury. Any such animal should be left alone.

Another false notion about bats and rabies is that they carry and transmit rabies without becoming infected themselves. This notion comes from faulty studies in the 1930s. More modern research has revealed that bats die from

the disease just as quickly as other animals.

Now you know that bats are not dangerous, that they are, in fact beneficial, but how many can you name? Those found in Kansas carry such names as big brown, big free-tailed, Brazilian free-tailed, evening, hoary, pallid, red, silver-haired, and Townsend's big-eared.

Next time you see one of these phantoms floating on the evening air, be thankful. It's presence probably means a few less mosquito bites.

—Shoup

## RECORD STAY FOR BOTTOMS WHOOPERS

**A**t the central Kansas wetland called Cheyenne Bottoms, the fall of 1994 will be remembered for one of the most unusual events in the area's history — the unprecedented stay of whooping cranes on the area. Mild weather and favorable water levels enticed the cranes to linger 48 days — Oct. 13-Nov. 29. Normally, migrating whoopers stay less than a week, if they stop at all.

At least two of the birds were on the wildlife area at any one time during this period. On the morning of Nov. 1, 18 whoopers were spotted, the highest number ever reported at Cheyenne Bottoms. From visible bands on one group of five, area biologists determined that these birds remained on the area 36 days — the longest known migrational stop made by whooping cranes anywhere in their flyway route from Canada to the Texas coast.

People from all over Kansas, as well as other states, took advantage of this rare opportunity. Bird watchers and hunters alike — from as far away as Kentucky, Ohio, Missouri, and Colorado — told Bottoms staff how thrilled they were to see the large, rare birds.

In the spring of 1994, 135 whooping cranes comprised the whooper population that migrates through Kansas — up from a low of 16 in 1942. Habitat acquisition is the single most important factor in this increase. Acquisition of marshes that the birds historically used became the priority of the Whooping Crane Recovery Plan, conducted by the U.S. Fish and Wildlife Service in cooperation with state wildlife agencies. Aransas National Wildlife Area, near Corpus Cristi, Tex., was purchased because it is the whoopers' primary wintering ground. In addition, Cheyenne Bottoms Wildlife Area, Quivira and Salt Plains national wildlife refuges, and a stretch of the Platte River in Nebraska were designated as critical habitat for the cranes.

The birds are protected from disturbance whenever they are seen at any of these areas. Cheyenne Bottoms closed a significant portion of the area to hunting during the whoopers' 1994 stay to allow the birds to rest undisturbed. Hunters, birdwatchers, and other visitors all cooperated in this effort.

Occasionally, more difficult measures must be taken to protect the birds. An outbreak of botulism in one pool at Cheyenne Bottoms forced biologists to intentionally flush 10 whoopers off that pool. Those birds flew safely to Quivira National Wildlife Refuge, about 20 miles to the south.

Bird watchers and hunters will remember the 1994 whooper stay at Cheyenne Bottoms and their direct involvement to save this beautiful bird. Biologists will also remember the extra hours required to monitor the birds. Hopefully, the whoopers' visit will remind everyone of the value of areas such as Cheyenne Bottoms in providing critical wildlife habitat and places to enjoy the natural world.

— Karl Grover, area manager,  
Cheyenne Bottoms



**ZAMRZLA MEMORIAL SCHOLARSHIP**

Bruce Zamrzla had a lot of friends. Today, those friends are raising funds for construction of a memorial to the fisheries biologist who died in a traffic accident last spring.

The Bruce Zamrzla Memorial Committee has begun a campaign to construct a permanent memorial at the Salina Mall aquarium and to establish a scholarship fund at Fort Hays State University, Zamrzla's alma mater.

Contributions to the memorial/scholarship fund may be sent to Bruce Zamrzla Memorial Fund, c/o Bennington State Bank, 200 S. 9th, Salina, KS 67401. For more information, contact Mike White (913) 827-8276 or Jerry Scott (913) 827-4668).

—Mathews

**DON'T CALL OUT-DOOR ALERT?**

The Department's Law Enforcement Division reports that at least 50 percent of the calls they get on the agency's Outdoor Alert hotline number (1-800-228-4263) are general requests for information, not reports of violations.

Such calls tie up important law enforcement resources and should not be directed to this number. Anyone who has general questions about regulations, hunting, fishing, bird-watching, boating, or other issues should phone the department's Public Information Section at (316) 672-5911 or any local office of the

Department of Wildlife and Parks.

Please **do not use the Outdoor Alert number for information requests.**

—Shoup

**CHICKADEE CHECKOFF**

With the help of the Kansas Society of Certified Public Accountants (KSCPA), the Chickadee Checkoff was able to hold steady with contributions from last year. In fact, we made nearly the exact amount from the previous year (\$148,000).

You may ask, "Why is it good news to stay the same?" Last year, there were fewer tax returns filed, and the trend for other states' checkoffs are downward, so this is good news.

Look for the Chickadee Checkoff poster and print depicting the elegant Trumpeter Swan, and checkoff on you income tax.

—Ken Brunson

**OWLS UPDATE**

To date, 65 Outdoor Wildlife Learning Sites (OWLS) have been established in Kansas.

One OWLS, Lanesfield School in Lenexa, even received mention in a British publication. The KANSAS WILDSCAPE Foundation has raised \$88,250 for OWLS. Most recent contributors include the Southwestern Bell Foundation (\$10,000), the Dane G. Hansen Foundation (\$10,000), the Finnup Foundation Trust (\$5,000), the Sprint

Foundation (\$2,000), Payless Shoesource, Inc. (\$2,000), Air Products Manufacturing Corporation (\$500), and the Reid Foundation (\$1,250). Other earlier funding partners include the U.S. Environmental Protection Agency, the U.S. Forest Service/Kansas State and Extension Forestry, the Forrest C. Lattner Foundation, Inc., The Boeing Company, and Vulcan Chemical Company.

—Ken Brunson

**TURKEY TIME**

The 1995 Spring turkey season runs April 12 through May 7. Only 100 permits were issued to the general public for Unit 1, in southwest Kansas

Unit 2, which includes the rest of Kansas, has unlimited permits available, one per hunter. In addition, any hunter who has bought a regular spring permit — for either unit — may purchase a second turkey game tag for Unit 2. Unit 2 permits and tags may be purchased through 5 p.m., May 5.

Each permit and tag allows the holder to take one bearded turkey. General resident permits are \$20.50, and second turkey game tags are \$10.50. Landowner/tenant and hunt-own-land permits are \$10.50. Non-resident permits are \$30.50. General non-residents may only purchase permits for Unit 2, but non-residents who own land in Unit 1 may purchase hunt-own-land permits for Unit 1.

"Our turkey population is in good shape," says big

game biologist Keith Sexson. "We should have a very good season. Last year we harvested a record 13,000 turkeys in Kansas, and hunters had a 60 percent success ratio."

Applications for the 1995 Kansas turkey season may be obtained from license vendors, county clerks, and most offices of the Kansas Department of Wildlife and Parks. Hunt-own-land permit applications are available only at department offices. For a non-resident hunt-own-land application, contact the Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, KS 67124-8174, (316) 672-5911.

—Shoup

**JET-SKI EDUCATION**

The Department of Wildlife and Parks passed a regulation last year requiring operators of personal watercraft (often generically called jet-skis) age 12-15 who want to operate their craft alone to successfully complete an approved safe boating class. The regulation went into effect Jan. 1, 1995.

The department, the U.S. Coast Guard Auxiliary, and the U.S. Power Squadron all offer approved courses. If there is not a class near you, the course is available through home study.

For a list of upcoming classes, contact your local state park office or boating education coordinator Cheri Swayne, 900 Jackson, Suite 502, Topeka, KS 66612, (913) 296-2281.

—Cheri Swayne

by Mark Shoup

GROW  
YOUR  
OWN

**E**very kid likes to dig in the dirt, so why not double your fun and plant a garden this spring. Few things make you feel better than watching the things you have planted grow. If you plant vegetables or melons, you even get a tasty bonus when you pick your crop. Flowers are just as much fun, and the harvest is a feast for the eyes.

The opportunity is, well, as close as your own back yard. Seed, soil, and sunlight are the essential elements. Add a few tools and some help from Mom or Dad, and you're set.

Of course, the first thing you'll need is a few tools — a shovel, a hoe, a rake. You don't need kid-sized tools, but if your folks decide to get them, make sure they're well made — metal and wood, not plastic. Most hardware and gardening supply stores can help you with this.

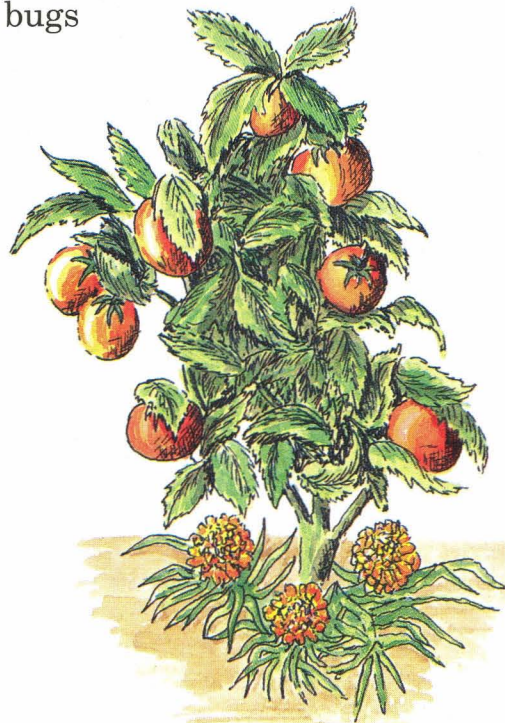
The next thing you'll need is a plot of land. The size just depends on how much you want to plant. Where you put it depends on what you plant. A vegetable garden usually needs plenty of sunshine, but some flowers, such as impatiens, need a little shade.

Chances are, your parents already have a garden area. If so, ask them to divide a portion of it just for your project. If not, maybe they'll set aside a small corner of the yard.

If you're digging up a lawn for a new garden plot, try to remove as much grass as possible and turn the soil at least twice afterwards. Then mix in sheep manure or, if your parents have a compost heap, mulch for fertilizer.

Next, it's time to pick your plants. Whether it's flowers or vegetables, plant what you like. Snapdragons and impatiens are cool to play with, and they're pretty as well.

Marigolds planted around your vegetable garden can help keep harmful insects away. (Perhaps the simplest and safest way to control garden pests is to pick them off, but be sure to leave critters like ladybugs, praying mantises, ground beetles, and spiders alone. They eat the bugs



that eat your plants.) Many flowers are perennial, meaning that once you plant them, they'll come up next year on their own. Wildflowers, such as Indian blanket, are great additions to any yard.

In the vegetable department, you can grow beans, carrots, cucumbers, peas, potatoes, tomatoes, watermelons, and many others in Kansas.

I know what you're thinking. Beans? Peas? Carrots? But forget what you may think about these veggies as you have known them before. When you have grown them yourself, they are among the tastiest treats on earth.

Okay, so you've decided on what to plant, but when and how do you do it?

At this point, it's a good idea to take a trip to your local County Extension Office. (Look up the number and address up in the phone book under the name of the county you live in. For example, in Reno County, look up "Reno — County Of," and under that you should find "Extension Agent" or "Office.") You'll find tips on growing just about everything a Kansas garden can grow. If you plan it right, you can harvest your own crops as early as May and as late as October.

Gardening is a creative activity, but you can make it even more fun by making your garden grow into a playground. Here's one great idea.

Push 10 or 12 poles or 1-inch dowels in the ground in a circle about 5 feet in diameter. Tie the poles together at the top in tepee fashion then circle the whole thing with twine.

Leave space for a "doorway" at the bottom. Plant pole beans at the base of each pole. As the beans grow, they will enclose the area, creating a hide-away and playhouse.

For an all-living version of this tepee, plant giant sunflowers instead of poles. When the sunflowers are about 8 feet tall, carefully bend them over and tie them together just below the flowers. Then plant morning glory seeds at the base of each sunflower. The morning glories will entwine the larger plants, making a beautiful hideout that will also be a great refuge and winter bird feeding station.





## You Should've Been There

If you think I exaggerate when I write, you should hear me tell a fish story. Natural-born fishermen (I've always believed I was *born* to fish) are gifted exaggerators. And I mean that in the most complimentary manner. The better the fisherman, the better the story. Notice I don't say lie. A lie is an intentional deviation from the truth. An exaggeration is kind of like a rough outline of the truth, with a degree of uncertainty about sizes and numbers. Good fishermen never lie unless it's necessary. Lying is acceptable (even mandatory) when someone asks the exact location of your latest exaggeration.

A fish story just flows over the lips of a good fisherman. No effort to exaggerate is apparent. Maybe this is because truly gifted exaggerators believe their own stories, no matter how far-fetched. But even the best must obey a few basic rules or they may be outcast, insulted, humiliated, called a liar or worse — have their fishing skill doubted.

Rule number one is to never count, measure or weigh your fish (unless you're keeping some to eat and there's a creel or length limit). Not only can you exaggerate better, but you'll never get outfished by a boat partner if you manage to lose track of how many fish you've caught. And if you're truly not sure how many fish you've caught, you can exaggerate. When you're partner says, "I've caught six bass already. By the way, how many have you caught?" You can reply, "I'm not sure but I think seven or eight— yeah, that last one made eight." Your partner may stare at you bewildered for an instant, but if he begins casting furiously while audibly gritting his teeth, you've won.

Counting, measuring and weighing also fouls up your ability to tell a good story, since you can't very well exaggerate if you know exactly how many fish you caught and how big they were (that would be lying). The only exception to this rule is that rare occasion when you really do catch a bunch of fish — I mean so many that no one will believe you anyway, so there's no point in exaggerating. Then and only then do you give exact numbers.

Generally fish stories should be vague. For example after catching five bass from a farm pond (this is purely hypothetical, since if you're following the rules, you lost track after the second bass), you say you caught around five or eight bass, and biggest weighed about six pounds (if you prefer length, substitute 22 inches for six pounds). But remember, you can only do this if you don't count, measure or weigh.

I know better, but last spring, I made an amateur mis-



Dana Eastes illustration

take after an exceptionally successful crappie fishing trip. We caught some of the biggest slab crappie I'd ever seen, and I suppose that contributed to my error. Just before I cleaned the fish, the phone rang. Seizing the opportunity, I proudly exaggerated about my catch, estimating that some of the biggest crappie were nearly 18 inches long (the lady from Dial-U-Credit Telemarketing didn't do much fishing, but she sounded impressed). Being a natural exaggerator, I sincerely believed what I was saying. Then I made the terrible error in judgment — I actually measured the biggest fish, *on a measuring board*. The fish barely hit 16 inches, a true slab, but well under my exaggeration. I wasn't ashamed of my length estimate, but I was disappointed that all future stories would now have to be accurate.

It's no fun to tell an accurate fish story — I mean one where you know exactly how many fish were caught and exactly how long they were or how much they weighed. For one thing, the accurate story can't change. A good exaggeration gets better each time you tell it. But the experts are careful to walk the line. To cross the line, or make an exaggeration that no one will believe, is a fatal mistake. The story must stay within the boundaries of believability.

Believability is important for several reasons. First, if no one believes your stories, then you're obviously not a very good story teller. Second, good fish stories are no fun to tell if no one believes them. I mean half the fun of a good fish story is stringing the listeners along — making them wish in the worst way they had been along for the trip. And finally, if you get caught in a blatant lie, I mean an exaggeration that goes too far, your storytelling career is probably over. And without that . . . well you might as well give up fishing. Whoa! I think I better go lie down. Just writing that last sentence made me woozy.

