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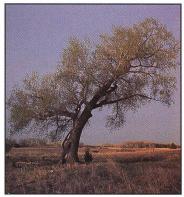
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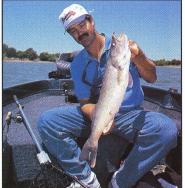
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Editorial Creed: To promote the conservation and wise use of our natural resources, to instill an understanding of our responsibilities to the land.

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



The View From Here

Steve Williams



The Year In Review

ver the course of the past year, the department has achieved many successes. These accomplishments came about due to dedicated teamwork among department employees and our interested constituents. Current trends demand that companies and government agencies maintain their operations at a level the public has grown to appreciate with a smaller workforce . . . and a smaller pocketbook. Because of the commitment displayed by the department employees, we continue to enjoy Kansas' bountiful natural resources.

Our continuing priority is the resolution of past federal aid diversion problems. Numerous changes in administrative and organizational processes have led to substantial progress in alleviating future diversion. Through internal reorganization, a separate Parks Division has been established, funded primarily with State General Funds and Park Fee Funds. Likewise, the creation of a distinct Fisheries Section and Wildlife Section within the Fisheries and Wildlife Division, which includes public lands, will better define the programs and should provide better public service for Kansas' hunters and anglers. These steps have met with favorable response from our constituents and the U.S. Fish and Wildlife Service (USFWS).

Support for Wildlife and Parks remains a priority for Governor Graves. The Legislature has approved the Governor's recommended budget, which, at this time, includes expenditures of \$33,802,675 for Fiscal Year (FY)1997. In addition, the Governor submitted a Governor's Budget Amendment for FY 1997 to provide for the first repayment associated with the USFWS audit for the period of FY 1993-FY 1994. The second payment for the same period will be included in the FY 1998 Governor's Budget Recommendations. The Legislature has demonstrated its commitment to working with the department through approval of the Governor's budget requests.

The Commission's Task Force on Outdoor Kansas met twice during the 1996 legislative session. The task force was assembled last fall to identify new sources of revenue in an endeavor to create a more self-sufficient Wildlife and Parks. Survey questionnaires were mailed this spring to legislators and various constituents to assist the task force. Establishing the task force is a positive approach to identifying those funds that support

our natural resources and guaranteeing future generations better quality, life-enriching outdoor recreation opportunities.

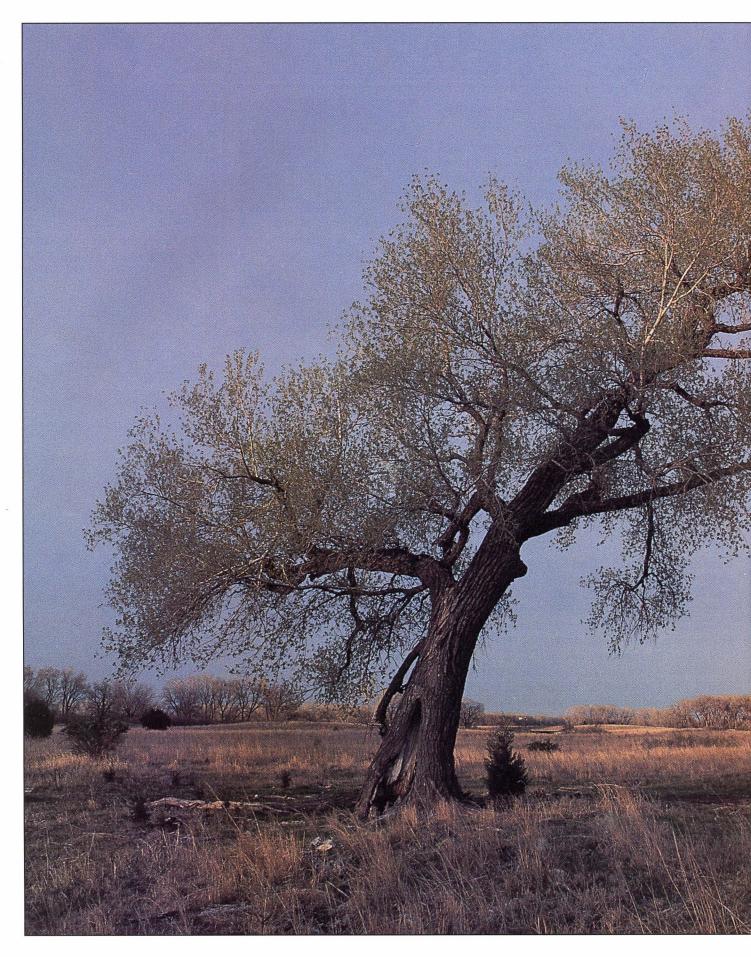
In March, many Kansans participated in the dedication of the first Rails to Trails conversion project in this state. Garnett was the site for the grand opening of the Prairie Spirit Rail Trail. Upon completion, this trail will span more than 50 miles, making it the longest trail in Kansas. Hikers, bikers and outdoor enthusiasts will be able to travel from Ottawa to Iola, stopping along the way to shop, dine at local eateries or relax by city parks and lakes. This popular form of recreation should attract visitors from all parts of the state, as well as people travelling from out state.

Hunters enjoyed more opportunities this year through the Walk-In Hunting Access (WIHA) program. Landowners contracted with the department to allow public access on their land. The program was a success. Hunters appreciated access to more public lands and contributed to the program's success through ethical and responsible actions. And most landowners who participated have signed up again for 1996.

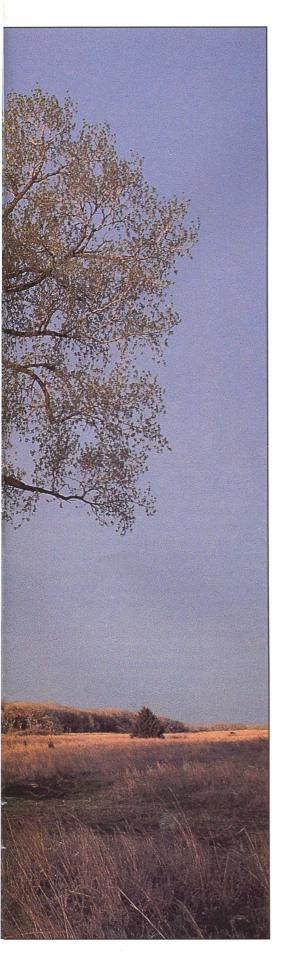
Renovation of Cheyenne Bottoms, a North American wetland jewel, continued this year. Additional Outdoor Wildlife Learning Sites (OWLS) were dedicated at schools throughout the state. Numerous other projects that benefit the people and the outdoor resources of Kansas were initiated or completed last year.

I am extremely proud of what this department has accomplished during my first year. However, we continue to face many challenges. Adequate funding for parks, expanding recreational opportunities, and protection of threatened and endangered species are but a few the issues ahead. I enter the second year of my tenure with a great deal of optimism. Together, we will forge ahead so that all residents of Kansas recognize the soundness of public policy that promotes and supports outdoor recreation. It is, as they say, "the right thing to do." The right thing to do for the economy of local communities and for the rich quality of life we deserve.

Stue Williams



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The Cottonwood: Prairie Pioneer

by Gary Naughton vice president, Foresters, Inc.

photos by Mike Blair staff photographer



Cottonwood: the embodiment of the pioneer spirit, the essence of rugged stubbornness;

Cottonwood: with seed so small that it makes the mustard look like an optimist;

Cottonwood: the opportunist, growing by leaps and bounds when sun and rain are favorable, waiting patiently for months and years when they are not.

The had been walking in the rugged hills of northwestern Pakistan for nearly an hour when, upon entering an Afghani refugee village, I came face to face with an old friend — a cottonwood tree! Even in the confusion of fleeing from the approaching Russian army, these Afghani farmers had taken the time and effort to pack some cottonwood cuttings in their baggage.

In the harsh environment of Afghanistan, these farmers had come to rely on the cottonwood as a source of fuel, shelter, and building material, just as the Kansas pioneers did 150 years ago. And they proudly told me that their best trees had been brought to them from the middle of America. Kansas? Nobody knows for sure, but I like to think so.

Until only a few years ago, and indeed for almost all of the 20th Century, a unique cottonwood tree stood on the Capitol grounds in Topeka, just to the southeast side of the Capitol itself. This was a big tree! Over the many years of its life, it had been hit by lightning several times and had suffered major damage from tornadic winds and ice storms — not an uncommon fate for a Kansas cottonwood.

Now, Kansas people have vivid imaginations, probably a necessary trait for coping with the sometimes inhospitable prairie environment. So, it is no surprise to any real Kansan that there is a legend about that old tree at the Capitol.

The most persistent legend springs from the fact that the cottonwood is one of the trees that can be transplanted by taking stem cuttings from a living tree and sticking them in the ground. Then, just as the "eyes" of a potato give rise to a new plant, the buds along the cottonwood stick develop into new growth and give rise to a new tree. The Kansas pioneers, like the Afghani refugees, knew this and took advantage of it in getting new trees started.

The high sugar and starch content of the bark and sapwood of a cotton-

wood cutting provide necessary energy to push new growth. Among one of the more interesting miracles of the plant kingdom, the buds of the cottonwood stick develop into roots when in the darkness of the soil, and into leaves and branches when in the light of the sun. The legend of the Capitol cottonwood is that the tree grew from a surveyor's stake that was driven into the ground when the East Wing of the building was built in the 1870s. This myth has been proven false, but who cares? If a legend of this sort helps people to understand the principle of starting cottonwoods from cuttings, and helps people develop a greater appreciation for the trees themselves, it can't be all bad. There was a point when we all profited from believing in the Tooth Fairy!

To set the record straight, the Topeka Capital-Journal carried an article in its August 21, 1927 edition, which shared a letter from Fred Gurtler of Topeka, one of the stone masons who worked on the Statehouse. Gurtler stated that he and his fellow workers took special care to protect and work around a "fast growing young cottonwood tree" that was growing on site.

Experiments conducted over the years by forestry research scientists show an even more remarkable fact: if a cottonwood stick is laid flat on the ground in a shallow trench and



Cottonwood seed flies in early June, carrying up to 3 miles on windy days.



Cottonwood seeds that land on water will blow to the windy shoreline. As water recedes, the seeds take root in the moist soil producing a ribbon of cottonwood trees.

covered with about an inch of soil, the buds will develop into both roots and shoots. The roots develop first, and after beginning to function, draw moisture from the soil. The surplus growth energy in the buds and the bark of the stick pushes new shoots toward the warmth of the topsoil, and new trees emerge from each of the buds along the top of the stick.

But nature is as fickle as she is clever. The seed of the cottonwood, once it leaves the small pod on the mother tree, is only viable for about three days. Even though an individual mature tree may produce 25 million to 30 million seeds in a season, the odds are really stacked against them. Just consider:

Jeff the seeds land on fresh, bare soil with a wet surface, they will usually germinate within 48 hours. The timing of seed-ripening is closely in tune with the wettest time of the year in Kansas;

Jef the wind is blowing (and it usually is in early June) when the

seeds leave the tree, their individual "cotton" parachutes may keep them airborne for several hours, enough to drift 2-3 miles.

✓ If the seeds drop on water, also common during this late-spring flood season, hordes of them will be blown into the shoreline. As the water recedes, the seeds will cling to the bare soil along the water's edge and find their perfect habitat. This will produce a ribbon of new trees strung along the edge of the high water line.

If the seeds are blown from the neighbor's tree into your yard, they will be an unwelcome nuisance as they cling to window screens, car radiators, and air conditioner filters.

The high concentration of sugar and starch in the bark of the young cottonwood stem, which gives it the energy necessary to push new life from a cutting, is also responsible for the ruin of millions of young trees each year by browsing wildlife.

The cottonwood, like its

cousin the willow, is popular with beavers. Cottonwood sticks are cut and hoarded by beavers as part of their winter food cache.

In late winter and early spring, as other sources of food become scarce, cottonwood buds provide high-energy food for squirrels, turkeys, deer, and many other species of wildlife.

✓In spring when cottonwood leaves and shoots are new and tender, they are relished by deer.

Cottonwood has survived through the millennia because it is tough, resilient, and takes advantage of every opportunity to grow and regenerate itself. Break it off, eat it down to the ground, or burn it in a prairie fire and you will see it sprout again and again from its living remnants. Starve it for water during the long droughts on the plains, and it will drop its leaves and the young twigs and branches will die, but the tree will spring back to life when the rains return.

About the only thing that cotton-wood trees can't overcome is lack of sunshine. New seedlings need to have their heads in the sunshine. If they sprout (or are planted) under the shade of other trees, they quickly give up and fail. The cotton-wood tree is a pioneer in every real sense of the word; new soil and open space are its demands.

Given the right circumstances of soil, moisture and sunshine, cotton-woods are the fastest growing tree native to the continental U.S. In just one year they may grow to more than 12 feet tall and 2 inches in diameter. Planted in carefully spaced plantations, cottonwoods can produce more fiber per acre, per year than the famous redwoods and can be ready for harvest in less than 20 years.

Because they produce male and female flowers on separate trees, landscape nurserymen have long practiced gender prejudice against the "cotton" producing females. The tree you buy today for landscaping is probably a cottonless male selection.

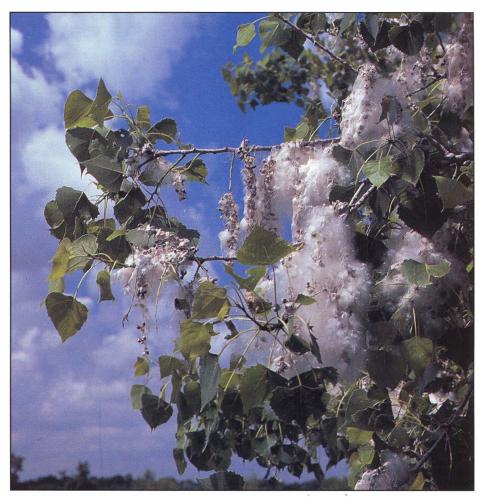
All things considered, it's no

wonder that we see so many old and grotesque cottonwood trees. They are the products, the caricatures, of their harsh environment. But, if you see cottonwood in its softer climate, say in Leavenworth County, you will find a tree that may grow straight as a ship's mast and more than 125 feet tall. Except for the loafing nests of squirrels and occasional rookeries of great blue herons, these trees tend to be much more attractive to loggers than they are to wildlife.

If you were to plot a cross-country line from Leavenworth to Elkhart, and stop every 50 or 60 miles to observe the cottonwoods, two things would become quickly obvious as you move toward the southwest: the trees become progressively shorter and more heavily branched. The changing environment creates the changing form of

the trees. Growing in the thick forests of Leavenworth County with its higher rainfall and typically higher humidity, the cottonwoods present themselves with long trunks and small tops. But such trees would be smashed down by the strong winds and low humidity of Morton County — to thrive there requires a short, stout trunk with broad, heavy limbs to dissipate the wind.

In a technical sense, the transpiration pressure, which causes a plant to give up the moisture from its growing parts, becomes so great in arid and semi-arid areas that the plant has no moisture left for growth and its extremities (branches). So, the life-giving water is literally sucked up through the leaves of the cottonwoods at such a fast pace that, once they reach 45 or 50 feet tall, they can no longer sus-



Some years, cottonwood seed can blow like snow, clogging window screens and air conditioners. Most landscape cottonwoods are the male, or "cottonless" variety.

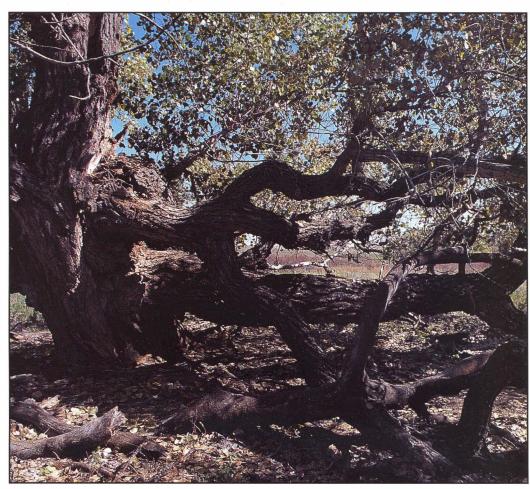
tain additional growth and life at the same time. These short, fat cottonwoods have adapted to sustain life rather than persist in growing tall.

It's only fair to point out here that some foresters and many botanists have been arguing for years about the Kansas cottonwood — is it only one species, the Eastern cottonwood (Populus deltoides), or is it really two different species, becoming Plains cottonwood (Populus sargentii) somewhere in central Kansas and from there westward? Generally, I want to say "Who cares?" But, the world seems to be divided almost equally between people who lump things together and people who "split hairs," someday somebody in the latter group will probably make a definitive conclusion about this differentiation, and then the thing will be settled (maybe). But it won't be me! After all, my training and interests in trees run toward the practical and functional rather than the specific and technical.

All of this scientific exploration and academic hair-splitting has also created an interesting problem for the people who are involved in the measurement and certification of candidates for the "Register of Big



Cottonwoods draw moisture from the soil until it is gone, dropping their leaves during dry summers.



A product of their harsh environment, cottonwoods in western Kansas have adapted by not growing as tall as eastern counterparts and developing stout limbs that defy the wind (almost).

Trees," sponsored by the American Forestry Association. Somehow and at some time in the past, the local sponsors of this program managed to certify both an Eastern and a Plains cottonwood as the Kansas champions for their species. Now,

local pride and vested interests being what they are, the local sponsors of these fine old cottonwoods don't want them to be declared as the same species, because the smaller of the two will then lose its prestige as a champion.

Perhaps this confusion really provides a practical illustration of the central theme of Charles Darwin's "Origin of Species." Cottonwood, as we

know it in Kansas, shows the response of a plant species to changes in the stresses of its environment, allowing for the gradual survival and domination of certain individuals which have, through the process of breeding accident and natural selection, managed to adapt and survive. At some point this results in specialization to the extent that a species is evolved, but we can't always tell when that point is reached.

The short span of Man's memory and understanding are such that we can't tell at any one point in time whether the cottonwood is continuing to adapt and evolve to its circumstances, or if it is on its inexorable path toward extinction. But, just like the securities broker who will ask that you look at the past in order to predict the future value of a stock, I would invite you to dwell for a moment on a few

facts about cottonwood trees:

We know that cottonwoods are old in a botanical sense because of archaeological evidence predating the ice-age. Current estimates point to their origin during the Jurassic Period, making them a little older (a few million years) than the chalk formations of the Smoky Hills.

Modern scientific theory tells us that cottonwoods are more ancient than the oaks (for example) because the male and female flowers of cottonwoods are produced on separate trees. This supposedly gives them an inferior opportunity to regenerate themselves and, therefore, to survive in a calamitous world.

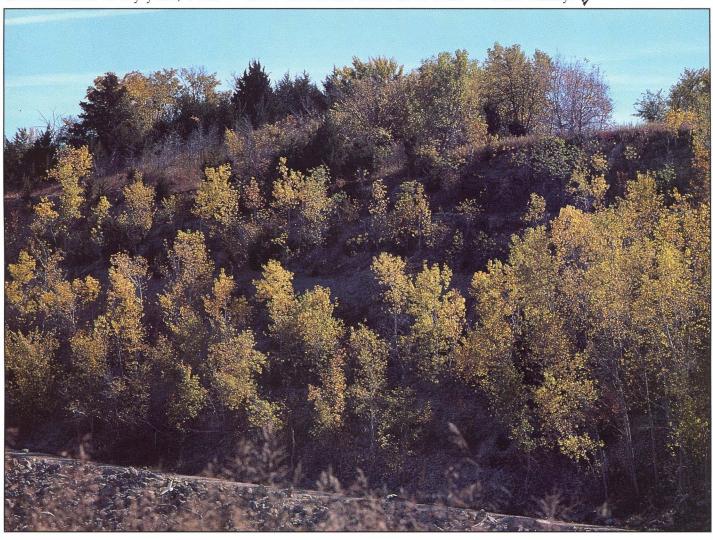
We expect, and anticipate, the bright yellow fall color of the leaves of our cottonwoods. But cottonwoods will also drop their leaves in mid-summer of dry years, while other trees in the neighborhood will keep their leaves. This is because the cottonwood, as a more ancient plant, has no means of slowing the loss of water from its leaves. More advanced plants shut down their leaf pores (stomata) during stress — cottonwoods just keep pumping until the soil runs dry, then it drops its leaves until moisture returns.

Prairie "faddists" as well as some respected folks in the scientific community seem to be hung up on the notion that Kansas, as a prairie state, was a treeless sea of grass prior to settlement by European immigrants. It's not hard to believe that millions of acres of grass, as far as the eye could see, could overwhelm a few hundred thousand acres of forest and woodland. But we shouldn't doubt that the cottonwoods were here as part of the environment of the Native Americans. How else could there have been

enough beaver to lure trappers into this wilderness as early as the 18th Century? How else could there have been tepee poles? How else could the early botanists, such as C. S. Sargent (from whom the Plains cottonwood gets it Latin name sargentii) have charted the geographic range of the species across the plains in the 1880s? I rest my case and applaud the cottonwood as the epitome of toughness and as an example of life on the Plains.

Largest cottonwood trees on record: Eastern cottonwood, (1990) 28 feet, 4 inches in circumference, 113 feet tall, 104 feet crown spread, 479 total points, 1/2 mile southwest of Osawkie in Jefferson County.

Plains cottonwood, (1989) 30 feet, 8 inches in circumference, 110 feet tall, 115 feet crown spread, 507 total points, Avery Road south of Plevna, Reno County.





Haired and Feathered

text and photos by Mike Blair staff photographer

Once thought to be a tool only for trout, the flyrod is now embraced by a growing number of Kansas warmwater anglers. Learning to create their own flies is a natural evolution of the art, as well as a fun and satisfying hobby.

The fly was a clumsy affair, a bit of muskrat underfur wrapped and wadded onto a size 10 hook. It was supposed to resemble a tiny freshwater shrimp called a scud. But it was too big, looked nothing like a scud, and was so ragged that I would never have paid for it. Even so, I eagerly attached it to my leader for one

reason: I tied it myself.

It was my first effort from a fly tying kit received at Christmas. After several months of procrastination, warm days had finally prompted me to get started. I'd been flyfishing several seasons with commercial flies, and now it seemed a natural extension to tie my own. But with no one to teach me, and

the kit's few instructions geared for trout flies, I was tentative. Fumbling fingers, strange tools and miniscule materials combined to produce a laughable first production.

But the fish didn't laugh. They bit. On my second cast of the new season, the line jerked taut and a 7inch bluegill showed its approval of the shabby scud. Three more 'gills



Getting started tying flies can seem overwhelming. Just look at the enormous selection of materials available from this outlet. However, a simple selection of materials in basic colors is all that is needed to create a variety of warmwater flies.

were taken before the fly fell apart. I was amazed and delighted that fish would strike my own creation. From that moment, I was hooked on fly tving.

Since then, I've been fortunate to fool lunker bass, walleye, catfish, crappie, carp and sunfish on hairand-feather flies tied at home. Fly tying has opened a door of discovery on how fish feed, and provides a pleasurable pastime in the off-season. Gone is the worry about running out of favorite flies when fish are biting. In short, fly tying has added a new and exciting dimension to the sport of fishing.

Fly tying certainly isn't new but is relatively obscure in Kansas where spinning and baitcasting dominate. Fly fishing has historically belonged to trout country, but flyfishers are currently waking to the idea that warmwater fishes are fair game, too. Fly shops are opening throughout the flatlands to accommodate this interest, and more Kansans are learning the art of tying flies.

Getting started is easier, too, as

numerous instructional books and videos pour into the marketplace. For most beginners, a fly-tying kit provides the best starting point. Kits include the necessary tools and basic materials for a range of fly sizes and styles. Kits packaged for warmwater species are best for Kansas, and may include such items as foam and cork bodies for poppers, deerhair for bugs and minnow patterns, and large hooks suitable for big fish.

A hook vise is the fly tyer's most important tool. The vise holds a hook stationary while materials are added and is adjustable to receive a range of hook sizes. Vices need not be expensive. They can cost more than \$500, but an entry-level vice can be purchased for under \$25. The important thing is to select one that has crisp action without play in the jaws. The hook must remain immobile so that the fly can be cinched tightly. Done right, a well-tied fly may catch more than 50 fish before falling apart.

Other indispensable tools are scissors, bobbins, and whip fin-

ishers. Scissors are used to cut materials ranging from delicate feathers to stiff wires. It's helpful to have several kinds. One pair should be small, with very fine, sharp points for cleanly trimming threads and hackles. A heavier model is best for cutting coarse materials such as deer hair, heavy monofilament, or wire used in weighting flies.

Bobbins are useful for managing threads, flosses and related wrappings. Their function is to keep tension on the tying thread while hands are busy elsewhere. Since various thread sizes and colors may be used, it's easiest to have several bobbins loaded with different wrappings.

Whip finishing tools are important in making a final, non-slip "knot" that prevents a fly from unraveling. After completing the fly, many turns of thread are stacked just behind the hook eye to form a head. Though glue is usually applied to the head, a tight knot makes the fly even stronger. Whip finishers do this by tightening a number of thread wraps over a



While flyfishing has been considered a method reserved for trout, the popularity of catching warmwater species is growing, as is the selection of warmwater flies.

long, tucked end of thread. Commercial whip finishers are inexpensive and efficient but can be tricky to learn to use. Instructional videos help.

The materials used in making flies are nearly endless. In addition to natural hairs, furs and feathers, many kinds of synthetic materials add flash and sparkle. Beads, wires, artificial eyes, foam, cork, and rubber are typical materials used in modern day fly patterns. Useful materials can be collected while hunting, gathered from farms, scrounged from drawers, or even taken from road-killed animals. Of course, most materials may also be purchased from fly shops or catalog suppliers. But while single items are inexpensive, it's easy to build material inventories totalling hundreds of dollars.

Money can be saved by caping legally taken wild turkeys, quail, pheasants, prairie chickens, geese and ducks. Skins and tails of small game and furbearers provide excellent dubbing and streamer hair. Prime big game pelts offer hair used in large, floating bass patterns. All skins and capes should be fleshed, rubbed with borax and dried to preserve for future use. A single skin or cape can provide material for years of tying.

Though I haven't tried it, self-provision can be taken a step farther, by dyeing collected materials. Popular colors are red, yellow, blue, black, white, chartreuse, olive, and brown. I buy these colors readymade to avoid a messy process and to ensure the brightest hues.

Obviously when beginning, it's neither wise nor necessary to start

with a huge inventory of materials. But there are some basic elements that a beginning fly tyer should have on hand. Some or all may be included in kits. If absent, they can be purchased separately.

First are tying threads. For large flies, heavy thread is needed to prevent breakage when cinching coarse materials. Fine threads for trout flies are inadequate for most Kansas patterns. Ask for 3/0 monocord or its equivalent. For big deerhair patterns, Kevlar thread is even stronger. All threads come in a full range of colors, but to begin with, two colors - black and white - are adequate.

Hooks vary by size and style of fly. The best advice on choosing hooks is found in instruction books that detail materials needed for each pattern, along with step-by-step tying instructions (my favorite is *Fly Tying and Fishing for Panfish & Bass* by Tom Keith, Frank Amato Publications, Portland, OR). Fly hooks are purchased by company, number and size, such as Mustad 9672, size 10. Hooks come in packages of 25 or 100. Because they are specialty items, fly hooks must usually be ordered or purchased



A good vise is the most important tool for a beginning fly tier. It should have fine jaws that hold the hook without wobble. Vises range in price from \$25 to \$500.



A selection of flies that will take a variety of warmwater species include those pictured above. The author has taken many species on these creations including largemouth, spotted, striped and white bass, channel cats, bluegill and redear sunfish and carp.

directly from fly shops or outfitters.

Materials that form a fly's bulk and color are called dressings. Again, many basic materials are included in kits, but for warmwater patterns, the following supplies are recommended: yellow, black and olive medium chenille; black, white and chartreuse marabou; black, yellow, and grizzly saddle hackle; white and gray streamer hair; natural, red and yellow bucktail; black and natural deer body hair; red yarn; natural hare's mask; black and purple rabbit strips; peacock herls; turkey quills; pearl flashabou; gold oval tinsel; medium flat silver tinsel; black floss; 1/24 oz. lead eyes; bead chain; and lead wire.

These items will tie dozens of fly

patterns suitable for most Kansas gamefish. Though it's nice to have a choice of colors, starting costs can be lowered by staying basic. Generally, dark-colored flies are most productive in murky water, and light-colored flies are best in clear. If I had just two choices, I'd tie all my patterns in black or yellow.

The creed of the trout fisherman is, "match the hatch." To a lesser extent, that's good advice for Kansas fly tyers as well. Warmwater fishes might eat a variety of foods, but can be selective based on what's most available at the time. For instance, a crappie might eat an insect nymph that happens by, but is usually more interested in minnows of a particular

size and color. Therefore, fishing with a minnow imitation is often more productive when crappie fishing.

The same is true of largemouth bass. In late summer when differential grasshoppers are plentiful, a yellow topwater bug often draws immediate response. But throw a surface popper when bass are feeding below on crawdads, and you'll have little success. Because of this, fly tying leads to a greater understanding of how fish feed at various times of the year. And it gives the opportunity to experiment with new patterns.

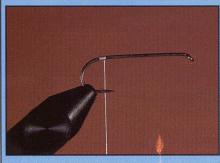
Generally for Kansas fishing, a selection of flies for all occasions would imitate minnows, frogs,



This fine stringer of black crappies was caught on an eastern Kansas state fishing lake using a Black Ghost. The flyrod can adapt to just about any species and condition.

CLOUSER DEEP MINNOW

Thread: white monocord; Hook: TMC 5262, sizes 2-8; Weight: lead eyes, 1/24 oz.; Body: white streamer hair, yellow bucktail; Red flashabou.



1. Place hook in vice and tie on thread at bend of hook.



2. Wind thread forward and tie on lead eyes 1/4 inch behind hook eye. Wrap lead eyes with figure eights to secure eyes to hook. Cement with Zapa-Gap or other quick-drying, waterproof cement.



3. Lay in a bundle of white streamer hair just behind the eye of the hook. Hair should lie above lead eyes and extend beyond bend of hook. Wrap the bundle in front of lead eyes with tying thread, 20 times or more to secure and cover hair bundle. Then wrap several times behind lead eyes to further secure to hook.



4. Turn hook upside down in vice. Tie in 6 or 8 strands of red flashabou to form lateral line. Secure in front of lead eyes only.

crawdads, grasshoppers, aquatic insects, worms and flies. Fortunately, the patterns need not be finely detailed, but rather suggestive of their real counterparts in size and color.

An example is a popular pattern called a Clouser Deep Minnow. The pattern is normally tied gray over white, to reasonably imitate the familiar gizzard shad found in Kansas lakes. On this fly, I've taken reservoir stripers, white bass, largemouth bass, walleye and crappie. But in farm ponds, I've found that the Clouser is more effective when tied yellow over white. No minnow is that color, but the pattern evidently suggests a young bluegill. Big bass and crappie readily strike the fly.

Often, the size of a fly is as important as color. Last spring while fishing for bass in a clear pond, I used a large, 1/0 yellow Wooley Bugger that had been successful there the previous fall. Though a few small bass were



5. Lay in a sparse bundle of yellow bucktail and tie on in front of lead eyes. Wrap with thread until well-cinched and bucktail is covered. Do not wrap bucktail behind lead eyes.



6. Tie on six peacock herls in same manner as step 5. Wrap to form head, whip finish and cement head.

WOOLEY BUGGER

Thread: red monocord; Hook: TMC 3761, sizes 2-10; Tail: yellow marabou; Body: yellow chenille; Hackle: yellow hackle; Weight: lead wire



1. Secure thread to hook shank at bend. Wind on lead wire and wrap with tying thread. Secure with Zap-a-Gap or waterproof cement.



2. Beginning at point above hook barb, tie in a clump of marabou feather fibers. The fibers should be as long as the hook shank.

fooled, nothing over two pounds hit the fly during several hours of trying. Occasionally, light taps indicated that pre-spawn bluegills were toying with the fly, so I switched to a miniature, size 6 version to catch them. During the next 30 minutes, I caught many larger bass, including a seven-pounder. Another bass estimated at nine pounds spit the barbless hook in a spectacular jump beside my float tube. Though I don't know for sure, I assumed that the small Wooley Bugger must have represented a particular size of forage minnows that the bass were feeding on.

Many traditional fly patterns are excellent for Kansas gamefish. These are good to learn on, since they can be tied from illustrated recipes found in books or videos.



3. Tie in a yellow hackle feather at hook bend, concave side toward the hook. Then tie on a 6-inch piece of yellow chenille at same point. Wind tying thread forward to hook eye.



4. Wind chenille forward to a point 1/8 inch behind hook eye and tie off with thread. Trim extra chenille.

It's fun to experiment with new patterns, or even to create your own, but a good supply of traditional favorites is really all that's needed for great fly fishing. As I enter each season, I make sure to tie the following for each species:

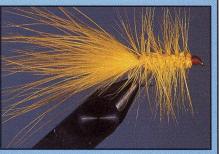
Bass: Clouser Deep Minnow; Bugger; Near-Nuff Crawdad; Swimming Frog; Deerhair Popper; Hare Worm.

Crappie: Black Ghost; Mickey Finn; Clouser Deep Minnow; Black Gnat.

Sunfish: McGinty Nymph; Gold-Ribbed Hare's Ear (GRHE) Nymph; Scud; Beadhead nymph; Black Gnat; Yellow Popper; LeTort Cricket; Royal Wulff.

Stripers, White bass, Walleye: Clouser Deep Minnow; Sheep Shad; Lefty's Deceiver.

Channel Catfish: Black Ghost; Black gnat; Wooley Worm (treat all flies with fish scent.)



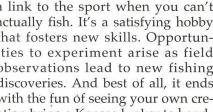
5. Wind hackle forward to same point behind hook eye and tie off. Trim, wrap with thread to form head, whip finish and cement.

Trout: Gold-ribbed Hare's Ear Nymph; Black Gnat; Wooley Bugger; Black Ghost; Beadhead Nymph

The best way to buy fly-tying materials is to visit a fly shop. There, experienced tyers can answer questions and sometimes even demonstrate techniques. Such shops exist in large cities, but for most anglers, mail order businesses are more convenient. Fortunately, many companies produce excellent fly supply catalogs. Orvis, L.L. Bean, Cabela's, Bass Pro and many others sell tying materials by mail. Usually, a phone call is all that's needed to secure a free catalog.

Over the past several years, I've done phone and walk-in business with an excellent fly shop in Kansas City. K&K Flyfisher's Supply in Overland Park has a full range of materials adequate for trout, warmwater or saltwater species. They understand warmwater fishing and are extremely helpful with advice. They offer free shipping on orders totalling \$20 or more and have a toll-free number (800-795-8118) to secure a catalog or supplies.

Fly tying adds to the enjoyment of fishing in many ways. It provides a link to the sport when you can't actually fish. It's a satisfying hobby that fosters new skills. Opportunities to experiment arise as field observations lead to new fishing discoveries. And best of all, it ends with the fun of seeing your own creation bring a Kansas lunker to hand.







Personal Watercraft Safety

by Cheri Swayneboating education coordinator, Topeka

photos by Mike Blair

These popular craft are attracting a lot of first-time boaters. Being familiar with boating regulations and completing a boating education course can help ensure riders safe and legal fun on the lake.

Personal watercraft (PWC), more commonly known by trademark names such as Jet Ski, Sea Doo, or Waverunner, account for one-third of the power boats sold in the United States. The sale of PWCs has increased dramatically over the last few years. However, these small watercraft have been around for 20 years. Early models were operated

standing up and required an aggressive and strong operator. Today PWCs can carry one, two or three people, depending on the model, and are generally much easier to operate. Modern PWCs are lightweight and easily trailerable. Some models can even tow a skier or person riding an inflatable.

A recent survey of 22,000 PWC users provided some interesting

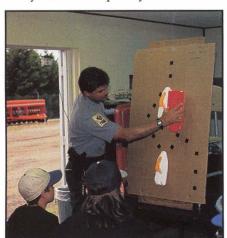
facts. The average operator is a male, 38 years old. The typical PWC is on the water two to five times a week and is operated by seven different people. The average boat is used about twice a month and operated by two different people.

One of the factors that makes PWCs unique is the jet drive propulsion. Water driven by a jet pump pushes the craft, utilizing an

impeller instead of a propeller. While there is no exposed propeller as on most boats, hands, hair, feet and clothing must be kept away from the water intake, located on the bottom of the craft. Water must be propelled through the jet drive in order to maintain steering control.

PWCs are considered Class A boats and must adhere to the rules and requirements of any Class A craft. They must be registered and the registration must be kept on board. Registration numbers must be correctly displayed, and PWCs are also required to have a type B fire extinguisher on board. If the craft is equipped with an engine cut-off switch, it must be attached to the operator, the operator's clothing or personal flotation device (PFD). All persons riding on the craft must wear a PFD, or life jacket. Those PWCs with inboard engines must also

have a backfire flame arrestor. Operators between the ages of 12-15 must carry on their person proof that they have successfully completed a U.S. Coast Guard approved safe boating course. Navigational rules and speed limits must be obeyed, and capacity load limits



A boating education class is required of young riders but a good idea for all.



Personal watercraft, a.k.a. jet skis, sea doos, waverunners, are enormously popular today. Early models required the rider to stand. However, today's models allow up to three people to sit.

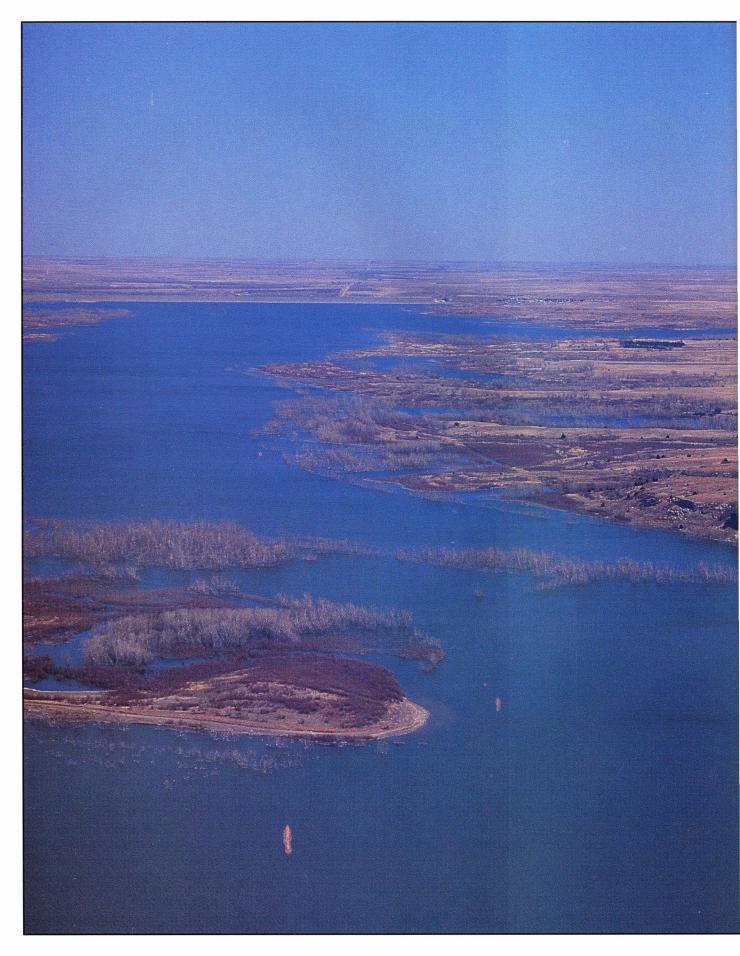
listed on the craft's warning label must be observed.

Suggested equipment and safety items for PWC operators include eye protection, a whistle or sound signal device and foot protection such as deck shoes or neoprene shoes. Gloves can help maintain a grip on wet controls, and a wet suit or shortie wet suit is recommended to protect against cold water or injuries in a fall.

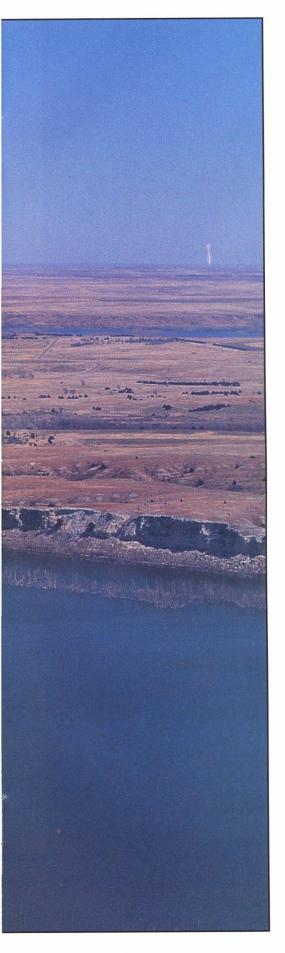
The popularity of PWCs has attracted many first-time boaters, and as a result of these inexperienced operators, boating accidents have increased. The craft are small and hard to see, and they can operate at high speeds and change course quickly. Careless operation such as wake jumping, surf riding and weaving in and out of boat traffic causes many accidents. PWC owners should remember that the craft are not toy and must be operated responsibly. Learning about

PWCs and how to safely operate them is a good first step.

PWC education can be obtained several ways - join a club, subscribe to a marine magazine with regular PWC columns or take a safe boating class. There are two clubs in Kansas — the Kansas City Watercraft Association, P.O. Box 13571, Kansas City, MO 65199-3571 and the Kansas Jet Ski Association, 920 N. Kokomo, Derby, KS 67037. Classes are sponsored by the Department of Wildlife and Parks, the U.S. Coast Guard Auxiliary and the U.S. Power Squadron. The department also offers a home study course. Contact the department's office in Topeka, 900 SW Jackson, Suite 502, Topeka, KS 66612; (913) 296-2281. Boat U.S. Foundation maintains a list of safe boating courses taught in Kansas as well as in other states. Contact them at 1-800-336-BOAT.



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GLORY DAYS RETURN TO WESTERN WATERS



by Lynn Davignon, district fisheries biologist, Hays and Steve Price, district fisheries biologist, Stockton

If you haven't been to Cedar Bluff, Kirwin, Webster or Sebelius reservoirs recently, you might not recognize them. The water has returned, and fishing should be outstanding.

In the September/October 1983 issue of Kansas Wildlife (now Kansas Wildlife & Parks) an article "Eyes On The West," depicted the effects of dewatering on western Kansas reservoirs. Completed in the 1950s and 1960s, these Bureau of Reclamation (BOR) reservoirs were designed to provide irrigation, recreation and flood control benefits. Changes in hydrology that occurred after construction, however, resulted in reduced inflows, and consequently, these projects were failing to meet

expectations due to inadequate water supplies when the article was written. Critically low water levels during the 1970s exemplified the severity of the situation. By 1981, Cedar Bluff, Webster, Kirwin and Sebelius were 43, 28, 34, and 28 feet low, respectively.

These low water levels might be best illustrated by comparing surface acres of water at normal levels to surface acres at the low levels. Cedar Bluff covered 6,000 acres when full, only 500 at its low point, Webster covers 3,739 full, only 815



After years of being extremely low, people who enjoyed Cedar Bluff had accepted that it might never again be full. However, after heavy rains in 1993 and 1995, the lake has nearly refilled. Facilities that were once far from water are now in use.

at its lowest point. Kirwin was 1,350 acres at its low point, 5,080 full. And Sebelius was reduced to 430 acres, but now covers 2,230.

In response to the concerns of the various water interests, the BOR conducted the "Solomon River Basin Water Management Study, Kansas" (Special Report, 1984). Ground water mining and conservation practices such as terracing, stubble mulching and pond development were defined as factors which reduced the amount of water flowing into the lakes.

Reservoir water levels were relatively stable during the 1980s with a modest rise occurring in 1987. This was short-lived, however, and levels spiraled even lower. Record lows occurred at Webster in 1991 and at Cedar Bluff in 1992, illustrated by maximum depths of only 8 feet at Webster and 12 feet at Cedar Bluff.

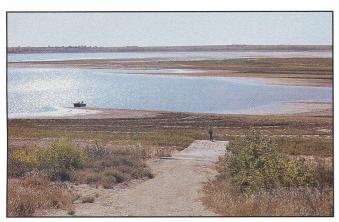
The depletion of water supplies impacted agriculture, as well as fish, wildlife and recreation resources. Inadequate storage allowed only short releases from the bottom of the irrigation pools, providing less than full supplies to farms and prompting a reduction of the number of acres irrigated. Impacts on the aquatic environment included degradation of water quality and a loss of habitat for fish, waterfowl and other aquatic wildlife. Water recreational use

declined substantially. Limited access to the water, remote facilities, deterioration of the sportfisheries, and a loss of aesthetics were primary factors curtailing public use.

This was a period of transition for all. As the resources changed, so did use and management. Irrigators adjusted farming practices for drier conditions. Public access facilities



This boat ramp at Cedar Bluff vividly shows the magnitude of the low water. Park facilities were also nearly unusable when the water receded.



Webster Reservoir, near Stockton, also experienced drastic reductions in water level. Recreation activity fell accordingly.

were developed or altered to accommodate low water levels. Hunting and wildlife viewing opportunities became more prevalent as deer, turkey, upland game and other species benefitted from

the expansion of habitat as the dry, fertile lake bottoms revegetated. The various interests adopted a mood of acceptance. Simply stated, most agreed that this was going to be the way of the future, at best.

However, complacency evolved into optimism in 1992, after a revival of the above river systems Webster, Kirwin and Sebelius reservoirs. Heavy, late-summer rains within the watersheds produced favorable inflows that christened a rebirth about to take place. Cedar Bluff joined the revival in the spring of 1993.

A fixed, wet weather pattern over the Midwest during 1993 accounted for near-record precipitation and phenomenal stream flows not seen since the 1950s. Inflow to the four reservoirs in 1993 alone totaled nearly as much as that for the entire decade of the 1980s.

Inflows were also above average in 1994 and 1995 for all four lakes, resulting in all-time high water levels at Webster and Kirwin by June of 1995. Webster peaked at

14.6 feet above conservation pool level (CPL), while Kirwin reached 7.8 feet above CPL.

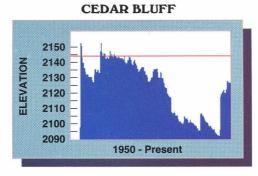
Expanses of timber, brush, and other terrestrial vegetation were flooded, creating unprecedented conditions (when these reservoirs were built, the basins were cleared). Other areas were also covered including

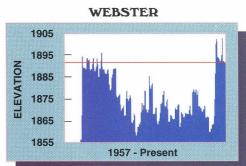
rocky ledges, sand beaches, and cattail flats, all combining to create ideal fish habitat. This was viewed as a miracle by fishermen, dreaming of a future fisheries explosion. All in

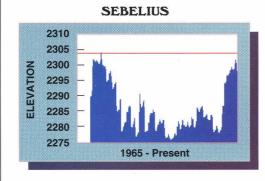
all, a total of nearly 11,000 acres of new, outstanding fish habitat was created among the four lakes.

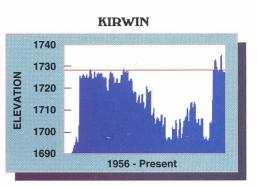
The response from fish communities to the initial water rises in 1993 was dramatic. Virtually all naturally reproducing species experienced excellent spawning success that year, and an abundance of prey, primarily gizzard shad, allowed exceptional growth. Openwater species such as walleye, white bass and wipers did well, while members of the sunfish family (black bass, crappie, and bluegill) came on especially strong. Sunfishes tend to benefit the most from water level recharge in western Kansas reservoirs since prosperity of these populations is closely correlated to shoreline habitat. Conversely, they tend to suffer the greatest when

Water Level Histories









These graphs portray water level histories for each of the four western Kansas reservoirs. Water level, or surface elevation, is represented by the top edge of the blue shaded area. The red line is conservation elevation, or what is commonly called full pool.

low-water conditions result in the loss of shoreline cover.

Overall, production was disappointing in 1994 and 1995. Many species experienced poor to mediocre spawning success and prey supplies were limited due to low numbers of young-of-the-year gizzard shad. These conditions were the most severe at Webster due in part to a falling water level resulting from a flood release during the spring and summer of 1995. Some of the fish spawned in 1993 will undoubtedly be lost as a result of prey shortages. Smaller cohorts such as crappie and white bass experienced slow growth and physical condition was poor at the end of the 1995 growing season. All in all, however, the fishery is much improved at Webster and even more so for the other three lakes. Gizzard shad production is expected to rebound in 1996 since adult shad density has increased substantially due to excellent recruitment of the 1993 year class. Given water level stability and favorable weather conditions, food for sportfish should be plentiful during the upcoming growing seasons.

This western Kansas reservoir revival has also witnessed a welcomed return of recreationists of all kinds. With more acres of water to enjoy, boating activities have skyrocketed. Campgrounds, once miles from the lake's shoreline and deserted, are now lakeside and full nearly every weekend. State parks at Cedar Bluff, Webster, and Sebelius grow to small cities on long weekends as western Kansans migrate to enjoy the rebirth of these lakes. In addition, the floods of 1993 and 1994 limited public access to central Kansas lakes and parks, sending those lake-users westward. A comparison of the average annual visitation figures during the 1980s versus 1995 shows increases in public use ranging from 22 percent at Prairie Dog State Park (Sebelius) to 63 percent at Kirwin National Wildlife Refuge, and 44 percent at Webster State Park.

A good portion of the increase in visitation was obviously related to angling. A creel survey was conducted at Sebelius Reservoir from March through October 1995. An estimated 21,887 anglers expended 61,269 hours of effort to harvest 31,027 fish. Crappie accounted for 65 percent by weight of total pounds of fish harvested; more than 9 tons of crappie were taken. Catch and release statistics were also impressive. Anglers returned an estimated 62,538 fish to the lake. Largemouth bass (30,694) and white crappie (25,278) accounted for 89 percent of the total number of fish



Keith Sebelius Reservoir, near Norton, was also a beneficiary of the wet weather cycle. In 1981, Sebelius was 28 feet below conservation pool. The flooded vegetation has been a boon to fish populations, creating ideal spawning and nursery habitat.



This aerial view of Cedar Bluff illustrates the magnitude of the increased inflow. Thousands of acres, once dry, are now inundated and available for lake users.

caught and released.

Successful walleye fishing highlighted angling activities at Webster and Kirwin in 1995, while at Cedar Bluff excellent black bass opportunities prevailed. Enhanced bass fisheries attracted anglers to Sebelius, Kirwin and Webster as well.

Several harvest restrictions were implemented in response to the new conditions, including 15-inch length limits on walleye at Webster and Kirwin and a 10-inch limit on crappie at Cedar Bluff. The Cedar Bluff restriction limited recent crappie harvest but will ensure excellent opportunities in the near future.

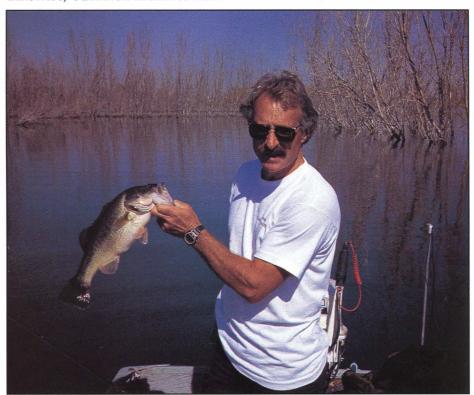
Improved aesthetics have also brought visitors back to these reservoirs. Clean, clear water surrounded by flooded timber, and in some areas freshened sand beaches, have lured recreationists to explore secluded coves and shorelines that haven't been visited in decades. Boat ramps left high and dry during the 1970s and 1980s are again usable, along with bathhouses, campsites, and parking areas that are now closer to the water.

Not all of the impacts associated with refilling of the reservoirs have been positive, however. While aquatic habitat was gained, terrestrial habitat was lost. Vast expanses of timber were flooded and most of these trees have died. Many facilities were damaged by the floods resulting in unforeseen expenses. Likewise, outdated facilities now

pressed into service will need maintenance.

What does the future hold in store for these reservoirs? As history has proven, that's difficult to predict. One thing is fairly certain, however, and that is the outlook for the near future is optimistic. Angling opportunities for the next two to three years should exceed those of the last couple of decades. Visitation by the various interest groups will remain high as long as favorable conditions exist. Realistically, however, this could be a short-term situation.

Factors that reduced inflows in the 1970s and 1980s remain. The flood events of the 1990s were rare and may not be repeated for many years. Water management philosophies will be a major factor influencing the future of these resources. Now is the time to enjoy and take advantage of the high-water benefits, but all water interests must accept responsibility. The need for conservation by all is as important now, and will be in the future, as it has ever been.



Lynn Davignon, fisheries biologist at Cedar Bluff, holds a typical lake largemouth. The high water has provided ideal conditions for bass, crappie and walleye at Cedar Bluff.

BECOMING AN OUTDORS-WOMAN

To provide women a chance to learn about the outdoors and outdoor recreation in a friendly environment, the department started the Becoming An Outdoors-Woman program in 1994. During the three-day workshop at Rock Springs 4-H Camp, volunteer instructors teach participants a variety of skills including fishing, wing shooting, botany, boating, dog handling, archery, muzzleloader shooting, nature photography and more. Response has been overwhelming, and reaction has been wonderfully positive. The 1996 class is scheduled for October 4, 5 and 6. A \$125 registration fee covers food, lodging and supplies. The workshop is limited to 100 participants. For more information contact Becky Johnson, Emporia Research and Survey Office, P.O. Box 1525, Emporia, KS 66801, (316) 342-0658. The following comments were made by participants of the 1995 class.



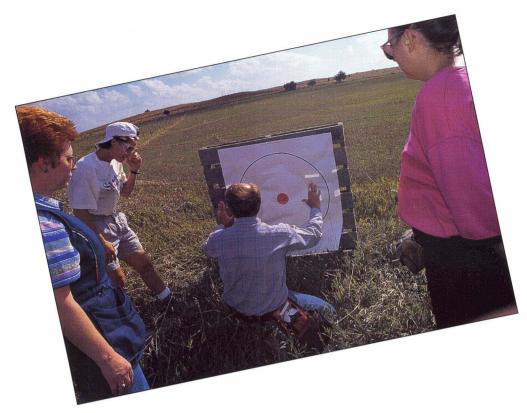
"You are providing a wonderful opportunity for outdoor experience for gals like me -ones who love it a whole lot but don't know very much. THANKS TO ALL YOU WON-DERFUL PEOPLE!"

"I had never held a firearm or snake

— I wanted to do both. Now I have!"

"It's over, and I still want more. I don't want to go home yet!"



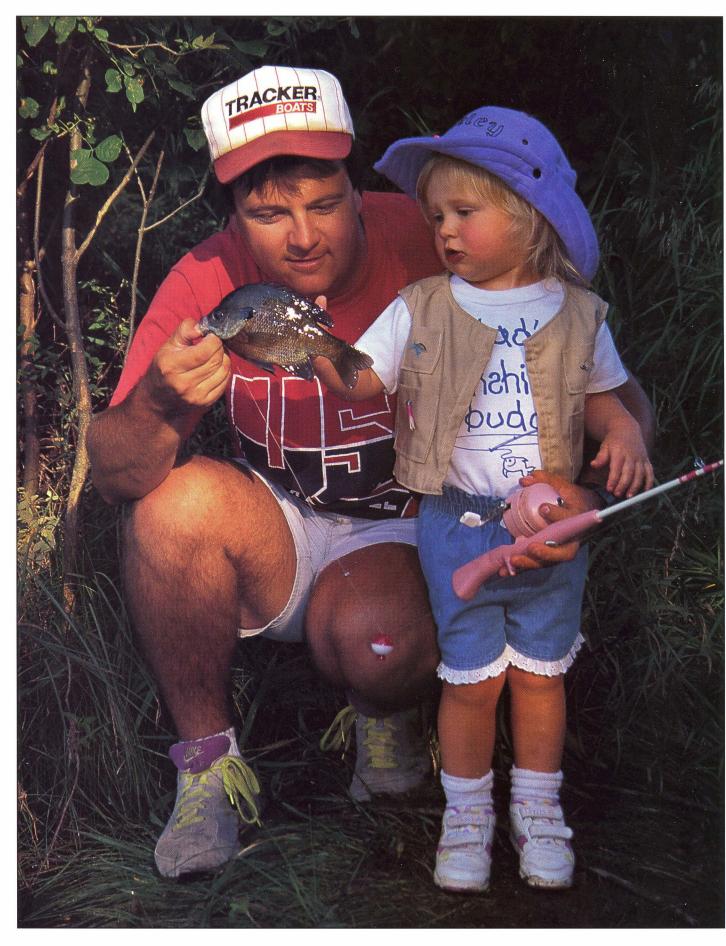


"The program was wonderful! Just what I needed and was looking for. I think a lot of women need this kind of exposure -- we've not had much of it. I really appreciate all the hard work and effort of the people who put this together and of the instructors."

"Please continue this program so that I can have another opportunity to come and learn more and that someday I can send my daughters, or maybe by then I'll have learned enough to teach them myself!"

"This is not only about Becoming an Outdoors-Woman, but about friendship and confidence-building for women. Those of us who work in male-dominated professions know how important such networking is to us."





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Promise In Her Eyes

text and photos by Marc Murrell public information officer, Great Plains Nature Center, Wichita

A daughter's first fishing trip is more than just a fun day outdoors. It's the beginning of a lifelong curriculum about the natural world, and the joy the father will know having her by his side.

Tust three short years ago, I became a father. High hopes and anxieties of first-time parents were relieved when my wife, Candace, delivered a healthy, mostly bald, beautiful baby girl we called Ashley. As I cradled my newborn with hesitant hands, I thought about the enormous responsibility. I would have to teach her to tie an improved clinch knot and spool line on a spinning reel without twisting it. I would provide guidance on how to pull a nightcrawler delicately from its hole without tearing it in two and to know just when to set the hook when a walleye bites. I felt overwhelmed.

Actually, those weren't my first thoughts of responsibility but ones I've recently considered now that my daughter is old enough to start learning about the outdoors. Many old-fashioned folks might balk at the idea of a little girl fishing or hunting, but it shouldn't be that way. Sharing a duck blind or a boat with my daughter may hold more meaning simply because of these preconceived notions.

"I once thought that if I didn't have a son, I would be losing out on many life experiences that I enjoy that I thought I could only truly share with a boy," said a veteran outdoorsman friend of mine and a father of three girls. "I fear now that if I'd had any male children, I might have unknowingly favored my son at the expense of not letting my girls have the same outdoor opportunities. It happens all the time in other families."

He went on to explain that girls are not expected to do these things. Peer pressure, television, men, and even other women hold them back and perpetuate the stereotype.

"I know that you will not fully understand this now, but you have something extra special to look forward to in having a daughter," said my friend. "You will find that doing outdoor things with your daughter is a special treat because of the rare nature of it. Someday, as you watch your girl bag her first turkey or catch her first 5-pound bass, you will begin to feel the joy that only a father of a daughter can know."

Ashley recently began her Outdoor 101 crash course and quest for a 5-pound largemouth. Her fishing interest was sparked as we watched fishing shows on ESPN when, as an infant, her internal alarm clock sounded too early for her mom's liking on Saturday mornings.

She then graduated to fishing for white bass in my cooler when I returned from spring trips at Fall River. Ashley would run out to the garage and get her fishing pole, lift the cooler lid and squeal with delight. I would slip the plastic casting sinker into a fish's mouth and she would start cranking and grunting, finally pulling the fish out onto the garage floor. She danced around and decided to trace the fish with sidewalk chalk. Thanks to her embellishing artistic abilities, I can now show my fishing buddies the enormous fish I catch. Some are amazed when I show them the 3foot outline of a white bass.

Her first lesson on live fish was last summer. She won't likely remember it, but it will be forever



Fishing through the eyes of a child is truly magical. An angler was born on that fateful spring day, and a father has ensured himself of a lifelong outdoor companion.

etched in my list of memorable experiences. After numerous cancellations due to bad weather, we finally picked a perfect evening. Michael Pearce, a family friend and freelance writer from Newton, volunteered to record Ashley's maiden fishing trip for posterity.

We arrived at the secluded pond and Ashley bailed out of her car seat into a virtual bath of bug spray from her protective father. Outfitted with her good luck fishing t-shirt and her custom-made fishing vest and hat (gifts from great grandmother and grandma on her first birthday), she waddled toward the pond's edge while I carried her pink, personalized Zebco rod and reel and a dozen worms. Pearce donned hip boots and joined the procession with cameras draped around his neck.

Ashley watched in amazement as

I pulled a nightcrawler out and laid it in my hand.

"Oooohhh, a worm, Daddy," her groan cut short as her curiosity peaked, and she had to touch it. "Is that our bait?"

I pinched the end of the worm off and showed her how to bait a hook, knowing full-well she'd probably charm me into doing it for her through the next 10 years. Pearce eased into the shallows and readied the video camera for that momentous first cast of her life. I reached around Ashley and wrapped my hand around hers and, with a flick of the wrist, she was fishing. Her little pink pole dangled from petite hands, a lottery-winning smile gracing her face.

"Watch your bobber," I barely got the words out when it plunked beneath the water's mirrored surface.

"You got one, Ash. Reel him in!" I screeched as I set the hook with a quick jerk of her pole.

A bit worried at first about all the commotion on the end of the line, she soon started reeling. Her hesitation returned as a behemoth 8-inch bluegill broke water at her feet. I grabbed the fish as Ashley tried to avoid the splashing backpedaling, nearly pushing me over in my squatted position behind

"You caught your first fish, honey!' I said. "What do you think of that?"

Her initial reaction offered the same look she used to get when she messed in her pants and didn't want to tell me. Adorable, child curiosity quickly prevailed, however, and she wanted to touch it.

"Ohh, Daddy, I touched his eye," she shrieked with discovery, and then she wiped the slime on my shirt. "Put him back in the water."

I already had plans for the oncein-a-lifetime fish, and Ashley was thrilled at the thought of having her very own fish hanging on the wall in her room. The mounted fish would serve as a reminder of our first fishing trip, her first fish and a sign of many outdoor adventures to

We caught and released many more fish, including a 10-inch green sunfish and several bass. Most were recorded on video and photographs. Although her attention span was quickly reached, Ashley thought this fishing stuff was exciting, and she promised to be a typical fisherman.

"How big was that last fish?" Pearce asked Ashley on camera to

get her response.

"He was huuuge!" her little arms stretched as far apart as they would

"How many fish have you caught?" Pearce quizzed after her second fish.

"This many," she responded, holding her hand up with five tiny fingers outstretched.

An angler was born. I was a proud father.

Fishing Forecast 1996

The following tables are designed to help improve your fishing success. Your ability to catch fish depends on many factors such as water temperature, water clarity, weather, angling skills, fishing pressure, and density (number of fish per acre) of fish in the lake. You many not have much control over many of these factors, but you can use these tables to select a high density population of your favorite species.

The information was formulated from data collected by fisheries management biologists as a part of their annual lake monitoring activities. The department is not able to sample every lake each year, so some lakes are not included.

The data is separated into reservoirs and lakes (lakes are impoundments with less than 1,000 surface acres). This was done because sampling on small lakes may not always be comparable with sampling on large reservoirs.

Tables have been created for eight



popular game species. The table lists the name of the lake, a Power Rating, a Lunker Rating, the largest fish sampled in each lake, and the district fisheries biologist's rating.

The Power Rating is the number of fish sampled that were quality size or larger per unit of sampling effort. Quality size is the length a fish must be to be considered acceptable to most anglers. Quality size differs for each species, but the table heading lists the appropriate measurement. Theoretically, a lake with

a rating of 30 has twice as many quality size fish per acre as a lake with a rating of 15. Using these ratings, you can select a lake with a high density of your target species. The Lunker Rating is similar to the power rating, but it tells you the relative density of lunker sized fish. Lakes with higher Lunker Ratings have more big fish. Some lakes may have a Lunker Rating of 0. This is because no big fish were captured during the sample effort. This doesn't mean that there are no big fish in the lake, but it may indicate that they are less abundant than in lakes with higher Lunker Ratings. The Biologist's Rating adds a human touch. Each fisheries biologist reviews the data from annual sampling, considers environmental conditions, previous years' data and perhaps creel survey data. When the biologist's rating doesn't agree with the Power Rating, it means the Power Rating doesn't accurately reflect the biologist's opinion of the lake.

				WHIT
IMPOUNDMENT RESERVOIRS	Power Rating (>9")	Lunker Rating (>15")	Biggest Fish (Lbs.)	Biologist's Rating
Elk City Res.	90.0	1.0	3.1	Excellent
Milford Res.	71.0	1.5	1.6	Excellent
Clinton Res.	63.7	1.0	1.5	Good
Perry Res.	53.0	0.5	1.5	Good
John Redmond	50.8	0.6	2.0	Good
Kanopolis Res.	48.3	2.3	2.3	Good
Hillsdale Res.	47.1	2.0	1.1	Good
Glen Elder Res.	42.3	3.1	2.5	Good
Marion Res.	39.7	0.3	1.9	Excellent
Melvern Res.	32.5	1.2	2.6	Good
Wilson Res.	31.3	9.1	4.6	Good
Pomona Res.	31.0	0.0	1.1	Good
Fall River Res.	25.3	11.1	2.8	Excellent
Tuttle Creek Res.	19.2	3.7	2.9	Good
La Cygne Res.	17.0	0.0	0.7	Poor

BASS				
IMPOUNDMENT RESERVOIRS	Power Rating (>9")	Lunker Rating (>15")	Biggest Fish (Lbs.)	Biologist's Rating
Lovewell Res.	15.0	0.7	2.3	Fair
Big Hill Res.	11.5	4.5	3.5	Fair
El Dorado Res.	11.0	0.0	1.0	Good
Cheney Res.	8.6	0.0	1.0	Good
Cedar Bluff Res.	6.0	3.0	2.1	Fair
LAKES				
Middle Creek SFL	74.0	7.0	2.1	Excellent
Clark SFL	65.0	0.0	1.5	Fair
Herington CL - new	41.0	2.0	2.9	Excellent
Jeffrey EC-Makeup Lake	27.0	0.0	1.0	Good
Winfield CL	20.5	0.2	2.0	Good
Jeffrey EC-Aux. Lake	12.0	0.0	1.2	Fair
Paola CL- Lake Miola	11.0	2.0	2.0	Fair
Shawnee Lake	4.0	0.0	1.5	Poor
Browning Oxbow	1.0	0.0	0.4	Fair

CHANNEL CATFISH				
IMPOUNDMENT RESERVOIRS	Power Rating (>16")	Lunker Rating (>28")	Biggest Fish (Lbs.)	Biologist's Rating
Sebelius Res. (Norton)	10.0	0.0	8.5	Good
Glen Elder Res.	8.9	0.0	8.1	Excellent
Milford Res.	8.7	0.5	10.5	Excellent
Toronto Res.	6.3	0.0	7.0	Good
Kanopolis Res.	6.2	0.0	8.5	Good
Webster Res.	6.0	0.0	6.1	Fair
Melvern Res.	5.8	0.3	11.3	Good
Lovewell Res.	5.7	0.2	12.2	Good
Cheney Res.	5.3	0.2	11.8	Good
Clinton Res.	4.7	0.5	11.5	Good
Perry Res.	4.5	0.0	3.7	Good
Hillsdale Res.	4.3	0.3	10.8	Good
Pomona Res.	4.2	0.2	11.9	Excellent
Fall River Res.	4.0	0.0	9.4	Fair
El Dorado Res.	4.0	0.2	13.6	Good
Marion Res.	4.0	0.0	4.8	Fair
Big Hill Res.	3.7	0.0	8.4	Fair
La Cygne Res.	3.6	0.4	15.9	Excellent
Tuttle Creek Res.	3.2	0.0	8.5	Good
Council Grove Res.	2.5	0.0	5.1	Fair
John Redmond Res.	2.2	0.0	6.4	Good
Wilson Res.	2.1	0.0	5.7	Fair
Cedar Bluff Res.	2.0	0.0	5.3	Good
Kirwin Res.	2.0	0.0	3.4	Fair
Elk City Res.	1.0	0.0	3.5	Fair
LAKES	110	0.0	5.5	- Lun
Yates Center CL - new	25.0	0.0	4.7	Excellent
Yates Center CL - old	20.0	0.0	8.5	Excellent
Osage SFL*	17.0	0.0	6.5	Good
Shawnee Lake	13.0	0.0	5.2	Good
New Strawn CL	13.0	1.0	11.0	Good
Butler SFL	12.0	0.0	6.0	Good
Mound City Lake	12.0	1.0	16.1	Excellent
Carbondale CL - east*	11.0	0.0	8.4	Good
Sheridan SFL	9.0	0.0	5.1	Good
Sedan New CL	8.9	0.0	5.8	Good
	n management contraction	0.0		
Olpe CL Washington SEI	7.9	1.0	2.5	Fair Good
Washington SFL WoodsonSFL	7.5	0.5	11.6	Fair
Madison CL				
Neosho SFL	7.1	0.0	6.1 8.4	Fair Good
	THE RESIDENCE OF THE PARTY OF T	0.0	SECURIOR CONTRACTOR OF THE	Good
Melvern River Pond	7.0		6.6	
Middle Creek SFL	7.0	0.0	5.6	Fair
McPherson SFL	6.5	0.0	3.6	Fair
Atchison SFL*	6.5	0.0	6.5	Good
Paola CL	6.0	0.5	9.9	Fair
Pottawatomie #2*	6.0	0.0	7.9	Excellent
Geary SFL	6.0	1.0	14.7	Good
Centralia CL	6.0	0.0	7.1	Good
Eureka CL	6.0	0.0	4.9	Fair
Ottawa SFL	5.5	0.0	5.1	Good
Garnet CL - south	5.5	0.5	14.0	Fair
Pleasanton CL - east	5.5	1.5	16.3	Excellent
Lonestar Lake	5.0	0.0	6.2	Fair
Chanute CL	5.0	0.0	6.9	Good
Moline CL	4.0	0.0	2.7	Poor
Shawnee SFL*	4.0	0.0	5.1	Excellent
Jeffrey Aux. Lake	4.0	0.0	5.0	Good
	4.0	0.0	8.7	Good

CHANNEL CATFISH cont.				
IMPOUNDMENT LAKES	Power Rating (>16")	Lunker Rating (>28")	Biggest Fish (Lbs.)	Biologist's Rating
Kiowa SFL	4.0	0.0	3.0	Fair
Clark SFL	3.0	0.0	3.3	Fair
Cherryvale Tanko Lake	3.0	2.0	11.6	Poor
Lyon SFL	3.0	0.0	4.0	Poor
Neosho WMA Pool #3	3.0	0.0	4.7	Good
Winfield CL	3.0	0.0	8.5	Good
Douglas SFL*	3.0	0.0	3.0	Fair
Jayhawk Boy Scout LK	3.0	0.0	3.6	Fair
Scott SFL	3.0	0.0	2.6	Fair
Miami SFL	3.0	0.0	8.3	Fair
Crawford SFL	2.5	0.0	9.6	Fair
Cowley SFL*	2.0	0.0	1.6	Fair
Jeffrey EX-Makeup Lake	2.0	0.0	6.1	Good
Council Grove CL	2.0	0.0	4.7	Fair
Barber SFL (upper)	2.0	0.0	7.7	Fair
Salina - Lakewood CL*	2.0	0.0	1.9	Good
Great Bend - Stone Lake	2.0	0.0	2.6	Fair
Osawatomie CL	2.0	0.0	3.5	Poor
Louisburg CL	2.0	0.0	3.9	Poor
Coldwater CL	2.0	0.0	5.7	Fair
Finney SFL	2.0	0.0	3.6	Fair
Osage CL	2.0	0.0	1.8	Fair
Herington CL - new	2.0	0.0	4.6	Good
Keller PD- St. Francis	2.0	0.0	4.2	Fair
Pratt CL	1.0	1.0	16.5	Fair
Ford Co. SFL*	1.0	0.0	2.4	Good
Garnett CL - north	1.0	0.0	17.0	Fair
Smokey Gardens	1.0	0.0	1.5	Fair
Montgomery SFL*	0.7	0.0	8.8	Good

^{*} indicates lakes enrolled in new urban stocking program.

WHITE CRAPPIE				
IMPOUNDMENT RESERVOIRS	Power Rating (>8")	Lunker Rating (>12")	Biggest Fish (Lbs.)	Biologist's Rating
Perry Res.	94.5	9.8	1.0	Excellent
Kirwin Res.	57.4	0.9	1.3	Good
Kanopolis Res.	52.0	2.0	1.6	Excellent
Hillsdale Res.	47.1	2.0	1.1	Good
Pomona Res.	29.2	0.4	0.9	Good
Marion Res.	18.8	0.7	1.1	Good
Melvern Res.	18.0	0.6	1.1	Excellent
Sebelius Res. (Norton)	13.8	1.6	1.3	Good
Clinton Res.	12.4	0.6	1.3	Fair
Lovewell Res.	11.5	0.0	0.7	Fair
Milford Res.	10.8	0.2	1.0	Good
Fall River Res.	10.4	0.2	2.4	Good
Council Grove Res.	8.5	0.0	1.5	Good
Big Hill Res.	7.3	0.0	1.1	Good
Elk City Res.	7.0	1.1	2.1	Good
Toronto Res.	6.9	0.6	3.0	Good
Webster Res.	6.3	0.2	1.0	Fair
Cheney Res.	6.1	0.0	0.6	Poor
Wilson Res.	5.9	0.0	0.5	Fair
Glen Elder Res.	5.0	0.2	1.3	Fair
Tuttle Creek Res.	4.8	0.6	1.2	Good
La Cygne Res.	4.0	0.1	1.0	Fair
El Dorado Res.	1.8	0.0	0.6	Fair

WHITE CRAF	PIE	cor	nt.	
IMPOUNDMENT RESERVOIRS	Power Rating (>8")	Lunker Rating (>12")	Biggest Fish (Lbs.)	Biologist's Rating
Cedar Bluff Res.	1.2	0.0	0.6	Good
LAKES				
Neosho WMA Pool #3	75.8	1.1	1.1	Good
Moline CL	54.7	0.0	0.6	Good
Miami SFL	41.8	0.0	0.8	Good
Clark SFL	34.8	0.1	0.7	Good
Atchison CL #8	27.7	0.8	1.1	Good
Horton Mission LK	25.7	2.9	1.5	Good
Spring Creek	24.0	0.0	0.6	Fair
Lansing CL	23.1	0.0	0.5	Fair
Pleasanton CL - east	17.0	0.0	0.4	Fair
Barber (Lower) SFL	16.4	0.0	0.6	Good
Sabetha CL	15.8	1.9	0.9	Good
Logan CL	15.2	7.0	1.5	Good
Webster Stilling Basin	14.0	0.0	0.7	Fair
Ottawa SFL	12.4	0.1	0.8	Fair
Mary's Lake	11.7	0.0	0.3	Fair
Lyon SFL	11.5	0.0	0.5	Good
Louisburg CL	10.4	0.3	1.2	Fair

BLACK CRAPPIE				
IMPOUNDMENT RESERVOIRS	Power Rating (>8")	Lunker Rating (>12")	Biggest Fish (Lbs.)	Biologist's Rating
Marion Res.	27.4	0.0	0.5	Good
Webster Res.	19.3	0.1	1.3	Good
Glen Elder Res.	7.2	0.0	0.6	Fair
Sebelius Res. (Norton)	5.4	0.2	1.6	Good
Lovewell Res.	4.7	0.0	0.4	Fair
Wilson Res.	4.0	0.0	0.7	Fair
Kirwin Res.	3.4	0.1	1.0	Good
Cedar Bluff Res.	3.2	0.0	0.7	Good
Wolf Creek Res.	2.4	1.5	1.5	Fair
Big Hill Res.	0.8	0.0	0.2	Poor
Kanopolis Res.	0.7	0.0	0.3	Poor
El Dorado Res.	0.3	0.0	0.4	Poor
LAKES				
Miami SFL	48.7	0.0	0.7	Good
Garnett CL - south	42.5	0.0	0.8	Good
Garnett CL - north	35.0	0.0	0.5	Good
Sabetha Pony Creek	25.9	0.0	0.7	Good
Atchison SFL	23.8	0.1	0.7	Good
Pottawatomie Co. LK	22.8	0.0	0.6	Good
McPherson SFL	17.9	0.6	1.2	Good
Keller Pond-St. Francis	16.5	0.0	0.6	Fair
Cherryvale Tanko Lake	11.7	0.0	0.6	Fair
Goodman SFL	11.7	0.0	0.3	Good
Atchison CL #8	9.9	0.0	0.6	Good
Atchison CL#1	9.6	0.5	0.5	Good
Holton Prairie Lake	9.3	0.2	0.9	Good
Herington CL - new	9.0	0.0	0.7	Good
Cowley SFL	8.8	0.0	0.5	Fair
Melvern River Pond	7.1	0.0	0.9	Good
Webster Stilling Basin	5.9	0.0	0.6	Fair
Yates Center CL - new	5.8	0.0	0.6	Good
Wilson SFL	4.1	0.0	0.6	Fair
Centralia CL	3.1	0.2	0.9	Fair

LARGEMOUT	H BA	ASS		
IMPOUNDMENT RESERVOIRS	Power Rating (>12")	Lunker Rating (>20")	Biggest Fish (Lbs.)	Biologist's Rating
La Cygne Res.	33.7	3.0	7.1	Excellent
Kanopolis Res.	28.2	0.0	5.4	Good
Marion Res.	24.5	0.5	5.6	Excellent
Glen Elder Res.	22.2	0.0	4.5	Good
Big Hill Res.	14.6	1.5	6.4	Excellent
Cedar Bluff Res.	12.1	0.0	2.5	Good
Sebelius Res. (Norton)	11.8	0.2	5.0	Excellent
Perry Res.	6.0	0.0	3.1	Fair
Wilson Res.	5.0	0.0	3.8	Good
El Dorado Res.	4.5 2.1	0.8	6.3	Fair
Lovewell Res.	NS NS	0.0		Poor
Webster Res. Kirwin Res.	NS NS	0.0	0.0	Good Excellent
Hillsdale Res.	NS	0.0	0.0	Good
LAKES	149	0.0	0.0	Good
Meade SFL	270.8	0.0	3.5	Excellent
Pottawatomie SFL #1	163.7	0.0	3.7	Excellent
Goodman SFL	161.1	5.5	5.3	Excellent
Jetmore CL	105.5	0.0	1.6	Excellent
Pottawatomie Co. LK	83.6	0.0	2.9	Excellent
Lebo Kids Pond	83.3	0.0	1.9	Good
Belleville CL	80.0	0.0	3.2	Good
Montgomery SFL	78.9	1.7	5.7	Excellent
Herington CL - old	72.5	3.7	6.0	Good
Cherryvale Tanko Lake	66.7	3.3	5.2	Good
Osawatomie CL	65.8	4.9	6.5	Good
Scott SFL	63.2	0.0	1.8	Good
Herington CL - new	61.0	0.0	3.9	Good
Waterville CL	60.6	6.1	7.8	Good
Atchison CL #8	60.0	0.0	2.7	Good
Atchison SFL	59.1	0.0	3.8	Good
Butler SFL	59.0	4.0	6.2	Excellent
Shawnee SFL	57.8	1.1	5.5	Good
Horton Little Lake	56.4	5.1	6.8	Good
Middle Creek SFL	54.9	2.3	7.4	Good
Pratt Co. Lake	53.8	0.0	4.1	Good
Miami SFL	52.0	1.6	6.1	Good
Mary's Lake	52.0	0.0	4.7	Fair
Holton Prairie Lake	51.1	0.0	2.8	Good
Wabunsee CL	51.0	1.0	4.7	Good
Geary SFL	50.8	0.0	3.7	Good
Quivera Scout Ranch LK	50.4	0.0	3.0	Good
Jones PK Middle Pond	50.0	0.0	1.9	Good
Pottawatomie SFL #2	46.0	0.0	4.3	Good
Yates Center CL Shawnee Lake	45.8	0.0	3.9 6.2	Excellent Good
	45.6	1.1		Internal experience of the community
Padilla Lake	45.0	0.0	2.4	Good Excellent
Mound CL Louisburg CL	44.7	0.0	5.1 3.8	Good
Eureka CL	43.9	1.1	4.5	Good
Great Bend Meml PK	43.7	0.0	4.5	Good
Spring Creek	43.7	2.3	6.2	Good
Great Bend-Stone Lake	43.2	0.0	4.6	Good
Kiowa SFL	41.9	0.0	3.1	Fair
Jones PK East Pond	41.6	0.0	1.2	Good
Centralia CL	41.4	0.0	2.6	Good
Troy 4-H Lake	41.4	3.4	4.2	Fair
Jewell SFL	40.0	0.0	3.9	Fair
Atchison CL #23	38.6	0.0	4.7	Fair

LARGEMOUT	H BA	ASS	cor	nt.
IMPOUNDMENT LAKES	Power Rating (>12")	Lunker Rating (>20")	Biggest Fish (Lbs.)	Biologist's Rating
Jeffrey EC-Aux. Lake	38.0	0.0	2.4	Good
Antelope Lake	35.4	0.0	4.7	Good
Chanute CL	33.3	0.7	5.0	Good
Crawford SFL	30.9	0.9	4.6	Good
Moline CL	30.0	8.0	7.1	Good
Lonestar Lake	29.5	1.0	6.2	Fair
Sheridan SFL	28.6	0.0	4.1	Good
Bourbon Co. LK	28.6	0.0	2.9	Fair
McPherson SFL	28.4	0.0	5.0	Good
Smoky Gardens	28.0	0.0	3.9	Fair
Douglas SFL	27.3	0.0	5.2	Fair
Olpe CL	27.0	0.0	4.4	Good
Melvern River Pond	26.1	0.0	4.1	Good
Lyon SFL	26.1	0.0	1.6	Good
New Strawn CL	25.7	0.0	1.9	Fair
Marysville CL	25.0	0.0	3.3	Fair
Ottawa SFL	24.7	1.1	5.0	Good
Cowley SFL	24.0	0.0	2.5	Fair
Osage CL	23.3	1.4	6.1	Fair
Sabetha Pony Creek	22.6	0.0	1.8	Fair
Neosho SFL	21.0	1.2	7.1	Fair
Wilson SFL	20.7	0.9	4.8	Good
Keller Pond St. Francis	20.0	1.3	4.9	Fair
Sabetha CL	19.7	1.4	6.5	Fair
Logan CL	19.3	0.4	7.5	Good

NS = Not sampled

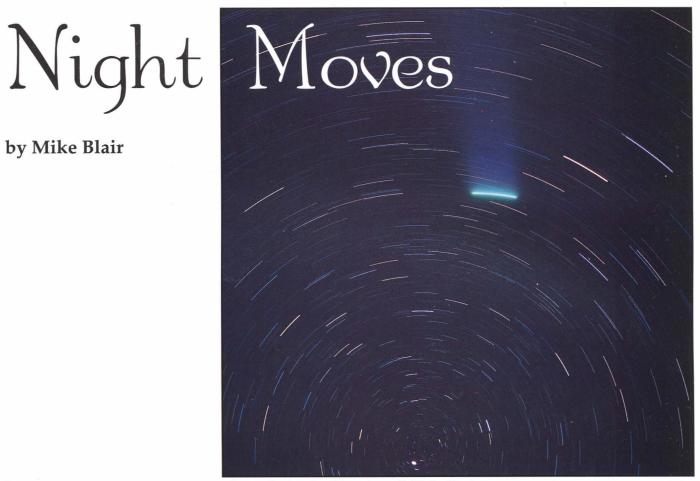
WIPER				
IMPOUNDMENT RESERVOIRS	Power Rating (>12")	Lunker Rating (>20")	Biggest Fish (Lbs.)	Biologist's Rating
Webster Res.	13.0	8.0	10.3	Good
Sebelius Res. (Norton)	10.5	4.5	10.7	Good
Lovewell Res.	5.5	0.0	3.2	Fair
Pomona Res.	5.0	1.5	7.3	Good
La Cygne Res.	4.0	1.0	5.6	Good
Milford Res.	4.0	1.7	11.2	Good
Cheney Res.	2.5	0.7	4.6	Fair
Kirwin Res.	2.5	0.0	.8	Fair
Marion Res.	1.4	1.0	4.9	Fair
LAKES				
Garnett CL - south	39.0	1.0	4.1	Fair
Coldwater CL	34.0	0.0	3.4	Good
Yates Cntr. S Owl LK	19.0	0.0	1.2	Good
Herington CL - new	16.0	0.0	3.5	Good
Jeffrey EC-Makeup LK	13.0	2.0	4.5	Good
New Strawn CL	8.0	0.0	1.8	Fair
Melvern River Pond	8.0	4.0	5.0	Good
Lonestar Lake	8.0	0.0	1.1	Fair
Woodson SFL	7.0	0.0	2.3	Good
Chanute CL	7.0	0.0	3.3	Fair
Yates Center CL - new	5.0	1.0	4.1	Good
Pratt Co. Lake	2.0	2.0	3.9	Good
Pleasanton CL - east	1.5	0.5	3.0	Fair
Garnett CL - north	1.0	0.0	1.2	Fair
Winfield CL	1.0	0.0	3.0	Fair
Jetmore CL	0.0	0.0	0.1	Fair
Logan CL	NA	0.0	5.6	Good

IMPOUNDMENT RESERVOIRS	Power Rating (>15")	Lunker Rating (>25")	Biggest Fish (Lbs.)	Biologist's Rating
Lovewell Res.	27.4	0.8	9.8	Good
Wilson Res.	26.7	1.0	11.7	Good
Glen Elder Res.	22.7	1.6	7.9	Good
Marion Res.	19.2	0.4	8.4	Excellent
Kirwin Res.	14.0	0.0	5.2	Good
Cheney Res.	11.0	0.0	3.4	Good
Webster Res.	10.5	0.0	6.1	Good
Sebelius Res. (Norton)	10.0	0.0	2.3	Fair
Kanopolis Res.	10.0	0.5	5.9	Fair
Hillsdale Res.	7.3	1.0	9.1	Good
El Dorado Res.	7.0	0.0	5.0	Good
Milford Res.	7.0	0.0	5.1	Fair
Cedar Bluff Res.	5.8	0.5	6.2	Fair
La Cygne Res	4.0	0.0	2.7	Fair
Tuttle Creek Res.	4.0	0.0	4.4	Fair
Clinton Res.	3.0	2.3	8.0	Poor
Big Hill Res.	2.5	0.5	6.6	Fair
Melvern Res.	2.3	0.0	4.0	Fair
Pomona Res.	0.5	0.5	6.6	Fair
Perry Res.	0.0	0.0	1.0	Poor
LAKES				
Yates Center CL - new	28.0	0.0	2.4	Excellent
Ford Co. SFL	23.0	0.0	1.7	Excellent
Herington CL - new	19.7	0.0	5.4	Good
Melvern River Pond	13.0	0.0	2.7	Fair
Pratt Co. Lake	9.0	0.0	4.9	Excellent
Winfield CL	8.5	3.0	7.9	Good
Butler SFL	7.0	0.0	4.8	Fair
Sabetha Pond Creek	7.0	0.0	1.5	Fair
Osage SFL	6.0	0.0	1.2	Fair
Mound City CL	5.0	0.0	5.7	Good
Shawnee Co. Lake	5.0	0.0	1.7	Fair
Council Grove CL	5.0	0.0	1.4	Fair
Cowley SFL	5.0	0.0	4.3	Fair
Jeffrey EC - Aux. Lake	5.0	0.0	1.2	Good
Madison CL	4.0	2.0	9.0	Poor
Crawford SFL	3.7	0.0	5.1	Fair
Clark SFL	3.5	0.0	4.7	Fair
Paola CL - LK Miola	3.5	1.0	7.3	Fair
Centralia CL	3.0	0.0	2.5	Fair
Scott SFL	3.0	0.0	3.7	Good

* Indicates Sauger

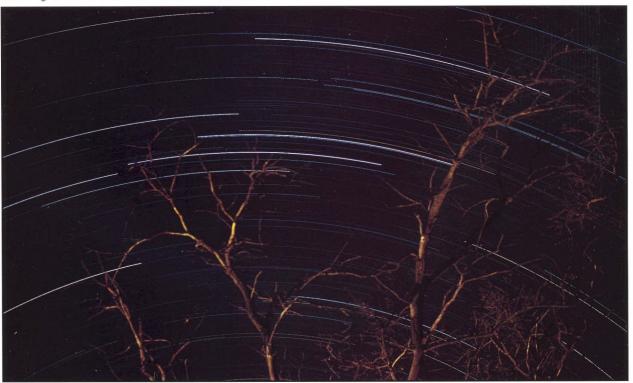
IMPOUNDMENT RESERVOIRS	Power Rating (>14")	Lunker Rating (>22")	Biggest Fish (Lbs.)	Biologist's Rating
Sebelius Res. (Norton)	39.5	2.5	7.1	Good
Melvern Res.*	15.7	0.0	1.9	Good
John Redmond Res.	2.2	0.0	2.6	Fair
Perry Res.*	2.0	0.0	1.0	Fair
Elk City Res.	0.5	0.0	6.5	Fair
Tuttle Creek Res.	0.0	0.0	0.2	Poor
Council Grove Res.	0.8	0.0	2.4	Poor
LAKES				
Chase SFL	24.8	2.6	4.0	Excellent
Washington SFL	24.0	1.0	4.8	Good
Marion Co. Lake	6.6	0.0	4.8	Fair

by Mike Blair



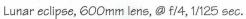
Comet Hyakutake, 55mm lens, @ f/2.8, 45 min.

Yard light on cottonwood, 55mm lens, @ f/2.8, 3 hours





55mm lens, @ f/2.8, 20 sec.







letters

Edited by Mark Shoup

FISHIN' KID

Editor:

Our family moved back to Bourbon County last summer. Logan, our 8-year-old son, has fished every day possible since then. He's caught a couple of 3- to 5-pound bass. He loves the outdoors, catching frogs, grasshoppers, and crickets and digging worms, all for fishing.

On Feb. 19, the school had in-service, so the kids were home. The weather had been just beautiful for fishing. We live across from one of our family's farm ponds. This is the only pond they're allowed to go to by themselves because I can see it from our front door. Anyway, about an hour later, I looked out, and across the fence was Logan holding this huge bass.

We ran down to Grandpa and Grandma Miller's to weigh and measure it. The largemouth weighed 10 pounds and was 24 inches long. Logan had broken open a mussel shell and used the meat for bait.

Of course, it's being mounted, but the thrill Logan got out of this experience will last Roger and I the rest of our lives.

> Laura Miller Ft. Scott

Dear Ms. Miller:

Thanks for sharing your experience. I, too, have an 8-year-old boy who loves to fish and is named Logan, so I can relate. He has yet to catch a 10-pound bass, but fortunately he is a better angler than his dad.

-Shoup

MORE VIDEOS, PLEASE

Editor:

I received the video, *Deer in Kansas*, for my birthday in June. I have watched it literally a hundred times, and my family and hunting buddies love it, too. It was very informative, and the buck footage was incredible.

Are there any plans to make a turkey

video, showing their year-round habitats and lots of spring and fall footage? I think it would sell very well. I know I would buy it. Keep up the good work on the videos and the magazine.

Ray McAllister Shawnee

Dear Mr. McAllister:

I am pleased to inform you than I am in the final editing stages of a new video production, *The Wild Turkey Story*. As with *Deer in Kansas*, I have compiled video taken over the last ten years to create a natural history/management story of the wild turkey's reintroduction into Kansas.

Copies of the video should be ready for retail soon. As with *Deer in Kansas* (\$21.20) and *An Upland Bird Hunter's Guide to Kansas* (\$10.60), *The Wild Turkey Story* (\$21.20) will be available using Mastercard or Visa and phoning (316) 672-5911, or by mail from the Pratt Operations Office, 512 SE 25th Ave., Pratt, KS 67124.

-Gene Brehm, videographer, Pratt

NOSTALGIC IN NORTH CAROLINA

Editor:

North Carolina has been my home since coming here in 1979. Kansas, however, is dear to my heart.

My father located in Olathe after retiring from the Navy in 1961. I spent the better part of my boyhood and my high school and college years wandering the length and breadth of Kansas. Truthfully, I can never say that I lacked for wonderful and exciting places to explore. From the escarpments of eastern Kansas to the Flint Hills and on to the great western prairie, I truly loved the beauty and variety of the wildlife and landscape.

Nowadays, when people ask me where I'm from and I say "Kansas," I watch their faces twist in disbelief. Then I hear a litany of testimony about their personal travails in making the passage across the "flat, barren, dry, hot, and dusty state."

I just tell them that I'm sorry, but

they missed out. Perhaps if they had slowed down a little and taken a closer look, they would have experienced what I know is there – a land and people that don't reach out and shake you, saying "Look at me!" but a place of subtle people and even more subtle beauty that creeps in your soul and captures your heart forevermore.

So it is that I write to you, to thank you for such a wonderful magazine. It is blessed to have someone like Mr. Blair as staff photographer. His art touches my memories of a land of color and serenity. Thanks, Mike, and keep it up. From farmpond fishing to great vistas of painted sky, you show me Kansas again.

Please renew my subscription to **Kansas Wildlife and Parks**, and while you're at it, send one to my friend in Iceland.

Mike Clarkin Nags Head, North Carolina

AMEN ON CATS

Editor:

I liked your short piece on house cats ("Killer Katz," *Kansas Wildlife and Parks*, March/April 1996, Page 37). The problem is larger than most people think. We should have bumper stickers saying, "Protect our songbirds: kill a house cat."

This problem is aired out much too seldom. Thank you.

Clayton Clark Abilene

GITHANKS

Editor:

I was wondering if you still have the Kansas lifetime fishing licenses. If you have information about this, thank you.

Also, thank you for the special photo issue of *Kansas Wildlife and Parks* (Jan./Feb. 1996). I really enjoyed it. It had some of the best pictures I've seen. Being in the Army for the last six years and going everywhere from Korea to Kuwait, I don't get many chances to see

my home-state wilderness. But thanks to you, I can relive some of my old memories and look forward to when I come back to Kansas.

Thanks for the magazine and all the work you're doing for our wildlife and parks.

SPC Rodger Arndt, Jr. Ft. Hood, Texas

Dear SPC Arndt:

I'm glad you have the chance to slip "home" every once in awhile through Kansas Wildlife and Parks. And yes, we do still offer lifetime licenses, to residents only. If you were a legal resident of Kansas when you entered the military, you also qualify for a lifetime license. Hunting or fishing licenses are \$240 each. A combination hunting and fishing license is \$440.

For more information and applications, contact the Kansas Department of Wildlife and Parks, Licensing Section, 512 SE 25th Ave., Pratt, KS 67124.

-Shoup

CHICKEN WOES

Editor:

I grew up in the middle of prairie chicken country, Council Grove, and can remember hunting feed fields when the sky would be full of chickens in wave after wave. My first chicken hunt was during the mid- to late 1950s when chicken season was reopened. The population was very good during those years and remained so through the 60s, 70s, and 80s. However, during the early 90s, we began to see fewer and fewer birds each year. On opening day of the regular season last fall, we did not see a bird. On the second day, we saw 18.

There seems to be several prevailing viewpoints on this decline: unfavorable weather (cool, wet springs), longer hunting seasons, the early season, more prevalent spring pasture burning, and more predators.

We have, of course, no control over the weather and do not want to restrict the ranchers' choice of where to burn. Owls and hawks are protected by law, and coyotes are no longer hunted for fur or bounties. The two remaining reasons address hunting seasons and are the only ones that we can control.

I truly believe that proper hunting pressure has absolutely no adverse affect on the numbers of game birds, providing that the season length and bag limits are adjusted to match the numbers of birds available. This action has evidently not taken place over the last decade because no change in regulated hunting has been enforced, even in the face of declining bird numbers. If I remember correctly, when prairie chicken season was opened back in the 50s, the length of the season was less than a week, possibly only two days with a bag limit of one.

In my opinion, a reasonable approach to the current problem would be to cancel the early season and cut the regular season to 9 days with a bag limit of one and a possession limit of two. I hope that it is not too late to save this thrilling and exciting sport.

Larry Osborne Andover

Dear Mr. Osborne:

It is clear that you are a careful observer and your memory of past hunting seasons serves you well. Kansas reopened the prairie chicken season in 1957 with a two-day season. Short seasons (two to 11 days) were maintained through 1971, and they were gradually liberalized to 101 days in 1981.

In 1982, the season was stabilized to start the first Saturday in November and run through January, causing the season to vary from 87 to 92 days, depending on the year. Harvest in the 1980s ranged from 41,000 to 109,000. The early season was added in 1990, increasing the days to as many as 120.

You are also correct in your assessment of low greater prairie chicken numbers in recent years. This decline began with torrential rains in the spring and summer of 1992. Since that time, we have had continued poor weather during production seasons.

I agree that spring pasture burning has become too thorough and frequent in the Flint Hills for good chicken production. Range experts at K-State generally recommend burning every three years, but many pastures are now burned every year, leaving less available nesting cover than in the past.

There also appears to be mounting evidence that chicken populations cycle and are currently in a cyclic low. Finally, there is evidence that raptor populations have increased, but this has been gradual over the last three decades and does not appear to be correlated with prairie chicken declines.

Although hunting pressure is the only factor we can control, we detect no evidence in nearly 40 years of records that the existing season length or modest bag limits have significant impact on prairie chicken populations. Short seasons in the early years were justifiable considering the lack of scientific information. Experience now shows that hunting pressure is self-regulating: hunters don't go out much when population levels are low.

Season length has only modest effect on hunting pressure. The extended season spreads out hunting pressure. When the early season was added, total hunting days did not increase. They were shifted toward the early season.

Neighboring states support the notion that season length is not the answer. Nebraska has had a liberal season for many years (107 days), and their greater chicken numbers are high. Oklahoma has had a 9-day season for many years, and their chicken numbers are currently very low.

The causes for the current low in prairie chicken populations seem to be mostly natural, with some decline possibly attributable to land management changes. I would not rule out a future reduction in the season or bag limits based on new information, but current information does not appear to justify it. Given some good production weather, we expect greater numbers will recover under the current hunting framework.

We are aware that the resource must come first. Without that healthy resource, recreational use suffers. In as much as we have control of prairie chicken populations (minimally), please be assured that we will do nothing to jeopardize this resource.

> --Randy Rodgers, wildlife research biologist, Hays



EDUCATION PAYS

Last September, a Smolan resident and his children reported a hunting violation to the Kanopolis State Park office. The witnesses reported seeing two people shooting doves from a vehicle near public land in Ellsworth County.

The children, who had recently completed the Department of Wildlife and Parks' hunter education course, recognized the illegal activity and were determined to report it. They were able to provide partial descriptions of the vehicle, the shooters, and the type of guns being used.

Later that day, I [Ranger Todd J. Lovin] located the vehicle's owner at his home in Kanopolis. The subject claimed no involvement in any illegal activity and wished to speak to a lawyer before further discussing the issue. Without any solid identification and the first subject not revealing any information, I chose to redirect my investigation and identify the second subject.

Over the next two weeks, I recontacted the witnesses and made several local contacts until I identified an Ellsworth man as the second suspect. I interviewed him in early October, at which point he confessed to the incident and confirmed the identity of the first subject. Each was charged with hunting with the aid of a vehicle and charged \$142 in fines and court costs.

This case is a perfect example of the success of the Hunter Education Program, which produced witnesses whose involvement brought the case to light.

-Todd J. Lovin, ranger, Lindsborg

BOOZE AND BOATS

A sunny day, 85-degree water, and no wind – sounds like the perfect combination for a day to waterski the lake, right?

Unfortunately, last June at El Dorado Reservoir this combination became lifethreatening when a woman waterskiing with two of her friends fell. As she waited for the boat to pick her up, she noticed another vessel rapidly approaching. She began yelling and waving a ski in the air, but to no avail. A few minutes later, she was lying on a picnic table with a deep gash to her left knee caused by the prop of the oncoming boat.

I [Dan Heskett] arrived at the scene approximately 15 minutes after the collision and began to investigate the cause. The evening light would have put the woman in danger because the boat was headed into the setting sun. I detected the real culprit, however, when I interviewed the operator of the striking boat. The operator admitted

that he had been drinking beer since 2:30 p.m. that afternoon and had just finished his sixth one prior to the accident, at approximately 7:30 p.m.

This factor, along with the stress of sun and wind, had acted on him all day long to impair his judgement, vision, and finally his reflexes. The man's blood alcohol level was registered as .121, well above the legal limit of .08. He was arrested and placed in jail where he was charged for negligent operation of a vessel and boating under the influence of alcohol. He paid more than \$1,000 in fines, was placed on two years probation, spent 30 days in jail, and was required to take a boating education course.

The woman spent several hours in surgery and will never view boating in the same way. As our waters become more congested, let's all remember to keep alcohol away from the boats.

-Dan Heskett, boating enforcement officer, Haven

SPEECHLESS IN POACHERVILLE

On the morning of Dec. 1, I [CO Jim Robinson] was patrolling the sand hills south of the Republican River in Cheyenne County. After stopping on a hill to scan the surrounding area for deer hunters, I saw a pickup driving though a pasture about two miles away. Thinking that the pickup might be driven by deer hunters, I got out my spotting scope and continued to watch.

Soon, the pickup left the pasture and began driving down a county road. The pickup came to an abrupt halt next to a field where some mule deer were standing, and the passenger got out, raised a rifle, and shot one of the deer.

The shooter then ran through the grass to the deer while the driver took the pickup into the field and hopped out of the truck. Both men looked at the deer, then got back in the pickup and drove out of the field and back down the road.

That's when I moved to intercept the vehicle. When they saw me, they slammed on the brakes and backed down the road several yards before coming to a stop.

I drove up to the shooters' pickup, got out, and asked them if they had been having any luck deer hunting. Both said that they had not. Then I asked if they had seen many deer, and the driver said that they had not seen any deer in the past two days. To this, I suggested that they all go back and take a look at the deer that they had shot. Both men were speechless.

After driving to the location of the dead mule deer doe, I asked both subjects for their driver's licenses, hunting licenses, and deer permits. The driver produced this material while the passenger – the shooter – explained that

all he had was his Colorado driver's license because he was not hunting. I responded that if that was the case, he should not have shot the deer.

Again, both men were speechless.

The driver's deer permit was a whitetail-only permit. The driver's excuse for their shooting the mule deer was that in this corner of the state the mule deer and white-tailed deer were cross-breeding and hard to tell apart.

Although the suspects in this case may have been speechless, the judge spoke loud and clear: the non-resident shooter's fines and court costs totaled \$903. The resident driver's fines and court costs totaled \$653.

In addition to the fines, the resident lost his deer permit and one .30-06 bolt action rifle, and the deer was seized. The judge also ordered both be restricted from all hunting in Kansas for one year.

-CO Jim Robinson, Goodland



KDWP PRIORITIES

Although the Kansas Department of Wildlife and Parks' fiscal year (FY) 1998 planning and budgeting process is just getting started, the department recently outlined a list of priorities for FY 1998, which runs July 1, 1997, through June 30, 1998.

"Currently, we are complying with federal aid requirements," said KDWP Secretary Steve Williams.

"The department has been given the governor's approval to reorganize certain units within the agency. Essentially, we are returning to the system of a Parks Division and a Fisheries and Wildlife Division."

The internal restructuring involves three primary elements: the Public Lands Section, which manages state fishing lakes and public wildlife areas, has been moved from the former Parks and Public Lands Division to

the Fisheries and Wildlife Division; separate Fisheries and Wildlife sections have been created within the Fisheries and Wildlife Division; and the Information and Education sections have been combined.

A primary objective among budget priorities is to establish appropriate funding levels to avoid any diversion of federal aid funds and to meet all federal aid obligations. "Our intent is to capture all available federal aid funds that are earmarked for the state of Kansas," Williams said. "Governor Graves has pledged his support to meet federal aid obligations, which should please all sportsmen and sportswomen in the state."

Also high on the priority list for the department is improving the infrastructure of the state parks system. This would include the repair and upgrade of restrooms, shower houses, electrical services, and sanitation and water supply facilities.

"An estimated 6 million people visited Kansas state parks last year," said Jerry Hover, director of the agency's Parks Division. "We want the public to know that we are aware of park conditions and are doing what it takes to bring them up to standard with the resources that are available to us."

Other priorities include the repair of state fishing lake dams, shooting range development throughout the state, expansion of the Walk-In Hunting Area program, and boating facility improvement projects.

"Kansas has some of the best natural resource offerings in the nation," Williams said. "Through planned infrastructure updates and program developments, we hope to better cater to the public need."

One of the cornerstones of Wildlife and Parks efforts is public involvement. The public is welcome and encouraged to attend the next meeting of the Kansas Wildlife and Parks Commission, scheduled for June 27 in Hutchinson.

-Dick Carter, public information officer, Topeka

Fish STORY

Despite February news stories to the contrary, bridge construction on Highway K-17 between Hutchinson and Cheney Reservoir would not be delayed by the presence of a small threatened fish that inhabits the North Fork of the Ninnescah River, over which the bridge will pass.

Last July, the Kansas Department of Wildlife and Parks (KDWP) issued a permit for the project. The permit was necessary because, according to Kansas law, any publicly-funded development project that might potentially affect a threatened or endangered species must first be reviewed and approved by KDWP. In this case, the threatened species is the Arkansas darter, a small fish that inhabits portions of the Arkansas River drainage.

In July of 1995, KDWP approved the project with the provision that work could not occur in the stream itself from March 1 through May 31, the peak spawning period for the Ark darter.

In January, workers decided that a temporary crossing was needed on the river to move construction equipment from one side to the other. Because this crossing was not in the original plans, KDWP had to be consulted to make sure the Ark darter would not be affected. Within a week after receiving information on the crossing, KDWP had amended the original permit allowing the temporary crossing. Work on the bridge began approximately 10 days later, in mid-February.

By the week of Feb. 26, work on the two piers immediately adjacent to each side of the river had begun. Because no pier needs to be built in the river itself and the temporary crossing was approved, there was no delay in the bridge work due to the Ark darter's presence or the permitting process.

The law governing this permitting process, entitled the Nongame and Endangered Species Conservation Act, was passed in 1975. It directs the Department of Wildlife and Parks to formally list threatened and endangered animals and to prepare regulations that protect them and habitats critical to their survival. Part of this process is the review of many different kinds of publicly-funded development projects, including bridge construction, mining, industrial, recreation, dams, utilities, and other projects.

Each year, the department reviews about 850 new projects for potential impact on threatened or endangered species. Only about 3 percent of reviewed projects ever require a permit. Of the 5,812 new projects reviewed since Jan. 1, 1989, only 192 have required a permit. And only 31 of these projects, or 0.5 percent, have required any mitigation – an obligation to enhance other lands, waters, or other habitat.

-Shoup

BOTTOMS UPDATE

A renovation project has been underway at Cheyenne Bottoms since the late 1980s. With the decline in supplemental water available to the Bottoms, efforts were needed to ensure that the water that is received is used efficiently. This would be accomplished by water conservation and improving management of water that is received.

One of the easiest ways to conserve water within a basin is to reduce the loss. The primary loss of water at Chevenne Bottoms through evaporation. Significant reductions in evaporation could be made by simply reducing the surface area of the water that is exposed to the air. That is the basic concept behind the dividing of Pool 1. This pool has served as a storage pool. Any water that was available during the spring was placed in this pool for storage during the summer. What water was left in the fall was then used to re-flood perimeter pools for migrational habitat. Reducing the surface area of this stored water reduces evaporation, and, therefore, improves the potential for having water left in the fall.

This same rationale can be applied to the sub-division of pools 3 and 4. Not only is there less evaporative loss with smaller pools, but less water is needed to flood them. This means that during dry periods, when limited amounts of water may be available in the storage pool, at least some wetland habitat can be provided without spreading the water over large pools. Prior to the renovation, the five pools averaged about 2,460 acres. Following renovation, the average size of the nine pools will be about 1,365 acres.

A lot of attention has been given to the department's need to acquire additional equipment and increase operation and maintenance budgets at Chevenne Bottoms. In response to the multi-milliondollar renovation effort at Cheyenne Bottoms (due to be completed by 1998) and beginning with the current fiscal year (July 1, 1995-June 31, 1996), the operation and maintenance budget at the Bottoms was increased. This increase has allowed the completion of projects that could only be dreamed of in the past. Some of the proiects include rebuilding roads to perimeter parking lots in pools 2 and 3, acquisition of a 30-foot agricultural disk to better deal with the cattail problem, renting a tractor to begin disking the cattails in Pool 4, and contracting with local construction companies to haul off silt removed from water-control structures and pool interiors.

The department has also gained approval from the legislature to purchase a rubbertracked tractor for disking cattails. Over the coming years, this additional money, when coupled with the purchase of the tractor, will allow increased success in dealing with cattail expansion and general maintenance of the area.

For more up-to-the-minute information, two options are available. We have a 24-hour hotline, (316) 793-7730, that provides a recorded message on current conditions at the marsh. We also have our regular business line, (316) 793-3066, for anyone wishing to visit with Cheyenne Bottoms staff.

--Karl Grover, manager, Cheyenne Bottoms

CRP EXTENDED!

On March 4, President Clinton signed into law a version of the new Farm Bill that includes full funding for the Conservation Reserve Program (CRP).

In the legislature, the bill was first passed by the Senate with about the same conservation provisions as those signed into law by the President. The original House version of the Farm Bill, H.R. 2854, did not re-authorize CRP, provide secure funding for existing conservation programs, or allow any new CRP for 1997. However, House members apparently worked late to include these provisions, which were widely supported by both conservation and agricultural organizations. The result was a bill that looked pretty much like the Senate version, S. 1541, which did include CRP.

The feat was accomplished when the House adopted an amendment to H.R. 2854 sponsored by congressmen Sherman Boehlert (New York), Bill Barrett (Nebraska),

and Collin Peterson (Minnesota). The amendment authorized spending as much as \$1.5 billion annually through the Commodity Credit Corporation (a secure funding source) to continue CRP contracts for seven years at the current 36 million-acre level. The amendment was supported by House Ag Committee Chairman Pat Roberts (Kansas).

As with the Senate bill and the final version signed by President Clinton, the amended House version also re-authorized the Wetland Reserve Program (WRP). Details were worked out in conference committee, and the biggest obstacles to reauthorization of the CRP had been overcome.

CRP has been especially popular in Kansas, where 2.9 million acres are enrolled, third in the nation. Increased wildlife habitat, reduced soil erosion, and greater water quality have been the result. This is good news for the Great Plains, where drought has plagued the landscape for the past 8 months.

-Shoup





fishing

KEEP BAIT FRESH

Experienced live-bait fishermen know that keeping bait fresh and lively is as important as where and how it is used. Successful anglers go to great pains to keep minnows, nightcrawlers, crayfish, and leeches healthy. After all, healthy bait equates to lively bait and better fish appeal.

Several factors contribute to bait survival, including its condition when purchased, the type of container used to carry it, and the overall quality of the water. Make sure you buy bait from a reputable dealer. If the bait isn't healthy to begin with, it may not survive the trip to the lake or river. Minnow buckets don't have to be expensive to be functional, but they should be light-colored to reflect heat and maintain coolness. Styrofoam buckets keep bait quite well. In addition, a bucket should hold plenty of water. Eight quarts should hold a day's supply of bait.

Water quality is equally important to bait survival. Anglers should change water often to keep minnows alive for long periods. Avoid filling buckets with chlorinated water. Also, remember that drastic changes in water temperatures are harmful to bait. Add lake water to the bucket gradually, so bait isn't shocked by a sudden change in temperature. You might want to transfer your bait from a styrofoam bucket to one with a water flow-through chamber once you get to your fishing hole. This will acclimate the bait to the water in which it will be fished and keep it fresh at the same time.

To keep bait alive for extended periods without a flow-through bucket, attach a battery-operated aerator and keep it running when the bucket isn't in use. Also, remove dead bait immediately. With a little maintenance and common sense, bait can be kept alive for several days.

-Plano release

CATFISHERMEN UNITE

he National Catfishing Association has recently been organized. Based in Chapel Hill, N.C., the organization plans to work with state fisheries agencies in four primary areas:

- environmental awareness programs to help anglers learn about state, local, and national aquatic systems;
- community restoration of local aquatic environments;
- increased wildlife revenues through education and promotion programs; and
- local fishing clubs emphasizing youth fishing activities.

Persons interested in starting a local catfishing club or learning more about the organization may contact the National Catfishing Association, 207 S. Elliott, Suite 202, Chapel Hill, NC 27514, (919) 990-2700.

-Mathews

FISH CORRALS

n the surface, building fences across three coves at El Dorado Reservoir may seem odd. But from a fisheries management perspective, the fences represent the most promising effort so far to establish colonies of aquatic vegetation along the lake's barren shorelines.

If the plants take root and flourish, they will provide crucial nursery habitat for young sportfish and help improve water quality. The fences are designed to keep plant-eating fish and turtles out of the three coves long enough for eight plant species to establish.

"We're excited about the opportunity to provide vegetative habitat where it is lacking," says Doug Nygren, the department's Fisheries Management Section chief. "This could have great implications for bass statewide."

-Wichita Eagle

HATCHERY HEAVEN

espite last year's cold spring weather, 1995 turned out to be one of the Kansas Department of Wildlife and Parks' most productive years on record for fish production. Fish production at the department's four hatcheries (at Farlington, Meade, Milford, and Pratt), along with fish obtained through trades with other state conservation agencies, resulted in the following approximate numbers of fish being produced and stocked in 1995:

- sunfish fingerlings (1-1 1/2 inches) 381,000
- · catfish fingerlings (5 inches) 753,000
- · catfish intermediates (10-12 inches) 419,000
- predaceous fry (1/2 inch) 42,650,000
- predaceous fingerlings (1-2 inches) 1,082,000
- predaceous intermediates & broodfish (1/4-4 pounds) 21,300
- predaceous intermediates (10-12 inches) 6,200 (predaceous species – largemouth bass, sauger, saugeye, smallmouth bass, striped bass, wipers, and walleye)
- rainbow trout (10-12 inches) 9,040
 (5,000 rainbows being held for early spring 1996 stocking)
- grass carp 19,600

In addition to the fish produced and stocked by Wildlife and Parks hatcheries, the agency also purchased and stocked the following:

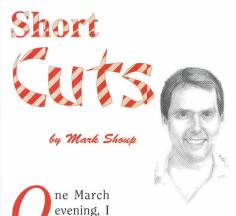
- catfish intermediates (12-16 inches) 197,000
- rainbow trout (1/2-pound) 127,400
- predaceous fingerlings and intermediates 10,500

"Fish production at the Milford Hatchery was particularly gratifying last year after the flood-related losses of 1994," says Jim Beam, department fish culture chief. "During 1995, Milford produced about 400,000 channel catfish intermediates that weighed more than 69 tons. This represents an increase of 80,000 lbs., or 22 tons, over the previous production high recorded in 1992."

In all, the department hatchery system handled 18 different fish species in 1995. In 1996, six new one-acre, plastic-lined earthen ponds will enhance the department's stocking efforts. Part of the original hatchery plan, these six ponds have been built at the Milford Hatchery and have been put to use this spring for the first time.

For more information on fish stocking in Kansas, contact the Department of Wildlife and Parks' Fisheries and Wildlife Division, 512 SE 25th Ave., Pratt, KS 67124, (316) 672-5911.

-Shoup



evening, I cornered my two boys (Logan, 8, and William, 4) in the bathroom for their bi-monthly haircuts. Through the whims of parental justice, it was Will's turn to be first, and he was clearly not in the mood to cooperate. Logan was dancing around the room with a Micro Machine helicopter, defending us from grizzly bears. Everywhere Logan went, so went Will's head.

"Get the bears, Logan," he shrieked.

"Stop it, William!" I demanded. "There are no bears in Kansas." The admonition worked for about two seconds before he was again tracking his brother's movement's.

"William, you'd better hold still, or I'm going to take you guys to the barber."

"No! No! Not the barber!" This threat had always evoked a chorus of dissent. Of course, I had never explained a barber's job and was content to let their little imaginations roll the word around. The threat usually worked, creating a calmness born of fear that would allow me to finish the task at hand.

Not this time. As I went for the bangs, I looked down to see that Will was unbuttoning my shirt. He looked up and grinned, as if to say, *Some fun*, *huh Dad*?

"That's it, guys." I tossed the scissors on the counter. "Go play, but tomorrow we go to the barber." They ran downstairs screaming, two wild animals released from a cage. Tomorrow, of course, was completely abstract.

However, tomorrow came, and we all loaded into the pickup to go "someplace special." When I pulled into a parking space two doors from the barber shop, Logan immediately recognized the red and white pole.

"No," he screamed. "This is the bar-

ber's." His face was filled with genuine worry. Perhaps curiosity helped him walk timidly into the shop, but I had to carry Will. Once in, they sat quietly and looked up at the chairs and the big men with scissors and buzzing instruments working over other men's heads. Their eyes were as big as dollars.

Brian the Barber – an intelligent, jovial character whose good nature and willing ear suited his job perfectly – greeted us. "Have a seat, guys. I'll be right with you."

Sitting in the corner was a local character named Skunk Johnson. Supposedly, Skunk came by his name because of his peculiar culinary habits although it could have easily been an allusion to his cologne. Anyway, Skunk didn't come to town often, and curiously, I never heard anyone say, "Dang, I haven't seen ol' Skunk around here for awhile." With bristly beard and grimy overalls, Skunk looked as if he'd just been greasing a truck with his head. I didn't envy Brian.

The boys didn't know what to think of Skunk, either. When they sat down, he looked them over and spat black juice into a paper cup. "You boys come ta git yer ears lowered?" He had a voice like a bullfrog. Logan just stared with his mouth open, and Will's lower lip began to tremble. Brian recognized the impending crisis immediately, came over, and kneeled down in front of the boys.

"That's just an old saying that means getting your hair cut," he explained with a smile. "Now I'm going to cut your daddy's hair first. After you've seen what it's like, you can decide who gets to ride in that chair first." Brian pointed to a chair with a carousel pony seat.

It's amazing how quickly a child's mood changes. As soon as I was in my seat, the boys started going through magazines and comic books on the rack, eyes shifting from the carousel horse to Skunk Johnson to me. Then Logan spotted a copy of *Kansas Wildlife and Parks* magazine. He held it up to me and said, "Look, Dad."

"You've seen that magazine before?" Brian asked knowingly.

"My dad writes it," Logan shyly over-stated.

This piqued Skunk Johnson's interest. "You werk for the Fish n' Game?" It sounded more like an accusation that a

question.

"Yeah, I do." I watched Skunk out of the corner of my eye as Brian clipped.

"Well maybe you can answer me somethin'," Skunk continued. "How come you boys is stockin' bears down in Kiowa County?"

I smiled, but Brian, who is a knowledgeable outdoorsman, beat me to the punch. "Why, Skunk," he said with a perfectly serious voice, "everyone knows it's to keep in check the mountain lions they've stocked."

The room was quiet. I could hear Brian's partner, Mike, stifling a chuckle as he finished off a sheriff's deputy's flattop. It was at least a minute before Skunk could answer.

"I knowed it!" he exclaimed. He slapped his knee, and a cloud of dust surrounded him. "You been takin' coyote pups out of their den and injectin' 'em with mange. You been cross-breedin' rattlesnakes and bullsnakes so we can't tell 'em apart. Yer gonna drain the lakes and stock 'em with spotted owls and endangered species. And now yer gonna try and git rid of our lions. I've had just about all I can take of the govermunt."

Skunk's voice was at fever pitch. Brian spinned me toward the mirror, turned his back to Skunk, and calmly began shaving the back of my neck. Skunk stood up and looked at me in the mirror, steam rising from underneath his sweat-brimmed conductor's cap. I looked at Brian, but he was intent on his razor, like a sculptor smiling on his work.

The boys jumped in their seats as Skunk stomped past them and out the door.

Brian dusted off my neck and soon had Logan on the carousel seat. Both boys succumbed to his deft and gentle touch and grinned throughout the dreaded procedure. As we were leaving, Brian pointed his comb at me and said, "Thanks for the distraction. I hate to lose business, but there are times when it's worth it."

"It's always good to get away from work," I sighed.

Back in the car, I asked the boys, "Now, that wasn't so bad, was it?" They both agreed that it wasn't. "Well, next time I'll cut your hair for you."

"No!" they cried in unison. "We want to go to the barber!"

hunting

BOOKS

reat Whitetail Hunts and the Lessons They Taught, is an armchair account of 13 trophy hunts spanning the continent and including nearly every hunting situation. Written by some of the nation's best-known deer hunting authors, each chapter combines a fascinating story with how-to information that can lead to better hunting success. Rifle, muzzleloader, and bowhunting tales are included, along with sometimes unconventional strategies that help to bag big bucks. This book is fun to read. It draws the reader into each hunt the cold, the long hours on stand, the frustrations and exuberations that are common to hunting the whitetail deer. Not all of its hunts are successful, but its stories certainly are. This book is fine fireside reading and would make a nice gift for any deer hunter.

Hunting the Four Periods of the Rut, by Dick Idol, is a serious study of how bucks move and behave as fall months progress. Idol, one of America's foremost deer hunting experts, condenses a lifetime of hunting knowledge into 244 pages devoted to outsmarting mature bucks. Addressing such issues as how to locate and pattern an animal, factors that affect travel patterns, and natural interactions within deer society, the book divides deer season into four distinct segments: the rut-preparation period, the prebreeding period, the breeding period, and the post-breeding period. Strategies for each segment are discussed in detail, including special considerations for various terrain and geographic regions. Applied hunting tactics are discussed for each area and time period. The book utilizes up-to-the-minute research on whitetail movements, and sheds light on the expansive range of a rutting buck. This book is written for the serious deer hunter and will probably be referred to annually as hunting strategies are planned.

Great Whitetail Hunts. . . retails for \$28.95 and Four Periods . . . for \$33.95, including shipping. Both books are available through Venture Press, P.O. Box 1689, Bigfork, MT 59911 (406)837-6780.

GAME CALLING

ould you like to view wildlife – all kinds of wildlife – up close? Then you might be interested in a portable bird and animal caller. This small, weatherproof device is an ideal way to call wildlife into point-blank range for easy viewing or photography.

I rely on a caller and various tapes for much of the photography used in *Kansas Wildlife & Parks* magazine. I've had tremendous success luring mammals, raptors, deer, and dozens of species of songbirds.

Performance and portability are the most important features of a caller. While many shy animals will avoid noisy groups, birds often readily appear within viewing range if hikers sit quietly among the trees. Small groups walking and hiding carefully may experience some of Kansas' most elusive wildlife species.

Of course, calling works best with one or two people who employ careful hunting tactics: a quiet approach to the calling site, attention to wind direction, and use of blinds. When everything works right, it's not uncommon to see wildlife at less than 10 yards.

A good caller costs about \$150. Considering that many wildlife enthusiasts pay more than this for a pair of binoculars, it is well worth the cost for animals brought close. A good portable caller weighs about 7 pounds and can operate for up to 12 hours on a single charge. Additionally, a remote control attachment is a handy, but more difficult to find, feature that allows the caller to be operated several hundred yards away.

Currently, there are 67 tapes available to cover most types of midwestern wildlife. Good callers are available through most outfitters. Check with your local sporting goods store or outlet for more information.

-Blair

HE OR SHE?

--Blair

reaks of nature do occur, and on opening day of the last Kansas firearms deer season, a woman on her first deer hunt bagged one. Laura Hare, of Wellsville, hunting with her partner, Doug Montis, shot what she thought was a

white-tailed buck. The animal had a 10-point rack. After shooting the animal, she discovered that there were no male sex organs, only those of a female deer. Hare was shocked.

"It was about 4:35 p.m. when I saw this buck coming, and I thought I should shoot it," she said. "I just wanted to get a clean shot, and when I got it, I took it."

Hare made a perfect shot, right through the heart, at about 55 yards. She said it was her first shot at a deer and, of course, her first deer.

Over the years, the Blue Rapids/Waterville areas have also spawned some unusual hunting occurrences, but this year another hunting expedition surprised even the most experienced of hunters. Near Irving on Sunday, Dec. 3, Bill Gose shot a perfectly-developed 9-point buck; only when his group began to field dress the deer, they learned that it was really a doe.

Keith Sexson, former big game coordinator for Wildlife and Parks and now chief of the Research and Survey Section, said he has seen only six or eight female deer with antlers.

"Usually, the antlers are just spikes or small gnarled protrusions," Sexson says. "It is definitely caused by an abundance of testosterone. It is not unusual for a female to have the male hormone, but it is rare that the hormones would cause fully-developed antlers. I've never seen a fully-developed rack on a female deer."

> --Miami County Republican and The Blue Rapids Telegraph





PRAIRIE PUPS

Black-tailed prairie dogs have experienced a 98 percent decline in Kansas since 1900. Once abundant, with active prairie dog towns covering more than two million acres, these small mammals are found on fewer than 50,000 acres in Kansas today.

Unlike many species that have experienced precipitous declines as a result of habitat loss, the loss of prairie dog populations is a direct result of governmental and private landowner efforts to eradicate them. The U.S. departments of Interior and Agriculture and state governments have supported eradication efforts, and counties and townships are authorized to eradicate prairie dogs on private land and bill the landowner.

Prairie dogs were not widely considered pests in western Kansas until homesteaders moved into prairie dog habitat to farm in the late 1800s. Prairie dog towns occupied large areas that were otherwise valuable for agriculture, and large populations could destroy farmers' crops.

More than 99 percent of potential habitat for black-tailed prairie dogs is on private property. Although many landowners are willing to tolerate small numbers on their land, most consider them pests. Many range managers believe that prairie dogs do extensive damage and should be extirpated from commercial range land.

Recent research examining the effects of prairie dogs on midgrass prairie has shown that although prairie dogs do remove grass, that which remains has higher nutritive quality. Native ungulates prefer grazing sites on prairie dog towns and may put on more weight if they feed on prairie dog towns.

There are a number of species that are at least partially dependent on prairie dogs. The federally-endangered black-footed ferret needs to prey on dogs to survive. Swift foxes are often found on prairie dog towns, presumably because mice and other prey are more abundant there. Mountain plovers and ferruginous hawks both use prairie dog towns extensively. Many other plant and animal species are more abundant on prairie dog towns than in surrounding grasslands. In all, more than 140 species of vertebrates have been found to use prairie dog towns.

-Plains Keeper

SUMMER HEAT

While you won't see perspiration running down the face of a quail, every animal has a way to regulate its body heat. Rodents and various carnivores, perspire, but their sweat glands are confined to their soles or between their toes. Other mammals pant to evaporate moisture from their lungs.

Cold-blooded animals such as snakes, whose body temperature is regulated by their surroundings, adjust their temperature by changing their environment, such as moving from the top of a hot boulder to the shade beneath it. Box turtles give off heat by frothing at the mouth and nose when they're hot. Some amphibians, such as frogs, wait until the sun sets before they venture out.

Birds cannot tolerate the wide range of temperatures that reptiles can. Rapid cooling is essential for their survival. To cool off, they evaporate water from their respiratory system by pumping their throat muscles to rapidly bring in air.

-Insider

Grasshopper
Wonster

hen loggerhead shrikes get down to the business of raising young, large grasshoppers near the nest site have a shortened lifespan. After a coworker told me about a nest along a county road, I grabbed my camera to get a photograph for education programs on birds. The adults were intent on feeding their five young. Each time an adult came to the nest, it stuffed a beak full of grasshoppers into the gaping mouth of a nestling.

Shrikes will use thorns as meathooks to hang some of the prey. We checked the nest tree, and there were a couple of mice and a lizard impaled on the thorns of a Russian olive tree a few yards away from the nest.

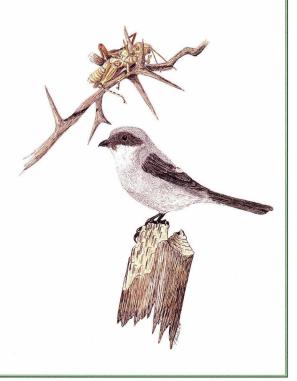
Sometimes shrikes are the bane of winter bird lovers because they make raids at the feeder in an effort to capture a bird for a meal. Often, they are successful. However, the diet of the shrike when averaged throughout the year is primarily invertebrates. One researcher estimated that 72 percent of the shrike's diet was insects and spiders, 20 percent was rodents and reptiles, and 8 percent was birds.

Loggerhead shrikes can be confused with mockingbirds because both have gray and black coloration with white wingspots that are easily noticed when the birds are flying. The shrike is a chunkier bird with a dark mask over the eyes and a shorter bill.

The Cherokee Indians were reported to have identified the shrike by the name that translated "head it eats." As legend has it, after the shrike eats the "singing parts" of enough birds, it gains the ability to mimic and becomes a mockingbird.

Loggerhead shrike populations have been seriously declining in eastern states in the past decades but are holding their own in Kansas.

-Ed Miller, nongame wildlife biologist, Independence





ADDRESS CHANGE?

Have you moved recently? If so and you subscribe to *Kansas Wildlife and Parks*, be sure to let us know what your new address is. The Postal Service will not forward magazines. Send notices of address change to *Kansas Wildlife and Parks* magazine, Subscriptions, 512 SE 25th Ave., Pratt, KS 67214, or phone (316) 672-5911.

-Shoup

"OUTDOORS WOMAN" IN YEAR 3

"Teach me how," is a simple and earnest request from women who want to learn outdoor recreation skills. They don't want their hook baited for them, their quail cleaned for them, or their campfire built for them. They want to do it themselves -explore their own potentials and meet their own challenges - but because they lack proper training, many women are left watching from the sidelines.

In an effort to provide outdoor education opportunities for women, the Kansas Department of Wildlife and Parks will offer its third annual Becoming an Outdoors-Woman program Oct. 4-6, 1996. This nationally-acclaimed program has been designed to teach women basic outdoor skills in an unintimidating environment, using a format that is almost exclusively hands-on.

We want participants to become physically familiar with the equipment and all of the related procedures, not just operation but safety, care, and ethical use, as well. It takes a thorough level of familiarity to build the confidence necessary to pursue new adventures. Our goal is to give participants that confidence.

Last year's conference offered more than two dozen classes, teaching skills such as shotgunning, wild game cooking, fly fishing, boating, and botany.

The workshop, which is limited to 100 participants 18 years or older, is held at Rock Springs 4-H Center near Junction City. Registration is expected to be about \$125 and will include meals, lodging, supplies, and use of equipment. For Becoming and Outdoors-Woman registration material, contact Becky Johnson, Kansas Department of Wildlife and Parks, P.O. Box 1525, Emporia, KS 66801 before June 1, 1996.

-Becky Johnson, Becoming an Outdoors-Woman program coordinator

TOPO MAP SHOPS

The department commonly gets requests for topographical maps. Fishermen, especially, are interested in obtaining such maps. Although the department does not publish topo maps, the following sources should be able to provide them:

- U.S. Geological Survey, 4821 Quail Crest Place, Lawrence, KS 66049, (913) 842-9909. These maps are printed in three colors. Features such as roads, railroads, cities, and map lettering are in black; water features appear in blue; and topographic relief is illustrated with brown contour lines. Cost for maps varies.
 - · Geological Survey maps

may also be purchased from the Kansas State Geological Survey, 305 Moore, University of Kansas, Lawrence, KS 66045, (913) 864-3965, or through the Publications Sales Office, 103 Colorado Blvd., Wichita, KS 67201, (316) 262-1639.

- Sportsman's Map Headquarters, 3300 Carlock, Wichita, KS, (316) 838-3670.
- •Rusty's Outdoor Sports outlets in Wichita, Salina, and Hutchinson.

-Bev Aldrich, I & E secretary, Pratt

YOUTH PROGRAM

The Flint Hills National Wildlife Refuge, near John Redmond Reservoir, is once again sponsoring a Youth Conservation Corps (YCC) program this summer. The YCC is a summer employment program for people age 15 through 18 who work, learn, and earn together by doing projects that further the development and conservation of natural resources. For more information, phone (316) 392-5553.

-Coffey County Today

WILDLIFE SURVEY

The U.S. Fish and Wildlife Service (USFWS) is asking for public participation in the 1996 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, a periodic survey in which participants are contacted randomly throughout the United States.

"This survey provides the only comprehensive statistical data available to quantify participation and expenditures on wildlife-related recreation,"

says Phil Million, chief of public affairs for the USFWS. "Survey results are published in a national report and 50 state reports. As such, it is an indispensable resource for wildlife officials, journalists, corporations, conservation groups, and anyone interested in wildlife."

To conduct the survey, the U.S. Census Bureau contacts nearly 130,000 households. A portion of these households are then tracked throughout the following year to determine their participation and expenditures on wildliferelated activities. Results from the last survey, conducted in 1991, showed that more than half of the American people enjoyed some type of wildliferelated recreation.

The Census Bureau will collect 1996 information primarily by telephone interviews with a sample of U.S. residents in April and August of 1996 and January of 1997. The willingness of anglers, hunters, and others to participate is critical to the survey's success. The Service encourages all conservation-minded Kansans to cooperate if contacted.

-Shoup

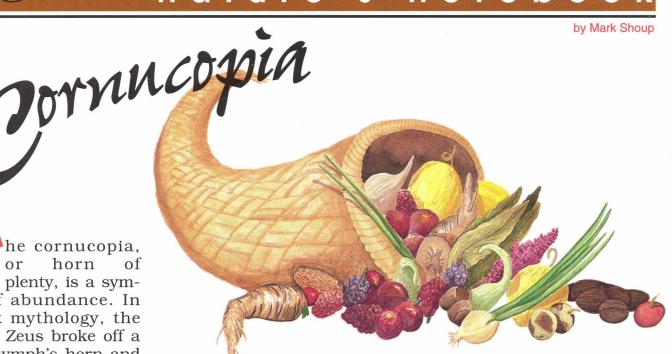
REWARD FOR EAGLE KILLERS

State officials are offering as much as \$2,500 for information about who shot a golden eagle found lying along K-14 Highway south of Beloit in March. Killing a golden eagle violates both state and federal law. U.S. Fish and Wildlife Service special agent Case Vendel said the eagle was shot in the head with a rifle.

-Beloit Daily Call



by Mark Shoup



he cornucopia, horn plenty, is a symbol of abundance. In Greek mythology, the infant Zeus broke off a goat-nymph's horn and gave it to the daughters of King Melisseus. Zeus promised that the horn would always be full of food and drink.

Since the days of the ancient Greeks, the horn of plenty has come to symbolize Mother Nature's bounty. However, in these days of giant supermarkets and fast food restaurants. we seldom associate the food we eat with nature. Few people realize that the natural world bears all the food a person needs, if only we knew what to look for.

When I was a boy, I could stand for hours in the shade of a mulberry tree, munching the dark purple berries as I escaped the summer heat. Sandhill

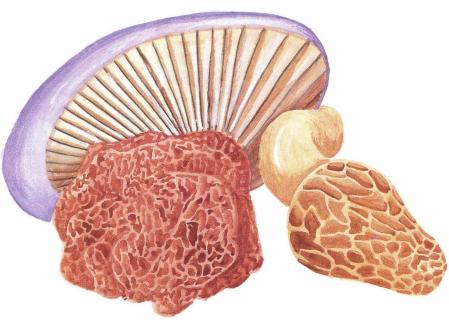
> plums were another summer treat, as were wild currents. Occasionally, I'd munch a wild onion. As I got older, I learned to dig the root of purple poppy mallow, or Indian bread, and eat it. It tasted kind of like rope, but it was neat to think you could eat it. I also learned to boil wild rose hips for tea.

Of course, these were only a few small summer snacks -- hardly enough to keep a person alive, especially year-round. How did Native Americans survive? They hunted, of course, and fished some. But it takes more than meat to live.

Most people would probably be surprised to learn that one favorite Indian food was cattails. In early spring, the cattail's crisp white tuber -- a swollen underground stem much like a potato -- was ground into meal. As the plant grew, the tender shoots were eaten like asparagus.

The cattail had other uses for Native Americans. The leaves made fine basket- and roof-making material. And the downy cotton was stuffed into





moccasins for extra warmth in winter. Other plants yielded dyes, medicines, tinder, and cord. Birch bark was used to make canoes.

Today, foraging for edible wild plants is a hobby for many nature lovers. Modernday foragers sometimes get even more creative than our forebears. Cattail pollen, for instance, has been used as a spice to replace the rare and expensive saffron. Elderberry jam, sandhill plum butter, persimmon preserves, and blackwalnut pie are other natural treats we get from Mother Nature.

Less well-know food sources, such as wild rice, fescue, and curled and narrow dock, yield seeds that can be cooked like rice or ground for flour. In early spring, pokeweed, Jerusalem artichokes, and morels are favorites. Throughout the summer, watercress, various berries, and plums provide a sweet heat-retreat. In autumn, nuts of all kinds are ready for the taking, especially in eastern Kansas.

Becoming an outdoor gourmet can be an exciting, fulfilling (and filling) hobby. Of course, you don't want eat plants without knowing for sure that they aren't poi-

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with mushrooms!) The best way to learn about wild edible plants is from someone who knows about them. Many older people know about these plants and would love to share their knowledge with young people. Scout troops and university biology departments often have access to such experts, as well.

One excellent book on the subject is *Edible Wild Plants of the Prairie*, written by Kelly Kindscher and published by the University Press of Kansas in Lawrence. Another good source is *Tom Brown's Guide to Wild Edible and Medicinal Plants*. With a little study and caution, gathering wild plants can be some of the best fun you have this summer.



Wildlife & Parks

HIGH GROUND



by Mike Miller

Stream Distance Warp

Tocould walk to China in a day if a trout or white bass stream led there. I know what you're thinking, here he goes again, waxing about the blissful virtues of stream fishing. No, there's something mysterious going on here . . . something that goes against all the laws of physics.

Distance walked in a stream (assuming you have a fishing pole in hand) does not equal distance walked on dry ground. It would stand to reason that, since a stream meanders, the straight-line distance on dry ground would be shorter, but it's not.

I first noticed the discrepancy in Colorado. I was naively determined to become a flyfisherman on our three-day vacation. My wife, hearing me cuss and fume while merely tying on a leader, decided to stay in the truck and read while I traipsed upstream in search of a *very* gullible trout.

Flyfishing takes patience, perseverance and a treeless mountain stream on which to learn. I had perseverance. The only flyfishing skill I could master that day was catch and release. I released dozens of trees, bushes and a few rocks. (I have yet to find a trout stream without trees or bushes lining its banks but if I do, I might actually catch a trout there.)

I persevered, casting, snagging, cussing, and avoiding a fall in the icy water. (As if the initial frustration isn't enough to weed out the less-than-devoted beginning flyfishers, there are the slippery rocks. All good trout streams have a rocky bottom covered with algae the consistency of snot. It's nearly impossible to walk on.) So I staggered up and around a few bends in the creek before I decided to see how my wife was faring with her book . . . and to look for more flies.

I climbed up the steep bank to the gravel road that followed the stream and looked down to where my wife and the truck should have been. They were gone. In fact I couldn't even see the parking area and picnic table. I figured I'd either been gone longer that I thought and she'd left me, or there's a bend in the road obscuring my view . . or both. I walked several minutes before panic hit; maybe this isn't even the same road, and maybe I'm not even walking in the right direction! Hoping the search party would find me if I stayed on the road, I kept walking.

Finally, in the distance, I could see a tiny reflection. I walked toward it, hoping it might be a road sign telling me where I was. A mile or two later I discovered the tiny reflection was the truck. I arrived to find my wife starting another book. She was peeved. "Where have you been all this time? I was afraid a bear had gotten you, or something. Did you catch anything?"

"Too far to carry fish," I lied. "And no bear with any sense would have gotten within 20 yards of me while I was casting. Just ask a couple of hundred pine trees."

$$\frac{\text{Dis.}^3/\text{H}_2\text{O} + \text{Fish}}{\text{MAC}^2 + \text{Dist.}^3} \neq \\ \text{Dis.} /\text{H}_2\text{O}$$

I couldn't figure out how I got so far from the truck. It only seemed like I had fished for a short time. I decided time flies when you're flyfishing.

The phenomenon came up again, however, on a white bass fishing trip on the Smoky Hill River. The whites had just started to run, so there were only a few small males in the river. Lennie and I cursed our rotten luck, arriving a day or so early, but it turned out to be a blessing.

We fished for what seemed like several hours, maybe a mile or so, wading and casting jigs. We even caught a couple of small whites apiece.

"We better head back," I told Lennie as the sun was nearing the horizon. "Let's cut across that farm field to the truck."

When we emerged from the streamside timber into the plowed dirt, Lennie squinted and pointed to a grove of trees in the distance. "That's where we parked, isn't it?"

"Looks about right," I answered. "Shouldn't be too bad of a walk. I'm glad I'm not carrying 25 2-pound whites, though." (Like we ever have to worry about that kind of problem.)

We kicked dust clouds as we plodded through the soft dirt, finally reaching the relief of the woodlot's shade. Unfortunately, my truck was gone again.

"Dang truck never stays where I park it," I said disgustedly.

"Did you leave your keys?" Lennie worried. "Somebody's drove off with your truck."

I walked on through the woodlot and looked across another plowed field . . . a huge field. There, barely visible, was another little woodlot. And as the sun set, I could see a familiar glimmering reflection.

"There's no way we walked that far from the truck," I said. "There's something fishy going on here. Maybe it's those darn fish spirits messing with us again."

"Fish spirits? You know, I worry about you sometimes," Lennie said. "Anyway, I'm hot, tired, thirsty and have eaten too much dust to care about fish spirits. But I'll tell one thing, if my cooler full of ice-cold sodas isn't in the truck, those fish spirits don't know what trouble is."

