

KANSAS

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On Point

by Mike Hayden



Taking the Right Tack

The pessimist complains about the wind; the optimist expects it to change; and the realist adjusts the sails.

William Arthur Ward

Wind power is the fastest growing form of green energy in the United States, and we Kansans are wind rich. In fact, Kansas ranks third among states for its wind energy potential. It makes good sense to develop wind power here. However, it requires common sense to do it in a way that won't irreparably harm our most precious resource: the native prairie.

Noted writer and prairie advocate John Madson wrote, "The wealth of the tallgrass prairie has been its undoing." Only a tiny fraction of the once vast tallgrass prairie that covered the midwest is left, and much of it is in Kansas. Kansas also hosts quality mid- and shortgrass prairie. We are justifiably proud of that. Native prairie is as much a part of our heritage and history as bison, cowboys and cattle drives. And the wildlife species associated with the native prairie are as unique and fantastic as any found in the world.

While wind energy appears to be environmentally friendly — it is emission free and produces electricity without the use of other resources such as water or fossil fuel — it's not without impact. We are particularly concerned about the effects on native prairie wildlife, especially ground nesting birds such as prairie chickens. Gov. Sebelius wisely asked for a voluntary moratorium of wind farm development within a corridor of the Flint Hills. We applaud and support that position, but we also are concerned about other areas of prairie.

Siting of wind power facilities on native intact prairie appears likely to cause avoidance or complete abandonment of otherwise suitable habitats by some

grassland birds. The actual footprint or area of physical disturbance affected by the construction of turbines, roads, transmission line connections, and other infrastructure of wind facilities is small compared to overall project areas. However, behavioral avoidance of these facilities by sensitive grassland birds has the potential to expand negative effects over the entire project (generally thousands of acres). Research at a Minnesota wind facility found nesting densities of grassland birds four times greater in grasslands that were 180 meters from wind turbines compared to grasslands within 80 meters of turbines. Studies in Europe have also documented bird avoidance of wind power facilities. Though not specifically associated with a wind facility, a six-year study in southwest Kansas showed that lesser prairie chicken hens seldom nest or raise their broods within a mean buffer of 1,191 feet from electrical transmission lines, 581 feet from oil and gas wellheads, 4,114 feet from buildings, 1,007 feet from center pivot irrigation systems, and 2,579 feet from either side of improved roads. The behavioral response of the greater prairie chicken is similar to that of the lesser prairie chicken, and it is predicted that nesting and brood-rearing hens of both species will avoid large wind turbines (1.5 MW models; 350 feet tall) by at least a one-mile radius. In its Briefing Paper regarding prairie grouse leks and wind turbines, the U.S. Fish and Wildlife Service recommends a 5-mile buffer between occupied prairie grouse leks and wind power facilities.

KDWP's position on wind power is that facilities should be sited on previously altered landscapes, such as areas of extensive cultivation or urban and industrial development, and away from extensive areas of intact native prairie, important wildlife migration corridors, and migration staging areas. Wind energy should be developed with prudence and wisdom, considering its impact on our other natural resources.

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Circulation Teri Simpson

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Front Cover: Lesser prairie chickens benefit from improved range practices. Photograph by Mike Blair, 600 mm lens, f/9.5 @ 1/500th sec.

Back Cover: Trout provide great winter angling opportunities across the state. Mike Blair filmed this fly fisher with a 600mm lens, f/11 @ 1/250th sec.



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New Answers To Burning Questions

It isn't easy to cut against the grain. For most of us, it's easier to go with what we believe and to be most comfortable around people who share those same ideas. To question accepted thinking in any social or professional pursuit is to invite criticism.

This article is about an idea that cuts against the accepted grain. It's an idea that has grassland managers questioning some of their own long-standing, dearly-held beliefs. It was right in front of us all along, but it took someone less bound by convention to see it.

As a wildlife student at Kansas State University back in the 1970s, I was advised to take the basic Range Management course. It may well have been the best class I ever took. One key lesson was on grazing distribution, and we learned that even utilization of a pasture was best. Heavy grazing in one part of a pasture with light use of another was considered a problem to be fixed by better water distribution, mineral blocks, more fencing, or intensive grazing systems that forced livestock to graze "underutilized" areas. We also learned that fire was the prairie's best ally and that burning one year out of three or even two back-to-back years over a five-year period was ideal for tallgrass prairie. But at the same time, we were instructed that a prescribed burn had to include the entire pasture. A partially burned pasture would result in cattle concentrating on the burned area and lead to uneven grazing.

by Randy Rodgers
wildlife biologist, Hays

photos by Mike Blair

A new way of thinking about how we manage grasslands holds the potential to turn around declines in greater prairie chicken populations without sacrificing livestock performance.

This notion of even grazing has propagated through a number of grazing systems that have become widespread. In the Flint Hills of Kansas and Oklahoma, the Intensive Early Stocking system became the even-grazing system of choice for many ranchers. As currently practiced, the first step in this system is spring burning, usually in late April, year after year. As soon as new growth emerges, cattle are stocked at a density two to three times that accepted for full-season grazing. The idea behind Intensive Early Stocking is to put a lot of cattle on this highly-nutritious, post-burn growth through early- to mid-July. Then they're pulled off, and the prairie grasses have the rest of the summer to recover. This system results in higher returns and, provided there's good summer precipitation, the grass

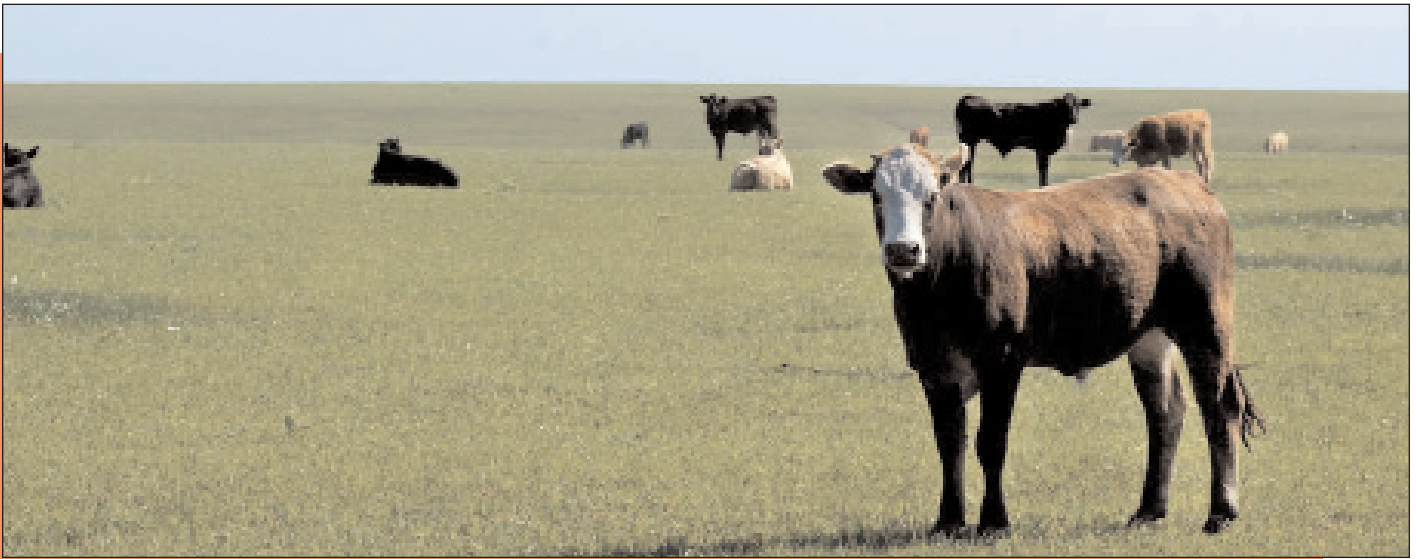
can recover by fall.

Unfortunately, annual burning and the Intensive Early Stocking system together leave much to be desired when it comes to the needs of prairie wildlife. The Flint Hills have always burned, both prehistorically and since ranchers brought cattle into this region in the 1800s. These fires, while extensive, seldom burned all the prairie in any one area. Even with manmade fires, plenty of unburned pastures intermixed with burned pastures. And within burned pastures, significant unburned patches often occurred.

But today, vast sections of the Flint Hills prairie go up in smoke almost every spring and often in just a few days. If a spot is missed, someone goes back on their ATV and burns it later. Airline pilots have commented on the extent

and completeness of these immense blackened areas. Once the grass greens, high-densities of cattle keep it cropped low from May through mid-summer. This just happens to be the reproductive period for most wildlife.

Some nests are inevitably burned, but grassland species like prairie chickens have adapted to fire over the millennia. In the past, hens whose nests were lost often re-nested in remaining unburned areas. But what happens if there are virtually no unburned areas? And what happens when even the new growth is kept so short by Intensive Early Stocking that it can't provide adequate concealment? The result has been poor nest success, which has translated into declining populations of



The prevalent practice in much of the Flint Hills is to burn everything each spring, usually in late April, then cattle are stocked at a rate two to three times greater than a season-long stocking rate. The Intensive Early Stocking system takes advantage of the new growth, then the cattle are taken off in July to allow the grass to recover. No unburned areas are left for prairie nesting birds.

prairie chickens, bobwhite, and other grassland birds.

To be fair, there is an up side to annual fire. It does keep woody vegetation, particularly trees, from invading the prairie. There are many prairie regions in

Kansas, even including parts of the Flint Hills, where tree invasion poses a much greater threat to grassland wildlife than excessive fire. It may seem odd, but prairie chickens and many other grassland birds are suffering from management at the extremes.

Some areas are getting too much fire and others not nearly enough.

The prevailing practice of even grazing works against wildlife in other ways, as well. This may be best illustrated with prairie chicken as an example since they're what biologists refer to as a "flagship species." This simply means that if conditions are good for chickens, then most other prairie species will thrive. If chickens are in trouble, so too are many other species.

The most critical phases of the prairie chicken's life cycle are nesting and brood rearing. But these aren't satisfied by the same habitat. For nesting, chickens need

knee-high residual grass with good concealment that offers protection from both predators and weather. Nesting cover in Kansas is usually at its best two years after a fire. But broods need something different. Little chicks cannot easily move through areas with lots of residual grass. They need areas with abundant forbs (broad-leaved plants) where plenty of insects are available and the chicks can move about freely to catch them. Keep in mind that a newly-hatched chick is just a 2-inch ball of fluff. Walking a few hundred yards through thick grass is to them an expedition. So, the key to prairie chicken production is having dense nesting cover close to open brood-rearing cover.

Indeed that's exactly what was learned by researchers with the Sutton Avian Research Center when they radio-tracked greater prairie chicken hens in northeastern Oklahoma. Prairie chicken hens selected nest sites in unburned cover that were usually less than 200 yards from a burned area. When a nest hatched, the hen immediately led her chicks to a burned area to forage. Prairie landscapes where everything is



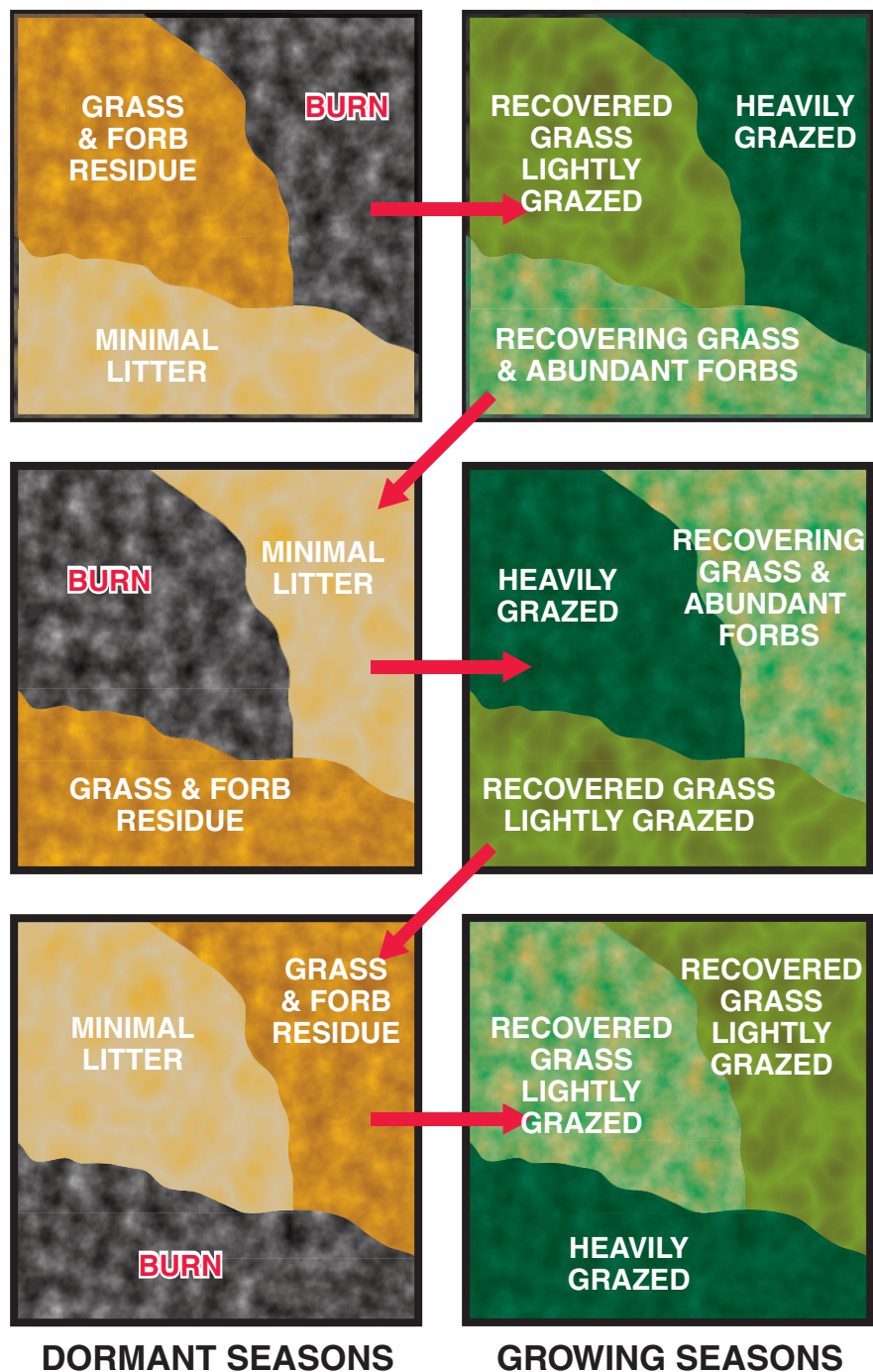
The prairie chicken is a signature species of the Kansas grasslands, and witnessing the spring booming grounds is an amazing privilege.

treated the same — all burned, all grazed evenly, or both — will be less productive for prairie chickens, as well as many other species of wildlife. What works best is a mosaic of burned and unburned areas where they can easily move from one to the other. Only 30 years ago, Flint Hills prairie provided exactly that.

Now think of the prairie itself. Prairie is not just grass. It is an entire ecosystem, much of which lies underground, composed of myriad interdependent species. Grasses may be dominant but forbs are critical players, too. Legumes and associated bacteria capture nitrogen from the air and store it in the soil. The long tap-roots of forbs pull micro-nutrients to the surface from deep subsoils, improve soil structure, and increase its moisture-holding capacity — all of which benefit the grass. And grazers, both domestic and wild, don't just eat grass. Grass may be a steer's staple forage, but an important part of its nutrition comes from forbs.

So is it good, over the long term, for a prairie to get the same even treatment year after year? Not likely. At least since the last ice age, the prairies and prairie wildlife of the Great Plains adapted to a cycle of perpetual change. Of course, this included sharp variations in weather — daily, seasonally, annually, and even over decades. But probably the key driving force to which prairies have adapted was what ecologists call the fire-grazing interaction.

Millions of bison once roamed the Great Plains, moving to wherever the grass was greenest, most tender, and most nutritious. More often than not, they found just what they wanted where a wildfire had passed and stimulated fresh new growth. Once there, they stayed and grazed it hard for as



The graphic above illustrates how the Patch-Burn Grazing Program might work in one pasture. The progression mimics fire-grazing interaction the prairie adapted to when buffalo roamed the Great Plains in huge numbers.



Researchers have fenced off test areas to better understand how the prairie ecosystem responds to management practices. A new management program called Patch-Burn Grazing has caught the attention of wildlife biologists and ranchers alike.

long as the grass held out. And the effect of all those bison hooves trampling the soil was like shallow tillage. Come fall, these heavily-grazed, hoof-pounded areas had little residual cover left, so they were less likely to carry a wildfire. All that hoof action, combined with temporary suppression of the grasses, allowed prairie forbs to flourish the next spring.

Elsewhere, sections of prairie that hadn't burned, while still grazed, had fewer bison on them and for less time. This allowed grasses in those areas to increase their top growth and build carbohydrate reserves in their roots. As time went by, this top growth accumulated as residual litter in lightly-grazed areas. And the longer the litter built up, the more likely it was to burn. When it did, the bison came and the whole process was repeated.

The Plains Indians understood this. Before the coming of man to North America, lightning was the sole igniter of wildfire. At some point after man came on the scene, some bright Native American saw the connection between

burned prairie and abundant bison. And so Indians started setting fires themselves to attract bison to their hunting grounds.

The prairies were never some homogenous sea of grass rolling off in unending sameness. They were a patchwork, a shifting mosaic of burned and unburned, some places grazed down, others hardly grazed at all. Some areas were replete with forbs and others not. Patches ranged from small to immense. And none of this happened on a set schedule; the whole process was infused with randomness and rotating change. Conditioned to forests, settlers from the east may have



Burning is necessary for a healthy grassland, and it prevents tree encroachment.

little perceived the diversity of the prairies, but diverse and dynamic they were.

With the passing of the great bison herds and fencing of the land, the scale and dynamics of the prairie mosaic changed. But it didn't go away altogether. Cattle aren't bison, but they graze pretty much the same. Barbed wire hemmed them in, but it didn't stop wildfire. Subdividing the prairie into pastures was a step toward grazing evenness, but no two ranchers managed exactly the same. Season-long grazing still created some variability within individual pastures, from one side of a pasture to another and right down to having heavily-grazed spots just a few feet from lightly-grazed clumps. For prairie chickens, the Flint Hills was still prime habitat, thanks in no small part to the ranchers' good stewardship. But the arrival of thorough annual burning, Intensive Early Stocking, and the resultant evenness precipitated a long-term prairie chicken decline and seemed to relegate them to survival on the margins. Intensive Early Stocking was destined to spread because it increased profits.

Life is full of "Eureka!" moments. I first learned of one that showed a possible way out of this conundrum when I read a paper published in 2001 in the scientific journal *BioScience*. Sam Fuhlendorf and David Engle, then both professors at Oklahoma State University, proposed there might be a way to re-establish something resembling the pre-historic fire-grazing interaction. They were not talking about creating some vast "buffalo commons" — far from it. Their idea was applicable to the modern pasture system with cattle as the grazers. Still, their suggestion that it might be better to burn only

part of a pasture in any one year was viewed dimly by some. And they heretically advocated that cattle should be given free choice to graze wherever they wanted in these pastures, on burned or unburned patches. What they proposed was to deliberately create uneven grazing!

Of course, the prehistoric Great Plains ecosystem can never be recreated, but their idea was to set up a fire–grazing interaction that at least imitated those conditions within individual pastures. The concept of Patch-Burn Grazing was grounded on the knowledge that conditions to which prairie had adapted over millennia were still best in modern times for the long-term health of the prairie, grazers, and prairie wildlife.

The basic nuts and bolts of the Patch-Burn Grazing system begin, obviously, with a prescribed fire. Regardless of the pasture size, initially, only a third

or so of a pasture is burned. Cattle are stocked at a density typical for season-long grazing of the entire pasture. Experience has shown that the cattle will focus about 75 percent of their grazing on the recently burned area and about 25 percent on the larger unburned area. By season's end, the burned area has been pounded and the unburned area partially rested. The next year, a different part of the pasture is burned and the cattle pound it, giving rest to the patch that was burned the first year and added rest to the yet-unburned patch. As in the prehistoric fire–grazing interaction, the patch that was grazed hard the first year will produce abundant forbs the second year. With a burn of the last patch in the third year, the shifting mosaic is completed and the pasture contains a pounded area, an area of abundant forbs, and a well-rested area with heavy grass topgrowth and litter. This is

rotational grazing without cross-fencing. And while this three-year example may represent an ideal system for tallgrass pastures, nothing requires that it be done over three years or that burn years can't be skipped during drought. The system can be adapted to varying range and climate conditions.

Within such a pasture, prairie chicken and bobwhite have a choice of habitats and can easily move from one to another. Whether they need nesting, brood rearing, foraging, loafing, or roosting cover, high quality habitat is available. Even species with different nesting requirements are accommodated by the Patch-Burn Grazing system. Species like upland sandpipers or common nighthawks that prefer very short nesting habitat will find exactly what they need in the most recently-burned, heavily-grazed portion of the pasture. At the opposite end of the nesting spectrum, Henslow's sparrows find the heavy litter they prefer in the patch that hasn't been burned for at least two years.

Naturally, ranchers can't typically make their management choices based on the number of Henslow's sparrows or upland sandpipers they produce. Their decisions depend on the bottom line. Fuhlendorf may be a heretic, but he isn't crazy. He and his colleagues at OSU understood the need to obtain economic data from the start and set out to test Patch-Burn Grazing specifically from the perspective of livestock performance. They knew if it couldn't compete economically with Intensive Early Stocking or other grazing systems, ranchers would never use it.

Of necessity, these studies are long-term and cover not only economics, but effects on vegetation, wildlife, and on other compo-



Patch-Burn Grazing generally calls for burning a third of a pasture each year, so ideally a pasture would include a newly burned area, a patch that was burned and heavily grazed the year before, and a final third that hasn't been burned for two years.



Researchers have confirmed that prairie chickens nest in unburned grass near previously-burned areas and move chicks to the burned areas soon after they hatch.

nents of the prairie ecosystem. An increasing number of researchers have set up their own evaluations of Patch-Burn Grazing in Kansas, Missouri, Iowa, Nebraska, Oklahoma, Texas, and Colorado. Up to this point, the results look really promising. Several years of comparisons have shown livestock performance, the economic side, to be competitive with other grazing systems. But the controversial challenge the Patch-Burn Grazing concept poses to the existing even grazing paradigm dictates that its economic benefits must be demonstrated in many settings over many years if it is to gain broad acceptance. The good news in this regard is that more and more ranchers are trying Patch-Burn Grazing for themselves.

In Kansas, two notable leaders in producer trials of Patch-Burn Grazing are ranchers Jane Koger and Kent Jarnagin who, respectively, operate ranches in the Flint Hills and Red Hills. Both have enlisted the help of range conservationists and researchers to help them implement and evaluate the system. And no small consideration must be given to the cooperation or assistance they've

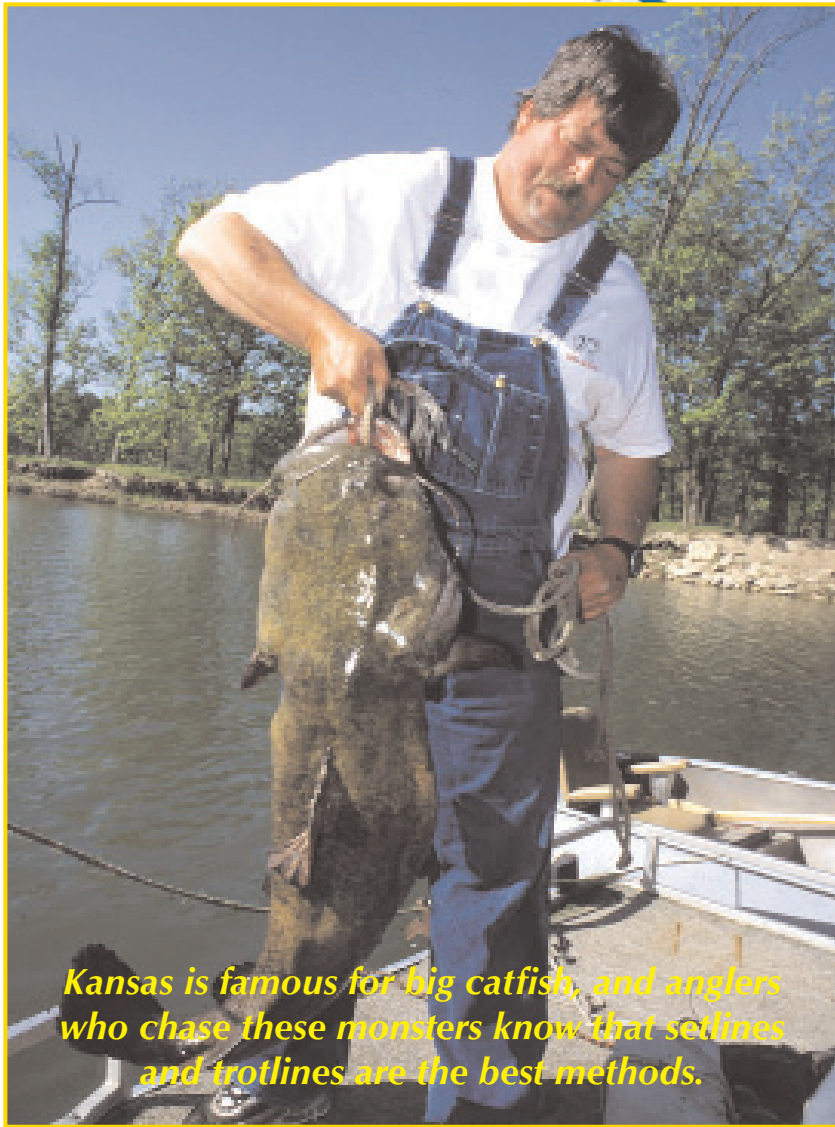
received from their ranching neighbors, all of whom are watching these trials to see how they work out.

Besides the promising economic results, studies of Patch-Burn Grazing already have yielded some important findings. It should be of great interest to ranchers to learn that eight years of study suggest the intensive, season-long grazing on recently-burned patches in Patch-Burn Grazed pastures can rein in the spread of *Sericea lespedeza*. This noxious, profit-threatening weed is spreading like wildfire, particularly where the combination of annual burning and Intensive Early Stocking prevail. Research has also shown that a greater variety of prairie plants are found in Patch-Burn Grazed pastures than with other systems. What's more, scientists have shown the number of grass plants is not diminished by the intensive grazing on burned patches; the topgrowth is only temporarily suppressed and quickly recovers when intense grazing is shifted to other burned patches. As an upland game bird specialist, it's clear to me that Patch-Burn Grazing holds great potential to

benefit bobwhite and prairie chicken.

On the Homestead Ranch in the Flint Hills, Jane Koger has already noticed cattle travel patterns changing. Old cow paths are revegetating and streams are in better condition than before. The Patch-Burn Grazing system offers other potential benefits as well. Unburned, high-residue patches offer a form of drought insurance because they're better at conserving moisture and may continue to offer grazing potential if burned areas become depleted. Since litter is allowed to accumulate in the unburned patches, they tend to burn hotter potentially resulting in better control of invasive trees. The intensive grazing that follows on the burned patches will further suppress resprouting of woody species.

How long will it take before Patch-Burn Grazing is more widely adopted? To be sure, new land-management concepts can be slow to catch on, even when well proven. Ultimately, it depends on the answers to these burning questions. Are ecosystem diversity and long-term prairie productivity important to the range manager? Should greater numbers of prairie chicken and bobwhite, and more diversity among grassland songbirds be considered in the ranch equation? Can we get past the ingrained idea that grazing evenness is the goal? If the answers are "yes," then maybe more ranchers will try the Patch-Burn Grazing system. If that happens, Patch-Burn Grazing has a real chance to catch on, bringing with it the dynamic energy of the shifting mosaic that once dominated the Great Plains. ♡



Kansas is famous for big catfish, and anglers who chase these monsters know that setlines and trotlines are the best methods.

Kansas' Big Cats

text and photos by Mike Blair
associate editor/photographer, Pratt

“This could make the hair on a catfish stick straight out,” Bruce Holt said, as lightning crackled near his boat on La Cygne Reservoir, in eastern Kansas’ Linn County. Rain quickly squelched that possibility as large drops began pelting down. R. C. Campbell, Holt’s partner and netsman bundled in a camouflage rainsuit, stowed gear as Holt checked the last hooks on the trotline. The sudden storm would soak the pair in exchange for two flatheads. They settled in and steered the boat into the wind, opening the throttle

toward the marina a mile away.

Spooky lightning continued to dance in the downpour, but the storm was fading fast as the anglers pulled into a boat slip and added the 12- and 30-pound fish to a rope stringer already containing a large blue cat. It was a near-daily April exercise for Holt, who lives near the lake and is manager for Linn County Park. This beautiful, county-owned 1,100-acre public camping area lies in the shadow of twin smokestacks at Kansas City Power and Light’s electrical power plant near La Cygne. The lake is a 2,600-acre cooling reser-

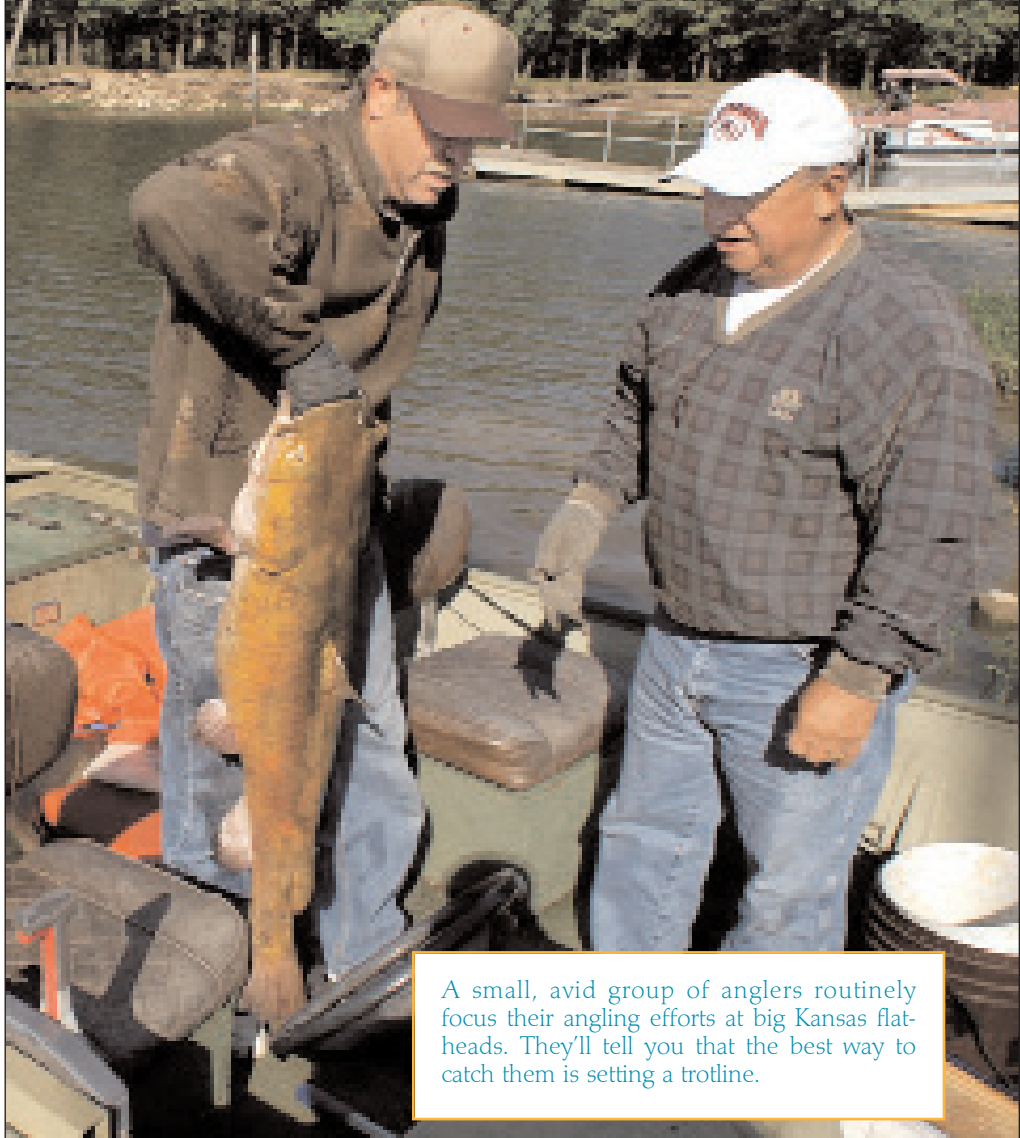
voir for the coal-fired plant, and its waters are warmed by the plant’s discharge. La Cygne, located 40 miles south of Kansas City, is heavily fished and known for its crappie, wiper, and bass fishing. But Holt and a few others work the water each spring for lunker catfish.

“It’s best the last few weeks in April,” Holt says, “when water temperatures here are about 65 degrees. But some years, good flathead fishing extends into May. I usually quit running spring trotlines by May 15. Some years, it gets good again in October and November.”

Bank fishers and boat fishers using rods and reels can catch big catfish, but serious lunker hunters set lines and run them daily. Trotlines with numerous hooks set at the right depth overnight increase the chances of catching flatheads and blue cats, since these predators are most active at night. Catfish move from deep water to coves and shallow humps, where they feed on large baitfish. Unlike channel catfish, they rarely scavenge dead prey and are not attracted to stink baits. Heavy equipment is necessary, since flatheads are powerful fighters and may reach weights of 75 pounds or more.

"You can have just one trotline apiece," Holt says. "But often, a friend and I work together so we can run two lines. That gives us 50 hooks, 25 on each line, the maximum allowed by Kansas fishing regulations. The trick is putting them in the right places. Over several years, I've found some good spots that are usually productive."

Holt favors places where deep holes are adjacent to shallow



A small, avid group of anglers routinely focus their angling efforts at big Kansas flatheads. They'll tell you that the best way to catch them is setting a trotline.

water near shore. Generally, he sets his lines about 10 feet deep. Held in place by heavy anchors, a trotline is marked at each end by large, floating jugs. This suspends the main line below the surface so that boat traffic can pass without fouling the set. Hooks are baited with live fish.

Much of the work in this kind of fishing involves keeping good baitfish. Large catfish prefer large meals, and fresh, lively baitfish are necessary to attract the attention of foraging flatheads. Though

bait can be purchased, it's expensive and sometimes hard to find in the proper size. Large goldfish are usually the choice of trotliners when visiting a bait shop.

For many anglers though, a better option is catching baitfish on hook and line, keeping them in aerated tanks for use as needed when running the lines. Like most flathead anglers, Holt must first go fishing to go fishing. Then, "you can turn a bucket of little fish into a bucket of big fish," he says.

Hand-sized sunfish are just right and usually available in local farm ponds. But not all sunfish are the same. Bluegills are plentiful and easy to catch, but they do not survive well on trotline sets. Green sunfish are better.



For big flathead or blue catfish, you must use live bait. The experts prefer goldfish, green sunfish or bluegills.

These hardy baitfish can be caught on flies, worms, and small spinners, are easy to keep alive in bait tanks, and remain lively on trotline hooks. Green sunfish 3 to 5 inches long are best. Bullheads also make good trotline baits, though they are not as easy to come by. Bullheads can be caught in creeks and pits on worms. Holt fishes with green sunfish when available, but sometimes uses bluegills, which are easier to get on short notice.

Though fishing for bait is part of the fun, it's also a lot of work. Holt often spends as much time securing bait in his own farm ponds as it takes to maintain lines through several weeks of catfishing. "We use about 30-50 baitfish a day," he says. "That means we'll need about 700 baitfish for two weeks of fishing. Since you can't hold the little fish effectively for more than a day or two, that means you've got to hit the pond."

It's important to be aware of baitfish regulations and the danger of moving fish from one body of water to another. There

are several species of non-native fish that could seriously threaten sport fish populations. Never release bait in another lake. Whenever possible, catch the bait you'll need in the lake you're fishing. And study the fishing regulations pamphlet so you know where aquatic nuisance species are already found.

Before starting each spring, Holt spends a day or so building or repairing his line. The main line is made of 3/8-inch nylon rope roughly 200 feet long. To each end is tied a 50-pound metal weight that serves to anchor the set. Also near the ends, large plastic floating jugs are tied to lead lines long enough to reach the surface. The line's middle is fitted with another lead line that attaches a jug above, and a small window weight below. This helps hold the hooks at proper depth. The floating jugs mark the line so that it can be found in open water.

Dropper lines composed of 500-pound-test braided cord are tied onto the main line with barrel swivels at six-foot intervals.

Each dropper is 3 feet long and terminates with a size 9/0 stainless steel hook. The swivels and line length between hooks are designed to minimize line twisting and entangling that could occur when fish are caught on adjacent droppers. The big hooks are large enough to hold giant fish without straightening and coming loose from a fish's jaw.

Overall, a trotline of this type is efficient for lake fishing, though it is heavy and slightly unwieldy. Once in the water, though, it can be tended fairly easily. The heavy line and hooks, while adequate to hold big fish, also help boat anglers to pull the line free from underwater brush and trees, should a large fish entangle the set as sometimes happens.

Trotlines may not be set within 500 yards of any dam and are prohibited on KDWP-managed waters less than 500 acres in size. All unattended lines must be checked every 24 hours and must be tagged securely and plainly with the angler's name.

Once the line is built, setting and running it averages an hour or two each day. Holt likes to set his line in late afternoon, so that bait is fresh and lively through the nighttime hours. He then runs the line in early morning to minimize the time a large catfish might have to escape. This also reduces the chance of piracy, an uncommon but possible scenario on public waters.

Properly hooking a baitfish to the trotline is important. Holt hooks a sunfish in the meaty part of the back, between the spine



When running trotlines, it's necessary to have help. Big fish, big hooks and a drifting boat require caution. The inset photo shows a large trotline hook imbedded in the angler's hand when a wind storm rocked the boat, snapping the line.



Many consider the flathead catfish to be among the best eating fish. Several 10- to 20-pounders caught after a morning of trotlining will provide plenty of tender fillets.

and dorsal fin. This minimizes injury and allows the baitfish to swim on its tether, helping attract a flathead or blue cat. A dead baitfish holds little interest for anything but a channel catfish.

When running lines, the anticipation for a large flathead is appeased by a dancing jug. As a boat motors close to the set, any caught fish begin to tug against the heavy system. The more a line bounces, the heavier the fish. With the boat motor shut off, the angler starts at one end of the trotline. Leaning over the bow, the angler works along the line hand-over-hand. This is where a netsman is handy. The lead angler pulls the main line to the surface, and a second angler captures the catfish with a large net. Big fish require considerable effort to raise over the side of the boat.

Holt's biggest La Cygne flatheads have weighed in the 60-pound class, though he's seen other anglers take fish up to 82 pounds. Twenty and 30-pounders are far more common. Usually, he catches three or four fish on a 25-

hook trotline. Five flatheads per day is the limit, so catches over this must be released accordingly.

"Flatheads seem most active on dark, stormy nights," he says. He catches most fish after unsettled nighttime conditions. Conversely, fair, moonlit nights in calm weather seem to produce the poorest catches.

Trotline fishing is not without dangers. Spring windstorms can complicate working the lines on open water, as can surprise showers and lightning storms. Holt's most serious experience occurred when a freak accident jerked a trotline hook into his hand.

While photographing this story, I was with him at the time. It was a sunny late afternoon, and we were setting the line to run next morning. The south wind, blowing 20 mph and causing substantial wave action, made the boat hard to control. Holt was in the bow, leaned over the railing and baiting hooks. To help control the drifting boat, he slipped the main line over a boat cleat on the deck. This held the boat tight to the anchored line and allowed him to use both hands for the baiting operation.


A large wave hit the boat and caused a moment's slack, popping the line loose from the cleat. This snapped the line like a bowstring and jerked the large hook through

the palm of his hand. Had he been alone, this bad situation would have been even more dangerous. I grabbed the main line and held the weight of the boat slack enough so that he could cut the dropper line free. Then he went for medical attention. It was six hours before the hook could be removed in a hospital several counties away.

Such things might rarely happen, but it's a good illustration why a second person makes trotlining safer. Beyond this, it's also easier to wrestle large fish with the help of another.

Aside from their trophy-sized proportions, flathead and blue catfish are prized for their delicious meat. Unlike the fatty, yellow meat of channel catfish, the big predator cats have white meat that Holt insists can give crappies a run for their money on the table. And since they are large, it's easy to fill a freezer for a year's worth of good eating. Big fish are hung and bled by cutting off the tail, and then cut into bite-sized chunks before freezing. Most people prefer them deep-fried.

"It's a tradition with us to save some flatheads for a big Superbowl party each year. We cook crappies and other fish right along with it, but it seems like catfish is always the favorite," he says. "In fact, it's so good that my daughter wanted us to cook it for the reception meal at her wedding last summer!"

This spring, Holt looks forward to running trotlines again at La Cygne Reservoir. On April dawns when turkeys gobble from nearby hillsides, he and a few others will motor out to check their lines. Scanning the water for dancing jugs, he'll hope for a 70-pounder. But whatever the catch, he'll enjoy his annual hunt for Kansas' big cats. 



Reading, Writing and Archery?

The National Archery in the Schools Program has already had an impact in some Kansas schools. As interest grows, it could become a common school program.

*text and photos by Alaine N. Hudlin
staff development specialist, Olathe*

The Kansas Department of Wildlife and Parks strives to get kids involved in outdoor activities. Recruiting young people has been emphasized in recent years as license sales have waned, and the percentage of Kansans who hunt has declined. Our population has shifted from rural to urban, and as those families move to urban areas they lose ties to the people and outdoor activities associated with rural life. And a new array of activities compete for their time. KDWP is working to ensure that all young people get a chance to experience hunting and fishing, and one way to do that is to introduce them to some of the outdoor skills they will need – stepping stones to experiencing the outdoor activities.

The National Archery in the Schools Program (NASP) is just such a program. Archery provides an opportunity for all students to succeed even if they aren't big and strong or fast runners, and archery can provide a lifelong sporting opportunity. This particular archery program can be included in the curriculum for 4th – 12th grades. It meets state Physical Education Standards with easily applied cross-curricular connections to math, science and language arts. Safety is emphasized through range set-up, class organization, and shooting method. The design of Archery in the Schools is also easily adapted to after-school programs, church youth programs and summer camps.

KDWP conducted a workshop at Bonner Springs High School on June 3, 4, and 5. Roy Grimes from the NASP came in from Kentucky to facilitate. The first two days were devoted to training facilitators — trainers, to conduct future teacher training. Fourteen individuals, primarily KDWP staff, participated, along with two devoted gentlemen who flew all the way from

Kansas became the 38th state to adopt the Archery in the Schools Program on June 5, 2006.

Australia. The third day was devoted to teacher training. Eight Kansas teachers showed up at 7 a.m. on June 5, eager to take on the program. All of the new trainers and teachers came away

Mike Klaver at Norwich High School wrote:

... wanted to drop a note to express our excitement for our archery program in Norwich. Our administration was very supportive and helped complete the funding for an additional archery set.

from the long weekend ready to implement the program.

However, schools were out for the summer so we focused on developing materials to support the program and planned the statewide Kick-Off Event for the Kansas Association of Health, Physical Education, Recreation and Dance Convention (KAHPERD) on November 3, 2006 at Emporia State University.

When the trained teachers returned to school last fall, the program hit the ground. Feedback has been overwhelmingly positive.

Two school districts have become strong advocates willing to reach out to other districts. David Cobb from Wichita West High School wrote that before NASP, he struggled to get 25 students in his class. After imple-

menting the program, he had 75 students sign up for this current semester. The enthusiastic response from Cobb's students prompted the Wichita School District to offer the archery program to all the schools. With the support of several of the department's trainers, Cobb provided an information meeting for the district on January 6, 2007. Schools that choose to participate in the archery program will have the equipment provided to them through the district's PEP Grant.

A similar response was received from Mark Moore's students at Clearwater Middle School, prompting the other PE teachers in the district to adopt the program. Moore created a video of his students' positive experience to share with others.

As November approached, David Cobb and Mark Moore graciously offered to share their experiences at the KAHPERD Convention. More than 70 teachers showed up for their session. A shooting range was set up to allow the educators to experience the shooting method with the archery equipment available at reduced cost to non-

profit organizations and schools. Interested teachers were provided the opportunity to view Moore's video. We came away from the KAHPERD Convention with names and addresses of numerous teachers from across the state.

At the time of writing this article we have trainings pending in Fredonia, Ottawa, Maize and Scott City. The scheduled trainings should bring approximately 15 new school districts, a church youth program, and an after-school program on board. We expect this number to grow.

If you are interested or know of an educator that would be interested in learning more about the program, please contact us at

archeryintheschools@wp.state.ks.us or (913) 856-7669, ext. 3. To visit the National Archery in the Schools web site go to www.nasparchery.com/activea.asp.

Keith Pauly, Clearwater Middle School principal, wrote:

... Our students absolutely loved participating in the archery program! It was a new experience for the majority of the students, especially the girls. Some of them were timid at first but quickly realized how much fun and rewarding archery could be. Once the word got out about our MS program, the elementary and high school instructors wanted to get involved. Mark has been working with those schools to allow their students to have the same opportunity that our students had. I would highly recommend this program to other schools.



The first group of trainers and teachers pose after the first NASP session last June. Ten Kansas schools implemented the program, and at least 15 more are interested.

2007 fishing forecast

Use the following pages to find quality fishing for the sport fish you prefer. The forecast lists reservoirs (water bodies larger than 1,000 acres) and lakes (water bodies less than 1,000 acres) for each species. Ratings include the **Density Rating**, which is the number of fish captured per unit of effort by fisheries biologists; **Preferred Rating**, which is the number of fish at a preferred length for that species; **Lunker Rating**, which is the number of fish sampled at a length most anglers consider a trophy, and **Largest fish**, which is simply the largest fish caught during sampling. The **Biologist's Rating** is a rating of E -excellent, G - good, F - fair or P - poor given by the biologist who considers other factors in addition to sampling. In theory, a lake with a **Density Rating** of 24 will have twice as many fish per acre as a lake with a **Density Rating** of 12. This information will give you an idea not only of which lakes have high populations, but also those which have larger fish. You may view these tables on the department's web page www.kdwp.state.ks.us or a brochure can be mailed or picked up at a KDWP office.

BLUEGILL						
IMPOUNDMENT	Density Rating (>6")	Preferred Rating (>8")	Lunker Rating (>10")	Biggest Fish (lbs.)	Bio Rating	Acres of Water
RESERVOIRS						
HILLSDALE	6.30	0.00	0.00	0.30	P	4580
PERRY	3.54	0.00	0.00	0.26	F	12600
LACYGNE	2.88	0.06	0.00	0.39	F	2600
LAKES						
ATCHISON CITY LAKE #1	51.00	0.00	0.00	0.32	F	6
POTTAWATOMIE SFL #1	44.00	0.50	0.00	0.50	G	24
BROWN SFL	43.50	8.75	0.00	0.71	G	62
EUREKA CITY LAKE	37.25	0.00	0.00	0.34	G	135
OTTAWA SFL	35.50	0.88	0.00	0.43	G	110
ATCHISON CITY LAKE #3	33.50	0.00	0.00	0.29	F	4
SABETHA CITY LAKE	32.00	0.00	0.00	0.28	F	100
GRAHAM CO.-ANTELOPE LAKE	31.50	4.25	0.00	0.60	G	80
OLATHE-LAKE OLATHE	24.30	0.20	0.00	0.44	F	172
NEBO SFL	23.50	0.25	0.00	0.40	F	38
GARDNER CITY LAKE	20.40	0.00	0.00	0.33	F	100
HORTON-LITTLE LAKE	19.00	0.00	0.00	0.38	F	10
BOURBON CO. ELM CREEK LAKE	15.75	0.00	0.00	0.31	F	106
SEVERY CITY LAKE	15.50	0.00	0.00	0.27	G	5
OLATHE-CEDAR LAKE	14.80	0.00	0.00	0.28	P	56
OSAWATOMIE CITY LAKE	14.50	0.80	0.00	0.40	G	21
JOHNSON CO. SHAWNEE MISSION LK	14.20	0.00	0.00	0.28	F	121
ATCHISON SFL	12.25	0.50	0.00	0.43	F	66

REDEAR						
IMPOUNDMENT	Density Rating (>7")	Preferred Rating (>9")	Lunker Rating (>11")	Biggest Fish (lbs.)	Bio Rating	Acres of Water
LAKES						
LYON SFL	12.00	2.50	0.25	1.06	E	135
COWLEY SFL	7.00	1.67	0.00	1.03	G	84
MONTGOMERY SFL	6.50	0.80	0.00	0.70	F	105
SEVERY CITY LAKE	6.00	1.50	0.00	0.69	F	5
THAYER CITY LAKE (NEW)	3.75	0.00	0.00	0.32	G	45
CRAWFORD SFL	2.75	0.00	0.00	0.33	G	150
DOUGLAS CO.-LONESTAR LAKE	2.50	1.50	0.00	0.80	F	195
MIAMI SFL	2.30	0.30	0.00	0.50	P	118
NEOSHO SFL	2.00	0.25	0.00	0.49	G	92
OSAWATOMIE CITY LAKE	2.00	1.00	0.00	0.70	F	21

BLACK CRAPPIE						
IMPOUNDMENT	Density Rating (>8")	Preferred Rating (>10")	Lunker Rating (>12")	Biggest Fish (lbs.)	Bio Rating	Acres of Water
RESERVOIRS						
MARION	3.82	1.45	0.27	1.28	P	6160
WILSON	2.04	1.64	0.24	1.45	F	9040
SEBELIUS	1.38	0.75	0.00	0.74	P	1500
CEDAR BLUFF	0.80	0.60	0.35	1.19	P	6500
WEBSTER	0.63	0.50	0.03	1.22	P	3500
LOVEWELL	0.56	0.22	0.00	0.80	P	2986
GLEN ELDER	0.37	0.26	0.11	1.18	P	12586
LAKES						
NEOSHO SFL	32.50	0.50	0.00	0.57	F	92
BALDWIN - SPRING CREEK LAKE	24.30	2.30	0.00	0.70	F	7
BOURBON CO. ELM CREEK LAKE	19.25	0.00	0.00	0.34	G	106
MIAMI SFL	18.30	4.80	0.00	0.80	G	118
GRAHAM CO.-ANTELOPE LAKE	18.00	4.50	0.00	0.85	G	80
BROWN SFL	12.75	2.50	0.00	0.77	F	62
HOLTON - BANNER CREEK LAKE	10.63	4.50	0.88	1.59	F	535
SABETHA - PONY CREEK LAKE	10.50	1.50	0.25	1.17	F	171
KINGMAN SFL	8.00	3.25	1.50	1.61	F	144
BOURBON CO. CEDAR CREEK	6.00	1.50	0.75	0.95	F	220
BOURBON SFL	5.25	4.25	1.75	2.48	G	103
MOLINE NEW CITY LAKE	4.50	3.75	0.00	0.78	G	185
JOHNSON CO. SHAWNEE MISSION LK	4.20	3.30	0.70	0.97	G	121
PRATT CO. LAKE	4.00	0.75	0.00	0.75	E	51
SHERIDAN SFL	4.00	1.25	0.00	0.65	F	67
CENTRALIA CITY LAKE	3.60	2.00	0.70	1.20	G	400
THAYER CITY LAKE (NEW)	3.50	0.25	0.00	0.55	F	45
OSAWATOMIE CITY LAKE	3.30	2.80	0.30	0.80	F	21
COWLEY SFL	2.83	0.67	0.17	0.80	F	84
CRAWFORD SFL	2.75	2.25	0.00	0.42	F	150
ATCHISON CITY LAKE #3	2.50	0.50	0.00	0.49	F	4
PAOLA CITY LAKE	2.30	0.00	0.00	0.40	P	220
BLUE MOUND CITY LAKE	2.25	1.75	1.00	0.96	E	19
BUTLER SFL	2.00	0.00	0.00	0.00	P	124
HOLTON-ELKHORN LAKE	2.00	2.00	0.00	0.68	F	4
BRONSON CITY LAKE	2.00	1.75	0.25	0.94	F	25
WYANDOTTE CO. LAKE	1.90	0.50	0.00	0.85	F	407
NEBO SFL	1.75	0.00	0.00	0.35	P	38
LEAVENWORTH SFL	1.30	1.00	0.00	0.80	F	175
ALMA CITY LAKE	1.30	1.30	0.50	0.90	F	80
PLEASANTON EAST LAKE	1.25	0.75	0.25	0.87	G	127
BONE CREEK LAKE	1.00	0.00	0.00	0.47	G	540

WHITE CRAPPIE						
IMPOUNDMENT	Density Rating (>8")	Preferred Rating (>10")	Lunker Rating (>12")	Biggest Fish (lbs.)	Big Rating	Acres of Water
RESERVOIRS						
TORONTO	245.00	149.50	31.00	2.65	E	2800
HILLSDALE	99.60	44.90	1.00	1.25	E	4580
PERRY	35.50	13.04	0.88	1.17	G	12600
ELK CITY	19.00	4.00	2.50	1.60	G	4450
CLINTON	15.50	5.90	1.00	1.20	F	7000
MARION	8.00	2.64	1.00	2.05	G	6160
FALL RIVER	7.47	4.27	0.80	2.26	G	2500
LOVEWELL	6.22	5.22	1.56	1.39	F	2986
LACYGNE	4.50	0.94	0.31	1.37	G	2600
COFFEY CO. LAKE	4.40	1.50	0.60	1.50	G	5000
SEBELIUS	4.38	0.50	0.25	0.74	P	1500
POMONA	4.13	1.31	0.19	0.97	G	4000
MILFORD	4.11	1.74	0.32	1.42	F	16020
BIG HILL	3.50	2.00	0.20	1.10	G	1240
GLEN ELDER	3.05	1.26	0.11	1.59	P	12586
WEBSTER	3.00	1.25	0.25	1.14	P	3500
TUTTLE CREEK	2.90	1.20	0.30	1.30	F	15800
LAKES						
WELLINGTON-HARGIS CREEK LAKE	85.50	51.25	12.75	1.43	F	67
WELLINGTON CITY LAKE	67.25	58.00	14.25	1.84	E	700
EDGERTON CITY LAKE	65.70	29.30	0.70	0.98	G	3
OTTAWA SFL	55.88	5.88	1.88	2.14	G	110
EUREKA CITY LAKE	48.25	3.25	1.00	1.26	E	135
OLATHE-CEDAR LAKE	36.00	2.30	0.00	0.68	F	56
MIAMI SFL	33.80	2.00	0.00	0.50	G	118
CARBONDALE CITY LAKE - EAST	32.00	12.25	1.00	1.20	E	265
MARION CO. LAKE	22.50	8.50	2.50	1.29	G	153
PLEASANTON WEST LAKE	15.30	2.00	1.00	1.93	G	20
HORTON-MISSION LAKE	15.00	4.50	1.75	1.91	F	154
NEOSHO SFL	14.75	1.25	0.25	1.19	F	92
SEDAN CITY LAKE-NEW	13.75	3.50	0.50	1.12	G	70
GEARY SFL	13.75	3.25	0.25	2.40	F	97
SPRING HILL CITY LAKE	13.30	4.30	1.30	1.44	G	38
HARVEY CO. LAKE-EAST	13.25	4.00	0.00	0.84	F	240
NEBO SFL	12.75	3.50	1.25	2.21	F	38
ATCHISON CITY LAKE #1	12.00	4.00	0.00	0.68	F	6
MIDDLE CREEK SFL	11.00	2.00	0.00	0.55	F	280
LOUISBURG CITY LAKE	10.00	3.30	1.30	1.09	G	23
PRESCOTT CITY LAKE	9.75	2.25	0.25	0.81	F	25
MOLINE NEW CITY LAKE	9.00	2.50	0.75	1.00	G	185

BLUE CATFISH						
IMPOUNDMENT	Density Rating (>20")	Preferred Rating (>30")	Lunker Rating (>35")	Biggest Fish (lbs.)	Big Rating	Acres of Water
RESERVOIRS						
MILFORD	2.20	0.40	0.20	28.00	G	16020
LACYGNE	2.00	0.75	0.00	12.65	G	260



CHANNEL CATFISH						
IMPOUNDMENT	Density Rating (>16")	Preferred Rating (>24")	Lunker Rating (>28")	Biggest Fish (lbs.)	Big Rating	Acres of Water
RESERVOIRS						
TORONTO	14.00	7.00	2.00	11.02	E	2800
FALL RIVER	9.00	3.00	0.00	7.72	G	2500
CLINTON	8.00	1.80	0.50	11.60	G	7000
KANOPOLIS	7.75	0.00	0.00	4.42	G	3550
MILFORD	7.60	1.00	0.00	7.04	G	16020
PERRY	7.50	2.50	0.75	12.76	F	12600
HILLSDALE	7.50	2.00	0.30	12.51	F	4580
GLEN ELDER	7.13	0.63	0.38	15.04	G	12586
CEDAR BLUFF	6.75	2.00	0.75	14.61	E	6500
POMONA	6.50	0.25	0.00	6.43	G	4000
WILSON	6.00	0.25	0.13	10.41	G	9040
MARION	5.33	1.67	0.50	10.84	F	6160
CHENEY	4.83	1.50	0.50	14.07	G	9550
COFFEY CO. LAKE	4.80	0.10	0.10	5.30	F	5000
SEBELIUS	4.32	2.90	1.08	10.47	G	1500
TUTTLE CREEK	3.90	0.60	0.20	10.10	G	15800
LACYGNE	3.75	0.00	0.00	4.31	G	2600
KIRWIN	3.72	0.81	0.33	5.53	G	4000
WEBSTER	3.21	0.81	0.33	6.46	F	3500
LAKES						
GARNETT CITY LAKE-SOUTH	41.00	7.00	0.00	9.40	G	25
BOURBON CO. ELM CREEK LAKE	35.00	6.00	0.00	7.50	E	106
SABETHA - PONY CREEK LAKE	34.00	6.00	0.00	8.38	G	171
SABETHA CITY LAKE	30.00	10.00	0.00	6.50	G	100
PLEASANTON EAST LAKE	26.00	4.00	2.00	11.60	F	127
PLEASANTON WEST LAKE	22.00	4.00	2.00	11.30	E	20
YATES CENTER CITY LAKE-NEW	21.00	7.00	3.00	12.00	F	205
BUTLER SFL	20.00	4.00	0.00	8.82	G	124
CARBONDALE CITY LAKE - EAST	19.00	9.00	1.00	8.82	F	265
MIAMI SFL	18.00	2.00	0.00	5.60	G	118
LYON SFL	17.00	5.00	3.00	18.30	F	135
OSAGE SFL	16.00	6.50	4.00	22.80	G	140
PAOLA CITY LAKE	15.00	1.00	0.00	6.70	F	220
LEAVENWORTH SFL	14.50	2.50	0.50	11.30	G	175
LEBO CITY LAKE	14.00	4.00	2.00	9.70	F	70
COUNCIL GROVE CITY LAKE	14.00	3.00	2.00	19.57	G	434
PRESCOTT CITY LAKE	13.00	3.00	0.00	5.62	G	25
CRAWFORD SFL	12.50	0.50	0.50	11.36	G	150
JOHNSON CO. SHAWNEE MISSION LK	12.50	1.00	0.00	5.60	G	121
HORTON-MISSION LAKE	12.00	1.00	0.00	6.61	G	154
OSAGE CITY LAKE	12.00	5.50	2.50	16.60	G	50
OLATHE-CEDAR LAKE	12.00	1.00	0.00	6.47	F	56
OSAWATOMIE CITY LAKE	12.00	4.00	1.00	8.50	G	21
SPRING HILL CITY LAKE	12.00	4.00	1.00	9.75	G	38
EUREKA CITY LAKE	11.00	1.00	0.00	6.83	F	135
BARBER SFL-LOWER	11.00	0.00	0.00	5.51	G	51
BROWN SFL	11.00	4.00	2.00	13.67	G	62
MOLINE NEW CITY LAKE	10.00	3.00	1.00	11.02	G	185
CENTRALIA CITY LAKE	9.00	1.50	0.50	8.90	G	400
ATCHISON SFL	9.00	0.00	0.00	2.86	G	66
CHANUTE CITY LAKE	9.00	1.00	0.00	8.70	G	80
WILSON SFL	8.50	0.50	0.00	7.00	G	110
HARVEY CO. LAKE-EAST	8.00	0.00	0.00	3.75	F	240
COWLEY SFL	8.00	1.50	0.50	20.33	F	84
BONE CREEK LAKE	7.67	1.67	0.33	12.14	G	540
GARDNER CITY LAKE	7.00	1.50	0.00	9.79	G	100
SEDAN CITY LAKE-OLD	7.00	0.00	0.00	3.86	F	55
BOURBON SFL	7.00	1.00	0.00	5.65	G	103
THAYER CITY LAKE (NEW)	7.00	1.00	0.50	9.50	G	45
HOLTON - BANNER CREEK LAKE	6.50	0.50	0.00	9.92	G	535
CLARK SFL	6.50	1.00	0.00	8.00	F	300
DOUGLAS CO. LONESTAR LAKE	6.50	1.50	1.00	12.90	F	195
GARNETT CITY LAKE-NORTH	6.00	0.00	0.00	5.10	G	55
WOODSON SFL	6.00	2.30	1.30	14.50	F	180
NEBO SFL	6.00	0.00	0.00	2.87	F	38
ALMA CITY LAKE	6.00	1.00	0.00	4.30	F	80
WELLINGTON CITY LAKE	6.00	0.00	0.00	5.07	F	700
SCOTT STATE LAKE	6.00	0.00	0.00	4.51	F	115
BRONSON CITY LAKE	6.00	0.00	0.00	2.31	F	25
OSAWATOMIE BEAVER LAKE	6.00	2.00	0.00	8.80	F	6
WELLINGTON-HARGIS CREEK LAKE	5.00	0.00	0.00	3.97	F	67
MOLINE OLD CITY LAKE	5.00	0.00	0.00	1.48	P	68
PRATT CO. LAKE	5.00	0.00	0.00	4.56	G	51
BLUE MOUND CITY LAKE	5.00	2.00	0.00	5.75	F	19

FLATHEAD CATFISH						
IMPOUNDMENT	Density Rating (>16")	Preferred Rating (>24")	Lunker Rating (>28")	Biggest Fish (lbs.)	Bio. Rating	Acres of Water
RESERVOIRS						
SEBELIUS	5.00	4.00	2.00	18.74	G	1500
CEDAR BLUFF	2.50	1.75	1.50	24.80	F	6500
MILFORD	0.80	0.40	0.00	9.70	F	16020
LAKES						
HERINGTON CITY LAKE-NEW	1.00	1.00	1.00	17.42	F	555
OLATHE-LAKE OLATHE	0.50	0.50	0.50	12.40	F	172

LARGEMOUTH BASS						
IMPOUNDMENT	Density Rating (>12")	Preferred Rating (>15")	Lunker Rating (>20")	Biggest Fish (lbs.)	Bio. Rating	Acres of Water
RESERVOIRS						
LACYGNE	50.74	33.82	5.15	8.41	E	2600
BIG HILL	31.60	16.70	2.80	6.30	E	1240
HILLSDALE	26.10	14.20	1.20	5.75	G	4580
PERRY	24.20	12.10	0.80	6.55	G	12600
CEDAR BLUFF	23.64	16.55	1.09	7.15	F	6500
SEBELIUS	22.58	9.68	0.00	2.37	F	1500
EL DORADO	10.96	4.11	0.00	2.67	F	8000
CLINTON	9.27	4.64	0.33	5.17	P	7000
MELVERN	8.00	3.00	0.00	2.70	P	7000
WILSON	6.19	1.55	0.00	4.19	F	9040
MILFORD	3.52	1.27	0.00	3.97	F	16020
LAKES						
MOLINE NEW CITY LAKE	188.20	31.40	0.00	3.97	G	185
BUTLER SFL	179.75	88.61	1.27	5.07	E	124
GARNETT CITY LAKE-NORTH	161.00	44.00	0.00	3.00	E	55
GRIDLEY CITY LAKE	157.00	38.00	0.00	4.00	G	33
EMPORIA-PETER PAN PARK	147.10	64.70	0.00	3.75	G	3
EUREKA CITY LAKE	143.10	51.00	9.80	5.95	E	135
PLEASANTON WEST LAKE	138.90	101.40	5.56	7.40	E	20
WOODSON SFL	132.00	89.00	0.00	3.30	E	180
YATES CENTER CITY LAKE-NEW	132.00	48.00	0.00	3.00	E	205
EMPORIA-JONES PARK NORTH	130.00	10.00	0.00	3.31	G	5
SHERIDAN SFL	130.00	30.00	0.00	3.11	G	67
FALL RIVER TOE DRAIN	129.40	23.50	0.00	1.76	G	1
SEVERY CITY LAKE	123.50	64.70	2.90	4.85	E	5
LYON SFL	123.50	23.50	0.00	3.53	E	135
PRATT CO. LAKE	122.68	55.67	0.00	4.18	E	51
OVERBROOK CITY LAKE	120.00	9.00	0.00	2.70	G	8
NEW STRAWN CITY LAKE	113.00	23.00	4.20	6.20	G	3
SEDAN CITY LAKE-OLD	111.80	58.80	7.40	6.28	E	55
BROWN SFL	105.80	46.70	4.20	5.73	G	62
MEADE STATE LAKE	105.63	40.85	4.23	5.34	F	80
GARNETT CITY LAKE-SOUTH	105.00	49.00	3.00	5.00	E	25
SEDAN CITY LAKE-NEW	102.90	8.80	0.00	3.31	E	70
CLARK SFL	98.94	68.25	6.88	6.55	E	300
GARDNER CITY LAKE	96.70	44.00	7.30	5.77	E	100
MADISON CITY LAKE	96.10	47.10	5.90	6.39	E	114
OSAWATOMIE CITY LAKE	90.91	1.30	0.00	1.46	F	21
OSAGE CITY LAKE	90.00	45.00	3.00	4.60	F	50
SABETHA - PONY CREEK LAKE	90.00	68.10	3.10	6.77	G	171
JOHNSON CO. SHAWNEE MISSION LK	89.60	17.90	1.50	4.68	G	121
NEOSHO SFL	87.70	37.70	0.80	4.90	G	92
LOUISBURG CITY LAKE	86.40	20.50	0.00	4.25	F	23
WYANDOTTE CO. LAKE	82.60	18.00	0.00	3.76	F	407
YATES CENTER-SOUTH OWL LAKE	81.00	56.00	0.00	4.00	G	150
MCPHERSON SFL	80.00	48.00	1.00	5.56	F	46
SABETHA CITY LAKE	76.50	33.70	3.10	6.25	G	100
EMPORIA-JONES PARK WEST POND	75.00	41.70	0.00	3.75	G	2
HOLTON - BANNER CREEK LAKE	74.50	34.50	0.00	3.08	G	535
LEBO CITY LAKE	71.00	47.00	0.00	3.50	F	70
PRAIRIE CENTER POND	70.40	29.60	3.70	5.25	G	1
GRAHAM CO. ANTELOPE LAKE	70.00	10.00	0.00	3.40	G	80
RICHMOND CITY LAKE	69.00	19.00	0.91	5.50	G	21
MOUND CITY LAKE	66.70	29.20	4.20	5.41	G	148
POTTAWATOMIE SFL #1	66.00	12.00	0.00	3.50	G	24
OTTAWA SFL	64.44	17.78	4.44	5.42	G	110
ATCHISON SFL	64.30	16.40	0.00	3.79	G	66
HOWARD-POLK DANIELS LAKE	63.20	33.80	0.00	5.07	G	69
LAKE HAMMOND-YMCA TOPEKA	62.50	2.08	0.00	1.64	F	15
SCOTT STATE LAKE	62.11	15.79	0.00	2.97	G	115
LEAVENWORTH SFL	57.73	9.55	0.45	4.31	G	175
BALDWIN - SPRING CREEK LAKE	55.81	39.53	0.00	3.53	G	7

SMALLMOUTH BASS						
IMPOUNDMENT	Density Rating (>11")	Preferred Rating (>14")	Lunker Rating (>17")	Biggest Fish (lbs.)	Bio. Rating	Acres of Water
RESERVOIRS						
EL DORADO	16.96	8.77	1.17	3.46	F	8000
GLEN ELDER	14.55	6.36	1.36	4.03	G	12586
COFFEY CO. LAKE	14.30	9.00	2.40	4.20	E	5000
BIG HILL	12.60	5.70	0.80	3.00	G	1240
WILSON	12.37	2.58	0.00	2.02	G	9040
CEDAR BLUFF	9.09	1.52	0.00	1.21	F	6500
MELVERN	6.20	2.70	0.30	2.50	G	7000
LAKES						
WYANDOTTE CO. LAKE	9.17	1.83	0.00	1.99	F	407
JEFFREY EC-MAKE UP LAKE	7.00	7.00	0.00	1.00	F	125
BOURBON CO. ELM CREEK LAKE	2.14	0.00	0.00	0.77	F	106
GEARY SFL	0.79	0.26	0.00	1.31	F	97

SPOTTED BASS						
IMPOUNDMENT	Density Rating (>11")	Preferred Rating (>14")	Lunker Rating (>17")	Biggest Fish (lbs.)	Bio. Rating	Acres of Water
RESERVOIRS						
CEDAR BLUFF	48.48	0.00	0.00	1.08	F	6500
SEBELIUS	10.97	5.81	0.00	2.09	F	1500
EL DORADO	6.51	1.71	0.00	1.77	F	8000
LAKES						
WILSON SFL	41.40	24.00	0.00	2.70	G	110
CHASE SFL	39.09	28.18	0.00	2.14	G	109
BOURBON SFL	20.00	4.40	0.00	1.80	G	103
EUREKA CITY LAKE	9.80	2.00	0.00	1.13	P	135
HOWARD-POLK DANIELS LAKE	7.40	4.40	0.00	2.65	F	69
CRAWFORD SFL	7.39	3.48	0.00	1.97	G	150

STRIPER						
IMPOUNDMENT	Density Rating (>20")	Preferred Rating (>30")	Lunker Rating (>35")	Biggest Fish (lbs.)	Bio. Rating	Acres of Water
RESERVOIRS						
WILSON	9.38	0.00	0.00	10.70	G	9040
GLEN ELDER	1.25	0.00	0.00	10.89	P	12586

WHITE BASS						
IMPOUNDMENT	Density Rating (>9")	Preferred Rating (>12")	Lunker Rating (>15")	Biggest Fish (lbs.)	Bio. Rating	Acres of Water
RESERVOIRS						
TORONTO	126.00	17.00	4.00	2.20	E	2800
CLINTON	78.00	30.00	0.30	2.50	G	7000
FALL RIVER	53.50	18.50	5.50	2.43	F	2500
KANOPOLIS	52.75	18.75	0.75	1.60	G	3550
CEDAR BLUFF	47.50	36.00	12.25	2.12	F	6500
HILLSDALE	35.50	30.00	0.00	1.50	G	4580
PERRY	31.75	22.50	0.25	1.79	G	12600
GLEN ELDER	31.00	15.38	3.75	2.36	F	12586
TUTTLE CREEK	27.00	15.00	7.30	3.50	G	15800
LOVEWELL	20.50	9.50	1.67	2.09	G	2986
COFFEY CO. LAKE	18.00	17.00	1.00	3.30	E	5000
WILSON	17.25	12.50	2.13	2.69	G	9040
MILFORD	15.60	11.60	1.00	1.53	G	16020
MELVERN	14.20	9.00	0.00	1.50	G	7000
KIRWIN	13.93	2.36	0.60	2.09	G	4000
WEBSTER	13.63	11.01	0.07	1.48	G	3500
EL DORADO	13.17	3.67	0.00	1.42	F	8000
MARION	13.17	3.67	0.50	2.50	G	6160
COUNCIL GROVE	11.20	1.80	0.00	1.57	F	3280
LAKES						
CENTRALIA CITY LAKE	66.00	17.00	0.00	1.00	F	400
HARVEY CO. LAKE-EAST	48.00	30.00	0.00	1.08	F	240
CLARK SFL	44.50	9.00	0.00	1.35	E	300
GEARY SFL	37.00	21.00	2.00	2.15	G	97
COUNCIL GROVE CITY LAKE	34.00	26.00	1.00	1.58	G	434
PAOLA CITY LAKE	19.50	5.50	0.00	1.00	G	220
JEFFREY EC-MAKE UP LAKE	19.00	14.00	0.00	1.40	G	125
JEFFREY EC-AUX. MAKE UP LAKE	11.50	9.50	2.50	2.80	G	460

WIPER						
IMPOUNDMENT	Density Rating (>12")	Preferred Rating (>15")	Lunker Rating (>20")	Biggest Fish (lbs.)	Bio Rating	Acres of Water
RESERVOIRS						
SEBELIUS	52.20	45.21	15.38	8.17	E	1500
KIRWIN	27.67	25.25	1.44	4.78	G	4000
MILFORD	27.40	18.20	10.20	14.55	G	16020
WEBSTER	26.42	24.25	3.95	16.93	G	3500
CHENEY	23.00	18.17	8.50	6.79	G	9550
MARION	21.00	19.50	1.50	4.61	G	6160
CLINTON	20.50	10.80	0.00	3.30	F	7000
CEDAR BLUFF	19.75	11.25	5.25	12.53	G	6500
POMONA	13.50	11.00	6.75	11.52	E	4000
EL DORADO	9.50	8.33	0.00	3.48	F	8000
KANOPOLIS	8.25	2.50	0.00	3.48	F	3550
LAKES						
COLDWATER LAKE	138.00	5.00	0.00	2.28	G	250
WELLINGTON CITY LAKE	57.00	46.00	8.00	7.53	E	700
SABETHA - PONY CREEK LAKE	46.00	38.00	14.00	7.05	G	171
SHAWNEE CO.-LAKE SHAWNEE	30.50	10.50	1.00	4.10	E	416
JEFFREY EC-MAKE UP LAKE	27.00	27.00	5.00	6.20	G	125
MIDDLE CREEK SFL	23.50	10.50	2.50	8.22	G	280
PAOLA CITY LAKE	23.00	8.50	0.00	1.90	G	220
GARNETT CITY LAKE-NORTH	22.00	20.00	8.00	6.30	E	55
DOUGLAS CO.-LONESTAR LAKE	21.50	8.00	7.00	7.50	G	195
LEBO CITY LAKE	19.00	5.00	3.00	5.30	E	70
OSAGE SFL	16.00	2.00	1.00	5.60	F	140
LEAVENWORTH SFL	14.50	8.00	1.50	6.10	G	175
PRATT CO. LAKE	14.00	8.00	1.00	4.31	G	51
WYANDOTTE CO. LAKE	11.00	0.00	0.00	1.15	P	407
HERINGTON CITY LAKE-NEW	11.00	6.00	2.00	3.97	G	555
GRIDLEY CITY LAKE	10.00	7.00	1.00	4.40	F	33
WINFIELD CITY LAKE	9.00	7.00	2.33	4.75	G	1200
JOHNSON CO. SHAWNEE MISSION LK	6.50	6.50	6.00	6.61	G	121
GARNETT CITY LAKE-SOUTH	6.00	6.00	1.00	4.90	G	25
SHERIDAN SFL	5.00	2.00	0.00	3.19	F	67
PLEASANTON EAST LAKE	5.00	0.00	0.00	3.24	G	127
MELVERN RIVER POND	5.00	4.00	2.00	4.10	F	100

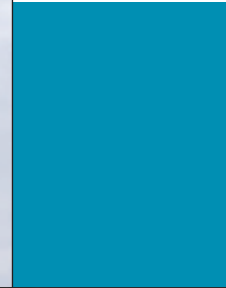
NORTHERN PIKE						
IMPOUNDMENT	Density Rating (>21")	Preferred Rating (>28")	Lunker Rating (>34")	Biggest Fish (lbs.)	Bio Rating	Acres of Water
LAKES						
KINGMAN SFL	8.00	6.67	1.67	8.60	E	144



SAUGER						
IMPOUNDMENT	Density Rating (>11")	Preferred Rating (>14")	Lunker Rating (>17")	Biggest Fish (lbs.)	Bio Rating	Acres of Water
RESERVOIRS						
MELVERN	11.50	10.20	2.00	2.20	F	7000
CLINTON	9.00	5.50	0.00	1.40	F	7000
PERRY	0.50	0.25	0.00	1.23	F	12600
LAKES						
HOLTON - BANNER CREEK LAKE	16.00	14.50	7.00	2.22	G	535

SAUGEYE						
IMPOUNDMENT	Density Rating (>14")	Preferred Rating (>18")	Lunker Rating (>22")	Biggest Fish (lbs.)	Bio Rating	Acres of Water
RESERVOIRS						
SEBELIUS	19.08	8.28	1.20	5.39	G	1500
TUTTLE CREEK	19.00	3.00	0.60	6.20	F	15800
COUNCIL GROVE	11.80	2.80	0.40	5.90	G	3280
LAKES						
HARVEY CO. LAKE-EAST	60.00	13.00	7.00	6.04	E	240
GRAHAM CO.-ANTELOPE LAKE	58.00	9.00	0.00	3.00	E	80
CHASE SFL	30.00	2.00	0.00	1.90	G	109
WELLINGTON CITY LAKE	27.00	1.00	0.00	3.75	F	700
MARION CO. LAKE	13.00	6.00	1.00	3.57	F	153
CENTRALIA CITY LAKE	13.00	3.50	0.00	2.80	F	400
PARSONS CITY LAKE	12.50	0.50	0.00	3.80	F	980
GEARY SFL	10.00	2.00	1.00	4.11	G	97
MIDDLE CREEK SFL	10.00	4.50	3.50	6.69	G	280
SHERIDAN SFL	10.00	0.00	0.00	1.43	F	67
PAOLA CITY LAKE	9.50	2.50	0.00	2.90	F	220
OLATHE-CEDAR LAKE	8.00	0.00	0.00	1.97	P	56
OLPE CITY LAKE	7.00	4.00	2.00	4.63	F	90
OTTAWA SFL	6.50	0.00	0.00	1.14	P	110

WALLEYE						
IMPOUNDMENT	Density Rating (>15")	Preferred Rating (>20")	Lunker Rating (>25")	Biggest Fish (lbs.)	Bio Rating	Acres of Water
RESERVOIRS						
HILLSDALE	20.00	6.50	2.30	9.29	G	4580
WILSON	14.38	0.38	0.13	5.25	G	9040
EL DORADO	13.67	1.00	0.67	8.36	G	8000
MILFORD	9.80	1.40	0.40	7.28	F	16020
CEDAR BLUFF	8.00	1.75	0.75	6.59	F	6500
MARION	8.00	1.83	0.00	5.32	G	6160
CHENEY	7.17	5.33	1.33	8.82	G	9550
WEBSTER	6.51	0.97	0.25	8.74	F	3500
KIRWIN	5.88	2.20	0.25	5.48	F	4000
GLEN ELDER	5.50	0.63	0.00	3.97	F	12586
LOVEWELL	3.83	0.67	0.17	6.76	F	2986
MELVERN	3.30	0.20	0.00	3.00	G	7000
CLINTON	1.80	0.30	0.30	6.80	F	7000
LAKES						
SCOTT STATE LAKE	29.00	5.00	1.00	7.72	E	115
ALMA CITY LAKE	22.00	7.00	0.00	4.50	G	80
HOLTON - BANNER CREEK LAKE	19.00	1.00	0.50	7.72	F	535
COUNCIL GROVE CITY LAKE	15.00	2.00	0.00	4.70	F	434
PRATT CO. LAKE	13.00	1.00	0.00	2.71	G	51
LEAVENWORTH SFL	12.50	1.00	0.00	5.10	F	175
BROWN SFL	9.00	2.00	0.00	3.04	F	62
JEFFREY EC-MAKE UP LAKE	8.00	5.00	1.00	6.10	G	125
WINFIELD CITY LAKE	5.67	1.67	0.00	4.46	F	1200
BOURBON CO. ELM CREEK LAKE	5.00	1.00	0.00	2.91	G	106
PLEASANTON EAST LAKE	5.00	2.00	1.00	1.50	E	127
WYANDOTTE CO. LAKE	5.00	1.50	0.50	6.83	F	407
JEFFREY EC-AUX. MAKE UP LAKE	4.50	0.00	0.00	2.30	F	460
SABETHA - PONY CREEK LAKE	4.00	3.00	1.00	5.29	F	171
HERINGTON CITY LAKE-NEW	3.00	1.00	0.00	3.89	F	555
SHAWNEE CO.-LAKE SHAWNEE	3.00	0.50	0.00	4.70	F	416
LEBO CITY LAKE	3.00	1.00	0.00	3.50	G	70
BOURBON SFL	2.00	0.00	0.00	2.54	F	103
BARBER SFL-LOWER	2.00	0.00	0.00	1.09	G	51
CLARK SFL	1.50	0.50	0.00	7.20	G	300
BONE CREEK LAKE	1.00	0.67	0.67	7.58	F	540
WOODSON SFL	1.00	0.00	0.00	2.10	P	180



TAKE-A-KID FISHING TIME

by **Tommie Berger**
district fisheries biologist, Sylvan Grove

photos by **Mike Blair**

There's no better way to connect to a youngster than to teach him or her to fish. Fishing is a positive, wholesome activity that could play a role in shaping what kind of person a youngster becomes.

Have you ever known a youngster who didn't enjoy the thrill of catching a fish? In 30 years of organizing fishing clinics, I can count on one hand the number of kids who did not like to fish after they attended one of our clinics. Fishing is a fun outdoor experience that everyone can enjoy for a lifetime. Kids and fishing just seem to go together. I am a firm believer that kids who are exposed to fishing grow up to become good stewards of our natural resources. And I also believe we can make a difference in a kid's life by simply taking the time to teach them to fish.

The Kansas Department of Wildlife and Parks has a vested interest in getting youngsters involved in fishing, hunting, furharvesting, target shooting, or other outdoor activities. A substantial portion of our revenue is provided by hunting and fishing license dollars. Another important revenue source is federal excise taxes on hunting and fishing equipment purchased by hunters and anglers, which is provided to the states based on the number of licenses they sell. To manage fish and wildlife resources in Kansas, we have to have license buyers.

Today's youth are tomorrow's license buyers, and they will also make decisions about our environment. If we can develop in them an appreciation for our natural world through fishing, they'll be more likely to be involved in those issues in the future.

Is that why we fisheries biologists conduct fishing clinics and educate people about fisheries management? Yes, to some degree. But I for one have a deeper reason for being so involved in education – I want everyone to have the opportunity to enjoy the outdoors as much as I have. I'm not necessarily thinking about each youngster as a potential license buyer. I'm thinking if they get hooked on fishing, hunting, or trapping, then they will have a lifetime of fun things to do. They will learn a real appreciation for the world around them.

We want our youth to understand the importance of good-quality habitat for wildlife, and us as well. We want them to

realize that we need clean water, and that conservation and preservation mean two very different things. Fishing is also a great way to connect with kids. Believe me, they will appreciate the time you spend with them while teaching them to fish, and I know you'll benefit, too.

So let's take a kid fishing. Late spring and summer are probably the best times, but fish can be caught just about any time of the year. Most warm water fish species spawn in the spring and bite best during warm months, but fall fishing can be good – when the fish are filling up on groceries for the long winter ahead. With our winter trout programs scattered throughout the state, there are even good opportunities during winter. And ice fishing has become an increasingly popular winter activity when it's cold enough for safe ice.

So don't worry too much about when to take the kids, just go whenever the time seems right and you are confident that

they will catch some fish. The recipe for teaching a young person to fish includes one dash of angling technique, two or three tablespoons of gear, and several cups of patience. Here are some important tips to consider the next time you plan a fishing outing with your kids.

- If you're serious about building a future fishing partner, invest in a quality spincast reel and a short rod. The push-button reels are made for novice hands, and require just a little coordination. Make sure the reel is properly filled with fresh line, so it casts smoothly. Too little line on a spool will cause lots of problems and frustrations, and old line will break easily, usually right before you net that big fish. Small bobbers and small hooks encourage more fish nibbles and – the supreme thrill for a youngster – a tug on the line. A small hook, a number 8 is about right, will catch big fish and little fish. A large hook will just reduce the number of bites and fish caught. Leave your own poles at home, since kids need your undivided attention. Wait until the child is proficient before you participate as a fisherman.

- Teach basics away from the water. Take time at home to teach a child how to tie on a hook, add split shot, or position a bobber. Kids feel more important when trusted to rig their own lines and bait their own hooks. (But check their knots.)

- For safety's sake and because of the yuck factor, you may want to start out handling the bait. Still, encourage that budding angler to



The face says it all. This young angler is totally engrossed in the task at hand and probably broke into a huge smile when the fish was landed. Fishing is a great outdoor activity that families can do together, and it could provide a lifetime of fun.



Start a young angler out with a quality spincast (push-button) outfit. And make sure the reel has a full spool of line so casting will be easier. A good rod and reel outfit will mean more time fishing and less time untangling birdnests.

give it a try. Use worms or minnows – records show these two baits account for 80 percent of fish caught. Don't use a whole worm, especially when using night crawlers. Just pinch off about an inch of worm, then put it on the hook just like a sock on a foot. Thread the worm onto the hook down the center, leaving nothing sticking out. Bring the point of the hook just slightly out of the end of the worm. You can run the worm on up the line above the hook if you've pinched off a bit too much. Minnows are fairly easy to rig. If you are fishing minnows under a bobber, hook the minnow under the dorsal or top fin, halfway back, but on top of the backbone. This method ensures that the minnow will stay alive for a while, swimming somewhat naturally. If you are trolling or drifting with minnows, hooking them through the lips helps them to stay alive. Don't use a swivel.

•
Never, ever forget the snacks and drinks. If you do, go back and get them — they're that important. Bring some wet wipes to clean face and fingers before and after snacks.



It doesn't take a big fish to put a smile on a young person's face.

•
Bring a camera and some extra film. Fishing is all about making and preserving memories. If your camera has a built-in flash use it with every shot, even in sunlight. The flash will eliminate shadows on young, excited faces.

•
In a boat, youngsters 12 and under are required by law to wear a life jacket. You may feel more comfortable with small children wearing them when fishing from the bank. Common sense says kids will get wet and muddy, whether you want them to or not. The younger they are, the more changes of clothes they will need. All anglers need to know how to swim, so start them early with swimming lessons too.

•
Use sunscreen. On the water, the sun can do double the damage because harmful rays come not only from above, but

from water reflection. And young skin is prone to sunburn.

- Insect repellent is almost as important as the sunscreen. Biting bugs can take all the fun out of a fishing trip.

- Fish close to home but go where there are lots of fish. That's the rule of thumb dictated by the age group whose favorite phrases include "Are we there yet?" "When am I going to catch a fish?" and "When are we going home?" A child needs lots of bites, lots of excitement, and probably doesn't give a hoot what kind of fish he or she catches. Farm ponds generally hold more fish per area than do state fishing lakes or bigger reservoirs, and most don't get the fishing pressure. That usually means more, hungrier and less-educated fish. Most Kansas ponds are stocked with bass, bluegill, and channel catfish, and some are even overstocked. If

you can find a farm pond like this, it can be a kid's paradise. Rivers and streams hold a lot of fish, especially channel catfish. A worm fished on the bottom or even with a bobber will keep the kids excited all day long on most any flowing water. If you want to get them into larger fish, learn to fish sponge bait and you can catch fish even during the hottest of days.

A low-water dam or a low water crossing on a stream can be a great place to fish. Fish in streams tend to move upstream during high water events and when they get to a dam, that is as far as they can go. So, these areas really fill up with fish and can be great places to take kids.

- Let them cast. Sure you'll be frustrated with tangles, but that is part of the learning experience. Teach them they need to leave their bait in the water to get a bite, but casting can break the monotony.

- Timing is everything. Let the young angler decide when enough is enough. If anything, it's better to quit before alarm bells ring. That keeps desire in the bank for the next fishing trip. Time your fishing for the most comfortable time of the day, usually morning.

- Make it fun. If they want to cast across the pond instead of where the fish are, let them. If they want to catch frogs, fish for crawdads, or play in the mud – go for it. Be prepared to point out things like turtles on logs, geese swimming on the other side of the pond, or raccoon tracks in the mud. They'll learn a lot from these types of experiences and want to go back for more. And take a few fish home and cook them for supper. Catch and release fishing can be taught later.

- Add three or more level cups of patience for a successful fishing trip and the creation of a new fishing partner.

- Fishing is just like any other activity. You don't get good at it going once or twice a year. It takes practice and experience to master fishing skills – even the basics. Hopefully I have given you some tips here that will make it easier. So, take the kids fishing every chance you get. You'll create a healthy bond with them, and you might even create a fishing fanatic. And when you think about all the stuff today's youth can get involved in, wouldn't you be glad if fishing was it. ♡



Kids learn quickly by doing. After some hands-on instruction, it won't be long until they're baiting their own hook and removing hooks from their catch.



DESIGNER GENES

by Mark Shoup
associate editor, Pratt

photos by Mike Blair

New technology, innovative culture methods and some dedicated biologists could result in better fishing for Kansas anglers through genetic manipulation.

Most anglers don't give a hoot about the genetic makeup of the fish they catch. If it looks like a walleye, fights like a walleye, and tastes like a walleye, it must be a walleye, right? KDWP fisheries biologists have a different take, however, one that upon closer scrutiny would convince even the casual fisherman to see "designer genes" as something more than fashion.

This insight has led KDWP biologists to embark on an imaginative fish propagation project that promises positive effects on the state walleye population, as well as other species. Because walleye populations in some lakes have struggled despite stocking programs, the agency has helped fill this gap by stocking hybrid saugeye, a cross between the walleye and the sauger. The resulting fish is one that grows faster and larger than the sauger and is less prone to wash out in high-flow reservoirs than walleye.

The problem with the normal hybrids — which are "diploid" hybrids — is that diploid saugeye may spawn with pure-strain walleye, diluting the genetics of the walleye population. A new process for creating saugeye — called "triploid induction" — may solve this problem, and a different problem involving grass carp, as well.

Triploid induction is a technique that allows genetic manipulation of a chromosome number to create a potentially faster-growing, but sterile, fish. A specific chromosome pair critical to reproduction is fractured, creating a third chromosome in that spot on the DNA helix.

2006 was the first year the agency attempted this process. Biologists used hydrostatic pressure chambers on the agency's walleye barge as eggs were harvested on Milford Reservoir. After eggs are taken from wild females, it takes four minutes to add milt (sperm), stir the mix, and get the eggs into the pressure chambers. Approximately 24 ounces of eggs were placed in each chamber, then



Once anesthetized, this grass carp is pricked with a lancet to draw a few drops of blood. Biologists tested more than 5,000 grass carp to ensure they were triploids.

were pressurized to 9,500 pounds per square inch (psi) for 10 minutes. The genetically-altered, fertilized eggs were then taken to the Pratt Fish Hatchery for incubation.

to experiment with Florida-strain largemouth bass. We'll be bringing Florida males to the Meade hatchery and crossing them with Kansas northern-strain largemouth to create a

KDWP's maiden voyage into the world of triploid fish produced about three million saugeye eggs. From this, 460,000 fry and 29,000 fingerlings were produced. Fry were stocked in Harvey County East Lake, Marion County Lake, and McPherson State Fishing Lake (SFL).

Fingerlings were stocked: in Sheridan SFL, Washington SFL, Graham Antelope Lake, and in Geary SFL. About 11,000 were sent to Milford Fish Hatchery to be trained on artificial feed and grown to 6-inch fish. The success rate in this process — 3,000 fish — was about the same as with diploid production.

Fisheries Section chief Doug Nygren sees great promise for this process. "Once you've got the fry hatched, they do just as well as diploids," he explains. "In 2007, all our saugeye production will be triploid, and we're going

sterile largemouth that potentially will grow faster and larger than our native bass."

Nygren says that initial stockings of triploid bass will go to La Cygne Reservoir and Critzer Lake in Linn County.

"This is an environmentally-friendly way of introducing the larger Florida strain bass into Kansas waters," Nygren says. "We're also being good

neighbors to Missouri by using this method because they do not want any fertile Florida bass in their waters. But it's possible we may one day see the largemouth record set in 1977 broken although we'd probably have to create a new category for it."

Another candidate for the triploid program is the grass carp (white amur). For years, grass carp have been stocked in a few select waters to control rooted aquatic vegetation. Originally, it was thought that this Asian native would not reproduce in the wild in Kansas. Unfortunately, grass carp have reproduced in the wild, making some stockings counterproductive because too many fish can destroy valuable native fish habitat and consume plankton and other vegetation necessary to maintain native fish populations.



Blood of each fish is carefully placed in a marked vial containing an agent that destroys everything but the nuclei of white blood cells.



The “coulter counter” removes solution containing only white blood cell nuclei.

To continue the program but control the number of grass carp in a given body of water, a triploid grass carp program has been started at Meade Fish Hatchery. Hatchery manager Jason Vajnar (pronounced Vinar) was excited when he heard this program would be initiated at Meade.

“I like challenges, and it seemed to me that Meade was a good fit for this program because it is so isolated from other bodies of water,” Vajnar explains. “I think this is a biologically responsible way to produce grass carp because we all share the same streams and many connecting bodies of water. If we’re going to produce grass carp, this is the way to protect our neighbors.”

Instead of producing their own triploids, however, the Meade Hatchery purchased 200,000 triploid fry from an Arkansas commercial fish producer for \$5,000. While this may seem like a lot of money, certified triploid grass carp 8-10 inches long cost \$10 each. It will be much more cost-effective if the agency can grow and certify its own stock of triploids — and eventually produce them as they have done with saugeye.

To continue the program but control the number of grass carp in a given body of water, a triploid grass carp program has been started at Meade Fish Hatchery. Hatchery manager Jason Vajnar (pronounced Vinar) was excited when he heard this program would be initiated at Meade.

However, it takes more than just purchasing fry to ensure a pure, productive supply of stockable, sterile grass carp. Hoping for a survival rate of 10 percent, Vajnar brought several biologists to Meade to help him and hatchery biologist Josh Jagels prepare the fish for stocking and ensure that all were triploids.

Before any real work could be done, however, the fish had to be kept in hatchery ponds for one summer, until they were 8-10 inches long. A survival rate of 7.5 percent left 15,048 fish for testing last fall. (Of these, only 5,500 would be tested to meet 2006-2007 demand. The rest are being held for 2007-2008

demand.) Six biologists worked the fish, testing all 5,500 in four days using the following laborious, high-tech process:

The first thing needed to test for either diploid or triploid is blood, and fish don’t give that up easily. To avoid trauma and decrease mortality in this process, the young fish were placed in tanks of water containing an anesthetic. At this point, the biologists had to work fast to prevent the fish from dying. Once anesthetized, the fish were placed in wet mesh baskets and pricked with a lancet to draw a few drops of blood. Fish were tested in lots of 10 and the blood of each placed in



This high-tech coulter counter measures the size of each fish’s white blood cell nuclei. The nucleus of a triploid fish is 33 percent larger than that of a diploid hybrid.



Biologists place anesthetized fish in wet baskets prior to taking blood samples.

The potential for triploid induction to control the reproductive capabilities of certain fish offers exciting possibilities for fisheries biologists and researchers, but the ultimate beneficiary will be the angler.

a marked vial containing a solution of isoton diluent and a “lysing” agent that breaks blood cells apart so that all that remains are the nuclei of white blood cells.

The solution was then run through a Beckman Coulter Multi-Sizer 3 “coulter counter,” a high-tech machine that measures the size of each nucleus. (This machine is the same apparatus that is used in hospitals to check human white blood cells. The delicate instrument must be flushed and cleared frequently.) As each sample was run through the coulter counter, the machine outputs data onto a laptop computer loaded with graphing software that revealed the size of each nuclei in both graphic and numerical formats.

This visionary process holds promise for other species, as well. White crappie, which can quickly overpopulate and become stunted in smaller impoundments, could be triploid-induced, making white crappie stocking of smaller state fishing lakes and community lakes possible.

The potential for triploid induction to control the reproductive capabilities of certain fish offers exciting possibilities

for fisheries biologists and researchers, but the ultimate beneficiary will be the angler. They can rest assured that grass carp can now be stocked to control aquatic vegetation without threat of reproduction. With the possibility of creating large numbers of desirable but faster-growing and sterile saugeye, Kansas anglers can also look forward to ample opportunities to catch more saugeye while knowing the walleye they catch are pure-strain.

And there may even be some very big bass in the Kansas angler’s future. ♡



Marc Murrell photo

Through the triploid hybrid program, anglers could see more nice saugeyes like this one in lakes they fish.



TWINS TACKLE TURKEYS

text and photos by Marc Murrell
Great Plains Nature Center manager, Wichita

A father's dream came true as he introduced his two young sons to his passion for hunting and the outdoors.

When I accompanied my wife to the doctor eight years ago, we were both pleasantly, or maybe frantically, surprised at her sonogram results. The doctor was running through the procedure as he calmly said, "There's one — and there's another!" Subsequent tests showed the twins were boys and ol' Dad couldn't wait for the day he could take them hunting.

Brandon and Cody, now 7 years old, have accompanied me on plenty of hunts in their young lives. We started out with doves and ducks and two seasons ago added bigger game. The two sat, and I use that term loosely, with me in a pop-up deer blind and watched as I arrowed a deer at 15 yards. After each hunt, they would ask, "Daddy, when can we hunt?"

Up until two years ago, kids couldn't hunt deer or turkeys until they were 12. Then an exemption was made that allowed kids to hunt turkeys after they completed a Hunter Education course, regardless of age.

But a new law passed last year allows kids to hunt, with an adult at least 21 years old, without completing the required Hunter Education Course.

It's a great way to get kids hooked on the outdoors before other interests start to compete for their time. And after the two hours we spent that Saturday afternoon during the 2006 Kansas youth turkey season, Brandon and Cody might be hooked for life.

Both boys were excited as we readied for their first hunt.

"Dad, are we going to use that stinky stuff?" Cody asked as he wrinkled his nose in reference to the raccoon urine we'd used as a cover scent on our successful deer hunt last fall.

"No," I laughed.

"Good, that stuff is gross," Cody said.

The weather was perfect with no wind, bright sunshine and 58 degrees as we started for our hunting spot. Each boy resembled a camouflage Ninja with their full head net and jacket as we eased into position. It wasn't long before we heard hens yelping and clucking in the distance. Brandon had won the, "pick a number," game and was first to hold the youth model 20 gauge shotgun.

The first few calls yielded no response. Less than 10 minutes later I called and got an immediate



Brandon, left, and Cody, right, show off their camouflage duds just like Dad's while practicing on their turkey calls during last spring's youth turkey season.

gobble; then another and I told Brandon to get ready.

As turkeys often do, three long-beards popped up at a bad angle only 15 yards away. The toms appeared nervous as they looked for the source of my calls. I whispered to Brandon to move the gun to his left, which was difficult since he shoots left-handed. All three gobblers started their alarm putts as they walked away. Brandon's problems were compounded by a bush and the sound of his shot sent all three birds straight into the air with nary a feather missing. He was disappointed at his miss but even unhappier about handing the gun to his brother for his turn.

We moved on to another location and sat down to call with a hen decoy positioned in front of us. Cody now sat on my lap and held the gun as we'd practiced at home. We could hear turkeys in the distance but were content to enjoy the day and hope more turkeys would move through our area. Our peace was interrupted when several hens stepped around a thicket and made their way toward the decoy.

"They might have a boyfriend

so, be still," I told Cody.

And just as I said that, I heard the gobbler drumming just out of sight. The big tom rounded the thicket in full strut, his iridescent colors gleaming in the sun. I helped Cody get the gun into position on his shoulder and told him to wait until he got lined up to shoot. At the shot, the big bird hit the dirt.

Both boys ran to the turkey, now starting to flop, which amused them like it would any boys their age. I took the opportunity to explain respect for the creatures we pursue and the seriousness of death as a part of hunting. I felt bad, though, as Cody went from total jubilation to tears. Brandon understood, too. I wondered at the time if the explanation was adequate.

Resilient as kids are, they were back to giggling and laughing within minutes as we tagged Cody's bird and carried it back to our hideout. We decided to finish the evening there.

Brandon experienced another miss and a close encounter with a gobbler that approached silently from behind. In full strut, the bird spotted us from a mere 7 yards

and vacated the premises too quickly for a shot from such a young hunter. With only 25 minutes of legal shooting time left, I worried but kept calling.

A few minutes passed before we heard a thunderous gobble behind us. A yelp on my call brought the same answer, now closer. I spun around with Brandon sitting on my lap.

"Point your gun at that gate," I told him, predicting the birds would come into view there.

And they did as three birds that looked much like the three we started the hunt with eased around the thicket.

"Wait until they get a little closer," I whispered.

The three birds inched closer looking at the decoy, now behind us. They didn't have any problem spotting us and just like the birds earlier started to alarm putt.

"You're going to have to put it on one and shoot," I said anxiously.

He dropped the bird on the left with a great shot. All three of us ran out to Brandon's bird which started to flop just like Cody's. Rather than laughing, both boys now stood and smiled. The gleam in their eyes told me they had learned from the earlier lesson and were on their way to understanding the responsibility of being a hunter.

As I knelt on the ground and hugged them, I realized how truly blessed I am. I couldn't help but think how those two little blobs on that first sonogram were now healthy, happy boys who love the outdoors. I'm sure their first hunt will be one of many outdoor experiences we share that I'll cherish forever. 🍷



THE TACKLE BOX ITEM YOU SHOULD NEVER BE WITHOUT

by Mark Shoup
associate editor, Pratt

The 2007 Fishing Regulations Summary is more than just a collection of regulations. It includes color illustrations, state record listings, a Master Angler application, and more.

2007

It's mid-April. You're casting along the dam of your favorite reservoir, looking for crappie and white bass. You feel a hit and set the hook into a heavy fish you know is not a crappie. Soon, you've landed a nice 16-inch walleye.

Now you're in a quandary; you don't have a copy of the 2007 Kansas Fishing Regulations Summary, so you're not sure if this is a legal fish. Walleye are great eating, and you'd like to keep this one, but is it legal size? You know that some lakes have a 15-inch minimum, some have an 18-inch minimum and there is even a 21-inch length limit. If you had the booklet, you'd know for sure and avoid depriving yourself of a fine-eating catch by releasing it

because you don't know the law.

The solution is simple. Keep a copy of the Fishing Regulations Summary handy at all times. But the pamphlet hasn't always been chock full of pertinent information. In fact, it hasn't always been a pamphlet. As recently as 1989, regulations came printed on an 11-by-17 flyer folded three times to fit in the pocket. Information included basic laws and regulations but lacked greatly in detail. The old brochure had about four pages of information compared to 35 in the current Summary. Since that time, the document has evolved into a four-color brochure that includes nearly everything an angler needs to know — not only to stay current with the law but to improve the angling experience.

One of my first jobs with the Department of Wildlife and Parks (KDWP) — way back in 1989 — was to key the information from that old brochure onto a desktop computer so that it could be formatted into a more comprehensive publication. Perhaps the most prominent evolution of this reformatting was a more comprehensive listing of length and creel limits.

As fisheries biologists worked to improve fishing on a variety of lakes in reservoirs, they began experimenting with different length limit and daily creel options. Management plans were developed for individual lakes. The flexible management options improve fishing but are difficult to keep track of. To help anglers, we developed a chart to

cover length and creel limits for a variety of waters and species. But the list kept growing every year, and the chart became difficult to read. In addition, listing similar species or species limits that combined with other species was confusing.

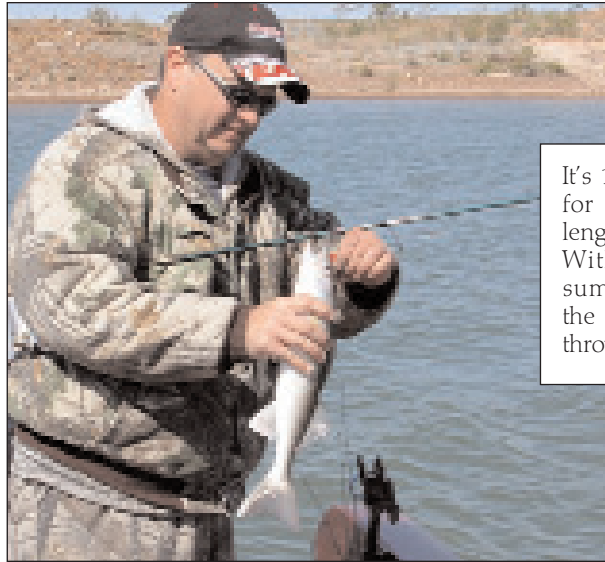
To clarify the issue, the 2006 booklet featured a paragraph of text for every body of water managed by KDWP. The 2007 Summary continues this format, with text clearly stating the length and creel limits of sportfish found in all locations listed in alphabetical order for each of the five KDWP regions. In addition, waters containing aquatic nuisance species (ANS) are marked with an "ANS Alert" that tells the reader what problem species to look for in each water.

Another popular feature of the new booklet is a full-color fish identification guide, complete with text descriptions and color illustrations by renowned fish illustrator (and Kansan), Joseph Tomelleri. Similar species are grouped with text to help the angler discern the differences.

Two pages are dedicated to invasive species, complete with detailed illustrations and how to prevent the spread of plants, mollusks, and fish. Zebra mussels, Asian carp, New Zealand mud snails, Eurasian watermilfoil, purple loosestrife, saltcedar, and white perch are described and illustrated in detail.

Anglers who want to contact a district fisheries biologist — for anything from record fish applications to pond management advice — will find a listing of names and phone numbers of the nearest local biologist. Listings of natural resource officers, awards and records, and special programs are also included.

The 2007 Kansas Fishing Regulation Summary booklet is user-friendly with topics grouped by subject matter for quick reference. Be sure to have one in your tacklebox. ♡



It's 16 inches long, that's for sure, but what's the length limit on this lake? Without a regulations summary to reference, the angler might have to throw it back.

THE FOLLOWING INFORMATION DETAILS SOME OF THE NEW REGULATIONS FOR 2007:

HANDFISHING — a handfishing season of June 15-Aug. 31 for flat-head catfish has been established on the Arkansas River from the John Mack Bridge on Broadway Street in Wichita downstream to the Kansas-Oklahoma border and on the Kansas River from its origin downstream to its confluence with the Missouri River; a Handfishing Permit (\$27.15), as well as a fishing license, is required to handfish.

BASS PASS — a Tournament Bass Pass (\$12.15) has been established; the Bass Pass allows participants in registered bass tournaments held between Sept. 1 and June 15 to keep two fish, to be released after tournament weigh-in, that meet the statewide minimum length limit but are under a special length limit for that fishing location; the regulation also allows anglers in registered tournaments to cull their catch, meaning they can replace a fish in their livewell with a larger one; to qualify for these tournaments, organizers must provide adequate weigh-in procedures; and boats must be equipped with working livewells that contain an electrolyte chemical-water solution.

PADDLEFISH PERMITS — a Paddlefish Permit is required of anyone snagging paddlefish during the snagging season opened at designated waters; paddlefish check stations are no longer required; and the \$12.15 permit will include six paddlefish tags that must be affixed immediately upon catch to each fish that exceeds the length limit.

TROUT PERMITS — two categories of trout fishing waters have been established; Type 1 waters require all anglers to have a \$12.15 Trout Permit during the Oct. 15-April 15 trout season; and Type 2 waters require a trout permit only for anglers fishing for and harvesting trout.

WHITE PERCH — One regulation that passed after the pamphlet was printed added white perch to the prohibited species list. White perch were inadvertently stocked in Cheney and Wilson reservoirs through a load of striped bass fingerlings that were received from another state. They are a problem, competing with desirable fish for food and space. To prevent them from spreading to other lakes, the regulation makes it illegal to possess live white perch. They can be kept for eating or used as bait, as long as they are dead.

Trout Fever

by Mike Miller
editor, Pratt

photos by Mike Blair

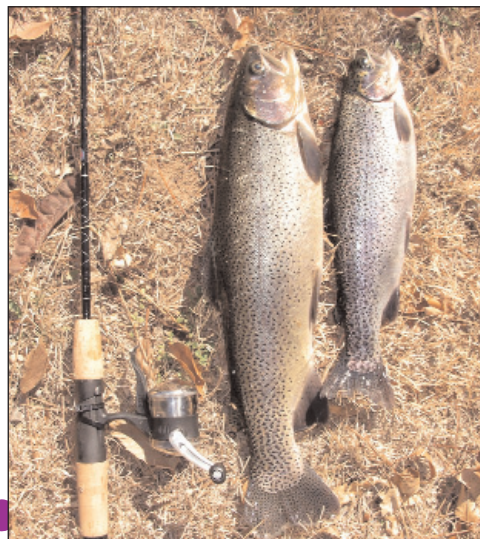
A sure bet to cure a case of cabin fever, get out and catch some Kansas trout.



This past winter more than 9,000 anglers enjoyed a unique fishing opportunity on the Kansas plains – they caught trout. Although rainbow trout are associated with the Rocky Mountains to our west or cold tailwater fisheries to our east, beginning in October, the Kansas Department of Wildlife and Parks stocks select waters throughout the state to provide anglers with a wonderful winter angling treat.

There are 23 locations in 21 counties where trout are stocked periodically from October through April. The waters range from small ponds to streams to strip and sand pits to reservoir stilling basins. While a trout stamp is required of all anglers fishing for trout during the season, Oct. 15-April 15, there

are actually two types of waters. On Type 1 waters, anyone fishing must have a trout stamp. On Type 2 waters, only those anglers fishing for and possessing trout are required to have a trout stamp. While the statewide limit is 5 trout per day, check for local regulations. Some waters do have special regula-



tions such as reduced creel limits or may allow anglers to use only lures and flies.

Trout are purchased from hatcheries in Colorado or Missouri, and funds raised from the sale of trout stamps pay for the stockings. Anglers can log on to the department's website to see a stocking schedule for each location.

An average of 167,00 trout are stocked each winter. The contracts with commercial hatcheries call for rainbow trout that are not less than 10 inches long and must average two fish per pound. Five percent of each stocking must consist of individual fish longer than 14 inches.

Because trout do not tolerate warm water temperatures, they don't survive past early summer in most locations. However, a



The trout season runs though April 15, and select waters will received periodic stockings through the season. There may not be a better way to spend a late-winter day.

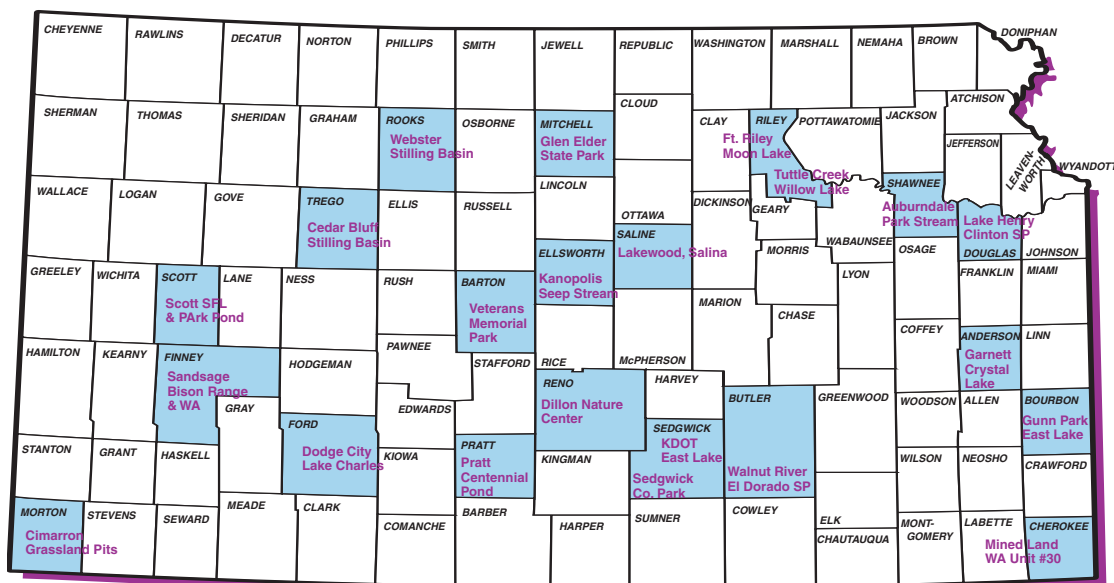
year-round fishery has been maintained at the Mined Land Wildlife Area near Hallowell., on Mined Land Lake #30. Water temperatures in this deep, strip-mined lake stay cool, and underflow provides oxygenated water that allows trout to survive all year. Because of this, this is a Type 1 trout water, and a trout permit is required to fish here all year, not just during the season. At this lake, a brown trout fishery has

been established, and last year, a state record category for brown trout was established. No angler has submitted a brown trout for that record, yet, so it remains open. If you catch a brown trout, have it weighed on certified scales, call the nearest KDWP office to have a biologist identify the species and you could be the newest state record holder.

The program has truly opened up new angling opportunities for

Kansans. Fly rods, leaders, tip-pets, nymphs — not common terms for most Kansas anglers — are turning up around the state. And while learning to catch fish on fly tackle is great fun, you don't have to invest in a new flyrod to have fun catching trout. Grab your ultra light spinning or spincast outfit, some small spinners or jigs and hang on. Bait can also be effective. Many trout are caught on worms, or commercially prepared baits such as PowerBait. Interestingly, they can be caught with bait techniques very familiar to most Kansas anglers. A small hook, a split shot, and some bait fished right on the bottom just like you'd do for channel catfish will catch plenty of trout.

So don't sit around this spring waiting for warmer weather. Pick the first nice day, grab your ultra light or flyrod and try a new experience. The map below shows where trout are stocked near you. 🎣



TROUT STOCKING LOCATIONS

Edited by Mark Shoup

NONRESIDENT BOBCAT

Editor:

I have thoroughly enjoyed opportunities to hunt your great state for the past several years. The quality and abundance of small and big game is unsurpassed, in my opinion. I have hunted in several western states, from Montana to Arizona and eastward, and find myself looking forward to hunting opportunities in Kansas the most.

Last season, you folks made it much more affordable for a nonresident to harvest a bobcat, which your state seems to have an abundance of compared to many other states. I thank you for this opportunity. I successfully hunted whitetail the first part of November and also had purchased a Nonresident Bobcat permit. I did not realize at the time of purchase that the season did not begin until Nov.15 but did read this before I began to hunt. It was my fault, of course, that I did not completely read the seasons on bobcat.

I, like many other nonresident and resident archery hunters, like to hunt the rut for whitetails, and that usually begins shortly after the first part of November. For this reason, my question to you folks is, would it be possible to move up the start date of bobcat season to about Nov. 1 without harming the resource? It seems that I always see a bobcat during the early part of November when I hunt and would love the opportunity to harvest one, as I am sure that several other hunters would.

I thank you again for the opportunities that KDWP has afforded nonresident hunters.

*Robert M. Young
Sevierville, Tennessee*

Dear Mr. Young:

Congratulations on your successful deer hunt. In response to your question about opening the bobcat season earlier, KDWP has considered extending the furbearer season, particularly with

bobcat in mind. However, harvest pressure on them has increased substantially in recent years, and we are currently collecting more population information through annual surveys to determine whether lengthening the season is practical. This has yet to be determined.

As far as when the season would be extended, among other considerations, current season dates are set to correspond with the time in which most furbearer species are "prime," or when their fur is at maximum length, density, and value. When earlier openers have been considered in the past, concern has been expressed by furharvesters and fur buyers about initiating a harvest season prior to most pelts being prime.

Additionally, recent comments from furharvesters have indicated most who would like to see a change would like to see the season extended at the end rather than the beginning – primarily for bobcats, which prime up late and are considered at their best when the season closes in February.

Based on these considerations, I'm not sure there is support from furharvesters for an earlier season. However, their preferences on season dates will be evaluated in this year's harvest survey, and if season dates are to be extended in the future, the results of this survey will be given much weight in the process.

In the meantime, the deer rut is still going strong at the time when the furbearer season opens, and in fact may even be at its peak around Nov. 15. Perhaps hunting deer slightly later would be an option for you. If you'd like to specifically target a bobcat, and distance doesn't preclude a second trip, most other outdoorsmen have left the field and bobcats are at their best in February. I consider this to be an exceptional time of year to be in the field. Thank you for your interest in Kansas furbearers.

*Matt Peek
furbearer biologist, Emporia*

WHENCE THE REGS?

Editor:

I would like to know the date that the Kansas hunting regulations were released to the public. If you have the information, I would like to know when the online regulations for 2006 were available and also the date when printed copies hit stores.

I am not interested in the preview of regulations, just the regulations booklet. I know they were not available until after the start of dove season. I remember this was the case last year as well. Is this generally the case? Is the release date the same every year. All of this information would be very useful to me and appreciated very much. Have a nice day.

*Ron Adkins
St. George*

Mr. Adkins:

Thanks for your inquiry regarding release dates of the *Kansas Hunting and Furharvesting Regulations Summary*. The complete 2006 hunting regulations booklet was posted on our website on Aug. 18. Printed copies of the booklet were received in our Pratt office and regional offices on Sept. 8 and were shipped from the Pratt office to license vendors around the state over the period of Sept. 8-12.

Your inquiry addresses a continuing challenge we face each year in providing hunting season information in advance of the Sept. 1 opening of dove season. Each year's hunting season regulations are approved by the Kansas Wildlife and Parks Commission in a series of public meetings. The duck and goose seasons are established in the August meeting of the commission, after final season frameworks are received from the U. S. Fish and Wildlife Service. That meeting occurred Aug. 17 last year. While the finished regulations can be placed on our website within a day or two after final season regulations are set, there is typically a three-week process involved in getting 300,000 copies of

the printed version printed and delivered to our office.

We have attempted to accommodate that delay by printing and distributing, in early August, a one-page brochure entitled the *Kansas Hunting Regulations Preview* with basic season and limit information on all game species except ducks and geese. However, we are planning to change the format of that publication in the future so that it more closely resembles the look of the complete hunting regulations summary available later. Apparently, some hunters who visit our offices or other vendors in August, looking for dove and teal season information, have overlooked the "preview" publication. It will be the same size format as the complete hunting regulations made available in September.

—Mathews

TALE OF TWO TOMS



Editor:

I thought you might like this turkey story and picture. Thirteen-year-old Grace Winter took a 14-pound jake with a 3 1/2-inch beard on the second day of the 2006 spring youth turkey season. On her first hunt, in 2005, she had taken a jake with a 4-inch beard and was very excited, but she did not appear as excited with this second jake in 2006. I then realized that she did not want to quit hunting until she had taken a mature tom.

After purchasing her second turkey tag, we hunted the opening day of the regular season with no luck. However,

that evening, we watched a hen and tom go to roost.

The next morning before daylight, we set up approximately 100 yards from where the turkeys were roosting. As we listened to the tom gobble at every loud noise, we knew we had a good chance of taking him. Earlier, we had placed a jake and hen decoy about 30 yards out. When the tom flew down at sunrise, I asked Grace to call him in with her box call, but she said, "You call; I don't want to scare him."

After a few calls on my box, he started coming in, strutting. Approximately 20 yards from the decoys, he turned to leave, but Grace shot him at about 40 yards.

The turkey was the tom Grace was looking for: 18 1/2 pounds, 9 3/8-inch beard, and spurs of 1 inch and 1 1/4 inches. Needless to say, Grace was excited again.

Both birds were taken on public land.

Benny Vaughn
Andale

PRAIRIE DOGS 'N FERRETS

Editor:

In the Sunday Dec. 3, 2006, *Wichita Eagle*, there was an article pertaining to the potential poisoning of prairie dogs located on ranches in Logan County. It seems that in complete disregard for private property rights, the Logan County Commission is going to pursue poisoning of these prairie dogs even though some landowners are in favor of maintaining them and even promoting them in order to pursue the possible reintroduction of the black-footed ferret.

A recent issue of *Kansas Wildlife & Parks* ("Nature's Notebook," Nov./Dec. 2006, Page 45) mentioned this possible reintroduction. I am a rancher and landowner, and I feel that this disregard of private property rights is intolerable. I understand that many county laws and ordinances go back to the homestead days, but this clearly oversteps those bounds. I feel that the Kansas Department of Wildlife and Parks should step in and side with the landowners in preventing the poisoning of these prairie dogs.

Eric McManaman
Pratt

Dear Mr. McManaman:

Thank you for expressing your concerns about the potential poisoning of prairie dogs in Logan County. The current law regarding prairie dogs is K.S.A. 80-1201 through 80-1208. These laws were passed in the first decade of the 1900s and have remained mostly unchanged since that time. (Actual text of the laws are online at www.kslegislature.org/legsrv-legis-portal/index.do and doing a quick search by statute number.)

The essential parts of the law provide that the county or township may enter the lands of any person who fails or refuses to control prairie dogs, and after notification, proceed to eradicate prairie dogs. Should the landowner, after being presented with the costs, fail to pay those costs within 30 days, the costs become a lien on the property and payable like property taxes.

KDWP has long argued for the laws regarding prairie dogs to be updated or repealed. In fact, the agency has requested introduction of bills regarding this topic many times. Three sessions past, the House passed one of the bills, but the bill did not pass the Senate in a form that was acceptable to both sides, and it died in a conference committee. The bills were attempts to ultimately prevent the listing of the black-tailed prairie dog as a threatened species when the U.S. Fish and Wildlife Service (USFWS) was petitioned for listing the species. Ultimately, the USFWS took the black-tailed prairie dog off of the warranted but precluded list, and efforts to revise the laws lost considerable steam at that time.

One of the main reasons stated in testimony by KDWP when working on passage of the bills was that the statutes were outdated and onerous to private property rights. We continue to work towards meaningful resolution of the situation in Logan County and appreciate your concerns.

—Christopher J. Tymeson, KDWP chief
legal counsel, Topeka

Dove Bait Boonjoggle

Early in the 2005 Kansas dove season I (NRO Rick Campbell) was informed that someone had unlawfully entered onto private property in Wabaunsee County and scattered milo around the shoreline of the landowner's pond. I drove immediately to the site. I informed NRO Jason Sawyers, Topeka, about the violation.

For 10 straight days, we kept the baited pond under surveillance, but we could not catch the culprits.

On a hot afternoon in August of 2006, Sawyers checked the site and found

that it had once again been baited with milo, and on Sept. 1, our surveillance began for the second time.

When we arrived at the site, Sawyers dropped me off along the roadway. Our plan was to allow me to make initial contact with the suspects and for Sawyers and his partner, K-9 Rex, to provide backup. I surprised a trio of hunters, and their hunt was over. They had already fired at least a box of shells.

We assembled the trio directly atop a heavily-baited area just above the pond, secured what evidence was

immediately necessary to support our case, and headed up to the road. Our trio hailed from three different communities: Alma and Topeka and Osceola, Missouri. The Missouri resident hadn't bothered to buy a Kansas hunting license or plug his shotgun. He also failed to buy a Harvest Information Program stamp, as did one of the Kansas residents.

The trio was given receipts for their shotguns and shells and told that the case would be turned over to the U.S. Fish and Wildlife Service and that most of the charges against them would be filed in federal court.

Sawyers, K-9 Rex, and I

returned immediately to the pond and found several shot shell cases and shot shell wads were located directly on areas of scattered milo. Two of the hunters had been standing directly on the baited areas when attempting to take doves. Rex also found one additional mourning dove that the trio had failed to locate, adding to the total of 24 doves already seized.

When all the smoke had cleared from this case, the trio had paid \$3,340. When time permitted, the baited pond was checked all September, with no evidence of further illegal hunting.

—Rick Campbell,
natural resource officer,
Wamego

K-9 Finds Turkeys

While on patrol in Dickinson County in April of last year, I (NRO Lance Hockett) watched a hunter dressed in camouflage standing at the edge of a milo stubble field. After about 15 minutes, the hunter bent over and walked away from me down into the trees, out of sight.

Then I parked in an abandoned farm yard. I found a different hunter in about five minutes and checked his license and permits. Just as I finished, his friend came walking down the tree line to us, so I asked to see his hunting license and turkey permit. While checking his permits and license, I asked the second hunter if he had shot at anything that day or had any luck harvesting a turkey. He told me that he had not fired a shot. I asked him if he had been standing at the edge of the milo stubble field about 15 minutes earlier, and he said that he had been.

I asked the hunters where they were staying, and they told me that they were staying in a local motel.

Then I placed a call to NRO and K-9 handler Jason Sawyers, Topeka, and told him that I believed that a hunter had hidden a turkey from me, and I needed him to bring his K-9, Rex, to see if he could locate the turkey.

Once Sawyers and Rex arrived, I took them to the last location I had seen the hunter carrying the turkey. From there, Sawyers released Rex. We followed until we came into the abandoned farm yard. Once in the farm yard, Rex stopped and put his nose high in the air, then ran about 30 yards to

an old grain cart parked in the farmyard and began scratching on the tire with his paws. I stood on top of the grain cart's tire and found two untagged turkeys.

After we collected both turkeys and tagged them as evidence, Sawyers had Rex search the entire 320 acres to see if we could locate the area that the turkeys were shot. After a short search, Rex found a ground blind and an area that had turkey feathers, fresh blood, and three shotgun shell wads.

We went to the motel where the hunters were staying, but the desk clerk told us that they had checked out about one hour earlier.

I then phoned NRO Glenn Cannizzaro, Tonganoxie, and asked him to locate the two hunters because one of them lived in Leavenworth County. The other one was from Pennsylvania. Cannizzaro went to the Leavenworth County residence and found the vehicle that the hunters had been driving. After talking to the hunters, he received a full confession from the hunter from Pennsylvania, who said that he had shot two turkeys earlier in the day and had not tagged them but had hid them in the grain cart.

I met with Cannizzaro in Leavenworth County, where we seized the hunter's license, two turkey permits, and shotgun. The hunter from Pennsylvania was charged with two counts of failure to tag turkeys and two counts of wanton waste. He was required to post a cash bond of \$860.

In May of 2006, the hunter was found guilty on all charges in Dickinson County District Court. He paid \$860 and forfeited his hunting license, turkey permits, and shotgun to KDWP.

—Lance Hockett, natural resource officer, Abilene

DEER RECOMMENDATIONS

In January of 2006, the Kansas Department of Wildlife and Parks Deer Task Force presented the Kansas Legislature draft recommendations to simplify and condense deer-related statutes. The recommendations also addressed many other deer permitting issues and could affect many different constituencies, so the task force requested a year to solicit input from the public before making final recommendations.

After conducting surveys and public meetings throughout the past year, the 10-member task force has assembled a final set of recommendations that were presented to the Kansas Legislature in January of this year.

As this issue went to press, legislation required to achieve the Task Force's final proposal had not yet passed. If legislation is agreed on, changes could not be made until the 2008 deer season. Deer permit allocation and application procedures for 2007 will be similar to 2006. You can follow all KDWP-related legislative bills on the department's website under "Legislative Update."

—Miller

THE OVERALL GOALS OF THE TASK FORCE, AS FOLLOW, ARE SIMILAR TO THOSE IN 2006:

- reduce and simplify deer-related statutes to allow changes and continuing adjustments necessary for permitting and resource management to be made through the regulatory process;
- through regulation, establish a permitting system that distributes permits fairly while conserving the deer resource and hunting traditions;
- simplify the permitting process while increasing and improving deer hunting opportunities for residents hunters; and
- develop a formula/model to establish nonresident deer permit numbers that satisfies desires of resident landowners and protects resident hunting opportunities.

RESIDENT DEER PERMIT RECOMMENDATIONS INCLUDE THE FOLLOWING:

- establish resident, statewide, Whitetail Either Sex, any-season permit;
- establish resident, statewide, Archery Either Species, Either Sex permit;
- establish two units for use of limited Either Species, Either Sex Firearms and Muzzleloader permits;
- maintain 19 deer management units for use of Whitetail Antlerless Only permits;
- eliminate Whitetail Antlerless Only game tags, instead establishing one type of whitetail antlerless only permit, the first one purchased valid on public or private land statewide. As many as four additional permits could be purchased and would be valid only in specific units and on private land and designated public lands; and
- eliminate Transferable Hunt-Own-Land permits, instead allowing lineal family members, two generations up or down from the landowner, to qualify for Hunt Own Land permits, regardless of residency, one per 80 acres.

THE TASK FORCE RECOMMENDED THE FOLLOWING FOR NONRESIDENT DEER PERMITS:

- eliminate the Landowner Transferable Nonresident permit, establishing nonresident permit quotas based on demand, landowner tolerance, and resource biology. An adjustment number would be determined using seven factors: population trends, deer-related vehicle accidents, age structure, deer damage, landowner desire for nonresident deer permits, general public desires, and biologists' judgment of deer health and habitat. The adjustment factor would be used to determine 2008 permit numbers based on an average of nonresident demand from the previous six years; however, the task force recommends no less than a 10 percent increase per deer management unit and no more than 50 percent increase per unit (Unit 16 the exception);
- maintain 18 deer management units for all nonresident hunting;
- establish a "Hunter Designate" permit application process – setting quotas of whitetail deer permits and allowing applicants to designate season/hunt type, either archery, muzzleloader or rifle; and
- establish a mule deer stamp. When a nonresident applies for an archery or muzzleloader Whitetail Either Sex permit in deer management units 1, 2, 3, 4, 5, 7, 16, 17, and 18, they would have an option to apply for a limited number of mule deer stamps that, if they are drawn, would convert their Muzzleloader or Archery Whitetail Either Sex permit to an Either Sex, Either Species permit, with an additional stamp cost of \$100.

WAY outside

BY BRUCE GOCHRAN



NWTF Aids Habitat

The Kansas State Board of the National Wild Turkey Federation (NWTF) has approved Hunting Heritage Super Fund proposals to aid wildlife habitat in Kansas. The organization will work with KDWP and the U.S. Forest Service to aid the following proposals, depending on available funds:

- funding of a contractor to trap 125 wild turkeys and move them to the western portion of Turkey Unit 1 – \$1,875 approved;
- restore a wildlife opening at Kaw Wildlife Area by removing invasive trees – \$670 approved;
- native grassland restoration at Marion Wildlife Area – \$2,250 approved;
- funds for 9,330 additional acres of spring wild turkey Walk-In Hunt Access (WIHA) lands – \$7,000 approved;
- riparian restoration by salt cedar removal at Cimarron National Grasslands – \$2,500 approved;
- restore upland native grassland openings at Nemaha Wildlife Area – \$1,250 approved;
- timber stand improvement at Marais des Cygnes Wildlife Area – \$2,500 approved; and
- riparian tree planting at Elk City Wildlife Area – \$1,000 approved.

These projects are in addition to more than \$30,000 budgeted toward outreach and education designed to preserve the hunting heritage. Also, an additional project was funded through NWTF's Southern Great Plains Riparian Initiative. This project allocated \$5,000 for salt cedar removal at Cottonwood Flats Wildlife Area in Hamilton County.

For more information, contact Brandon Houck at 620-443-5906.

—Kansas Chapter National Wild Turkey Federation



EQUIPMENT SALES UP

If shopping for athletic and sports equipment were an Olympic event, the bronze medal would go to America's hunters and shooters. Golfers would claim silver, and work-out buffs would take gold.

New statistics show that hunting gear and firearm sales topped \$3.3 billion in 2005. Only golf and exercise equipment performed better, with sales of \$3.4 and \$5.2 billion, respectively, according to data from the National Sporting Goods Association. Hunting and firearm sales grew 6 percent from the previous year, which is two times better than the athletic and sports equipment market performed as a whole.

Within the hunting and firearms category, hunting footwear sales saw a 7 per-

cent increase, and sales of hunting-related apparel saw a 4 percent gain. Firearms sales were up 21.7 percent, with shotgun sales showing the greatest increase, 10.5 percent.

—Bullet Points

\$25,000 FOR PLAYAS

The Playa Lake Joint Venture (PLJV) Management Board met last winter in Oklahoma, and KDWP received the maximum funding of \$25,000 from Conoco/Phillips for a new habitat grant to help purchase additional critical wetland habitat at Herron Playa in Ford County.

In addition, wildlife biologist Helen Hands, Great Bend, was elected chairman of the playa lake Monitoring, Evaluation, and Research Team (MERT). Hands has



ConocoPhillips
PLAYA LAKES
JOINT VENTURE

served on that committee for several years.

"The comprehensive KDWP playa lake report given at the meeting was by far the best state report of the six states that reported," said Joe Kramer, KDWP Fisheries and Wildlife Division director. "Our people have done a great job."

Kansas also received an additional \$20,000 annually that is passed through the U.S. Fish and Wildlife Service's Region 2 to the Kansas Alliance for Wetlands

and Streams (KAWS) for playa lake grant work that indirectly benefits Kansas and Kansas playa lake areas.

The Playa Lakes Joint Venture's mission is to conserve playa lakes, other wetlands, and associated landscapes through partnerships for the benefit of birds, other wildlife, and people. PLJV works in portions of six states: Colorado, Kansas, Nebraska, New Mexico, Oklahoma, and Texas.

—Shoup

Youth Hunt Success

Note: Organized youth hunts – during the two-day youth/disabled deer season in late September and at other times throughout the season – are growing in popularity. Here are reports on a few conducted last deer season.

–Shoup

Gray County

KDWP staff in western Kansas conducted a youth deer hunt in Gray County, where 12 kids and one adult in a wheelchair participated during the September youth/persons with disabilities hunt. Tom Brown, the wheelchair-bound hunter, harvested a small buck on the last evening. Five kids harvested a deer, and one missed twice. The first successful hunter shot a deer standing at 80 yards, and the second deer was taken at 100 yards. One youngster watched a large mule deer buck only 15 feet away for about four minutes, but with a Whitetail Either Sex permit, all he could do was watch it walk away. A few minutes later, he watched six mule deer does stand 20 yards away. Once again, all he could do was sit and watch. But he finished with a positive attitude, knowing that he still had the regular firearms season to hunt.

After the morning and evening hunts, my house was filled with young kids talking about their experiences. At one time we had about 18 people at the house snacking and napping. We ended up with some deer harvested and everyone having a safe experience.

I would like to thank all the mentors and landowners who made this possible.

–Manuel Torres,
public lands manager, Garden City



Austin Reed and Marc Murrell pose after a successful hunt.

Harper County

The 7th Annual Harper County/Morris Banks Memorial Youth Deer Hunt was held Sept. 23-24. The hunt was conducted with KDWP staff and local sportsmen and business owners. More than 35 kids applied this year, and 21 were chosen to hunt. Some were local kids, and others were from the Wichita area. Each youth had a parent or guardian with them and a personal guide, either a KDWP employee or a local hunter. All the hunting was on private land in Harper County.

On Saturday after a hamburger lunch, rifle and shotgun shoot, and deer hunting seminar, the kids took a sack lunch with them to the field for some fine deer hunting. Nine youngsters harvested deer that night. The next morning, five kids harvested deer. Fourteen deer were harvested on this youth hunt, including three bucks and 11 does. Almost every youngster had an opportunity to harvest a deer.

One of our young hunters, Austin Reed (and his father, John) was guided by KDWP's Marc Murrell. Austin took his first deer, a whitetail doe. After the hunt was over, John Reed sent a thank you to Marc Murrell saying, "Marc, I can't thank you enough for giving Austin and me such a great experience. Austin had such a great time, and it's something we'll have to look back on for life. For all who are involved in this, I give a heart-felt thanks. Hope to meet up again with you sometime. Thanks again."

–Clint Bowman,
assistant public lands manager,
Osage City

Greenwood County



Manuel Torres and other volunteers help make youth hunts a success.

"This is the most awesome day ever," and "No one will ever believe what I did today," were just a couple of the memorable comments from kids who participated in a youth deer hunt sponsored by Big Brothers/Big Sisters, KDWP, the Kansas Wildlife Officers Association, and the Spring Creek Ranch on Jan. 6.

KDWP natural resource officers Bob Funke, Dave Adams, Brian Meiwes, John Bills, and Dan Melson, along with Kansas Highway Patrol trooper Chris Markham, served as big brothers for the event. The officers spent the day mentoring four kids from El Dorado and one from Fall River.

Spring Creek Ranch manager James Palmer and his wife Pat provided lunch. After lunch, each hunter spent one-on-one time at a rifle range with their mentor for the day, learning firearms safety and marksmanship.

After the range, hunters and mentors went to hunting blinds on the 11,000-acre Spring Creek Ranch in Greenwood County. They weren't in the blinds long before deer began to fall. All five of the young participants harvested deer during the afternoon hunt. For all but one of the participants, it was the first deer they had ever harvested.

In addition to Spring Creek Ranch providing lunch and a terrific place to hunt, the Kansas Wildlife Officers Association purchased each hunter's deer permit and paid for their deer processing after the hunt.

–Dan Melson,
natural resource officer, Eureka



*What is the way to
the place where the
lightning is dispersed,
or the place where the
east winds are scat-
tered over the earth?*

-Job 38:24

by Mark Shoup



All my life, rains – particularly thunderstorms – have sparked my imagination and energized me, physically and spiritually, like nothing else in nature. Juncos, woodpeckers, and nuthatches have calmed my thoughts through the kitchen window. Deer materializing near my treestand have provided adrenaline surges that made my eyebrows shimmy; jumping bass have made me laugh out loud; full bags of ducks have satisfied my appetite for wild game, but nothing has filled my soul like the spine-tingling rush of a thunderstorm and its transcendental aftermath.

Storms are always welcome in the semi-arid westcentral Kansas landscape where I grew up, greening crops and cleansing the air. In childhood, I walked the gutters barefoot along my small-town streets, kicking up sodden, leafy debris to reveal knots of earthworms that had slipped through cracks in the curb. This bonanza filled my worm bed at home and provide bait for the Pawnee and Arkansas rivers.

Across the street from our home, I often sought refuge from storms in a 4-H livestock facility, a sideless roundtop structure from which I could inhale the power, electricity, and freshness of the storm in dry but open comfort.

Whether tucked in bed at night, curled in the comfort of a tent, wrapped in a blanket in the back seat of the family car as we traveled, or watching lightning-laced thunderheads approach from a hilltop on the banks of the Arkansas, storms were at once a source of comfort and spellbinding wonder for me. I often went for walks in the rain, watching streams appear in the mud, damming them up or sending an improvised stick boat floating down a mighty river to some unknown Lilliputian port.

Lest I be accused of over-romanticizing the power of nature, however, I acknowl-

edge that storms can cause great damage. Having lived near Estes Park, Colorado, in the summer of 1976, I witnessed this destructive power first hand, hiking up the Big Thompson Canyon the day after 6 inches of rain fell in one Saturday night hour, flooding the canyon, tossing cabins and cars like toothpicks, and killing more than 200 people. I also understand that an ill-timed storm can wash away freshly-planted wheat or milo, or prevent harvest of ripened crops.

But events such as these can bring out the best in people. In the summer of 1965, flood waters on the Arkansas River reached unprecedented levels. As news of the charging waters reached Larned – a 12-foot wall of water was rumored to be approaching Dodge City – the entire community banded together. That night, everyone gathered downtown, filling bags with sand that would provide makeshift levies for homes and businesses. National television crews rolled into town. Jay Hungate, my boss at the swimming pool where I was a lifeguard, and I made several trips between Larned and Kinsley to track the progress of the river and its tributaries. When all was over, the flood waters rose to within 3 feet of the Arkansas River bridge south of town and stretched a mile southward, at once splendid and terrifying.

To a kid, tragedy is abstract when the power of a storm abounds, and as an adult, I have had the pleasure of revisiting this perspective through the eyes of my sons. When my boys were in grade school, my sister, Carol, visited from San Francisco. Carol loved thunderstorms, and Kansas always seemed to brew up a storm for her when she came back. We sat on my front porch during a storm and

watched the boys play in the rain.

They stripped their T-shirts off and stood in the gutter's rushing water, soaked to the bone but apparently not wet enough because they slapped their shirts in the rushing water, flung them back over their heads in dazzling arcs, and slapped them down again, spraying back at the sky over and over. Carol captured this moment of sheer ecstasy in black-and-white photographs that have etched that moment forever in the scrapbook of my mind.

Perhaps the most sublime experience of this nature occurred shortly after my wife, Rose, and our then one-year-old son Logan moved to Pratt. We were half-moved into our new home, and Logan and I were at home alone when a thunderstorm attacked, its artillery making the old two-story house shudder. Logan was afraid of loud noises at that age, so I gathered him in my arms and talked to him softly, saying what he surely couldn't believe – that it was okay; the storm would not hurt us. To reassure him without compounding the fear by hiding, I stepped out on the covered back porch and sat down, holding Logan on my lap.

It may have been minutes, it may have been an hour, but as water poured over the eaves, thunder gave way to a gentle shower. I pointed to the glistening raindrops and blades of grass straining from eddies in the backyard. "See," I said, "it's beautiful, and the thunder is gone away. Oh, there's a rainbow!" But as I looked down at my young son, he was sound asleep, head nestled in my chest, all fear dispersed with the receding rumble of God's most breathtaking opus.

Quote of the Issue

"I fish because I love to. Because I love the environs where trout are found, which are invariably beautiful, and hate the environs where crowds of people are found, which are invariably ugly. Because of all the television commercials, cocktail parties, and assorted social posturing, I thus escape. Because in a world where most men seem to spend their lives doing what they hate, my fishing is at once an endless source of delight and an act of small rebellion. Because trout do not lie or cheat and cannot be bought or bribed or impressed by power, but respond only to quietude and humility, and endless patience. Because I suspect that men are going along this way for the last time, and I for one don't want to waste the trip. Because mercifully there are no telephones on trout waters. Because only in the woods can I find solitude without loneliness. Because bourbon out of an old tin cup always tastes better out there. Because maybe one day I will catch a mermaid. And finally, not because I regard fishing as being so terribly important, but because I suspect that so many of the other concerns of men are equally unimportant – and not nearly so much fun."

—John Voelker,
attorney, judge, and novelist;
author of *Anatomy of a Murder*;
pen name Robert Traver

Male or Female?

Most of the year, the sex of a bass, like most fish species, is nearly impossible to tell without cutting the fish open and looking at the internal organs. However, during the spring spawning period, male bass tend to be slender. At this time, sexually-mature females are fat because they are full of eggs.

—Shoup

NO White Perch

White perch have been added to the list of live species illegal to import, possess alive, or release in Kansas waters. At a Jan. 11

meeting in Winfield, the Kansas Wildlife and Parks Commission approved addition of white perch to the list of prohibited species.

White perch are native to the Atlantic coast of North America but have invaded many waters west of their native range. Once established in a lake or stream, this non-native species outcompetes native species, resulting in declines in native fish populations.

White perch have established populations in Browning Oxbow Lake, Wilson and Cheney reservoirs, and Kingman State Fishing Lake. Currently, anglers at white perch-infested waters may use the

species as live bait. The regulation, which became effective Feb. 15, no longer allows use of live white perch as bait.

Kansas Department of Wildlife and Parks staff recommended the regulatory change to help prevent anglers from inadvertently releasing white perch in uninfested waters.

—Shoup

Fish Atlas

Anglers will find welcome news in the *2007 Kansas Fishing Atlas*, available for viewing and download from the KDWP website. Printed copies are also available from most KDWP office or by request through the agency's website.

The maps in this atlas pin-

point a variety of public fishing areas, as well as public lands across Kansas. Fishing Impoundment and Stream Habitats (F.I.S.H.) areas are privately-owned ponds or streams KDWP has leased and opened to public fishing. F.I.S.H. sites are numbered in red on each county map. Each map also shows all federal reservoirs, state fishing lakes, river access areas, and community lakes. To find fishing areas near you, consult the map legend, then locate corresponding color codes on the county maps. With this atlas you can locate just about any type of fishing you desire.

All county maps are included in this atlas, but not all counties have public fishing opportunities.

—Mathews





I have been watching this white red-tailed hawk for the last few years and finally got some beautiful pictures of him/her. I just thought someone in the department would be interested in the pictures.

—Jay Peetoom, Argonia

Albinism

Albinism (from the Latin *albus*, meaning "white") is a form of hypopigmentary disorder acquired at birth and characterized by a lack of dark pigment in the eyes, skin, scales, feathers, and hair of animals and humans. Albinism affects mammals, fish, birds, reptiles, and amphibians. The most common term for individuals with this condition is "albino."

Albinism is inherited genetically from an individual's parents. Two famous rock and roll musician brothers of the 1970s and 1980s — Johnny and Edgar Winter — are both albino although born three years apart. Many other famous people throughout history have been afflicted with albinism, including Edward the Confessor, King of England from 1042-1066, and 20th century Oxford scholar and priest William Archibald Spooner.

Because albinism is a genetic disorder, it is not infectious. The principal gene that causes albinism prevents the body from making the usual amounts of the pigment melanin. Most forms of albinism are caused by a rare combination of recessive genes from both parents, but some even rarer forms are inherited from only one parent.

People spot albino animals in Kansas from time to time, usually more visible species such as squirrels and deer. Hawks are occasionally seen, too, but photographs of them are difficult to get.

—Shoup

GRUMPY TURTLE!

Last October, two Haven men — Allen Andersen and Jay Mattison — caught a new Kansas state record snapping turtle on the Arkansas River near their home town. The monster weighed 45 pounds and was 16 inches long. The previous largest Kansas common snapper was caught by Ian and John Bork in 1992 in Barton County. That specimen weighed 32 pounds. The world record for this species (*Chelydra serpentina*) is 86 pounds, 19 1/2 inches.

Common snapping turtles live an average of 28 years in the wild, and specimens living more than 40 years are documented. They are found throughout the United States east of the Rocky Mountains. Snappers are omnivorous and will consume anything that will fit in the mouth, including algae, duckweed, sedges, insects, crayfish, earthworms, frogs, fish, mice, and other turtles. When young, common snappers are active foragers, but as adults they more commonly ambush prey. The flesh and eggs of common snappers are edible and highly desirable in parts of their range.

They are highly aquatic and rarely venture onto land except to bask or lay



eggs. When searching for a suitable site to lay eggs in late spring, a female may travel as far as 10 miles. The nest is dug into the ground, and 20 to 40 round, hard-shelled eggs are deposited. Then the nest is covered.

The sex of common snapping turtles is determined by the temperature at which the eggs incubate. Those incubated between 71 and 77 degrees Fahrenheit produce predominately males, while cooler or warmer temperatures produce females.

In late October, most common snapping turtles settle into the mud bottoms

of ponds or streams or beneath logs and remain there until warmer spring temperatures set in.

The new state record, nicknamed "Roland," is on display alive at the KDWP Pratt Education Center, 2 miles east of Pratt. Eventually, it will become part of the herpetology collection at the Sternberg Museum of Natural History in Hays.

—Travis W. Taggart,
associate curator of herpetology,
Sternberg Museum of Natural History

CORRECTION

The department's 2005 annual report, which appeared in the Nov./Dec. 2006 issue of *Kansas Wildlife & Parks* magazine, incorrectly reported sales of resident combination hunting/fishing licenses. The number of combination licenses sold in 2005 was 36,478, generating revenue of \$1,313,208.

—Mathews

PASS ON FISHIN'

I thought this picture might be suitable as part of KDWP's Pass It On program. It is my granddaughter on her first fishing trip, to a pond near Burden last May.

—Carl Conley, Clearwater



SHOREBIRD GUIDE

The Great Plains Nature Center (GPNC) has released its latest pocket-sized reference guide, *A Pocket Guide to Great Plains Shorebirds*. Shorebirds, such as plovers and sandpipers, are a captivating group of birds primarily adapted to live on open shorelines, wetlands, and grasslands.

There are more than 200 species found worldwide. Approximately 50 regularly breed, winter, or migrate through the United States and Canada. About 40 of these can be found within the Great Plains.

This guide features 38 of the most common shorebirds found in the Great Plains. The 70-page booklet highlights size, description, similar species, and comments for each bird. Seventy-five photographs show both breeding and nonbreeding plumages.

Single copies of the guide can be picked up free at the Great Plains Nature Center. Copies can be mailed for \$2 each by sending your check, payable to GPNC, to Shorebirds Pocket Guide, Great Plains Nature Center, 6232 East 29th Street North, Wichita, KS 67220.

—Murrell

KIDS PRODUCE BOOK

Four ceremonies unveiling the book, *Kansas Critters: Mammals, A Wildlife Book Written and Illustrated by Kansas Kids*, were held on August 26 at the Great Plains Nature Center.

The book is compiled from almost 1,500 pieces and 242 entries from 224 artists and authors. Kansas children in kindergarten through 8th grade submitted entries of original artwork, poetry, or descriptive text for the book. Students featured 26 species of Kansas mammals.

Single copies of the book can be picked up free at the Great Plains Nature Center or through mail by sending a \$4 check to Kansas Critters, Great Plains Nature Center, 6232 E. 29th St. N, Wichita, Kansas 67220.

The Lattner Family Foundation provided funds for the book project.

—Murrell

HALF-PRICE PARK PERMITS

The cost of visiting Kansas state parks is going down in 2007. In a public hearing in Chanute last October, the Kansas Wildlife and Parks Commission approved changes in state park vehicle entrance fees, effective Jan. 1, 2007. The changes in fees at the state parks for calendar year 2007 were made possible through enhanced funding support from the Kansas Legislature and the governor and fulfill a request by KDWP to reduce entrance fees.

Historically, Kansas state parks have been funded by a combination of user fees and state general revenue funds. However, in recent years, Kansas state park fees had been increased to accommodate declining appropriations from the State General Fund. The actions of the governor and 2006 Legislature reversed that trend. As a result, state park visitors in 2007 will enjoy vehicle entrance fees that are roughly half the cost of fees in 2006.

For 2007, these are the state park vehicle entrance permit fees:

OFF-SEASON (OCT. 1 – MARCH 31)

- Daily vehicle permit – \$3.70 (senior/disabled: \$2.60)
- Annual vehicle permit – \$19.35 (senior/disabled: \$10.75)
- Additional annual vehicle permit – \$11.85 (senior/disabled: \$7)

IN-SEASON (APRIL 1 – SEPT. 30)

- Daily vehicle permit – \$4.20 (senior/disabled: \$2.85)
- Annual vehicle permit – \$24.35 (senior/disabled: \$13.25)
- Additional annual vehicle permit – \$14.35 (senior/disabled: \$8.25)

Costs listed include applicable service fees, except online purchase convenience fee.

KDWP's Parks Division operates a system of 24 parks and the Prairie Spirit Rail-Trail. Most state parks provide utility and primitive camping and are located adjacent to lakes or reservoirs. Camping and utility fees remain unchanged. In addition to camping facilities, parks offer boat ramps, courtesy docks, shelter houses, swimming beaches, trails, and a variety of other amenities. Parks also host numerous special events, such as concerts and festivals, throughout the year.

More information on state parks is also available at the department's website.

—Mathews



WE ARE THE CHAMPIONS

Everyone is fascinated by *Ripley's Believe It Or Not* facts: the biggest, smallest, fastest, longest, shortest, smartest, highest whatever. A close look at Kansas mammals reveals that they, too, can fill a number of these fascinating categories.

First, let's consider the category of smallest. The least weasel is not only the smallest carnivore in Kansas, it is the smallest carnivore in North America. Although it looks like most weasels, this animal is shorter than 10 inches and weighs no more than 2 ounces. But its appetite is big. Least weasels eat more than half their body weight each day — the equivalent of one or more mice.

The least shrew is the small-

est mammal in Kansas. At just under 3 1/2 inches, these tiny mammals weigh about 1/10 of an ounce — the same as a penny. They have a mighty appetite and may eat their body weight every day in mostly insects, snails, and earthworms.

You might ask, "Why is the least

weasel the smallest carnivore but the least shrew is not?" In mammals, the word "carnivore" refers to the order Carnivora, or flesh-eating mammals. The least shrew belongs in the order Insectivora, or insect-eating mammals.

Now for the largest, which covers several sub-categories. The American beaver is the largest rodent in Kansas and the second largest rodent in the world. This rodent may weigh 90 pounds although 30 to 60 pounds is more typical. Maximum length for the beaver is about 4 1/2 feet, from nose to tip of tail.



Not surprising, the American bison is the heaviest land mammal found in Kansas and North America. It is actually the third largest of wild cattle in the world, behind the Asian guar and the water buffalo. Weights for American bison are anywhere from 900 to 2,200 pounds, but one of the largest on record weighed 2,500 pounds.

The tallest animal in Kansas is the elk, called the wapiti by the Shawnee. It is the largest member of the deer family in Kansas and the second largest deer in North America, behind the moose. An adult bull may stand 5 feet high at the shoulders, and the antlers can be an additional 4 feet tall.

The badger is the largest member of the weasel family, and pound-for-pound, it is probably the most powerful mammal in Kansas. An adult badger may weigh 10 to 16 pounds and grow 32 inches long. The woodchuck is the largest member of the squirrel family. This squirrel may reach a weight of 12 pounds and be 26 inches long.

Everyone is interested in speed, and Kansas has one especially fast mammal. In a quarter-mile race, no other land animal on earth would win against the pronghorn antelope. Able to reach speeds of 60 mph and sustain it for 3-4 minutes, even the mighty African cheetah could not win against this speedster. A cheetah can only sustain its 70 mph sprint over short distances. Pronghorns can run long distances at speeds of 30 to 40 mph.

Jumping, too, is a popular human sport, and in the animal world, the mule deer would win a gold medal

for the long jump in a mammal Olympics. A mule deer can leap 23 feet, 3 inches on a flat jump and 28 feet, 7 inches on a downhill bound. Whitetail deer can high jump more than 8 1/2 feet. (Interestingly, the human long jump world record is 29 feet, 4 1/2 inches, set in 1991 by Mike Powell of the United States. The world record high jump is 8 feet, 1/2 inch, set by Javier Sotomayor of Cuba in 1989.)

Records may focus on certain families of animals, too. Among wild dogs, the red fox has the widest distribution of any carnivore in the world. This Kansas native is found in North America, Europe, Asia, and North Africa. The coyote is the largest wild dog in Kansas today, weighing between 28 and 35 pounds. (The gray wolf was once the largest member of this family in Kansas, but it has been gone for more than a century. The last gray wolf in Kansas was reported in 1905.) The smallest wild dog in Kansas, and North America, is the swift fox. It weighs a little more than 5 pounds.

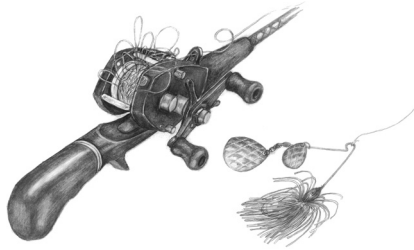
If you consider reproduction, some Kansas animals cre-

ate their own record categories. The deer mouse produces the most litters each year of any Kansas mammal. Females can produce up to 10 litters per year with 4 to 5 young per litter. The nine-banded armadillo always bears an identical set of same-sex quadruplets conceived from a single fertilized egg. The initial embryo divides in two, and those two embryos divide into two more. Every armadillo is a clone of its three brothers or its three sisters.

Finally, there is one mammal "event" where no competition exists — flying. Bats are the only mammal that can truly fly. The big brown bat is probably the most common bat in Kansas. The eastern pipistrelle is the smallest bat in Kansas and only slightly bigger than the least shrew. It weighs 1/10 to 1/5 of an ounce. The hoary bat is the largest bat in Kansas, weighing as much as 1 1/2 ounces and growing as long as 6 inches.

You won't find these "athletes" assembled in Beijing for the next Olympics, but if you look closely, you may see them bounding across the Kansas landscape or burrowing a tiny hole in your back yard.





Backlash

by Mike Miller

One Kid At A Time

I stopped by Lennie's the other day to drop off some Zebco 202s. Lennie was in his garage rigging 40 rods and reels for an upcoming kids' fishing clinic. The local city rec. director had overheard Lennie spinning one of his fishing yarns one day, and she knew he wouldn't refuse her request to run the clinic in front of his audience. She also knows Lennie has a heart of gold and couldn't say no to helping kids.

Heart of gold or not, Lennie hooked me with his usual devious way. He claimed he was having trouble twisting line as he was replacing old line on some reels. Of course, I went into great detail on how to avoid line twist and the next thing I knew, I was putting new line on 20 Zebcos.

As I helped Lennie rig rods, his neighbor, Roger Wirthlow, moseyed up the driveway.

"I haven't seen one of these old Zebcos since I was a kid," he said as he turned the handle on one of the reels. "What'er you guys doing with 'em?"

"We're helping with a kids' fishing clinic at Milt's Pond on Saturday morning," Lennie said without looking up.

"You two guys are teaching a bunch of second graders to fish?" Wirthlow questioned. "Ha! They'll eat you for lunch."

"You're probably right, Worthless. We could use someone with exper . . ."

"No, no, no," Wirthlow said holding his hand up. "I was just thinking that I should attend as a student," he added with a wink. "I've always wanted to fish that pond."

"It's a kids' fishing clinic," Lennie said. "No one's called you 'kid' since Elvis was on the Art Linkletter show."

"That would be the Ed Sullivan show, you knucklehead," Wirthlow retorted.

"Whatever." Lennie chuckled. "You're too old."

"Sounds like age discrimination to me," Wirthlow said. "I'll bet the rec. department wouldn't want someone claiming discrimination. You just hide and watch. And bring some extra-large night crawlers. I'll want to catch one of those giant channel cats that swim in Milt's pond. Besides, you can't teach those little urchins to fish with just a one-day clinic."

We really thought Wirthlow was bluffing but on the morning of the clinic, Lennie and I were busy baiting hooks when he elbowed me and pointed. There was Wirthlow, chatting with the recreation director and checking in. He walked over grinning with his Zebco outfit and a little gift tackle box tucked under his arm.

"I need a worm," he said with a pathetic smile. "Hey

mister, I need a worm," he demanded just to further irritate Lennie.

"I'll be with you as soon as I help these polite youngsters in front of you," Lennie hissed, holding his tongue.

Wirthlow stepped back, then glanced down into the eyes of a cute-as-a-button, 8-year-old girl waiting in line. Holding her rod in one hand and a bare hook in the other, she looked like she was about to burst into tears. Wirthlow's heart melted.

"Hi Sweetie," he said as he kneeled beside her. "What's the matter?"

Her bottom lip curled down and in a soft, sweet voice she told Wirthlow that she needed a worm on her hook. She wasn't catching fish, even though the other kids around her were all catching them. Without a second thought, Wirthlow grabbed a container of worms and started for the water's edge, a little pigtailed, blue-eyed blond happily skipping behind him.

Later, when Lennie and I had a break, we surveyed the action. There were kids and helpers all laughing, dodging hooks, netting fish, and taking pictures. Then we heard Wirthlow.

"You got him, Sweetie! Keep your rod tip high," Wirthlow was absolutely giddy. "You're doing great. Just a little closer, and I'll get it in the net. It's huge!"

Later, after all kids were gone, Lennie and I were untangling lines and putting rods away when Wirthlow walked up grinning from ear to ear. He handed me his rod, which obviously hadn't been used.

"Man that was great," he said. "That was the first fish that little girl had ever caught, and she loved it. In fact, she was baiting her own hook by the end of the morning. She said she was going to make sure her daddy took her fishing as soon as he could," he continued shaking his head. "There were a bunch of kids who told me they never knew how much they liked fishing until today. Maybe we did some good here today."

"I know we did, Roger," Lennie chuckled. "We've got to convert 'em one kid at time."

Wirthlow and I were both stunned. It was the first time we had heard Lennie call him anything but Worthless.

"But we should've charged you an entry fee, Worthless because none of the kids had as much fun as you did," Lennie shot back recovering from his momentary lapse. "Next time, you're supplying the night crawlers." ♡

