

1

KANSAS

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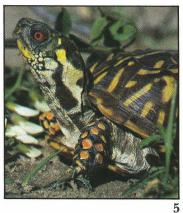
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THE BUCK STOPS HERE

The Ornate Lobby

Bluebird On The Rebound

Eastern bluebirds are returning to Kansas, largely due to nest box trails. Here's how you can help this little songbird. by Marvin D. Schwilling

Meet Our State Reptile

Kansas has a state reptile, thanks to the hard work of Caldwell Elementary schoolchildren, their teacher and countless other Kansans. by Ken Brunson

KATFISH

This new youth fishing program is catching on in the Kansas City area. Here's why it's so popular with students, instructors. by Mary Kay Spanbauer

A View Through The Viewfinder

Each week our video cameras bring the great outdoors home to many of you. The story behind our TV operation. by Bob Mathews

A Matter Of Ethics

The question has surfaced on a few Kansas reservoirs. Should daily limits be placed on crappie and white bass? by Paul G. Koenig

13

ADMINISTRATION

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About The Covers

Front: David Vineyard of Mustang, Okla., used a 400 mm Nikkor lens to photo-graph this male Eastern blue-bird. Vineyard set his shutter speed at 1/250th of a second, his aperture at 5.6.

Back: Mike Blair photo-

graphed this 10-spot dragon-fly perched atop a cattail. He used a 70-210mm macrozoom mounted on an auto-matic bellows. Exposure was f/3.5, 1/1,000th of a second.

The Canoe Can Do

Although its design is ancient, the canoe always provides a contemporary way to float a river. A few tips for that first float. by Gerald Segraves

29

An Ace Of Clubs

Nineteen bass fishing clubs in Kansas are measuring and releasing their fish, then giving the data to state fisheries biologists. by David Willis

33

As He Sees It

With this issue we introduce Mike Blair as our staff photographer. A five-page photo display.

36

HIGH GROUND

That Old Feeling by Mike Miller 41

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

THE BUCK STOPS HERE



The Ornate Lobby

ansas schoolchildren seem to have a lot of pull with legislators. In 1937, for example, the Legislature designated the western meadowlark as the official state bird. Twelve years earlier, however, schoolchildren had selected the meadowlark for such recognition.

In 1976 another generation of Kansas schoolchildren diligently campaigned for a state insect. Their choice? The honey bee, chosen for its industriousness. A fitting pick indeed for a state that prides itself on a strong work ethic. Appropriate, too, because America was celebrating its 200th birthday that year. And America also prides itself on its industrious character, its determined people.

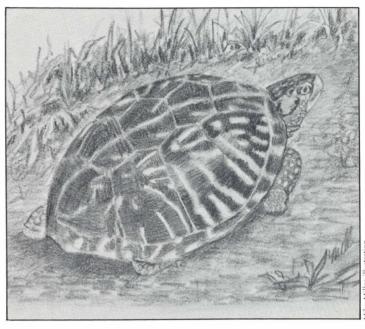
That go-get-'em attitude began percolating in Caldwell Elementary School last October. In an effort to do something really neat for the state's 125th anniversary, Larry Miller's sixth-grade class decided it would champion a state reptile. Kansas already had a state tree, mammal, flower and bird. Why not a reptile?

But which one? The culling process came down to two candidates: the bull snake and the ornate box turtle. Both species were found throughout Kansas. But the class was split evenly on the choice.

So they reasoned. Many Kansans probably don't understand snakes. And maybe they couldn't count on their fellow Kansans to support a snake for such an honor. The ornate box turtle, then, was the obvious choice. The support would have to be there.

It's common knowledge that if you want to have a bill passed, you need a lot of supporters. Media attention also helps. But there has to be a starting point, and the 18 sixth-graders got under way by mailing 30 letters the first week of November. The news media, environmental groups and education groups received letters. So did Gov. John Carlin.

The Wichita Eagle-Beacon was the first heavyweight to come aboard. The paper threw its support for the ornate box turtle in a Nov. 10 editorial. Universities and colleges soon followed. So did schoolchildren in other Kansas elementary schools.



Mike Mil

Wichita television stations helped keep the issue bubbling. KSNW (Channel 3) did a piece on the kids and their beloved turtle. Then KAKE (Channel 10) did a live spot one day over the lunch hour.

But this would not be a cakewalk through the legislative process. On March 7 the schoolchildren were told their bill probably wouldn't get through the House Energy and Natural Resouces Committee by session's end.

Undaunted, the sixth-graders, their teacher, principal and about 20 parents, grandparents and Caldwellarea friends boarded a bus bound for Topeka.

The media were waiting for them. So was more bad news. "Don't get your hopes up," they were told. "Most bills never make it out of committee."

Again the group sought the media's support. Ornate supporters mailed more letters, placed more phone calls and lobbied more legislators.

By late March new bills had been introduced in both houses. Feeling renewed, the group again traveled to Topeka and arrived in time to see the House pass the bill March 24. The Senate gave its approval April 2. And, Governor Carlin may have paid the supreme compliment when he trav-

eled to Caldwell Elementary School in mid-April for the bill-signing ceremony.

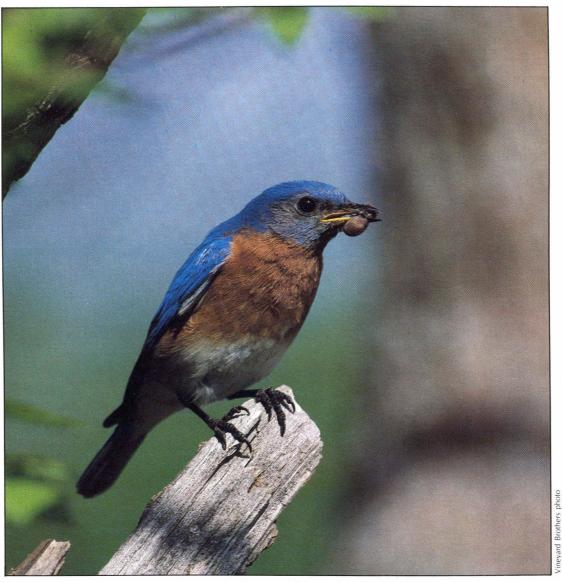
The bill passed not because legislators were overwhelmed by zealous Kansas schoolchildren. It passed because those youngsters mounted a lobbying campaign the National Rifle Association would envy. Their massive effort got responses—either letters or phone calls from about 30 of the 40 state senators and about half of the 125 state representatives. Fellow Kansans also responded admirably.

The sixth-graders who spearheaded the bill move on to junior high school this fall. But I doubt we've heard the last of Caldwell, Kan. Larry Miller says there's talk at Caldwell Elementary of supporting a city resolution that would proclaim the town the Ornate Box Turtle Capital of the World. Given the current fervor for ornates in Caldwell, such a resolution seems like a sure bet.

Watch it happen.

Paul G. Koenig Editor

For more on the ornate box turtle, see Ken Brunson's story on page 5.



Male bluebirds are blessed with most of their species' blue feathering . . .

Bluebird On The Rebound

Eastern bluebirds are returning to Kansas, largely due to nest box trails. Here's how you can help this little songbird.

by Marvin D. Schwilling

Project Leader Nongame and Endangered Wildlife Emporia

he Eastern bluebird, with its soothing, gentle warbling song and vivid blue and rust-red colors, was one of the first birds to attract the attention of our Pilgrim Fathers.

They called this little blue bird "blue robin" because of its resemblance to their beloved robin redbreast back home. It should be noted, however, that the bird the Pilgrims knew as robin redbreast is not the same as our American robin. The European robin redbreast is bluebird-sized and

Eastern Bluebird Trails In Kansas SHERIDAN GRAHAM ROOKS SAORM MITCHELL INCOLN WALLACE LOGAN ELLIS RUSSEL I FLLSWORTH LANE RUSH RARTON RICE PAWNEE HAMII TON HODGEMAN TAFFOR RENO ARVE STANTON HASKELI KINGMAN MEADE COWLE COMANCHE HARPER CHAUTAUOU

These 51 bluebird trails, which include more than 600 nest boxes, were established since 1982 as part of the Chickadee Checkoff Nongame Wildlife Program. The state's game management section distributed an additional 60 boxes, and numerous Kansans have established private bluebird trails.

has a rust-colored breast and a uniform olive-brown back and tail. It, too, nests in cavities, holes and nest boxes as does our bluebird, although these nests are different from the open mud creations of our American robin.

From that early association with the Pilgrims, the pleasant, colorful bluebird has shown itself so responsive to friendly treatment that it has endeared itself to us throughout its range in eastern North America.

Villages sprouted as our ancestors established themselves in the new land. They soon learned they could attract bluebirds to their yards simply by providing nesting boxes. These boxes served as artificial cavities for nesting and roosting. Bluebirds responded and flourished for years. The first real problems, however, came with the English sparrow's introduction in the United States during the 1850s. The bird made it to Kansas in 1874. Topeka was the site of that introduction.



. . while females sport much less blue.

The sparrow spread rapidly throughout the bluebird's range. As with many successful introductions, English sparrows had few natural enemies or controls in their new world. They, too, preferred to live near people and nest in holes previously used by bluebirds.

English sparrows are really not sparrows. They are black-chinned Weaver finches. English sparrows begin nesting earlier than the bluebirds, so the sparrows occupy the most suitable cavities and nest boxes first. If bluebirds should establish a nest in a cavity an English sparrow wanted, these more aggressive sparrows will often destroy the bluebirds eggs or young and move in. Finches commonly kill adult bluebirds and build their nests over the dead birds.

Due largely to competition from this alien finch and the increasing loss of natural cavities to firewood, bluebird numbers steadily declined for more than 70 years. Then came a disastrous

crash during the severe winter of 1957-1958, the winter birdwatchers refer to as "the year of disaster." It was an unusually cold winter with a persistent ice cover widespread over much of the eastern United States. Bluebirds, robins, hermit thrushes and other songbirds that winter here starved or froze to death by the tens of thousands. It's estimated that onethird to one-half of the entire Eastern bluebird population died that winter. Unfortunately harsh weather continued throughout most of the bluebird's winter range for the next six years. Bluebird populations continued to decline until their numbers reached an all-time low in the spring of 1963.

he introduction of the European starling into the bluebird's range added to the problems of house sparrow competition, severe winters and continuing loss of natural nesting and roosting cavities. The starling was flourishing and, as with the house sparrow, proved to have few natural controls in its new world. Starlings, too, were early nesters and occupied even more of the nest cavities that

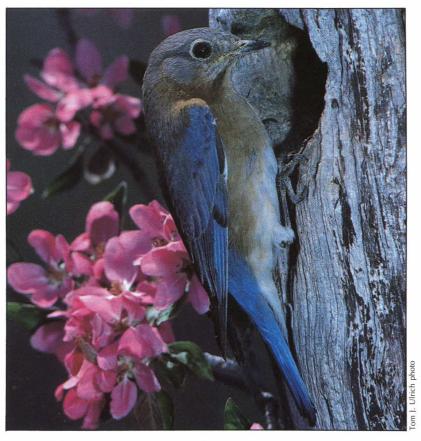
would have later been used by bluebirds. Chemical pesticides such as DDT and other persistent chlorinated hydrocarbons were now in widespread use and poisoning the bluebird's food supply. It appeared the bluebird would disappear.

But Americans became concerned about the plight of their beloved songbird. Researchers experimented with several nesting boxes. They also monitored the habitat and box locations bluebirds used.

An entrance hole of 1½ inches was found to be too small for starlings to penetrate. But house sparrows remain a problem. House sparrow competition can be reduced by placing boxes at least 300 yards away from houses or occupied buildings, placing the boxes no more than five feet above ground level and providing no perch at the entrance hole.

Bluebirds don't like dense woods or high brush. They prefer more open areas with only a scattering of trees. Favorite places include pastures, golf courses, cemeteries, parks, large lawns, fields or farm areas where insecticide use is minimal. Never attach the boxes to green trees, but keep them in the open. Attaching the box securely near the top of a steel post in a fenceline works well. Steel posts discourage ants, mice, snakes and other predators from approaching nest boxes. Face the box toward a small tree or bush that's 30-50 feet in front of the box. This gives the fledglings a safe haven for their first flight. Boxes should be placed, cleaned and repaired by mid-March. Nesting usually begins in late March and continues through August.

Don't be discouraged if you have few bluebirds the first year the boxes are up. Even one nest along the trail will provide a nucleus for more boxes the next year. Bluebirds are persistent nesters and will nest three times in one season if suitable habitat is available.



Bluebirds will nest in tree cavities, but man's encroachment and competition from other birds has meant increasingly fewer of these natural dwellings.

For More Information

For free instructions on how to build a bluebird nesting box, write Marvin Schwilling at the Emporia Investigations Office, P.O. Box 1525, Emporia, Kan. 66801. He'll send you the plans as well as information on how you can start a bluebird trail. If the trail is approved by the state, you'll be reimbursed up to \$5 per box (not to exceed \$100 for the trail).

Funding for this nongame project

comes from the Chickadee Checkoff, found on the state income tax form.

For more information on bluebird restoration, write the North American Bluebird Society. Ask for free copies of "Where Have All The Bluebirds Gone?" and "Suggestions For Organizing A 'Save the Bluebird' Committee." The society's address is: Box 6295, Silver Spring, Md. 20906-0295.

Meet Our State Reptile



The ornate box turtle joins an elite group of plants and animals that represent Kansas.

by Ken Brunson Stream Biologist

ho would have thought when the Kansas Legislature was embroiled in debates over sales taxes, lotteries, horse racing and the farm crisis that there was any room for considering a state reptile? Who would have believed that this small, secretive animal would have garnered so much public attention and go on to be recognized as the state reptile of Kansas? But it was.

Even Larry Miller and his sixthgrade class at Caldwell Elementary School were somewhat surprised at their success. They'd championed a bill and seen it pass on their first attempt. The ornate box turtle (Terrapene ornata) joins an elite group of specially recognized plants and animals in Kansas. The list of official state organisms now includes the bison (state mammal), western meadowlark (state bird), common sunflower (state flower), honey bee (state insect) and cottonwood (state tree), in addition to this newest member. And what an appropriate recognition it is. As Larry's class along with other elementary kids across the state attested, this animal is an excellent symbol for Kansas. A shy, docile creature, the ornate box turtle is abundant here. The adult, which may

attain a length of six inches, is an ideal shape for the inquisitive grasp of even small children. Its name depicts its decorative appearance and hinged, lower box-like shell. This shell can be closed as the turtle withdraws its head and legs for protection from predators.

Box turtles emerge from their subterranean burrows in the spring. Being cold blooded, they become more active as summer nears and are often seen roaming prairies, pastures, even backyards. Unfortunately this harmless creature also is fond of dark surfaces such as highways, which retain heat on cool evenings. This innocent attraction to roads is the most obvious threat to this species. As protective as its hard carapace is, an ornate box turtle is no match for moving vehicles. The male ornate box turtle is easily recognized from his mate by his red eyes. The female ornate box turtle most commonly lays from two to eight leathery white eggs after mating in late spring. It takes about two months for the eggs to hatch and another 7-8 years for the young to mature. Some box turtles may live 30 years or more. Box turtles feed on many different items though primarily on insects, earthworms and fruits.

For the sixth-grade class of Caldwell Elementary School, Larry Miller, numerous Caldwell-area supporters and Kansas schoolchildren, the designation of this state reptile was the culmination of effective lobbying. The kids pushed and prodded the bill (HB 3113) through its legislative course. On March 24 the House passed the bill by a 77-47 vote. The Senate followed on April 2 with a 33-7 vote. When Governor Carlin signed it into law April 14 in Caldwell, he proclaimed that this particular signing ceremony was the largest he'd ever held.

Now that the thrill of victory has subsided, what does it mean to have a state reptile? Joseph T. Collins, of the Museum of Natural History at the University of Kansas, has this to say: "The ornate box turtle is the greatest gift that the state could get on its 125th anniversary of statehood." Collins is especially elated because the Museum of Natural History has become the caretaker of Tina, the female box turtle mascot for the Caldwell sixth-graders. Tina also is the official representative of this newest state species. The ornate box turtle will be included with the other official state symbols in all pertinent literature.



KATFISH

The KATFISH program is catching on in the Kansas City area. Instructors say it's as rewarding for them as it is for their students.

by Mary Kay Spanbauer Wildlife Information Representative Kansas City

ore kids are wetting a line in Kansas City these days thanks to a new species of fish. KAT-FISH, an acronym for the Kansas Association to Teach Fishing, is a one-year-old program designed to get youngsters hooked on fishing.

Fishing clinics are a great way to expose children to angling because such programs are fun and exciting. The KATFISH clinics give kids, who might otherwise not have the chance, an opportunity to fish. Clinics in Kansas City are held for scouts, inner city children, church groups and other youth-oriented organizations.

Clinics have been held in the Kansas City area since the urban fisheries program began in 1979. As the program expanded and the duties of the urban fisheries biologist increased, the number of clinics declined. "It's not that we didn't recognize the importance of fishing clinics," says Paul Birdsey, former urban fisheries biologist, "but increased duties left us with fewer hours to devote to those clinics."

KATFISH overcomes the lack of manpower by rotating volunteers on scheduled clinics. These volunteers also put on fishing clinics of their own. Instructors are recruited through sportsmen and community groups, the newspapers and by word-of-mouth. The KATFISH program has many advantages. Volunteer instructors increase the number of clinics available in the Kansas City area. More instructors at the clinics means more individual attention for the youngsters. Most importantly, it gets kids fishing.

Another improvement is the expanded format. A manual covering

program administration and the educational section was developed for the instructor's use. The three-hour clinics are divided into an educational section and a fishing derby. The educational section is separated into three, 15minute modules that run simultaneously. Kids rotate among the modules, keeping the pace active and the learning enjoyable. Students are divided by age, which allows the material to be tailored to each level. Team teaching is used because it's less demanding on the instructors and gives the students more personalized attention. Instructors teach the same module all three times so they're comfortable with the material.

Module A covers basic fishing equipment, including handlines, rods and reels, and baits. Demonstrations and displays help relay information on fishing techniques and rigs. Youngsters practice the easy-to-tie improved clinch knot on knot boards equipped with rope and one-inch screw eyes. This module also covers the basics of catching fish, including proper hooksetting and fish-release techniques.

The first question usually asked after a fish is caught is: "What kind is it?" Module B discusses fish identification. Kids enjoy learning to identify fish they catch. The skill is necessary so they'll know how to obey creel and length limits. This module also covers fish habits and habitats. First-time anglers learn why fish are found in certain places. One of the program's most important goals is to give youngsters a sense of responsibility for their outdoor behavior. This module, then, concentrates on aquatic resource conservation.

aws, ethics and safety are the topics addressed in Module C. Regulations (especially creel and length limits) are briefly examined — not only what they are but the reasons for them. Good sportsmanship is essential on the water. The unwritten laws, or ethics, of fishing also are emphasized. Fishing safety is discussed, too.

After the instruction, students practice what they've learned, and a casting practice is held if time permits. Instructors are encouraged to do this since this might be the first time many of the youngsters have held a rod and reel. Casting targets and thumb-stop drills help students get a feel for the fishing outfit.

Teaching kids to fish often goes beyond words. Kids would rather "do" than listen to adults talk. Demonstrations and hands-on experiences are worth a thousand words, especially when the kids can't speak English. This was the case at the clinic held at a Wyandotte County lake. Unaware that not one of the 80 participants spoke English, we began teaching the educational section. Our students were unusually quiet for kids although they appeared to be listening attentively. But it soon became apparent they didn't understand a word we were saying. When asked a question they just smiled and nodded. Explaining a simple overhand cast became quite a challenge. But when we got to the "doing" part, the kids began to understand and catch on. Words became unnecessary. They were soon casting and even catching a few fish. Though they couldn't express it in English, we

knew they were excited by the looks on their faces.

For most kids the clinic is the first time they've tried to catch fish. Catching that first fish is so exciting, and the derby is when the youngsters put all the concepts together. The derby reinforces what's learned in the educational section and the casting practice. The derby lasts an hour, long enough to catch fish but not too long for the young anglers. KATFISH instructors monitor the derby by individually helping the kids. Sometimes assistance is a simple matter of worming a hook or listening to a story. Sometimes

minor but makes all the difference in the world. I was making the rounds during a derby at an Overland Park clinic when I noticed this very sad young man. His mother explained that he was upset because everyone was catching fish except him. I inspected his gear and found the problem: an oversized spinner with treble hooks. Not a good rig for bluegill fishing. The youngster's mother said the equipment was borrowed, and she knew very little about fishing. A simple change to a small hook and a worm and the boy began catching fish. He was happy, and the mother was grateful.

Volunteer instructors have different reasons for donating their time, but they all have a love of fishing and a strong desire to share this enthusiasm with youngsters.

it's a little more involved — untangling the fishing lines of overzealous casters, for example.

Clinics are held at area lakes holding lots of catchable fish. Since this is the first outing for most of the clinic participants, numbers of fish available, not fish size, is the key. Even the smallest bluegill is regarded as a prize catch. But hooking into a big fish can be thrilling and sometimes a heartbreaker. Billie Thompson, KATFISH Instructor of the Year for 1985, remembers one such incident well.

"It was definitely one of my most memorable and satisfying experiences as a KATFISH instructor" explains Billie. "This little fellow was so excited when he landed this big fish. He came running over, fish in tow, to proudly show me his catch. My heart fell as I realized it was a bass under 15 inches and would have to be released. It's tough to tell a kid that he can't keep what is probably the biggest fish he's ever caught. But it's important for them to be aware of the regulations and abide by them. I took him aside and explained in detail why he had to turn the fish loose. His disappointment was evident but he said he understood.

"He returned to his group and instead of pouting and getting upset, he explained to them what he was doing and why. He gently released the fish, and the group watched as it swam away. He had taken what I told him, applied it and then passed this knowledge to his friends. That's what this program is all about."

Sometimes the help rendered is

haring knowledge with kids is what being a KATFISH instructor is all about. It's easy to become one. A two-hour training session is held for prospective instructors. Requirements are few but instructors must hold valid fishing licenses and permits (unless exempt) and have no fish and game violation in the past year. The final step in certification is participation in a Kansas Fish and Game-sponsored clinic. This gives instructors a first-hand look at the clinic format. After certification the instructors determine how involved they wish to become. Instructors must participate in a least one clinic each year although they're encouraged to take part in more.

In the first year of the program, 19 people attended KATFISH training sessions and eight earned certification. In addition, 19 summer park employees from Olathe and Overland Park went through training sessions and used the KATFISH format at several park-sponsored clinics. Nineteen clinics were held in the Kansas City area with more than 820 youngsters participating. This represents an increase of 250 percent over the 1984 level. This couldn't have been achieved without KATFISH instructors.

Volunteer instructors have different reasons for donating their time, but they all have a love of fishing and a strong desire to share this enthusiasm with youngsters. Most of the instructors I've talked with say they receive immense satisfaction from helping youngsters and knowing they're somehow contributing to the future of sportfishing. Whatever the instructors' motivation, the program works and the kids are the ones that benefit. Instructors agree the time spent working with the kids is well worth it; that they, too, gain from the experience.

The Kansas Fish and Game Commission makes every effort to help instructors with their clinics. Sign-ups, equipment, publicity and other assistance can be arranged through the Fish and Game office in Kansas City. When a clinic request comes into the office it's routed to a KATFISH instructor from that particular area. The instructor then sets a time and place for the clinic. Instructors also are encouraged to contact sponsors and organize their own clinics.

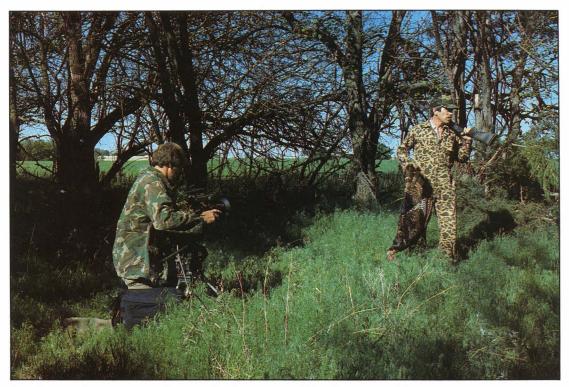
Kansas Fish and Game supplies all of the educational material and some of the fishing equipment needed for each clinic. A limited number of rods and reels may be checked out for each clinic. Many of the clinic kids lack their own gear. Charts of rods and reels, casting targets, knot boards and other supplemental materials also are available. Fishing regulations, Kansas fishing guides, fish identification guides and fishing comic books are available as handouts. A few "goodie bags," which provide the kids with some hooks, sinkers and a stringer, are available, too.

Local vendors and manufacturer representatives like the new format because they believe the younsters learn more with this program. These vendors and reps support the program by donating bait, prizes and their time to the clinics.

The future of the program is bright so long as the network of Kansas Cityarea KATFISH instructors continues to grow. Veteran instructors may advance to Master Instructor. These Master Instructors can then train new instructors.

KATFISH instills in Kansas youth an awareness, respect and appreciation for sportfishing and conservation of our natural resources. The instructors are the key to the program, the reason it works. The rewards are many and the time involved minimal. Izaak Walton once said that the Lord does not subtract from one's life the hours spent fishing. Surely this applies to those helping kids learn to fish.

For more information on the KAT-FISH program, please call the Kansas City District office of Kansas Fish and Game at (913) 722-6024 or write us at: Clover Leaf Bldg. 1, Suite 221, 6811 W. 63rd Shawnee Mission, Kan. 66202-4080.



Gene Brehm videotapes Bob Mathews and his Rio Grande gobbler after a successful spring hunt.

A View Through The Viewfinder

Each week our video cameras bring the great outdoors home to your television screen. The story behind the operation and the first in a series on conservation jobs.

by Bob Mathews Assistant Chief Information-Education Division

Photos by Gene Brehm

t's one of those classic spring days. The woods are hyperactive. Every living thing seems on the verge of bursting at the seams. A slight breeze ruffles new leaves in the crowns of the cottonwoods. Puff clouds float in a rich, blue sky. A dozen kinds of songbirds seem bent on trying to outloud each other. Then from way off through the trees comes a sound so distinctive it commands the attention of anyone within earshot. A wild turkey's gobble. A minute of silence, then the gobble again, though closer this time. More silence. Another gobble, closer still. Finally, the Rio Grande steps cautiously out of the timber. The iridescent rusts and bronzes of his breast

feathers come ablaze in the sunlight intruding on the shadowy woods.

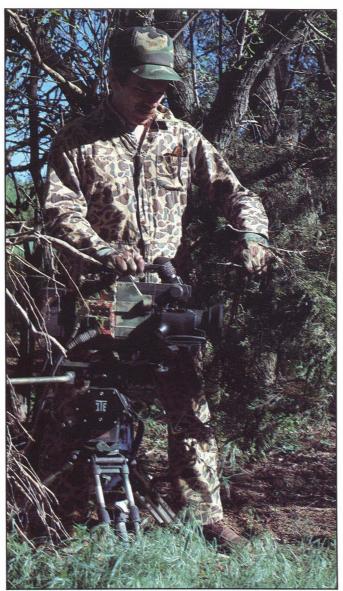
Fifty feet away, Gene Brehm is running a video camera from a blind of cedar trees and camouflage netting. With every yelp Brehm coaxes from a mouth call, this grand Rio Grande stretches its neck, looses a raucous gobble, fans his tailfeathers and assumes the peacockery posturings of one very proud and virile bird.

For the next few minutes, camera and microphone follow the gobbler as he does his best to dazzle a plastic hen decoy planted at the edge of the clearing. By the time the gobbler loses interest and slips into the trees, the video camera and recorder have stored the sights and sounds of his grand display.

irst, a confession. I started as a print journalist. Newspapers, magazines, technical journals, catalogs, poetry, soup can labels, love letters, daily diaries. All of those, I reasoned, were legitimate media for spreading ideas and information. I bought the smug dictum that television was all fluff and sputterfuss. That it was nothing more than a glitzy mechanism for selling toothpaste or shampoo. That it took advantage of our streak of lethargy by serving up a

If I could explain how all these parts work together to put sight and sound on magnetic tape ... well, I could have fixed the thing myself the last time it quit on us. But I can't, and I didn't.





Wildlife photography begins with proper blind selection. That axiom of still work holds true for videography, too. The video camera, shown above, has been placed in a suitable site. Bob Mathews begins the camouflaging process at right. He attaches a custom-built camo screen to the front of the camera. To that frame he wires western red cedar boughs. This allows the camera to be panned discretely near wildlife.

mesmerizing diet of programming between commercial breaks.

I was wrong. Specifically, I was wrong to accept such sweeping generalizations about a medium that's done a lot more than just charm us. It has moved us and amused us, informed and enlightened, uncovered myths and created legends. It has broadened our view of a world that's become, in one man's words, a global village. Television and its offshoots — cablecasting, computer graphics, interactive video and satellite transmission, to name a few — are leading the charge into the Information Age.

The bottom line — telling a story — is still the same. It always has been. Before language existed, visual images were the primary source of information. Today, thousands of years after the first alphabet was devised, television has brought us full circle. Once again we're eyewitnesses to our world. We see pictures, complete with color, sound and motion. And we're enthralled by it all. That lesson was reiterated when Gene and I sat down in front of our office video monitor to view the wild gobbler.

As we began to play the tape and log the various shots collected, a pair of passing co-workers lured by the videotaped turkey's first gobble entered our office. Like us, they were entranced by the scene on the television screen. A minute later another passerby locked on to the gobbling, stopped in his tracks and came in for a look. Moments later two more joined the growing audience standing in front of the screen.

By the time the videotaped gobbler finished his performance, a throng of





Mathews, far left, nears completion of the blind. Camouflage clothing is part of the hiding game, too. At left, a look at the concealed camera. All that's visible is the lens. Videotape of turkeys and turkey hunts will be made into a television program called "Turkey Hunting in Kansas."

employees and office visitors stood silently, every eye and ear tuned to the television image. When the wild turkey disappeared from the screen, the room erupted in excited conversation. And as they filed out of the room, members of the impromptu audience boisterously rehashed details of the videotaped turkey. Their voices faded down the hall, and I could hear them trading stories of similar scenes they'd witnessed during their own trips to the turkey woods.

That little incident demonstrates the unique and powerful quality television possesses as a communications tool. It captures moments with sight and sound.

field video production package is a fascinating array of photographic technology. First, there is the camera itself. A video camera is a collection of switches, tubes, circuit boards, servo motors and micro-electronic wizardry. If I could explain how all these parts work together to put sight and sound on magnetic tape . . . well, I could have fixed the thing myself the last time it quit on us. But I can't, and I didn't. What's surprising is the rugged dependability of this eightpound package, the centerpiece of our field equipment.

The other components used in field production include a three-quarter-inch videotape recorder, directional shotgun microphone, tripod and enough cables and batteries to unite and power all these components. Occasionally we'll have to substitute a wireless microphone for the shotgun

microphone. Other times we'll carry along a portable light to illuminate a dark subject.

Portability and visibility are our main equipment concerns. The more portable we can make the equipment and the less visible we are to the wildlife subjects we're taping, the more successful we're likely to be.

Portability is important because most of the field video we shoot is a one-man production. Actually it's more like half-man/half-mule. One of the most physically demanding parts of a wildlife videographer's job is getting the equipment to the shooting site. We've found that lugging 60 pounds of gear across marshes, through thickets, around lake shorelines, up and down woolly hills and across long stretches of sand-sage prairie is an excellent body-conditioning program. If it's done in pre-dawn darkness, as is often the case, the trek is even more interesting.

In order to reduce our visibility, we've modified our equipment. We painted the camera body's orange casing camouflage. We also built a clamp-on portable blind that attaches to the top of the camera and supports camouflage netting in front of the cameraman and his equipment. The tripod (also disguised with a camouflage finish) is sometimes left behind in favor of a lighter, less cumbersome substitute — a beanbag — on which to steady the camera during shooting.

ansas Fish and Game's video production began five years ago with the purchase of a broadcast-quality color camera. Three years

ago the first full-time video production position was created in the agency's Information-Education Division.

The main function of our two-man television staff is simply to collect as much outdoor-related video as possible each week. The subject of each week's field shooting is determined primarily by what is seasonally applicable. Good subjects for July might include topwater fishing for bass, setline fishing, a wildlife profile on bats or nightfishing on a Kansas reservoir.

Often an idea will present itself in agency programs and projects. Some examples of that from past productions include the elk reintroduction in Kansas, how a root plow works, what a fisheries biologist can learn by testnetting a lake or what a wildlife biologist learned from attaching radio transmitters to raccoons along a Lyon County creek.

Occasionally we deal with Kansans who have outdoor-related positions or pastimes. People such as Maure Weigel, a Salina businessman who spends his spare time operating a raptor rehabilitation center. Or Jim Hale, a wild-life conservation officer with a unique talent for wildlife metal sculpture.

The video we shoot is used three ways: for loan to broadcasters requesting video to support their own outdoor-related programming; as raw material for our own public service announcements; and as content for a weekly television news story broadcast by the Kansas State Network (KSN), the group of NBC affiliates in Kansas.

Many television broadcasters are interested in doing more outdoor-related programming. The problem is that they're often unable to devote enough time to collecting their own wildlife video. If a Topeka broadcaster, for example, is interested in developing a story on Cheyenne Bottoms Wildlife Area, he can get raw outdoor video from us to complement his own videotape.

We produce about four public service announcements each year. These

tion is a one-minute weekly video story broadcast by KSN. KSN affiliates are located in Wichita, Topeka, Great Bend, Garden City, Oberlin and Joplin, Mo. Production of those weekly stories began in May 1984, a few months after we approached several broadcasters and asked their advice on how best to get the outdoor message on television. We were hoping at least

videotape editing, narrating and occasionally field photography. Other members of the Information-Education staff regularly contribute ideas and time. Conservation officers and field biologists are sometimes asked to serve as on-camera commentators.

In wildlife video photography, it's especially satisfying that good days show up in living color on our monitor screen. Unforgettable visual images of outdoor Kansas. A bull elk gracefully hurdling a fence. An 8-point whitetail buck perking up his ears, sniffing the wind and seemingly blowing smoke on a frosty January morning. A 6pound bass (OK, five pounds) exploding out of the water and trying to throw the hook. A great blue heron's slowmotion liftoff from the cattails. A gaggle of Canada geese setting their wings and gliding 20 feet overhead. A black Lab bursting from a duck blind to retrieve a downed mallard.

Outdoor Kansas is a visual feast. We want to keep Kansans in touch with it. Television adds a powerful dimension to the task.

Outdoor Kansas is a visual feast. We want to keep Kansans in touch with it.

PSAs are distributed to major broadcasters throughout Kansas. Maybe you've seen one. Subjects of PSAs produced within the past year have included the Chickadee Checkoff, Operation Game Thief and the Kansas Safe Boater program. A public service announcement might show up on television in the middle of the night or during a prime-time commercial break. There's no charge from broadcasters for airing the message. Our only cost is the production of the single master tape and copies for each broadcaster receiving the PSA.

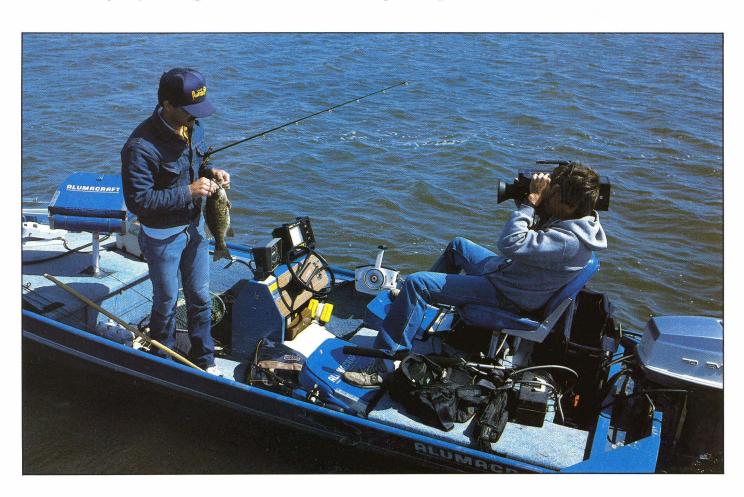
Our most regularly visible produc-

one of them would invite us to submit a regularly-produced feature. But none did. At least not immediately. Finally, Pat O'Donnell, KSN's executive news director, invited us to Wichita for a meeting on video formats we might produce for KSN. By the middle of the next month (May 1984) we'd begun producing the weekly spot for KSN.

Gene Brehm shoots most of our video. An experienced outdoorsman and wildlife photographer, Gene is well known among KANSAS WILD-LIFE readers.

My main duties in television production include script writing, final

The video camera captures Mike Miller and the 16½-inch smallmouth bass he pulled from El Dorado Reservoir in late April.





A Matter Of Ethics

The question has surfaced on a few Kansas reservoirs. Do we need limits on crappie and white bass? Some insight into the controversy.

by Paul G. Koenig

n Jan. 25, 1986, John Lodwig and John Montgomery had what is commonly termed a field day on Clinton Reservoir.

Crappie fishing on this eastern Kansas impoundment, the two Topekans boated 289 keepers that day. Word of big catches spreads quickly, but this one was jet-fueled by a photograph in the *Topeka Capital-Journal* Jan. 27. Seemed everyone had a comment on the photo, too.

It was your typical hero shot. There

were Lodwig and Montgomery, posing with an 84-quart cooler full of freshly caught crappie. The photo drew lots of attention, but not the kind the two Topekans expected.

"We got an awful lot (of flak) from that photo," Lodwig says. "It came out in the paper and that's all we heard for the next two months."

What Lodwig heard was an outcry from fishermen criticizing him and his partner for keeping so many crappie. "One guy who'd been a guide in Missouri said he'd seen lakes go sour for catching as many fish as we did. But he also said if we didn't keep the fish, the guy behind us would have," Lodwig explains, adding that he and Montgomery returned lots of small crappie that day.

Regardless of their size, 289 crappie take a long time to clean. That night Lodwig, Montgomery and a friend filleted all 289 fish. Working non-stop with electric knives, the trio finished the monumental cleaning job two

hours and 10 minutes after they'd begun.

Lodwig experienced similar days last winter. "You just wouldn't believe the fish coming out of Clinton," he says, still in disbelief. But Lodwig says he's now limiting himself to 30-40 "nice crappie" a day, even though there's no limit on the species in Kansas. Lodwig credits this self-imposed restriction to public comment and his belief that big catches hurt a lake's crappie population.

Some Kansas fishermen believe the no-limit status for white bass could hurt that gamefish, too. Some of the fishermen who've witnessed big harvests of whites through the Cheney Reservoir ice say a limit is needed. Why, then, are crappie and white bass, in addition to a few other species, granted this status? Because Kansas fisheries biologists have no biological reason to recommend a limit.

All of which points to one pressing question: Should the Kansas Fish and Game Commission regulate daily fish limits based on ethics, based on what some folks perceive is too much?

No, says Mike Theurer, the state's chief of fisheries. "Our responsibility is to manage the aquatic resources to the resource's benefit and the angler's benefit," he says. "If we'd want to impose a limit, we'd have to pick a number. Since we see no need to restrict harvest for biological reasons, we don't need to pick a number"

Pick a number, however, is exactly what at least five concerned Kansans suggested after seeing the cooler of crappie in the Topeka newspaper. What follows are edited excerpts from letters sent to Fish and Game head-quarters in Pratt.

I believe there should be a limit of about 50 crappie per day. It's hard to believe that these two men will clean all of the fish let alone eat most of them. More than likely, they will give some away. If not that, then more than likely they will throw some away because of not wantng to clean all 289 crappie.

I strongly urge the commission to enact a limit of 30 crappie per day. (The writer bases his comment only on the strength of two big-catch items in the local paper.)

Some Kansans have asked for a daily limit on white bass although none would object to an angler keeping a nice stringer of whites.

Fifteen crappie per day is ample. Missouri has a limit on number and size of crappie. So some Missourians come to Kansas and take home all they catch. Something is going to have to be done so everyone will be able to enjoy catching fish in years to come.

A daily crappie limit of about 30 should be more than sufficient. I have talked with several fishing friends of mine, and they all believe a limit is necessary.

The enclosed article of the 289 crappie from Clinton is very disturbing to me and to a great many other fishermen. There is no reason in the world why two men need to take 289 crappie in one day. I'd like to see you set a limit of 50 per day. This is sufficient for anyone.

Each of the writers received a personal reply from Jim Beam, the state's fisheries management supervisor. Beam pointed out that sampling data does not show fishing pressure to be detrimental to crappie populations, at least in Kansas. He went on to explain that crappie populations in some lakes (Clinton, for example) have improved in recent years despite the high crappie harvest.

Theurer also has this to say about ethics and state fishing regulations. He made the following comments last year to Jim Reid, outdoor editor for *The Wichita Eagle-Beacon*.

"It's a complex subject because you're melding biology and ethics. Ethics mean different things to different people. They have different standards. How many fish is too many to catch—20, 50, 100, what? We have to look at the biological ramifications first. If the population can take (the fishing pressure) then there's no biological need for limits. If it can't, then limits are necessary. Normally we say, 'If you're gonna catch 'em and keep'em, don't waste 'em.' We have a state waste regulation that covers that.

"A limit does one thing—it distributes harvest," Theurer said. "If you have a finite number of fish, birds, animals or anything else, a limit is imposed to give everyone their fair share. On white bass, normally, there are more than enough to go around, and there is no biological reason to have a limit. A limit simply limits the anglers. It would be a sociological thing, not biological."

Please turn to page 27.

the

center section

Edited by Rob Manes

LETTERS

AIR IT OUT

Editor:

I am writing to express my views against steel shot. This is a very controversial subject as you well know. I am aware that lead is a toxic substance.

The fact is that all the lead shot shellsfired yearly are inconsequential when compared to the other causes of lead poisoning (auto exhaust, lead mining and industrial, for example). Why are hunters singled out? Are there people in power who want to eliminate hunting?

I also resent the fact that my hunting fees and taxes are being used against me. State employees such as Marvin Kraft are lecturing throughout the state in favor of steel shot for all hunting, not just waterfowl.

And lastly, how could you print an article that states that "Steel shot is not ballistically inferior to lead shot," unless you are part of this bureaucratic scam and espouse falsehoods?

How you can you support an article that says No. 6 steel is the same as No. 8 lead? A more accurate and honest statement might say: "You can compensate for No. 8 lead by using a size larger in steel No. 6, out to 40 yards."

I feel that these few reasons more than substantiate the fact that there is a bureaucratic ploy to force steel shot on the unsuspecting hunter . . .

Remember, without hunters' license fees, your funds at the Kansas Fish and Game Commission would be diminished.

Richard D. Krause Great Bend

Dear Dr. Krause:

There is no doubt that the lead poisoning/steel shot issue is controversial. There's also no doubt that most profes-

sional waterfowl managers realize lead poisoning is a serious problem, and steel shot is a viable solution. This statement is supported by the Atlantic, Mississippi and Central Flyway Waterfowl councils, their technical committees and the Wildlife Management Society, which have passed resolutions calling for mandatory steel shot use in waterfowl hunting. In addition, the conservation agencies of North Dakota, South Dakota, Nebraska, Iowa, Mississippi and Arkansas have passed regulations requiring mandatory steel shot for waterfowl hunting. These organizations are dedicated to the future of waterfowl and waterfowl hunting.

This controversy is kept alive mainly by misinformation and distorted facts. The objective of this agency and Waterfowl Project Leader Marvin Kraft is to educate hunters with accurate, proven information. Neither the Fish and Game Commission nor Mr. Kraft advocate required steel shot use for all hunting.

Your letter states one of many myths concerning lead poisoning — that all lead shotshells fired yearly are inconsequential when compared to the other causes of lead poisoning (auto exhaust, lead mining, industrial, for example)."

Dr. Milton Friend, an ardent waterfowl hunter and Director of the National Wildlife Health Laboratory, addressed this as follows:

". . . Nearly all of the occurrences of migratory bird mortality from lead poisoning within the United States involve the ingestion of spent lead shot. Isolated losses due to lead contamination of waters from mine tailings and ingestion of fishermen's lead sinkers and other solid lead objects have been reported, but these are insignificant in total losses occurring from lead poisoning . . Atmoshperic lead has not been shown to be a cause of migratory bird mortality, nor has lead that has become incorporated into plants or adhered to plant roots and other parts. Calculations,

based on the amount of lead found in the air and incorporated within plant parts, do not support toxic levels of lead being available to wild migratory birds. The scientific evidence for lead from shotshells being the cause of lead poisoning in migratory birds is overwhelming and without room for doubt."

Based upon all of the major scientific shooting tests performed to date, we stand by the statement: "Steel shot is not ballistically inferior to lead shot." The article did not state that No. 6 steel is the same as No. 8, only that it is comparable. Manes

FIELD NOTES

Editor:

I just read an interesting article from your office regarding Kansas' most popular bird, the robin.

Last week, I observed a white bird in the yard, and close by was a male robin. Then I noticed the white bird had a reddish breast. It was a female robin.

The birds worked for more than an hour in the yard, and I tried to watch to see where they were making their nest. But I failed. This moming the same white robin was working in the front yard, and close by was a male robin.

Never before have I seen an all-white robin. Isn't this unusual?

Gladys A. Bewley Fall River

Dear Mrs. Bewley:

It is unusual to see such a light-colored robin. Both albinison, complete lack of pigmentation, and melanism, the other extreme have been noted in many wildlife populations, however. More common are animals that display varying degrees of color abnormalities, such as the bird you saw.

Reported Kansas sightings of this sort include white deer, meadowlarks, pheasants, channel catfish and others. Black, or very dark, specimans have been seen among Kansas wildlife populations as well. Manes

THE

JUST DUCKY

While patrolling near Lakin last November, Wildlife Conservation Officer Bruce Peters heard gun shots about 15 minutes after legal shooting hours ended. Peters investigated and found four Garden City men returning to their pickup truck from a nearby pond. One man's gun was non-functional, so he wasn't a suspect.

Peters asked the men to show him where they'd been shooting. Nervous, they led him to another area on the pond where there was no evidence of a violation. Darkness and heavy fog also hindered his view. When Peters and WCO Dennis Sharp returned the next day, they found several dead ducks lying in and around the pond.

In all, Peters and Sharp retrieved 44 scaup, common ducks in Kansas during the fall. When Peters talked to the subjects the night before, he found two of them did not have their gun magazines plugged, as required for hunting migratory birds. One of them had no federal migratory bird stamp. Peters had also taken their names and addresses.

With that information and the 44 dead scaup as evidence, Peters and Sharp went to the subjects' homes and issued all three wanton waste citations for leaving the dead ducks. Two received tickets for hunting ducks without properly plugged magazines, and one was cited for hunting ducks without the required stamp.

Because the violations were severe and involved migratory birds, Peters and Sharp handed the case to U.S. Fish and Wildlife Service Special Agent Terry Tarr for federal prosecution. Tarr required the subjects to appear in a Wichita court.

U.S. Magistrate John B. Wooley fined the three a total of \$2,550. He also gave each one 20 months' probation and suspended their 10-day jail sentences. Under federal wildlife laws, each man could have been sentenced to a maximum of six months in jail and fined \$2,000. Manes

SERENDIPITY

Second-hand information isn't always the best tool for catching poachers, but Wildlife Conservation Officer Val Haworth got more than she expected from just such a report.

An anonymous second-hand tip sent

Haworth and WCO Rob Ladner to look for an illegal deer in a Wilson man's home. The report said deer blood was on the basement floor and steps, and the meat was in a freezer. The tip also gave Haworth the name of someone who'd seen the illegal deer firsthand.

Haworth and Ladner found the evidence as reported. Then they visited the firsthand witness, a former companion of the alleged deer poacher. She told Ladner and Haworth another man who lived in the same house had shot a wild turkey near the Smoky Hill River. The suspect reportedly stashed the turkey in a ditch when a passing vehicle spooked him. The bird was never retrieved.

The man connected with the deer paid \$276 in Russell County Judge Jean Becker's court for illegal possession of the animal. Ellsworth County Judge Dale Urbanek fined the second culprit \$976 for killing a turkey without a permit, without a hunting license, out of season and without retrieving it. Manes

GAME THIEF TALLIES

Since its autumn 1984 inception, Operation Game Thief has produced more than 400 convictions for Kansas wildlife law violations. The toll-free number, 1-800-228-4263, is so easy to use that most people don't hesitate to dial. A guarantee of anonymity means anyone can report a violation confidently.

The conviction total includes 30 fish-related violations, 40 trespassing, 33 spotlighting, 20 upland bird, 26 migratory bird, 28 furbearer and 222 deer.

Fish and Game law enforcement officials say OGT is working because concerned Kansans are calling with good information. OGT saves a valuable resource that belongs to all Kansans. Manes

IT WAS A GIMME

Haskell County Undersheriff Eugene Bailey was investigating damage to a rural stop sign around midnight last Dec. 23. He heard five distant rifle shots and went to investigate. Bailey drove with his headlights off to avoid alerting the shooters.

From the top of a hill, Officer Bailey saw

From the top of a hill, Officer Bailey saw a Jeep's headlights not far away. Moving into position behind the Jeep, he saw two deer inside.

a Jeep's headlights not far away. Moving into position behind the Jeep, he saw two deer inside.

Bailey arrested the driver and the passenger and hauled them to the sheriff's office in Sublette. There he called Wildlife Conservation Officer Marvin Jensen.

One of the culprits, a Satanta man, was cited for hunting deer during closed season and hunting with an artificial light, two counts of shooting a game animal after sunset and possession of an untagged deer. Judge Dave Rinehart ordered the man to forfeit his rifle and pay \$1,026.

"It was a 'gimme' case," Jensen said, "but we'll take 'em however we can get 'em. Bailey deserves all the credit - it was his work that made the case." Manes

GONE TO THE DOGS

The New York Department of Environmental Conservation acquired a unique wildlife law enforcement tool in 1978 - a trained police dog named Paws. The agency now owns four such canines.

During 18 weeks of intensive training, Paws was taught obedience, agility, handler protection, criminal apprehension, building search, tracking, evidence recovery and venison detection. The handler was instructed in training methods and canine first aid.

One week after Paws graduated, he made his first case. This case involved a deer taken the day before the season opened. It was hidden in a building behind a Catskill Mountains hunting camp.

At the camp, Paws was commanded to search for deer meat. The 90-pound male German shepherd went directly to the building's door. Paws indicated his find by passively sitting by the door. This arrest resulted in a \$1,000 fine.

Not long after this, Paws was called to help find a man missing in the Adirondack Mountains. A two-day search involving hundreds of men and another dog had been unsuccessful, but Paws located the missing man in two hours.

The goal for New York's Detector Dog Program is to have nine dogs and handlers. In specially equipped four-wheel-drive vehicles, the Detector Dog units patrol regularly and help with other work, such as vehicle checks. The dogs can quickly check a vehicle or camp and let the handlers know if there are furs or deer meat present.

The dogs live in the officers' homes. Family situations are desirable, but not mandatory. This keeps the dogs accustomed to people. The Detector Dogs also help with public relations by making appearances with their handlers.

The Detector Dogs' arrests have resulted in thousands of dollars of fines. The canines have proven their worth. *International Game Warden, by Richard Matzell and Larry Kring*

BIG BUCKS

A major U.S. Fish and Wildlife Service investigation into endangered species violations resulted in several successful prosecutions last year. Called Operation Falcon, the investigation uncovered a variety of violations, including the taking of peregrine falcons from the wild.

Fines resulting from the investigation total more than \$320,000.

To date, 55 people have been convicted through Operation Falcon. Violations of the Endangered Species Act and other federal laws have been uncovered. Fines resulting from the investigation total more than \$320,000.

Manes

SCIENCE AND LAW

Scientists may soon provide a valuable law enforcement weapon for detecting illegal meat in commercial products. A joint study project of the University of Wyoming and the Wyoming Game and Fish Department is pioneering the use of a chemical enzyme-analysis process, or isoelectric focusing, which may allow officers to identify the meat used in cooked and processed foods. In cases where hunters fail to claim game meat, commercial processors have been known to blend deer, antelope, elk or moose with domestic meats in the form of sausages and salamis. *Izaak Walton League*

WAR ON POACHING

A U.S. Fish and Wildlife Service official says commercial poaching of fish and game is a \$500-million-a-year industry in this country.

That estimate may be low, however.

Pennsylvania officials believe 80,000-90,000 deer are taken illegally in that state each year. The state's latest dollar value of a deer is \$1,116.69, the cost of replacing one animal. Multiply 85,000 deer by \$1,100, and you have a staggering \$93.5 million annual value.

Texas officials say the poaching of fish and game in that state may have a commercial value "in the millions."

Illinois representatives report: "Based upon the assumption that poaching equals legal kills, wildlife and fish taken illegally in 1983 value more than \$45,568,684.78."

In Michigan, the estimated loss resulting from poaching deer alone approaches \$20 million.

"Conservatively, we estimate we are losing in excess of \$1 million a year to the economy of the state (to poaching)," say Arizona's wildlife managers.

In Kansas, the annual revenue loss from deer poaching has been projected to be about \$750,000.

Some of what is poached in the U.S. is sold in foreign countries, making it an international problem. The scope of this problem may be impossible to determine. *Rockford Register Star*

BEHIND BARS

Two Federal court cases involving protected wildlife concluded recently when a U.S. District Court passed sentences. A Bulloch County, Ga., farmer was convicted of possessing a bald eagle in violation of the Bald Eagle Protection Act. The man was sentenced to six months in prison and fined \$2,500.

"I don't view this as a simple game violation," the judge said. "I want to put people who mess with eagles behind bars."

"I don't view this as a simple game violation," the judge said. "I want to put people who mess with eagles behind bars."

In the other case, a South Carolina man pleaded guilty to illegal possession and sale of alligator hides. He was sentenced to three years in prison (all but six months was suspended) and five year's active probation. He'd sold the hides to a Georgia man who unknowingly sold them to Fish and Wildlife Service undercover agents. Both men were found in violation of the Lacey Act, which prohibits possession,

transport and interstate sale of illegally taken wildlife.

The Georgia man also was convicted of selling marijuana. He was sentenced to serve two years in prison and five years' probation. He was further ordered to pay the Fish and Wildlife Service for the money its undercover agents spent buying the hides. USFWS

\$5,000 LION

Two Albuquerque, N.M. men were fined \$5,000 each and placed on five years supervised probation by a federal judge. Both men pleaded guilty to charges of transporting mountain lions into New Mexico for what authorities contend were guaranteed-kill hunts.

The pair, both outfitters, was indicted as the result of a two-year undercover operation conducted by the N.M. Department of Game and Fish and the U.S. Fish and Wildlife Service.

The men were charged with two felony counts each. Prosecution came under the federal Lacey Act, which prohibits the illegal interstate transportation and sale of mountain lions and other wildlife.

The investigation started in July 1983 as a result of rumors circulating in southern New Mexico. It was alleged that mountain lions were being imported into Carlsbad Caverns National Park. A one-year probe, however, found no proof of the allegations.

A second phase of the investigation, involving an undercover storefront located in a neighboring state, was initiated simultaneously and lasted two years. The culprits were charged after purchasing lions from the storefront and taking them into New Mexico for hunts. N.M. Dept. of Game and Fish

JINXED

Missouri Conservation Agent Matt Wolken isn't superstitious. But recently, he answered a call which involved a wrecked car containing 14 hoop nets and about 100 dressed catfish.

"Many of the fish were underlength and it turned out all the nets had been stolen the night before in Iowa," Wolken says.

"I called the owner of the nets and he said he put a jinx on the thief when he found his nets had been stolen. This happened at almost the same time the defendant fell asleep at the wheel and had the accident that led me to the

"Justice acts in mysterious ways . . ." Mo. Dept. of Conservation

ISSUES

STILL WAITING

Four water-related bills were presented to the Kansas Legislature this year, but none became law. All four were to be part of the State Water Plan - three under the Fish and Wildlife Section and one under the Management Section.

House Bill 3036 would have created a reparian (streamside) and wetland (marsh) protection program administered by county conservation districts. Program assistance would have come from the Fish and Game Commission, the State Conservation Commission and other natural resource agencies.

HB 3039 would have allowed the use of conservation easements in establishing the reparian and wetland protection programs. Administered by Kansas Fish and Game, the program could have allowed tax deductions for easement donations. Many areas potentially affected by the program are unproductive croplands. Under the bill's provisions, the easements could be obtained only through donations or voluntary sales.

Also proposed as part of the Fish and Wildlife Section, HB 3038 would have allowed certain rivers to be designated for limited public use. It would not have allowed streambank or other private land access. If passed, the law would have established a recommendation and study procedure for stream

designation.

Those three proposed bills failed to even receive House committee consideration. The lack of action was blamed on a busy Energy and Natural Resources Committee schedule. Without time to consider the legislation, the ENRC passed the bills to the Ways and Means Committee, where they sat until the Legislature adjourned.

The fourth bill would have provided minimum flow protection for nine more Kansas streams — Mill Creek, and the Smoky Hill, Saline, Republican, Medicine, Delaware, Chikaskia, Big Blue and Little Blue rivers. Though passed by the House of Representatives, the bill died in the Senate Energy and Natural Resources Committee.

Conservationists are optimistic about the bill's chances for passage next year. Water Office official Kerry Wedel encourages that positive outlook: "Certainly they (the bills) are

going to be reintroduced next year, but they will have to go through the whole process again. I'm not sure we'll get everything, but certain portions have good chances." Manes

A BLEAK YEAR

According to a report published in National Wildlife magazine, 1985 was a bleak year for wildlife. The continuing loss of wetlands, estimated at 350,000 acres per year, has meant the destruction of valuable waterfowl habitat. Duck populations in many areas dropped to their lowest levels. Conservationists hope habitat destruction will be slowed by two bills: the 1985 Farm Bill, which could protect or restore millions of wetland and upland acres, and legislation requiring construction costsharing among those who benefit from water projects.

Some of the nation's most important wildlife habitat was further degraded last year by toxic pollution. According to the U.S. Fish and Wildlife Service, a fourth of the nation's wildlife refuge waters are polluted. Chemicals that wash from farmland are the single largest

cause. NWF

ANTIS AT IT AGAIN

Having campaigned successfully to ban the steel leghold trap in New Jersey, the antis now are apparently taking aim at the trappers themselves.

An attorney for Friends of Animals and the Humane society of the United States has asked the New Jersey Division of Fish and Game for a list of all licensed trappers in New Jersey.

An attorney for Friends of Animals and the Humane Society of the United States has asked the New Jersey Division of Fish and Game for a list of licensed trappers in New Jersey. The New Jersey attorney general's office has instructed the division to make the names and addresses available.

The Coalition of New Jersey Sportsmen doesn't want any of these names and addresses released. Their attorney has asked an appellate court to stay the release of the list.

The coalition chairman said the antis already are harassing trappers and sportsmen and that there is no reason for them to have the list. The antis claim they need it for a court case.

Although no one is questioning that the use of the steel leghold trap has been banned in New Jersey, some important questions remain unanswered: May New Jersey trappers keep their steel leghold traps? (The new law bans even the possession of leghold traps but provides no compensation for their confiscation.) Can the state ban the interstate transportation of leghold traps? (The law seeks to make it illegal to even drive through the state with a leghold trap in a vehicle.) Is the padded-jaw trap a viable alternative to the steel leghold trap? Will the antis want a list of all licensed hunters in the state? What about gun owners?

Sportsmen worry about the list being distributed to anti-trapping organizations. Trappers say they could be placed under surveillance - as some allegedly have been

in the past.

A New Jersey court earlier ruled that trappers may keep their traps until the courts reach a final decision.

One fact that has emerged during the legal debates is the connection between banning traps and banning guns. The New Jersey attorney general's office has argued that traps can be banned without compensation and has cited gun bans to support its case. NWF

SHOOT OUT

The U.S. House of Representatives overwhelmingly approved sweeping changes to the 1968 Gun Control Act when it passed the Firearm Owners Protection Act during the last session. The reform measure has been sent to the Senate for approval. Last year, that body adopted similar legislation by a 79-15 vote.

The House vote came after more than nine hours of debate on the bill sponsored by Rep. Harold Volkmer (D-Mo.) and an alternate measure offered by New Jersey congressmen Peter Rodino and William Hughes, both Democrats.

The Volkmer bill will ensure that the gun laws will be used to catch and convict criminals and not to harass and entrap law-abiding gun owners and dealers. The Rodino-Hughes bill fell far short of correcting ambiguities contained in the 1968 Gun Control Act. In the past, certain portions of that law have been used to prosecute otherwise law-abiding gun owners and dealers who where charged on technicalities.

"Once again logic and the guarantee set

forth in the Second Amendment have triumphed over emotionalism and empty rhetoric," said National Rifle Association representative J. Warren Cassidy. "Gun owners, sportsmen, collectors and dealers have won a tremendous victory here today. But this victory is not only for America's gun enthusiasts — it is for every law-abiding citizen in this country who values the freedom to be secure and uninhibited in the pursuit of his or her lawful endeavor."

Among other provisions, the Volkmer bill will:

- 1. Allow the interstate sales of rifles and shotguns between licensed dealers and law-abiding citizens meeting the requirements of both their home state and the state of purchase.
- 2. Limit federal officials to one unannounced inspection of a gun dealer's records per year, except in criminal cases.
- 3. Permit the interstate transportation of all firearms provided they are unloaded and inaccessible.
- 4. Require prosecutors to prove that gun law violations by dealers and citizens were committed with criminal intent.
- 5. Exempt gun collectors who make occasional firearms sales from obtaining federal dealers' licenses.
- 6. Guarantee the return of confiscated firearms after the acquittal or dismissal of firearm-related criminal charges.
- 7. Require a five-year mandatory prison sentence for anyone convicted of using or possessing a gun during the commission of a violent federal felony, including drug trafficking offenses.
- 8. Prohibit anyone from selling or transferring a gun to a proscribed person. NRA

MORE ANTI-TRAP

Animal rights organizations are pushing for passage of anti-trapping legislation in Indiana and Vermont.

Bills to ban trapping in both states are meeting strong sportsman opposition. Hunters, recognizing that the anti-trap campaigns are openers for anti-hunting efforts, have come to the trappers' aid.

Friends of Animals and The Humane Society of the United States are behind HB 505 in Vermont, which would ban the use of all steel-jawed traps. In Indiana, animal rights organizations are backing passage S13 to end the use of leghold traps.

Vermont trappers attending a hearing on their bill outnumbered anti-trappers three to one.

Similar support for trapping has been mustered by Indiana trappers. Wildlife Legislative Fund of America

REFUGES POLLUTED

Nine of the country's 434 national wildlife refuges have documented contaminant problems. More in-depth study is required at another 76 refuges where there are suspected or potential contaminant problems.

Most contaminants identified come from agricultural, industrial or municipal activities outside the refuges. They are carried to the refuges by either natural or man-made water systems. Examples of contaminants identified include pesticides, PCB's, asbestos, selenium from irrigation drainage and heavy metals such as mercury.

The Fish and Wildlife Service is preparing plans outlining response strategies for each contaminant issue. The FWS will then set priorities for follow-up actions, based on such factors as the source, nature and extent of the contamination. In most cases a coordinated effort involving local, regional, state and federal entities will be needed to remedy the contaminant issues. The FWS plans to seek cooperation from those responsible for the contaminants in funding and carrying out necessary remedial actions. FWS

WATERFOWL HELP

Secretary of the Interior Don Hodel and Canadian Environment Minister Thomas McMillan met in Washington D.C. to sign the North American Waterfowl Management Plan — A Strategy for Cooperation. The plan outlines efforts needed to protect waterfowl habitat, build current populations and enhance research and management.

The plan extends to the year 2000 and will be reviewed every five years, beginning in 1990. It will be implemented through action plans developed at the national, flyway, provincial, territorial and state levels, which will set out the specific management details required for waterfowl conservation in both countries. Although Mexico is not currently included in the plan, the U.S. and Canada will encourage Mexico's participation. The North American plan does not change the means by which Canada and the U.S. establish waterfowl hunting regulations.

One major recommendation is for public and private organizations in Canada and the U.S.

to cooperate in joint ventures to improve water-fowl habitat by changing land use practices on 3.6 million acres of mallard and pintail habitat on Canada's prairies. This program would emphasize agreements with private landowners to benefit duck production and would cost an estimated \$1 billion over 15 years. The plan calls for large-scale contributions from interested U.S. and Canadian organizations, both public and private.

The habitat conservation goals are designed to help rebuild waterfowl populations to their average levels of the 1970s. The plan sets population goals for individual waterfowl species, with an objective of rebuilding duck numbers to a breeding population index of 62 million and a fall flight index of 100 million. The 1985 breeding index was 31 million, with a fall flight index of 62 million.

Geese and swans are generally faring better than ducks. The plan's goals for these species are aimed at maintaining current populations and increasing several West Coast goose populations. FWS

WETLAND BILL

The House Subcommittee on Fisheries and Wildlife Conservation and the Environment is marking up a bill (H.R. 4531) to extend the Wetlands Loan Act for two more years. Chaired by Louisiana Congressman John Breaux, the subcommittee apparently wants to move the Loan Act extension through channels while it negotiates with the Administration and others on more extensive wetlands legislation (H.R. 1203).

The Wetlands Loan Act authorizes the U.S. Fish and Wildlife Service to borrow money from the general treasury for wetland acquisition. The loan is to be repaid from future duck stamp receipts. That loan authority has expired and must be renewed if loan money is to be available next year.

Subcommittee staff reports that Breaux and company have not given up on enacting a much broader wetland bill. Evidently there still is some hope of getting a bill approved that would establish refuge entry fees, increase the price of duck stamps and capture import duties on sporting arms and ammunition, with the new money going for wetland acquisition. Also, the legislation may include provisions to authorize federal and state agencies to use Land and Water Conservation Funds for wetland protection purposes.

Bills similar to the House measures are pending in the Senate. Wildlife Management Institute

HUNTING

TURKEY TEST

Eighty Kansas wild turkeys were tested for mycoplasma disease, which mainly affects the birds' respiratory systems. The test results, from the Kansas State University Veterinary Diagnostic Center, showed the turkeys were in good health.

Only one of the 80 birds tested positive for mycoplasma. A K-State veterinarian who received the test procedures said the result was probably faulty. Fish and Game's Wild Turkey Project Leader Terry Funk is working through the state veterinarian and the U.S. Agriculture Department to have Kansas turkeys officially declared free of the disease.

Affecting mainly turkeys, the mycoplasma disease attacks the respiratory system and causes pneumonia-like symptoms. The disease also can affect the hen's ovaries, causing reduced reproduction. *Manes*

TURKEY STUDY

Nearly \$50,000 is committed to a four-year Eastern wild turkey study in southeast Kansas. The project is a cooperative effort of Pittsburg State University and the Kansas Fish and Game Commission, funded through a Wild Turkey Federation research grant.

Each bird is fitted with its own coded leg band, bright orange wing tag and a radio transmitter. The transmitters allow researchers to document the habitat selection and dispersal of the Eastern turkey subspecies. Each radio pack transmits on a separate frequency, so individual birds are identified by their own signals.

"All of this gear only weighs approximately three ounces, so its weight and bulk are of little concern to the turkey. In fact, the first tom we released immedately took off and flew," said Dr. James Triplett, professor and chairman of the Pittsburg State University Biology Department.

A hand-held antenna is used daily to locate the electronic signals. Each bird's movements are carefully noted, but the data currently being collected is just a small part of the information that will result from the project.

Tracking turkeys by radio transmitter is necessary because of the bird's wariness says

Tom Glick, a wildlife biologist. "Wild turkeys are afraid of everything, and they are said to have the eyesight of a human using eight-power binoculars. Their hearing is excellent, too, which makes them very hard to monitor through personal observation," Glick pointed out.

The project should give wildlife managers insight into successful restocking techniques. In addition to supplying habitat information, the study also will help researchers learn more about wild turkey movements and survival. *Manes*

DU PAYS

Ducks Unlimited is providing more than \$124,000 to the Kansas Fish and Game Commission for waterfowl management. The money is to be coupled with Fish and Game matching funds.

The new DU program, titled M*A*R*S*H (Matching Aid to Restore States' Habitat), offers a total of \$1,172,000 to the Central Flyway states this year. Initiated in 1985, MARSH has improved waterfowl habitat on more than 60,000 acres, and current projects will affect an additional 53,500 acres. MARSH support comes from DU's Kansas fund raising efforts, with 7.5 percent of the resulting monies going to the program.

Central Flyway MARSH projects conducted to date involve land acquisition, habitat improvement and nest box construction, to name a few. Last year, DU spent more than \$31.35 million on waterfowl management in the United States, Canada and Mexico. *Manes*

1986-1987SEASONS SET

The 1986 archery deer season will begin Oct. 1 and end Dec. 31, with a nine-day break from Dec. 6-14. As in years past, the number of archery permits available will be unlimited. Permits may be purchased between July 1 and season's end.

The firearms deer season will run from Dec. 6-14. Three military installations — the Smoky Hill Bombing Range, Fort Riley and Fort Leavenworth — will have slightly different season dates. The firearms permit application period is July 1-18.

The number of firearms deer permits available is 41,755, or 7,870 more than last year. That's an increase of 23 percent. Game

Division officials estimate this will result in a harvest of 27,600 deer, of which 52 percent will be antlerless.

One hundred and fifty archers will be allowed to hunt antelope in northwest Kansas this season. Bow season is open from Sept. 27-Oct. 5.

The firearms antelope season is set for Oct. 11-13. A total of 245 permits is available for the four hunting units. The application period for both firearms and bow permits is June 1-20.

Bowhunters will be allowed to take wild turkeys from Oct. 1-31. All or portions of 17 counties in northeast Kansas are closed to bowhunting turkeys. The remainder of the state is open, and the number of permits is unlimited. Firearms hunters may take wild turkeys from Oct. 11-19. A total of 1,500 permits is available for a single unit, which covers most of southcentral and southwest Kansas. The application period for both firearms and archery turkey permits is Aug. 1-22.

Key Commission action dealing with furbearer seasons created a new beaver management zone in southeast Kansas. The season in the new zone will run from Nov. 19-March 8. In the central zone, the season will be from Dec. 15-March 8, and Jan. 1-31 in the western zone.

The hunting and trapping seasons for opossum, raccoon, red fox, gray fox, swift fox and weasel will be the same as last year — Nov. 19-Jan. 31. Badger and bobcat seasons will also run from Nov. 19-Jan. 31. Mink and muskrat seasons will be open from Nov. 19-Feb. 8.

Coyote hunting will be allowed year-round, except during the opening weekend of firearms deer season, Dec. 6-7. Trapping will be allowed throughout the year. *Manes*

1986-1987 BIG GAME, FURBEARER, COYOTE SEASONS

Deer Firearms Dec. 6-14
Deer Archery Oct. 1-Dec. 5 & Dec. 15-31
Antelope Firearms Oct. 11-13
Antelope Archery Sept. 27-Oct. 5
Fall Turkey FirearmsOct. 11-19
Fall Turkey ArcheryOct. 1-31

Furbearer Hunting & Trapping

(Opossum, Raccoon, Weasel, Swift Fox, Red Fox, Gray
Fox, Badger, Bobcat)
Beaver (southeast zone) Nov. 19-March 8
(central zone) Dec. 15-March 8
(western zone)Jan. 1-31

Furbearer Running

(Raccoon, Opossum, Red Fox, Gray Fox) July 15-Nov. 2 and Feb. 9-March 31

Coyote Hunting and Trapping.... open year-round, except no hunting Dec. 6-7; trapping allowed throughout the year.

FISHING



WHITE BASS: A FISH FOR ALL SEASONS

White bass inhabited Kansas waters before the first European settlers came to the country, and these hardy fish find the man-made reservoirs here much to their liking. Kansas boasts some of the most impressive Master Angler statistics for white bass found anywhere. Only fish bigger than three pounds are even recognized, and eight of the 1985 Kansas Master Angler awards were for fish weighing more than $3\frac{1}{2}$ pounds. The state record 5-pound, 4-ounce white held the world mark for more than a decade, and it's still only five ounces from the top.

In early spring, white bass form large unisexual schools, staging in the upper ends of impoundments before the spawning run into feeder streams. Chances are good for catching a large fish at this time. Roadrunners, jigs, live minnows and crawdads are reliable baits.

The best places to find these all-male or all-female groups are points at creek mouths in the upper ends of impoundments. White bass spawn on dam faces of some impoundments, and may do their pre-spawn staging there also.

In middle to late April, white bass begin their stream spawning run. Some of the best fishing occurs in streams above Kansas reservoirs. The scenery of prairie streams is spectacular, and catching white bass in such a setting is almost unbeatable.

Where the current rushes around rock outcrops or brush piles, holes are formed in the stream bed, and spawning white bass crowd into these pools. The most popular bait for this type of fishing is yellow or white jigs. The jig and line weight should be matched so the lure will drift with the current above the bottom. An effective bait presentation involves a simple flipping or casting into the current just above a riffle, allowing the jig to drift through. The retrieve may include a jigging motion, but it is important to keep the line as straight as possible. This will aid in detecting strikes and preventing snags.

The same baits will work for white bass spawning on dam faces, but presentations may need to vary to fit the situation. Whites may surface in schools, providing exciting targets at which to cast. If heavy spring rains muddy the streams, white bass may spawn only on the dam faces.

By mid-May, the white bass spawn is generally over, and the fish can be caught in the same areas where they staged before the spawning run. As the summer heat raises water temperatures, the fish move into the main body of the lake. There white bass are often in deep water near submerged points or creek channels.

Summer brings in two other white bass fishing methods — night fishing and trolling. Night fishing under floating lights is a unique experience. The lights sit just above the water on Styrofoam floats, attracting first small aquatic insects, then shad and other bait fish and finally white bass and other predators.

Fishing under lights, white bass anglers may do better with live baits (shad and especially crayfish) than with jigs. The lights, available at most sporting goods stores, should be set up over some type of submerged structure. The bait should be worked slowly up from the bottom, until the fishes' depth can be determined.

Trolling is another popular summer technique. Shad-colored crankbaits are perhaps most popular, but many deep-diving lures can produce good results. One key to success is to keep track of where the first fish was caught, as it may indicate a nearby school.

White bass occasionally can be seen breaking the surface while chasing shad during midsummer. A well-placed cast into or near these feeding schools will almost always bring a strike. Fishing with heavy lures such as lead slabs may be helpful in catching the large ones, which are often below the small fish.

Fall white bass fishing can be a special treat to the dedicated angler, because few people compete for the best spots on the lake. Fall whites inhabit much the same areas they do in early spring, before the spawn. Fishing during October and November can yield larger fish than those taken during other times of the year.

Icefishing for white bass can be as productive as any short-sleeve angling. Jigged straight up and down, lead slab spoons and other heavy, metal lures such as Kastmasters can be effective. Light line and a sensitive rod will help in detecting the subtle taps of cold-water whites.

Among the best white bass waters in Kansas are Cedar Bluff, Cheney, Fall River, Glen Elder, John Redmond, Kanopolis, Marion, Melvern, Pomona, Tuttle Creek, and Wilson reservoirs. *Manes*

TROLLING MOTORS

Selecting the proper trolling motor is especially difficult for new boat owners. Even anglers who have used electric motors for many years may be wondering why theirs don't perform as expected.

In selecting the power for your trolling motor, try to get four or five pounds of thrust for every 200 pounds of boat and contents. This is only a general rule, as other factors influence trolling motor performance.

Though flatbottom, aluminum boats are lighter and can be moved without much thrust, they're also more susceptible to wind. While a less powerful motor may provide plenty of thrust on calm days, it may afford nothing but frustration on windy days. Holding the boat's position in moderate winds may even be difficult.

While heavier boats may not move as fast under less trolling motor power, they require less thrust to hold position in the wind. A deep-V hull has much the same effect.

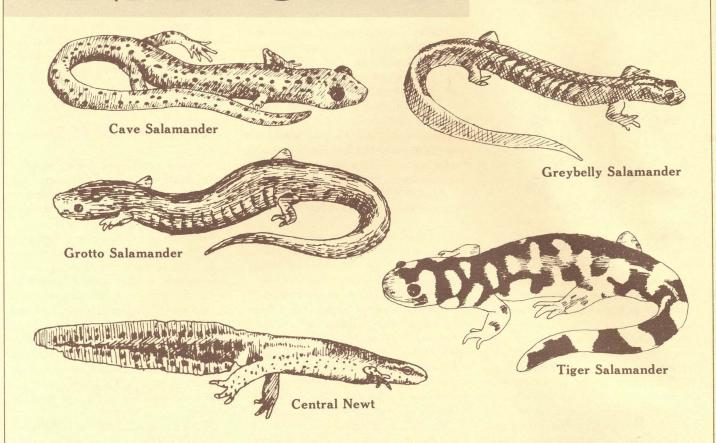
Generally, the larger wire you use to connect the trolling motor and battery terminal, the better. Well-insulated 6 AWG is recommended, and the battery and motor should be as close together as possible.

Manufacturers say the center of the bow is the best place to mount a trolling motor. Running lights and other gear may prevent exact centering, but it should be as close as possible.

To determine how long your trolling motor shaft should be, measure the distance between the top of the bow and the water's surface. Take this measurement with normal gear aboard. That includes a person in both the bow and stern. To that distance add about 18 inches. A few more inches should be added to raise a hand-controlled motor to the proper position.

Other considerations — foot control or hand control, brand and control box design — are matters of personal preference. The bottom line is this: Buy all the trolling motor you can afford. It's not likely you'll have too much for your boat. *Manes*

NATURE



MUDPUPPIES

Eight salamander species inhabit Kansas, and four are on the state's threatened and endangered species list. Seven are confined to eastern and southeastern counties. Only the tiger salamander is common across Kansas.

Salamanders are unique creatures. Some have lungs, some do not. They breed and lay their eggs underwater, usually attaching them to submerged rocks or plants. All Kansas salamanders go through a larval stage, during which they live underwater and breathe with gills. Most of them metamorphose (change bodies) to an adult stage more suited for land dwelling.

The larvae of salamanders, with their feathery gills, are often incorrectly called "mudpuppies." Actually, mudpuppy is the proper common name for only one Kansas salamander species. The mudpuppy is unique because it retains its gills throughout adult life, never developing into a terrestrial stage.

The tiger salamander is Kansas' most com-

mon salamander, sporting bright yellow stripes on a shiny black background. Growing to a maximum length of nearly a foot, tiger salamanders eat most living animals small enough to be consumed. These salamanders winter underground, often in caves or burrows of prairie dogs and crayfish.

One of the most brightly colored Kansas animals is the cave salamander. Small black spots speckle its glowing orange body. The cave salamander is found only in dimly lit caves of Cherokee County's Ozark Plateau.

Another endangered Kansas salamander is the graybelly. Reaching only three to four inches in length, the graybelly is the state's smallest salamander. It, too, is found only in Cherokee County.

Also an endangered species, the grotto salamander is dusky purple or light pink. Though the larvae of this species can see, adults are blind and live only inside dark caves. It takes two or three years for the larvae to mature. The grotto salamander's range also is restricted to the Ozarks of Cherokee County.

The fourth endangered Kansas salamander is the central newt. Its back, head and tail are

brown or olive green, and its belly is a distinct yellow. The newt's body is covered with tiny black spots. Though more widely distributed than the other three endangered salamanders of Kansas, the central newt is confined to the state's eastern edge.

The central newt is the only Kansas salamander that exhibits three developmental stages. An "eft" stage separates the gilled larval stage from the adult. The eft-stage newt is a land-dwelling animal with rough skin unlike most salamanders. The adult newt is strictly a water creature. Its large, finned tail is used for swimming.

The smallmouth salamander is found across much of eastern Kansas. Its gray-black body reaches a maximum length of about seven inches. Like other amphibians, the smallmouth salamander spends most of the winter and summer underground. When threatened, it waves its tail back and forth.

The dark-sided salamander's known Kansas range is Cherokee County. Its slender body is yellow with black spots. It prefers cave streams, where temperature and moisture remain constant. *Manes*

100-YEAR SNAPPER

"It weighs 59.4 pounds," says Dr. J. T. Collins. "That makes it the largest Kansas alligator snapping turtle found in recent history. It's the only documented living specimen in the state since a 100 years ago."

Collins, who works out of the Kansas University Museum of Natural History, says it is likely that other alligator snappers have been found, but not documented, in the state.

One caught by setline anglers and taken to the Sedgwick County Zoo in the mid-1970s died before photographing and official examinations could be conducted.

"I'm sure there have been other Kansas alligator snappers caught and eaten by fishermen," says Collins. "But those haven't been documented, so this is only the fourth one on record."

Wildlife Biologist Doug Blex found the huge reptile on a Montgomery County road. He knew it wasn't an ordinary turtle. Including the head and tail, it measured more than four feet.

The creature's size alone was enough to convince Blex that it was an alligator snapping turtle, a threatened species in Kansas. There were other identifying characteristics, too, including a long, saw-toothed tail and large scales on top of the head. Blex said he estimated the turtle's head to be more than six inches wide.

Collins says cold winters are the main reason

for the alligator snapper's rarity in Kansas. The turtles are common in the southeast United States, where specimens weighing more than 200 pounds have been documented. An alligator snapper found near Emporia in the mid-1960s marked the northwest extreme of their known range.

Collins and his associates determined that the recently found turtle was a female but was not carrying eggs. Most male alligator snapping turtles never leave the water, and females do so only to lay their clutches of up to 50 round, white eggs.

The new Kansas turtle has been fitted with a radio transmitter and released near where it was found, allowing researchers to monitor its movements. Little is known about the habits of alligator snappers. This one will be monitored for about six weeks.

Alligator snapping turtles are carnivores, eating any live animal they can catch and drag beneath the water. Fish, other turtles, birds and small mammals are part of the snapper's diet.

The alligator snapping turtle sometimes employs a unique technique for catching fish. Blending into a river or lake bottom, it holds its mouth open to reveal a red worm-like appendage on the tongue. When a fish comes to investigate, the turtle snaps its jaws closed.

Adult alligator snapping turtles have no natural enemies. The main threat to limited Kansas populations is pollution and other stream alterations. *Manes*



Woe be to those who plow field to field and build house to house so there is no room for man to be alone.

Isaiah 5:8

GOOD EATING

Anyone who has stumbled down a Kansas riverbank is probably painfully familiar with stinging nettles, a common annual plant in the state. Fuzzy bristles on leaf undersides are hollow and contain formic acid.

Just a few seconds after bare skin touches the leaves, a severe red irritation occurs. Sometimes it causes welts and small blisters. Fortunately, the rash generally disappears in an hour or so.

Bare-legged anglers carefully avoid nettles, but the plants have several redeeming values. Quite tasty, nettles are top-notch sources of protein. They are reported to be among the best for both taste and nutrition when the small, early spring plants are boiled. Only these tender plants and the new leaves that appear later in the year should be eaten. They can be collected painlessly if rubber or leather gloves are worn. Large, late-summer nettles are not considered edible.

Certain nettle species are also used to make paper, cloth, rope and even beer. So next time you encounter nettles on your favorite riverbank, step carefully around. But don't cuss them. *Manes*

WOLVES IN KANSAS

Gray wolves, the largest of the canids (dogs), once roamed Kansas. Though slightly resembling the coyote, the wolf was more than twice as large, weighing as much as 100 pounds.

Early explorers said the gray wolf was common across Kansas, except in the southeast corner. On the open prairie, their territories often covered several hundred miles. Usually in packs of 5-10 they may have travelled more than 50 miles per day. Experts believe Kansas gray wolves preyed mainly on young and unhealthy buffalo.

Studies show that a wolf needs about five pounds of meat per day for survival, but may eat nearly 20 pounds in one feeding and then fast for more than a week. *Manes*



NOTES

P-R TURNS 50

Since 1937, the Pittman-Robertson Federal Aid in Wildlife Restoration Act has allowed a manufacturer's excise tax on sporting arms and ammunition (and archery equipment beginning in 1974). Funds collected under this law are distributed by the U.S. Fish and Wildlife Service to state wildlife management agencies. More than half the money is used to acquire land for public hunting and wildlife management. To date, sportsmen and the sporting arms industry have provided more than \$1.5 billion dollars for wildlife restoration. That's a big investment in the future of America's wild resources.

The early settlers encountered a spectacular abundance of wildlife. But they squandered this resource in their zeal to conquer an untamed continent. Some species were eliminated, and others were reduced to remnants of their original numbers.

In the 1930s, the impacts of plundered forests, heedlessly plowed grasslands and commercial wildlife slaughter were intensified by the worst drought and economic depression in America's history. Something had to be done.

Even the best efforts seemed too little too late, however. Money was as scarce as wildlife and growing scarcer. Many species became extinct, and the sight of once common animals such as white-tailed deer and wild turkey became something only old-timers remembered.

Then a few far-sighted conservationists organized sportsmen, the firearms industries and state wildlife agencies to meet the wildlife crisis with an ingenious long-range plan. At their urging, Congress earmarked a 10 percent tax on hunting ammunition and firearms for state use in wildlife restoration.

The result was called the Federal Aid in Wildlife Restoration Act. Today it's better known as the Pittman-Robertson Act, named after its principal sponsors, Sen. Key Pittman of Nevada and then-Rep. A. Willis Robertson of Virginia. The measure was signed into law by President Franklin D. Roosevelt on Sept. 2, 1937.

Progress came slowly. By the time the program was well under way, World War II sent millions of sportsmen into the armed forces, curtailing the excise tax receipts.

Pittman-Robertson really began to grow in the 1950s. Its successes have since exceeded the hopes of many early supporters.

Many species have rebuilt their populations and extended their original ranges. Several of those species include the wild turkey, white-tailed deer, pronghorn antelope, wood duck, beaver, black bear, giant Canada goose, ring-necked pheasant, American elk, desert bighorn sheep, bobcat, barren-ground caribou, mountain lion, gray and fox squirrels and several species of predatory birds. Improved research techniques and habitat development also have helped non-game animals such as bald eagles, sea otters and songbirds. These and many other species have benefitted from the Pittman-Robertson Act.

Before P-R funds were available to state conservation agencies, wild turkeys were scarce outside a few southern states. Today they're found in nearly all states and number more than 2 million.

Similarly, pronghorn antelope populations had dwindled to less than 25,000 during the 1920s. Today there are more than 750,000 of North America's fastest land animal.

There are five times as many elk in North America today as there were in 1920. Wood ducks, once thought bound for extinction, are the most common breeding waterfowl in the East. Woodies are hunted in most states.

Last year, P-R funds for Kansas totaled more than \$1.5 million, about 10 percent of the state's wildlife management budget. Though agencies such as Kansas Fish and Game face even greater difficulty in offsetting habitat losses, the Federal Aid in Wildlife Restoration Act lends hope for the nation's wildlife legacy. USFWS

FWS UNDER DUNKLE?

Frank H. Dunkle has been nominated to be the U.S. Fish and Wildlife Service director. He will replace Bob Jantzen, who resigned more than six months ago. Dunkle's early May nomination must be confirmed by the U.S. Senate. Currently, Dunkle is the Fish and Wildlife Service's coordinator for the Colorado River Endangered Fishes Project. He began his career as a warden with the Montana Fish and Game Department in 1947 and became director of the department in 1963. Dunkle has been a member of the Montana Senate and has a master's degree in wildlife management. Wildlife Management Institute

BE DIRECT

The 1986 Conservation Directory, published by the National Wildlife Federation, is a 302-page source of conservation contacts. It lists addresses and phone numbers of more than 12,000 individuals and 2,000 organizations, including state and federal officials, committees and citizens' groups. Write: Conservation Directory, National Wildlife Federation, 1412 16th St., N.W., Washington, D.C. 20036. The cost is \$17 per copy. NWF

THE ART SHOW

The Seventh Annual Kansas Wildlife Art Show, held in conjunction with National Hunting and Fishing Day and Kansas Wildlife Day, will be held at the Beech Activity Center on Sept. 27 from 10 a.m.-8 p.m., and on Sept. 28 from 1 p.m.-6 p.m.

The art show will feature 65 nationally known artists displaying artwork in scratch-board, stained glass, wood carving, watercolor, bronze, acrylic and oil. The fifth painting in the Kansas Fish and Game Commission's "Wildtrust" Wildlife Art Series will be displayed. Prints will be available at a later date.

The Kansas Wildlife Art Show offers a unique opportunity for collectors and wildlife enthusiasts to buy originals and prints of some of the finest wildlife art available. There is no charge for admittance to the show. Drawings will be held every hour to give away signed and numbered prints.

Other activities of interest to sportsmen, such as equipment booths and displays, will be included in the National Hunting and Fishing Day expositions. The Beech Activity Center is located at 9709 E. Central in Wichita. Free parking will be available. *Jan Royston*

MUZZLE BOOKS

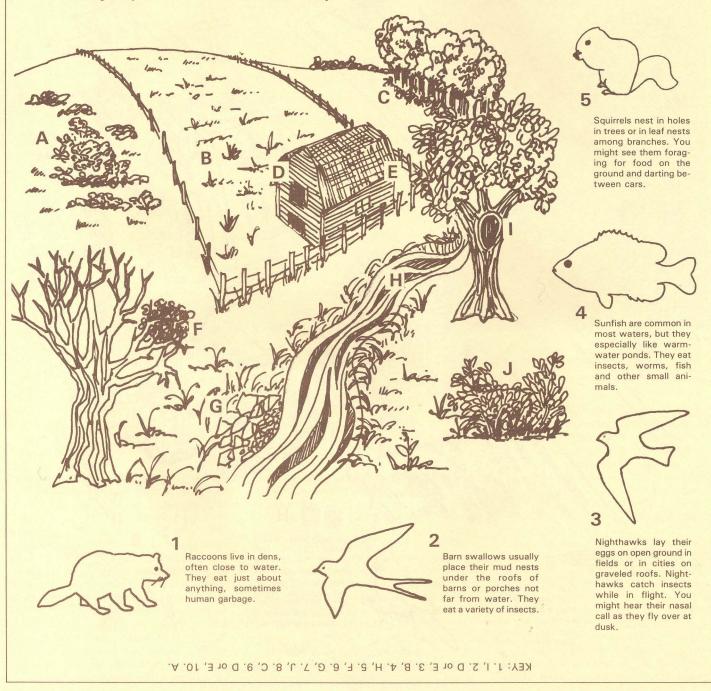
The National Rifle Association's muzzleloading handbooks are published individually for pistol, shotgun and rifle. At two dollars each the illustrated publications are good resources for these popular shooting disciplines. Emphasis is placed on the safe and rewarding use of historic muzzleloading firearms. Care, transportation, competition and other important muzzleloading topics are discussed. The books are available from NRA's Education and Training Division, 1600 Rhode Island Ave., Washington, D.C. 20036.

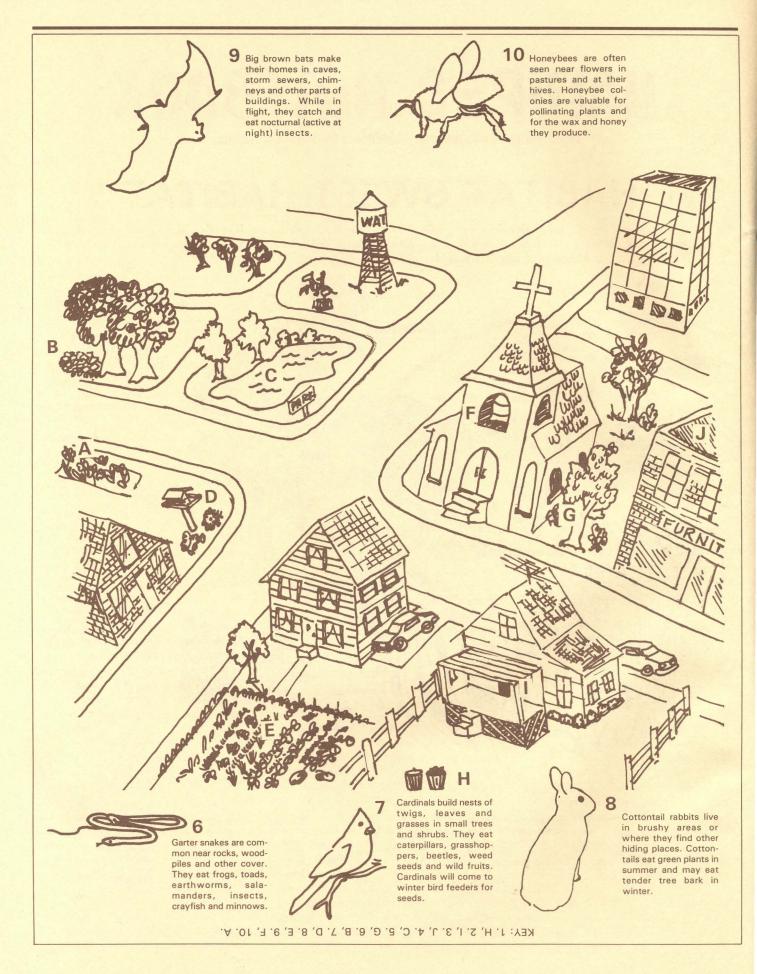
NATURE'S NOTEBOOK

by Joyce Harmon Depenbusch Wildlife Education Coordinator

HABITAT SWEET HABITAT

In the country and city, Kansans are lucky to have wildlife nearby. See how familiar you are with the habits and habitat (where the animals live) of some wild animals. Match the animals shown below with their habitats. Then, go outside and see how many wild animals you can find living near you. Make a list of these animals, or draw pictures of them.





ordon Schneider, the district fisheries biologist who manages Cheney Reservoir, agrees. Schneider vividly recalls the big catches through the ice in January and February 1985. "Biologically there appears to be no cause for concern," Schneider explains. "Our fall (1985) sampling shows no major change after the (intensive icefishing pressure) nor any changes in the size structure of the fish."

Schneider was sure enough of his data and sampling techniques on Cheney to write the following management summary: "Public concern over alleged heavy harvest of white bass by icefishermen was apparently unfounded. This is our bread-and-butter fish at Cheney, and it is thriving."

Recent figures from the December 1985 icefishing survey on Cheney support Schneider's summary. About 4,200 icefishermen caught 22,924 white bass that averaged 1.8 pounds each. Anglers averaged five white bass or about nine pounds of fish per trip. Those numbers average out to about 4½ pounds of white bass caught per acre. The number is insignificant, however, considering Cheney can support about 40 pounds of white bass per acre.

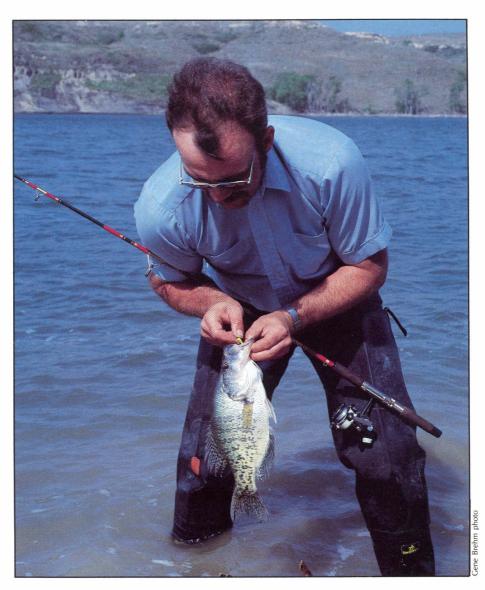
Talk of a limit is frequently discussed in the Clinton Lake area. White bass, however, aren't the center of attention. Crappie are. And it took just one photograph in a big city newspaper to get the issue stirring again.

The story on Kansas crappie is the same as for white bass. A creel limit does not appear necessary to protect any Kansas crappie fishery. Yet some biologists suggest that a crappie limit may be proper, if for nothing more than what they call ethical reasons.

"Biologically, no, we don't need a crappie limit on Clinton or most other lakes," says Steve Hawks, a regional fisheries supervisor based in Topeka. "But ethically, a limit would be acceptable to (at least some of) the biologists and the general public."

Hawks has heard plenty of comments on the Clinton Lake crappie controversy. He's been stopped several times since the infamous 289 crappie photo hit the paper in January. He's been confronted in grocery stores, grilled in fast-food restaurants and cornered at intersections while waiting for the light to change. A fellow sees the familiar buffalo-and-sunflower Fish and Game emblem and figures here's his chance to be heard. The questions and comments, Hawks says, are usually the same.

'There's no reason in the world why



A three-year crappie study on six Kansas reservoirs—Clinton, Perry, Pomona, Melvern, Fall River and Marion—will tell biologists more about the species. This fisherman unhooks a keeper crappie.

someone needs 200 fish on any one outing," goes one lament.

"Those guys are taking all the big fish out of Clinton," goes another.

"So what are you going to about it?" goes the third jab.

For openers, Hawks tells the irate citizen that crappie can stand the pressure they're receiving on Clinton Reservoir. Two, those crappie have lots of suitable habitat. And three, the crappie are taken in just a small part of Clinton's productive fishing waters. Of Clinton's approximate 7,000 surface acres, about 3,000 hold suitable crappie habitat. And the high-harvest area comprises only 150 acres tops, Hawks says.

He'll also tell his questioners that the Fisheries Division recently began a three-year crappie study on six Kansas impoundments: Clinton, Perry, Pomona, Melvern, Fall River and Marion. The study will focus on crappie recruitment, growth and mortality, which includes fishing pressure.

Don Gabelhouse, the fisheries biologist in charge of the crappie study, has heard the fishermen's remarks. "Most people don't like to see other people carrying out five-gallon buckets of crappie," Gabelhouse explains. "But creel limits in the neighborhood of 15-50 fish would do nothing to improve the numbers and sizes of crappie available. When overharvest of any fish species occurs, it's usually the result of many anglers each taking a few fish, not an occasional angler filling an ice chest. To counter overharvest with a creel limit, the limit (would have) to be set much lower

than most people want . . . often less

than five fish per day.

"A limit (would have to be low enough) to substantially reduce the take by most anglers, not just the few who are highly successful. I lean toward an ethical limit, yes. But I know any creel limit we're likely to impose will not have biological im-

Some Kansans strongly support the no-limit regulations on white bass and crappie. A survey of the four states bordering Kansas shows similar nolimit regulations in Oklahoma and Nebraska. Oklahoma has no daily limit on white bass, and Nebraska has no daily limit on crappie.

Robert Thomas, Nebraska's chief of fisheries, says natural mortality and massive die-offs from springtime diseases—not the angling harvest—have the biggest effect on a population's size. "Our bag limits are mainly an evolution," Thomas says. "They don't have a strong factual basis. We've concluded fishing just isn't a factor.'

Kim Erickson, Oklahoma's chief of fisheries. Oklahoma is doing crappie research although biologists there have no proof that a 37-fish limit on crappie is depleting or helping any fishery.

White bass fishing in Oklahoma has traditionally been "lots of fishing in the spring runs. And our fishermen love it," Erickson says. "To our knowledge, the no-limit regulation is not impacting the resource any. White bass are short-lived anyway, and the traditional thinking is they should be used . . . caught by the angler . . . instead of losing those fish to natural mortality."

Of the four states bordering Kansas, Missouri is the most restrictive on its crappie harvest. The Show-Me State, the nation's leader in crappie research, has found it necessary to reduce the daily limit from 30 to 15 on several big impoundments and further restrict the catch with a 10-inch length limit on three heavily fished waters. Kansas biologists consulted with Missouri's bi-

Until the three-year study is completed, fisheries biologists can't say with certainty how the natural mortality and fishing pressure affect crappie in lakes such as Clinton and Perry. The commission also knows that while some fishermen are pleading for a limit on white bass and crappie, others are demanding that no limits be set on those two gamefish.

lthough some limits are based on biology, others are set to keep fishermen happy. Take the Oklahoma daily limit on crappie, for example. It's been 37 for more than 20 years. Why 37? Why not round it off to 35 or 40? Years ago it used to be 25. But at least one Oklahoma legislator thought 25 was too low; 50 would be a better limit. No, said at least one of his peers. Fifty crappie is too dang high for one day of fishing. Let's keep it at 25.

Nope, let's not. Yep, let's do.

The situation was ripe for a compromise. So they split the difference. Simple division shows 371/2 to be the point halfway between 25 and 50. So both sides settled on 37.

'That's the significance of how our crappie limit was determined," says ologists when planning the three-year

study crappie here.

"We felt the crappie had plenty of growth potential (in Missouri), but found they were being overharvested," says James Fry, Missouri's chief of fisheries. That's why several impoundments have limits of less than the 30, the statewide limit. "Restrictive limits are not for everybody," Fry says. "It may be that crappie in your area are not exploited.'

That's one of the topics the new three-year study will address. The Kansas Fish and Game Commission, a five-member board appointed by the governor, will be informed of the study findings. The commission has the authority to set state hunting and fishing regulations and relies heavily on recommendations from Kansas' trained wildlife and fisheries biologists. The five commissioners are expected to strike a balance between professional recommendations and the wishes of Kansas hunters and fishermen.

Until the three-year study is completed, fisheries biologists can't say with certainty how natural mortality and fishing pressure affect crappie in lakes such as Clinton and Perry. The commission also knows that while some fishermen are pleading for a limit on white bass and crappie, others are demanding that no limits be set on those two gamefish.

And there is the matter of ethics. How to regulate it? More importantly, should it be regulated?

Who can condemn a man who catches 200 crappie, fillets every one of them and either feeds them to his family or distributes them to friends?

But the point is made, too, that coolers and five-gallon buckets of panfish may have a gamehog appearance to some folks. And maybe that "boy, we-sure-slayed-'em-today" attitude may not be the one we want to instill in

young fishermen.

Know that some limits are largely ethical restraints. Fish and game populations are far more prolific than most people realize, and relatively few sportsmen ever catch or harvest their limit anyway. For some sportsmen, a limit serves only as a stopping point for the day. Yet it should also serve as a mark that does not have to be reached to enjoy a day outdoors. A limit is a constant reminder that there is a bottom to the horn of plenty, that man cannot just take, take, take. One concerned Kansan wrote fisheries officials in March and told of having seen crappie fishing become "a contest of numbers and not a sporting event."

"We may need to strike a balance," Don Gabelhouse observes. "We may want to show that fisheries are a limited resource, that fish should not be taken lightly." Yet Gabelhouse believes a crappie limit won't even be considered until after the three-year crappie study is completed.

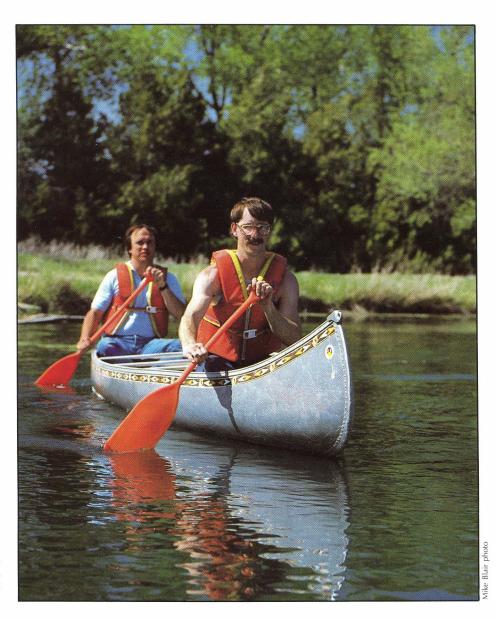
What the study will uncover only time will tell. But this much appears certain: There is a concern in Kansas that some fishermen may be taking too much advantage of a good thing, that fishing might improve by arbitrarily

setting a limit.

Maybe that concern is envy tugging from within, maybe it's a sincere caring for the resource. Maybe both. Kansas allows every crappie and white bass fisherman to set his own limit. This is a privilege far greater than most of us realize.

We should use that privilege wisely or risk losing it.





Canoeing is fun sport, no question. Life jackets make it a safe, fun sport.

The Canoe Can Do

by Gerald Segraves

Great Bend

Although its design is ancient, the canoe always provides a contemporary way to float a river. A few tips for that first float.

The canoe is one of the most popular and well-known watercraft in the world.

In some countries this sleek boat is the only mode of water travel available. For most of us, though, the canoe is merely a recreational vehicle. Nothing quite compares with the solitary, peaceful feeling of gliding down an unspoiled stream in silence, viewing only nature's handiwork and relishing our contact with a world we may not know.

Kansas is not famed for its float streams although there are many float-



When floating tandem, each canoeist should paddle on one side of the boat. Tired of one side? Yell "switch!"

able reaches, particularly in the eastern half of the state. Floatable streams are within a two-hour drive of nearly everyone in Kansas, and yet very few Kansans use canoes as their vehicle of escape. Because of this, canoeists here usually enjoy solitary floats. The only people you might see on a weekend float are a few fishermen near populated areas.

Canoes may be rented or borrowed. Many scouting groups will let you borrow or rent one when their canoes aren't in use. Outdoor outfitters also have a few they may let you rent. Or they may be able to recommend someone who will let you borrow a canoe.

If you've never been canoeing before, you'll want to learn a few basics before taking any trips. The best place to learn basic canoe handling techniques is in calm, shallow water. This brief explanation is no substitute for a couple of good canoeing books. Most modern canoeing books provide good information on paddling techniques, equipment and gear storage. We'll review a few of the basics here.

Your most important piece of equipment, in addition to a comfortable, quality life jacket, is a good paddle. Each boat should be equipped with at least two paddles, plus one in reserve. If a paddle is lost, misplaced or broken, you'll soon learn the wisdom of carrying that spare.

You'll need to know several basic paddling maneuvers. When holding the paddle, always grip the shaft with the lower hand just above where the handle widens into the blade. This Your most important piece of equipment, in addition to a comfortable, quality life jacket, is a good paddle. Each boat should be equipped with at least two paddles, plus one in reserve.

grip provides much better control than if your lower hand is gripping the shaft halfway between the handle and the blade. The strokes you use vary depending on how you'll be traveling. With two people in a tandem boat, each person paddles with a straight stroke on opposite sides of the canoe. This propels the craft in a straight line. Paddling alone in a solo canoe or from the stern of a tandem boat? Use the J-stroke. This stroke lets you paddle on the same side of the boat for extended periods. And its easier than switching sides every couple of strokes.

You'll need to know how to backpaddle, too. Until you become comfortable with the various paddling techniques, you should get out of the boat and guide it through or around any obstructions or tight spots. That's if the water is shallow enough, of course. If the water is too deep, paddle to the shore opposite of the obstructed area. The water will usually be shallower or at least less congested there. If the entire width of the stream is blocked, pull over, get out and portage around the rough spot.

f in doubt, always get out of the boat. It's easy to get confused and turn the boat sideways when trying to paddle through a four-foot opening in brush, rocks or tree limbs. Should the boat turn sideways in the current, do not lean upstream. If you do, the boat will fill with water and you'll swamp. Don't lean too far downstream either or you'll learn the true definition of Tippecanoe.

Weight distribution in the boat also is important. In a tandem canoe you'll want the two paddlers to be about the same weight. Put extra weight closest to whichever person is lighter. This balance, along with the large, heavy gear stored in the middle of the boat, will prevent the bow from riding too high and catching the wind. A boat with a high bow is hard to handle. You'll soon discover that you can help steer the boat by leaning slightly in the direction you want to go.

What gear you take will dictate how comfortable you'll be. You won't need overnight equipment for a simple day trip. And if you don't mind a cold lunch you can dispense with most of the kitchen gear. Travel lightly when you can.

For an overnight trip, though, you'll want to take a tent, sleeping pads, bags and basic cooking gear. Your camp kitchen can be as elaborate as you wish or surprisingly simple. A soft plastic cake box will hold paper plates, napkins, a couple of folded trash bags, salt and pepper shakers and other small items such as can openers and small drinking cups. A potato chip can stows the silverware, and an old pillow case will carry a small grill. A large Ziplocstyle food storage bag will keep enough charcoal dry for cooking supper. The grill can be set up on four empty beverage cans filled with water. The charcoal will remain hot enough to start the evening fire should you decide to have one. A large ice chest will carry all the food and drink your crew will need, and a small chest or water jug in each boat will keep thirsty paddlers refreshed. A collapsible water jug will hold plenty of water for washing hands and kitchen utensils. A folding saw and a hatchet are invaluable for gathering firewood and doing other camp chores.

Don't forget a small folding shovel for digging the camp latrine and burying the dead fire. Each canoe, in addition to its painter (a 15-foot length of rope tied to the bow and used for tethering), should have another 50-foot coil of rope stashed away. Rope has many uses in the outdoors, and you always need it when you don't have it.

Each boat also should have a firstaid kit, survival kit with knife, compass, matches and fishing line, to name a few necessary items. You'll also want to keep all of your gear dry, and there are several ingenious ways to do this. If you like to canoe and plan on canoeing regularly, invest in a couple of large-capacity, rubberized Duluth packs. These packs have a top that rolls up, folds over, secures with Velcro and cinches tight with straps. Duluth packs keep your gear dry (even if they fall out of the boat) and have shoulder straps for portaging. Smaller waterproof bags and boxes will hold all of the small, essential items you'll need.

f you won't be canoeing a lot, consider double wrapping your large items in plastic trash bags. While not nearly as good as Duluth packs they'll keep your gear and clothing dry. And they're inexpensive. Zip-closure food storage bags will neatly store those small items. You'll also want to take along a shady hat, sunglasses, suntan or sunscreen lotion and a pair of thongs or sneakers for safe wading. All the gear that won't be used while on the water can be stored in the waterproof bags. Secure these bags in the canoe with rope and bungee cords. Keep the often-used items within reach so you won't rock the boat stretching for them. Your waterproof camera bag or box and your drinking jug should be within arm's reach. With all your gear stowed efficiently you'll have plenty of room to stretch out and



Both paddlers should be on lookout for tricky water, but the bowman, with the best front view, is the main scout.



Going it alone is fun, too. This paddler moves his boat through an easy stretch.

kick back on those straight, smooth sections of stream. Always wear your life jacket on the water. If you need something soft to sit on, use a boat cushion.

If you paddle quietly downstream you'll often notice the silence. It can be so complete that it seems unbelievable. Keep a watch for wildlife at these times. Often when it seems quietest you'll see a deer staring from the riverbank or an eagle soaring overhead. But be sure to watch where you're going. Always pick the deepest channels on shallow streams, which often are filled with small islands and sandbars. You may have to get out occasionally and push the boat to deeper

water, but if you keep a running check of water depth with the paddle you can usually keep the boat in deeper water. Take it slow when approaching river bends that you can't see around. Remember, too, that the slower and often shallower water usually runs along the inside of the bend. Watch for obstructions and tight spots well ahead. Once you're within several feet of a situation you're usually committed and there's little to do except backpaddle. You will resort to this stroke every now and then.

Always remember the most tame and peaceful river can be unforgiving. A two mile per hour current can wrap an aluminum canoe around a rock or bridge piling and can break a fiberglass boat in half if it hits such an obstruction sideways. Plastic boats will take much more abuse and usually unfold to their original shape.

Always respect the river. Don't ever play with your own safety or the safety of others in your paddling group. Remember that respect and you'll always be around for the next trip.

Gerald Segraves, an avid outdoorsman, learned his paddling strokes from his brother, who is a certified whitewater instructor.

Floating The Ark

ell the average person in western Kansas about your weekend float on the Arkansas River and most of them will stare at you in disbelief. Many people who live between Dodge City and Great Bend haven't seen water in the river for several years. And although there is water near Garden Cty, that situation could dry up soon.

East of Great Bend the river develops minimal flow, and near Raymond (20 miles east of Great Bend) it finally regains its status as a real river. The current flows along at a fair pace, and the water averages knee deep. In only a few spots will you have to get out of your canoe and walk, usually when you drift out of one of the main channels. There are no shallow stretches where you'll have to get out and push more than 20 feet.

The bridge three miles northwest of Raymond is a fair put-in spot. A half mile east of there is an even better one. From there you can have your choice of several trips. If you're looking for an afternoon of river adventure, try the four-mile float from the west Raymond bridge to the south Raymond bridge. Want a float of six to eight hours? Start at the west Raymond bridge and paddle to either of the bridges south of Alden. For the more ambitious, camp south of Alden and float on to Sterling (another three hours) the next day. The really adventurous might want to paddle on to Hutchinson, which would require another overnight camp and

more driving. The trip from Raymond to Sterling, or Sterling to Hutchinson, is an ideal weekend float.

Our group sampled the Raymond-to-Sterling trip, which made for a memorable weekend. This stretch of river offers pretty countryside and a lot of wildlife. Near Sterling, however, riverbank stabilization has resulted in junked cars and other trash. Yet man's influence is generally negligible along this stretch.

South of Alden, Rattlesnake Creek flows into the Arkansas just north of Quivira National Wildlife Refuge. Along this section of river we saw many ducks, egrets, a few great blue herons and a couple of deer. Waterfowl are common here during the fall.

Photography from a moving canoe is tricky if you're the only one paddling. It's better to stop the boat in shallow water and get out when you want to photograph something. Be sure to take your camera along in a waterproof container. Army surplus ammo boxes are ideal for this purpose.

The Arkansas River is classified as a navigable waterway. This means the river and its streambed belong to all of us. The Kansas Canoe Association, in cooperation with one of the counties through which the Ark flows, has developed several access sites along the river. Camping is permitted in these areas although you may camp anywhere in the riverbed, which is public property. Maps and information on this river and other canoeable waters in the

state are available from the Kansas Canoe Association. Write the association at: P.O. Box 2885, Wichita, Kan. 67201. These fine folks printed detailed maps and brochures of canoeable areas. They also let you know whose permission you'll need for putting in, taking out, crossing private property or camping. Many of the smaller streams in the state are private property, and the Kansas Canoe Association has contacted several landowners in heavily-floated areas. Most have graciously allowed canoeists to cross their property, but permission is still required. You must ask the landowner.

Remember that nobody likes to see a trashy river. Pack out all your trash and if you build a fire, build it in a pit or use charcoal. Then bury all traces of your fire when you break camp. This will make river camping more enjoyable for everyone, and in many areas will keep private access points open.

Suggested Reading

Path of the Paddle: An Illustrated Guide to the Art of Canoeing Van Nostrond Reinhold, by Bill Mason (1983)

You, Too, Can Canoe: The Complete Book of River Canoeing Stode Publishers, by John H. Foshee (1977)

American Red Cross: Canoeing Doubleday (1977)

—Gerald Segraves



Steve Bersuch of the McPherson Bassmasters measures a 143/4-inch largemouth bass before releasing it.

An Ace Of Clubs

Nineteen bass fishing clubs in Kansas are measuring and releasing their fish, then giving the valuable data to state fisheries biologists.

by David Willis

Reservoir Fisheries Investigator Emporia

photos by Mike Blair

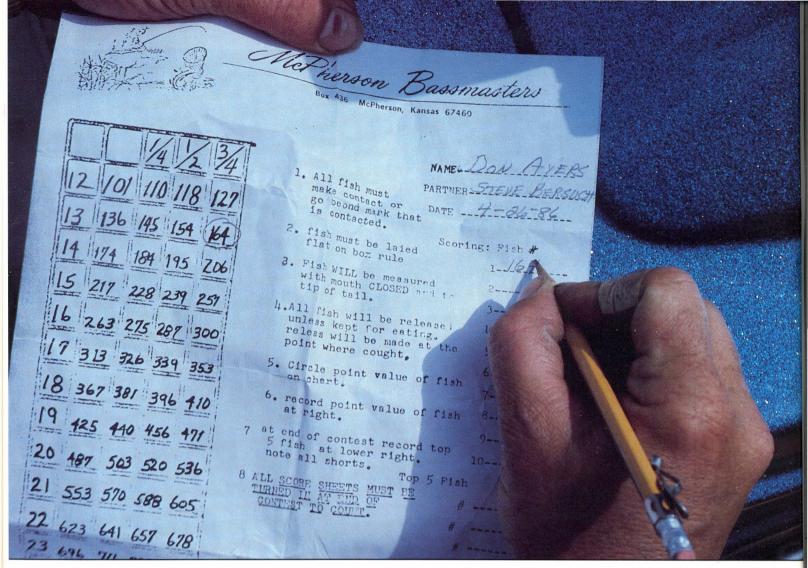
he impact of fishing tournaments on our fish populations is often questioned. But I've found local bass clubs in Kansas do show genuine concern for this resource.

It's important to distinguish between the small tournaments held by local bass clubs and the larger, more competitive tournaments that require larger entry fees and give cash awards to winners. The size of the local bass clubs varies across Kansas, but most clubs typically have 6-15 boats in a tournament. Two men fish per boat, although each angler competes against all club members.

Most of the clubs now follow catch, measure and release procedures. When a fisherman catches a bass, he measures its length, which is confirmed by the angler's partner. The fish is then released immediately, and

scores are determined later from standard length-weight tables or from a point system. Most clubs score largemouth bass that are 12 inches and longer. Because they measure and release fish at the boat, anglers may include fish that are smaller than legal length limits.

Only artificial lures may be used in these tournaments. The combination of such lures, careful handling and



Don Ayers, also a member of the McPherson Bassmasters, keeps track of the largemouth bass he caught April 26 on El Dorado Reservoir. This catch information is then given to Kansas fisheries biologists, who use the data to study fish populations.

catch, measure and release results in high survival of released bass. From various studies done across the country, we've come to expect 95 percent or better survival in such situations.

Many of the bass clubs in the state participate in the Kansas Black Bass Tournament Monitoring Program, begun in 1977. About one-third of the local clubs take part in this voluntary program each year.

Program Procedures

Tournament record forms are mailed to club officers each spring. These officers are asked to complete and return a separate form after each tournament. Clubs provide information on sizes of largemouth, smallmouth and spotted bass caught (by one-inch length groups). In addition, we ask for the number of participants and hours fished so we can calculate total fishing effort.

Most information collected by this program is from tournaments held at large (1,250-16,000 acres) federal reservoirs. Most of our small lakes aren't large enough to allow competitive fishing.

We compile this tournament information in annual summaries. Reports are then prepared for bass clubs and Fish and Game Commission biologists. The clubs use their report to help select tournament sites. Members appear most interested in knowing sizes of fish caught at various impoundments, number of fish caught per hour of angling effort and impoundments where 20-inch and longer largemouth bass were caught. (A 201/2-inch largemouth bass typically weights five pounds.) Biologists use specific information on fish size and catch rates to monitor bass populations.

1985 Results

Nineteen clubs reported their tour-

nament catches in 1985. These clubs, listed in the accompanying table, deserve recognition for participating in a voluntary program. Eighty-nine tournaments were reported — the most in any year since the program began.

Catch rates for largemouth bass 12 inches and longer were highest at Hillsdale, El Dorado, Big Hill and Clinton reservoirs — our four newest impoundments. Newly flooded impoundments have high productivity that results from flooded vegetation. In addition, this flooded vegetation provides excellent nursery areas for young bass. These two factors result in the high numbers of bass that are produced in new impoundments. These numbers typically decline, however, as the reservoirs age.

Catch rates for 15-inch and longer largemouth bass were highest at El Dorado, Clinton and Perry reservoirs. El Dorado and Clinton reservoirs have been impounded long enough for bass populations there to mature. Hillsdale

and Big Hill reservoirs are newer and do not yet contain high numbers of big bass. Perry Reservoir catch rates were probably influenced by a special largemouth bass stocking in 1982. The Fish and Game Commission stocked fish that averaged 8.3 inches that year. These fish ranged from 15-17 inches in 1985 and contributed to an improved catch rate during tournaments.

The two heaviest largemouth bass reported in 1985 were from Glen Elder and Perry reservoirs. Each fish weighed nearly six pounds. The largest bass caught any one year has ranged from a low of 5½ pounds in 1979 to more than seven pounds in 1983. A large smallmouth bass was caught at Wilson Reservoir during a 1985 tournament. The bass was 19 inches long, weighed more than three pounds and was caught by a member of the Tri-City Bass Club.

Participating clubs reported catches of 2,401 largemouth bass that were 12 inches or longer and 946 smallmouth bass that were eight inches or longer. Of these 3,300-plus fish, only 12 died. The rest were released alive. In addition, one large bass was kept to be mounted.

Tournament Data

Careful analysis of tournament data has shown it to be reliable when compared with the electrofishing information biologists collect. There are biases in the tournament information, but they have been recognized. Thus the information is used to monitor bass populations in our large reservoirs.

The cost of this monitoring program is low. In 1984, for example, the total cost of the program was estimated at less than \$500. By comparison, the 1984 electrofishing sample at Clinton Reservoir alone cost nearly \$700. In short, one sampling of 92 largemouth bass (eight inches and longer) cost more than the entire 1984 monitoring program. Tournament anglers reported catches of 339 bass at Clinton in 1984. The monitoring program, obviously, is quite cost-effective.

Biologists have used tournament data 1) to monitor statewide trends in largemouth bass populations, 2) to document population trends on individual impoundments, and 3) to determine the impact of management efforts (such as fish stockings). This information is used to supplement biological samplings for some impoundments but is the only source of trend data for other waters.

Statewide Trends

The average weight of largemouth

bass (12 inches and longer) caught by club tournament anglers decreased steadily from 1977-1984. Normally this would be reason for concern. But the catch per hour of angling increased during this same period. Both these trends resulted from better fishing for high numbers of small fish at the four reservoirs impounded from 1979-1983 (Hillsdale, El Dorado, Big Hill and Clinton). The average weight of bass caught increased in 1985, and the catch rate appears to have peaked in 1983. We may see a trend toward fewer, larger fish as the new impoundments age.

Catch rates of largemouth bass varied from .10-.15 per hour from 1977-1979, before fishing at the newer reservoirs was available. After 1979, catch rates have typically been .2 per hour or better. Catching one bass every four or five hours may seem like poor fishing to some people. But tournaments are held from March through October rather than only during prime fishing periods in the spring and fall. In addition, most tournaments last eights hours or more. Catches of largemouth bass during hot July afternoons are often sporadic at best. For comparison, 1978-1982 statewide catch rates of largemouth bass (10 inches and longer) in Texas ranged from .14-.17 per hour. Tournament fishing for bass in Kansas reservoirs has apparently been quite good in recent years.

This tournament data allows biologists to study largemouth bass population trends on individual impoundments. A good example is the changes observed in Clinton Reservoir's largemouth bass population during the first seven years after impoundment. Catch rates for 8-inch and longer bass were initially high but then declined as the habitat changed. This is a classic example of the new-impoundment syndrome mentioned earlier. The catch rate appears to have stabilized above .2 fish per hour, which is still quite good. As its bass population has matured, Clinton has become one of Kansas premier impoundments for catches of 15- to 18-inch fish.

Management Efforts

Tournament information also can be used to monitor management efforts. Smallmouth bass were stocked in both Milford and Wilson reservoirs during the late 1970s. Smallmouth bass catch rates have generally increased at both impoundments since then, and catches were quite high at both impoundments in 1985. These increased catch rates probably reflect increasing numbers of smallmouth bass in these impoundments. Catches are probably in-

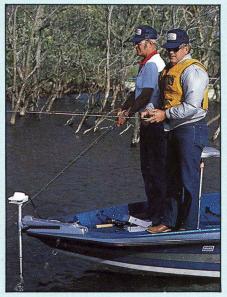
fluenced by angler intentions, too. In past years, some tournaments on these two impoundments were directed at largemouth bass only. It now appears that more clubs also fish for small-mouth bass when fishing at Milford and Wilson reservoirs.

Information that's inexpensive to collect yet allows the biologist to monitor fish populations and accurately measure management practices will be the trend for conservation agencies on tight budgets. Bass fishing tournament data fit into this trend well. The Kansas Fish and Game Commission applauds the voluntary cooperation of the Kansas bass clubs.

Clubs Participating In The 1985 Black Bass Tournament Monitoring Program

Air Capital Bassmasters (Wichita)
Big Hill Bassmasters (Parsons)
Boot Hill Bass Club (Dodge City)
Choctaw Bass Club (Military Bass
Anglers Association, Ft. Riley)
Flint Hills Bass Association (Topeka)
Flint Hills Bass Club (Wichita)

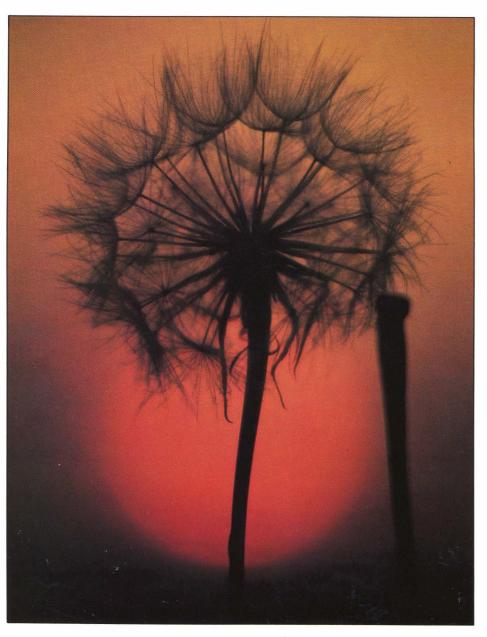
Jayhawk Bass Club (Chanute)
Kansas Bassmasters (Wichita)
Leavenworth Bass Club
McPherson Bassmasters
Russell Bass Club
Safari Bassmasters (Chanute)
Salina Bass Anglers
Salina Bassmasters
Shawnee Mission Bassmasters
Topeka Bass Club
Tri-City Bass Club (Downs)
Twin Lakes Bassmasters (Osage City)
Twin Rivers Bass Club (Emporia)



Ayers, left, and Bersuch doing research.



With this issue Mike Blair, shown here photographing a wildflower, takes over the KANSAS WILDLIFE photographing duties. Blair uses his bowhunting skills to set up near wildlife. That makes him a pretty fair bowhunter, too. Blair, 32, holds a bachelor's degree in forestry management and a master's degree in entomology from the University of Missouri. He is married and has two daughters.



A western salsify flower prepares to launch its fluffy seeds in mid-July. The exquisite detail of the seedhead is evident against the setting sun.

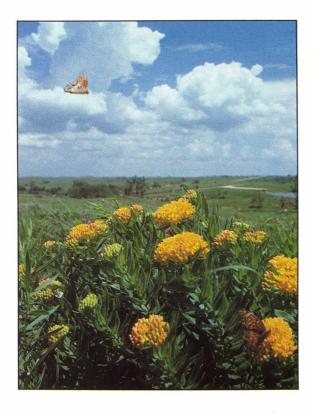
As He Sees It

A five-page photo display of some of Mike Blair's best work . . .

photos by Mike Blair



Resting peacefully, a pair of wood ducks exhibit late-winter bonding that will continue through nesting time.





A variegated fritillary butterfly, far left, crosses white thunderheads as it descends on butterfly milkweed, a favorite food. Maxwell Game Reserve in McPherson County provided this study in color. A deer mouse, at left, peers from its home. The mouse gets its name from its bulging eyes and dark hair, reminiscent of the larger mammal.

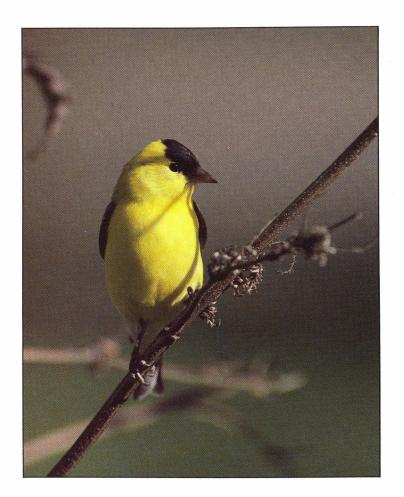




A whitetail doe, alert to danger, waits on springlike legs for a threatening move by the intruder. The chocolate heads of mullein mark the winter landscape at Quivira National Wildlife Refuge.

At right, a formation of Canada

At right, a formation of Canada geese crosses the moon on a bitter winter night. Persistence is needed to capture such a photo. The photographer spent four chilly evenings on a roosting area when lighting conditions were ideal.





Left: A male goldfinch rests momentarily on a horseweed in late afternoon. Goldfinches are late nesters, waiting until thistles ripen in July and August. Unlike most other perching birds, they do not remove their waste products from the nest. Makes for quite a mess.

Above: Later known for their cunning, these red fox kits stare with curiosity at the sound of the camera shutter. Foxes often den close to human dwellings though they may seldom be seen. Parent foxes often provide a "toy" for their young to play with. In this instance, the toy is the white object shown in the lower left corner of the photo.

Below: Barely 5 pounds at birth, whitetail fawns rely on spotted coats for camouflage and leave no odor to betray themselves to predators. The small spot of black hair above this fawn's eye marks the future location of its antlers and distinguishes it as a buck.

Page 40: Great horned owls need big feet to catch prey, but these Barber County great horned owlets display feet that are disproportionately large for their age. These owlets were raised in a darkened barn and found on bare boards atop a small tack room.





HIGH GROUND



by Mike Miller

That Old Feeling

omorrow had to be a good day. As I sat in my living room contemplating the opening of the 1986 Kansas spring turkey season, I glanced at a picture on the wall. The picture shows a young boy flanked by his father and grandfather after a successful hunt. The proud smile on my 12-year-old face sends me back in time.

That day and countless others like it spent fishing or hunting with Dad and Grandad are among my fondest memories. Whether we were sitting in an old aluminum boat on a Colorado lake or walking through a field of milo stubble, a feeling comes back to me. It's a feeling of satisfaction, of being where I always wanted to be.

I think back to one of my fondest memories. It was the fall of my first pheasant season, and opening day was fast approaching. I'll never forget coming home from school and finding a 20-gauge pump shotgun in my closet.

I remember the smell of cigarette smoke on crisp fall mornings and those hunts when Dad's hunting buddy would smoke on the ride to the country. It's a good smell.

I remember my eighth-grade graduation. While other kids received watches or bikes, I received something far more valuable, at least to me — a fishing and hunting lease on a 10-acre farm pond. I remember the first time Dad and I fished the pond. It was a blustery day. I can't recall catching fish although I'm sure we caught some. The recollection that's most vivid, however, is a special satisfying feeling of being with Dad. I still have a lease on that farm pond.

One Christmas comes to mind, too. The day after Christmas to be exact. This was the third straight year I'd been stubborn enough to ask for only one gift — a bird dog. Mom and Dad had debated on whether I could properly raise a large dog while we lived in town. Dad finally decided that I couldn't grow up without one. Mom acted surprised when Dad and I came home with the half-Lab, half-Brittany puppy, but I don't think she really was. That day began a 10-year friendship with a dog that I'll cherish forever. When I left for college Dad began taking care of Sam. I think Dad became as attached to Sam as I was.

But those memories fade as I return to the task at hand. I would be taking Dad on his first turkey hunt in the morning. I wanted to show him a good hunt.

I'd worried that the wind would blow (I had worried about everything), but the morning turned out perfect. As we put on our last layers of camouflage clothing, a turkey gobbled. "Was that a turkey?" Dad asked in a low voice. I nodded and could tell he was feeling the excitement.

I hurriedly started into the darkness. Were we too late? It was getting light. I wanted to set up before the birds came off the roost. As these thoughts raced through my mind, I turned to look at Dad, who was lagging behind me. "Just slow down and enjoy the morning," I told myself. "Things are turning out just fine."

A tom eagerly answered my first yelps when we reached our destination. When the big tom hit the ground I called to him and he responded. I told Dad to get ready, and he nervously shifted his weight. The tom and I called back and



forth for several minutes, but he wouldn't come any closer. Must have some hens with him, I thought. I tried every turkey calling trick I knew, but the bird finally faded away. It was early so we moved and set up again.

The morning remained quiet; Dad and I heard several toms gobbling. That old feeling returned as we whispered about each bird. This was where I wanted to be.

I was calling to some distant birds when a lone gobble shattered the stillness. The bird had to be within 40 yards. I called and he gobbled again, this time closer. When I could hear him working the shelterbelt behind us, I quit calling. Afraid of turning my head, I couldn't see the bird off to my right. I expected him to see the decoy and eventually come into view. But he didn't. Finally I found him and panic set in The gobbler was 60 yards out and moving away.

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"Mike! There he is," Dad whispered as he spotted the bird. I called quickly. The bird turned to us and immediately fanned its tail. Relieved, I glanced at Dad and noticed his right leg quiver. I kept calling to the jake, which was incredibly cautious. The bird tired of the game 15 minutes later, however. The bird was about 40 yards out when it started to leave. I told Dad that it was now or never. I had hoped to have the bird inside of 30 yards, so Dad's first shell was a load of steel 4s. Shoot that first shell, pump quickly and get that load of No. 2s on its way, I whispered to Dad. He inched the full-choked barrel up, aimed and fired. The bird crumpled on the first shot. Before I knew it Dad was already standing next to the bird.

I shook Dad's hand. He smiled as he felt the weight of his bird, and I knew that old feeling once again.



