KANSAS Wildlife & Parks

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by Mike Hayden

Better River Access For Kansas

Kansas is part of what 19th century explorers labeled The Great American Desert. Even today, water-based recreation may not be the first thing people think of when they think of Kansas. Nevertheless, our public and private lakes, farm ponds, and streams provide countless hours of enjoyment

Kansas has more than 20 large reservoirs owned by the U. S. Army Corps of Engineers or the Bureau of Reclamation that provide great recreation. However, the state has only three rivers open to the public — the Missouri, the Kansas or Kaw, and the Arkansas. Although the bed and banks of these rivers are public land, public access points and facilities are limited. The Arkansas is dry for many miles across southwest Kansas due to drought and extensive irrigation. Restoring surface flow in that region would provide sustainable water use for agriculture and industry, as well as recreation. Except for those on public land above reservoirs, no other rivers or streams in Kansas are open to the public.

Canoeing and kayaking have become increasingly popular in Kansas. I recently spoke to a young man who enjoys canoeing and kayaking on the Kansas River and many of our lakes. He talked about how amazing it is to paddle right up to birds and watch them virtually undisturbed. He also commented that it would be nice if the smaller streams, such as the Wakarusa River, near Lawrence, had more access points with parks so that day trips would be easier to do.

In addition to the outdoor recreation opportunities rivers offer to individuals, city planners are starting to see their riverfronts as potential centerpieces of downtown renewal. Across the country, cities have developed or are planning to develop their riverfronts, with most of them including some restoration of riparian habitat, and outdoor recreation opportunities such as trails and boat ramps. San Antonio, Tex.; Memphis, Tenn.; Richmond, Vir.; Louisville, Kent.; and even Los Angeles, Calif. are all cities that have developed their riverfront areas extensively. In Kansas, Atchison, Lawrence, and Kansas City have at least partially revitalized their riverfront areas, and Wichita and Topeka are in the midst of planning to develop their riverfronts. In the early years of this country, cities grew up along rivers that provided power and transportation. Today, urban leaders recognize that the social and recreational benefits of river-based activities can revitalize downtown areas. The website of the national river conservation group, American Rivers, states, "After centuries of hard use and neglect, many communities have realized that riverfronts are valuable economic and community assets . . . With this new attention, downtowns can be revived, neighborhoods reconnected to the river and each other, water quality improved, and wildlife habitat rehabilitated as we have come to realize that our urban riverfronts are valuable economic, ecological and community assets."

The Kansas Department of Wildlife and Parks (KDWP) is involved in an advisory capacity in the riverfront planning for both Topeka and Wichita. The KDWP regularly works with local governments to help establish access sites on the three navigable rivers. A number of access sites were constructed in the early 1970s and need to be improved. Since 2002 about $500,000 has been committed to river access projects. Most of this money comes from the fees that recreational boaters pay.

Missouri River access is better now because of improvements made before the Lewis and Clark celebration in 2004. The Kansas and Arkansas Rivers are different stories. Access along the lower Kansas is improving, but there remain long stretches between Lawrence and Manhattan with little access. Currently there are access projects in progress in Manhattan, DeSoto, and Edwardsville.

Recently KDWP received the donation of nearly 80 acres in Topeka that will become a state park. The property is situated on the Kansas River, and the KDWP plans to eventually put in a river access point.

Compared to the states immediately to our west and east, Kansas may have limited river-based recreation, however, there is much potential. Work needs to be done to restore water to the Arkansas River in southwest Kansas, modify existing law to allow limited public access on smaller streams, and develop plans for rivers that provide not only recreational and economic opportunities, but also restore riparian habitat.

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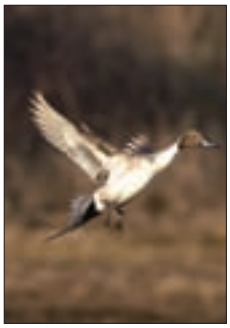

Front Cover: A spectacular pintail drake takes flight during spring migration. Mike Blair filmed this bird with a 600mm lens, f/9.5 @ 1/500 sec. **Back:** The poster featured on the back cover was produced by the Kansas Department of Health and Environment to promote the "Get Caught Recycling" campaign.

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

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New Life for Wheat-Fallow

by Randy Rodgers, wildlife biologist, Hays
and Alan Schlegel, KSU agronomist, Tribune

Once the foundation of High Plains agriculture and pheasant populations, researchers have found a new way to increase both profitability and pheasant production in the wheat-fallow crop rotation.

For a copy of the complete "New Life for Wheat-Fallow" pamphlet, including step-by-step instructions, contact KDWP's Region 1 Office, (785) 628-8614, or you can download a PDF version from KDWP's website, www.kdwp.state.ks.us. For more information about this research, contact K-State's Southwest Research and Extension Center at Tribune, (620) 376-4761.

Perhaps you remember the times when the wheat stubble fields of the High Plains were loaded with pheasants. Those birds were the bi-product of a cropping system that meshed beautifully with the pheasant's annual needs — the wheat-fallow rotation.

Designed for the semi-arid High Plains, the wheat-fallow rotation produced one wheat crop every two years. The 14-month fallow period between harvest of one crop of winter wheat and the planting of another permitted accumulation of moisture in the soil and reduced the risk of crop failure. Many farmers allowed weeds to grow in the stubble after wheat harvest. While weeds and farming were perceived by some as incompatible, the practicality of letting weeds grow after wheat harvest in wheat-fallow had been proven in several High Plains agronomic studies.

Pheasants nested very successfully in the abundant green wheat but took particular advantage of the 14-month fallow. The weed growth at the beginning of fallow was key to their abundance. Pheasant chicks depend upon insects for food in their first two-months of life, and these broadleaf weeds were the primary source of those insects. Not only did the weeds harbor this essential food source, they provided just the right habitat for the broods. Chicks were able to move about freely to search for insects under a weedy canopy that provided shelter from the hot sun, drying winds, pelting storms, and predators.

Come winter, this combination of broadleaf weeds and stubble offered food, shelter, and concealment. The birds literally never had to leave the field.

As the days lengthened, new growth of the next wheat crop in nearby fields would draw pheasants away from the weedy stubble, typically just in time to avoid spring tillage. And so, the cycle would start again. The needs of their entire life cycle had been provided by the different phases of the wheat-fallow system.

Weed growth in fallow wheat stubble once provided excellent habitat for Kansas High Plains pheasants.

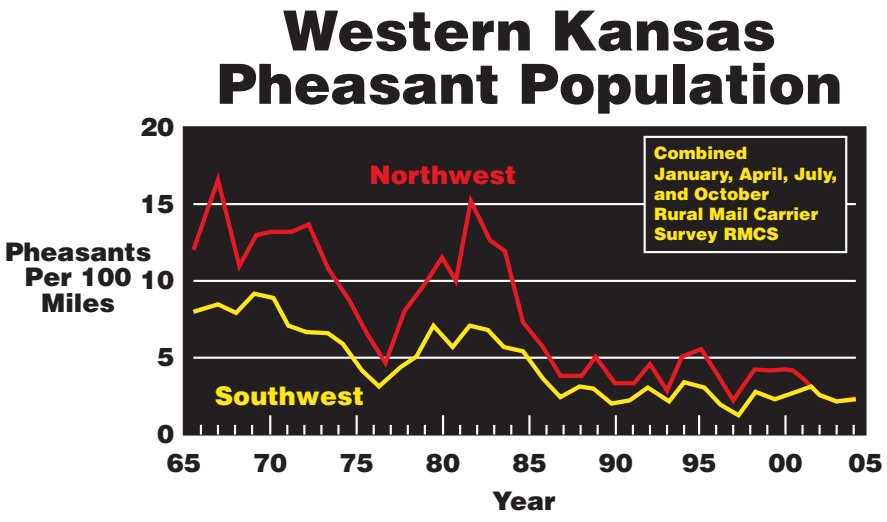
The Decline

By the 1980s, economic pressures and research-driven agricultural intensification was rapidly changing farming practices on the High Plains. Agricultural researchers increasingly considered wheat-fallow's 14-month fallow period a waste. They had already found ways to insert more crops, even thirsty crops like corn, into new High Plains rotations. One crop in two years with wheat-fallow seemed inefficient compared to two crops in three years, or even three in four, with the new rotations. A 1987-1991 comparison of four variations of the old wheat-fallow rotation to three modifications of a new wheat-sorghum-fallow system concluded that wheat-fallow could not compete economically with the new systems.

But a fundamental requirement of the more-intensive rotations was thorough weed control. The practice of letting broadleaf weeds grow after wheat harvest, as was once common in wheat-fallow, was replaced with a herbicide application soon after harvest. Instead of a green growing habitat where insects were abundant, post-harvest wheat stubble became sterile and nearly lifeless in the new systems. And the subsequent reduction in the stubble's quality for winter cover was no less dramatic. Research conducted in the early 1990s showed that herbicide-treated wheat stubble harbored an average of only 16 percent of the pheasants found in traditional weedy wheat stubble. The same was true for many smaller species of wildlife.

Advances in agricultural engineering and genetics also had an effect. As combines became more powerful and efficient, it became possible for harvesters to lower combine headers in an attempt to cut even the shortest tillers in the wheat stand. Over the same period, wheat breeders had created and popularized strains of wheat that were shorter and more resistant to lodging. The net result of these changes was shorter wheat stubble and poorer wildlife habitat. Studies showed that untreated stubble 7-10 inches tall supported an average of just 11 percent of the winter pheasant use as occurred in untreated stubble 15-18 inches tall.

In less than two decades, this combination of post-harvest herbicide application and shorter height caused wheat stubble habitats in western Kansas to lose most of their capacity to produce or sustain pheasant populations. Other research indicated that even the addition of Conservation Reserve Program (CRP) grasslands could not compensate for this loss of weedy wheat stubble. CRP fields offered little in the way of food to pheasants and averaged only 37 percent percent of the winter pheasant use as was supported by weedy wheat stubble. Prospects for High Plains pheasants seemed grim.



New Ideas

Progress always builds upon previous knowledge. And so it was that several agronomic principles gleaned from earlier High Plains research provided the foundation for a new approach to wheat-fallow. Those principles include:

1) There is typically little moisture left in the soil after wheat harvest, with occasional exceptions. It's difficult to store much soil moisture during the summer because of the relatively high amount of runoff from summer thunderstorms and the evaporation caused by hot, windy conditions.

2) Moisture from snow accounts for less annual precipitation than rain, but snow's value for crop production is proportionally greater than it might appear. Around 80 percent of the moisture received from snow penetrates deep enough into the soil to be effectively stored for the next crop. That's three to four times the moisture storage efficiency obtained from an average August thunderstorm. Of course, storing soil moisture from snow requires that the snow be held on the field.

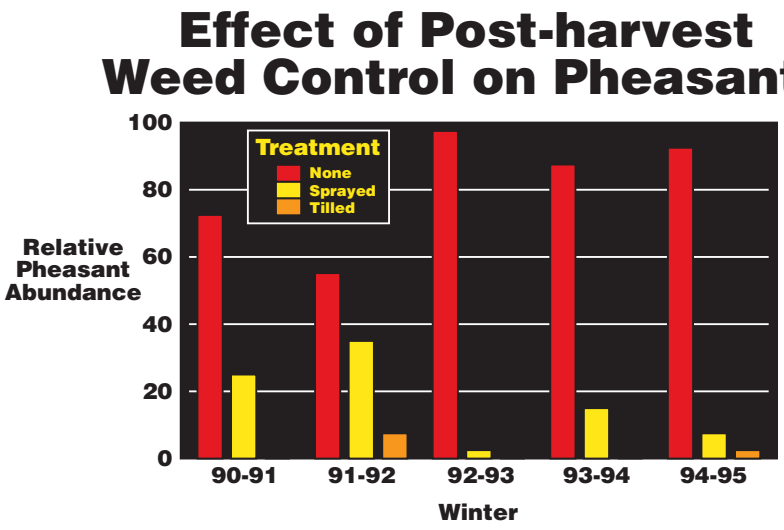
3) The greatest amount of soil moisture storage on the High Plains occurs in the spring when precipitation is most frequent and soil and air temperatures are relatively cool. Frequent precipitation events in spring mean that moisture from the latest rain will help force moisture from previous rains deeper into the soil. Cooler spring soil and air temperatures reduce evaporative losses, yielding a greater chance that moisture will accumulate in the soil profile.

4) There is a positive relationship between the amount of surface residue (dead plant matter) and the efficiency with which moisture is stored in the soil. Plant residues cushion the impact of raindrops on the soil, preventing the break up of soil particles that can seal the soil surface. With adequate residue, the soil surface remains porous and can take in moisture more rapidly. And residue also prevents wind from reaching the soil surface, reducing evaporation. The bottom line is the more residue on the soil, the better the soil moisture conservation.

5) Taller and more upright plant residues are more effective in fostering soil moisture storage. Anchored, upright residue can catch and hold much more snow, particularly when wind accompanies the snowfall. During warmer periods, taller residue better protects soil from wind and reduces evaporation.

6) Agronomists estimate that an extra inch of stored soil moisture can increase High Plains wheat yields by four to six bushels per acre. With that much yield in the balance, it's clear farmers must try to minimize moisture losses to the wind; whether that's moisture lost to snow blowing off their field or moisture lost to evaporation during the growing season.

From a pheasant's perspective, the choice is obvious. Compared to sprayed wheat stubble (left), weedy stubble provides better protection from weather and predators and more food. The taller weeds also can aid in moisture conservation.



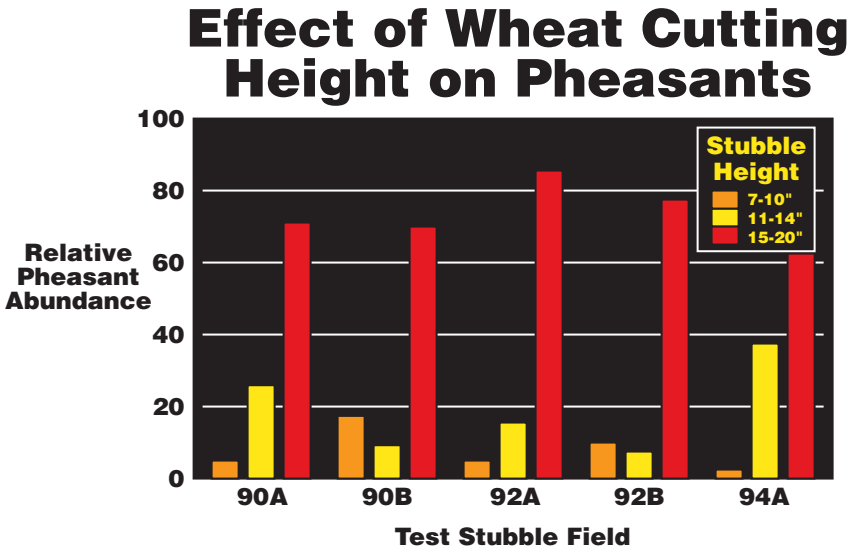
With those six principles in mind, a new approach to wheat-fallow was spawned. What if we let weeds grow after wheat harvest? Of course, weed growth would sacrifice much of any soil moisture left unused by the wheat, as well as some that might otherwise be stored in late summer. But weed growth also provides tall residue that, when added to the stubble, could catch more snow and reduce evaporative losses better than either tilled or sprayed stubble. Could the late-summer moisture sacrificed by growing weeds be outweighed by the winter and spring moisture-conserving benefits of taller residue? How might this affect future grain yields? Would the input savings from not spraying or tilling stubble between wheat harvest and spring be enough to justify growing weeds? To be sure, maximizing the moisture conserving benefits of this taller, weedy residue would require that it remain both anchored and essentially undisturbed during spring, when the potential for moisture storage is greatest. To do that, a spring herbicide treatment would be necessary.

Wheat stubble cut short and sprayed with herbicide after harvest is nearly useless for wildlife.

To answer these questions, research was designed and conducted at the Kansas State University Southwest Research-Extension Center at Tribune. The new wheat-fallow system used no post-harvest tillage or herbicide application, leaving the wheat stubble undisturbed until the following spring. Once weed growth resumed in spring, a single contact herbicide application was used to control that growth while maintaining the weedy residue anchored and upright through early summer. Any subsequent weed control operations (usually three) needed in summer were performed with subsurface tillage using sweeps (undercutters). This summer subtillage also served as seedbed preparation for the next crop. The new wheat-fallow modification was dubbed Delayed Minimum-Till or DMT.

Work began in 1995 and, for six cycles, the DMT system was compared to two other more typical wheat-fallow systems. In the Conventional-Till system, weeds were controlled after wheat harvest and throughout the following spring and summer with subsurface tillage using sweeps. This involved two sweep operations between wheat harvest and frost, plus five more passes the following spring and summer. The No-Till system required five herbicide applications to control weeds throughout the 14-month fallow period: two treatments between harvest and frost, plus three more the following spring and summer.

Everything else was kept the same for each of these three wheat-fallow systems. Each system was randomly assigned to four of the 12 test plots, with buffers between them. Having two sets of these 12-plot areas allowed harvest data to be collected every year of the study. Each plot was fertilized, seeded, and harvested in the same way. And each received the same late-winter herbicide application to the green wheat for cool-season weed control. Soil moisture was sampled using a hydraulic probe shortly after harvest, in the fall, in spring, and again prior to wheat seeding.



The Results

Wheat yields in 1996, the first harvest year, were surprising. The DMT system proved to be the top yielder at 42 bushels per acre. That was 6 bushels better than the 36-bushel yield in the No-Till system and double the 21-bushel yield of the Conventional-Till system. In terms of profitability, the DMT system returned $118 per acre compared to less than $8 for the Conventional-Till system and $60 for the No-Till system that year.

The last harvest year of the research, 2001, was a counterpoint to 1996. That year, the DMT system was the poorest yielder and least profitable. The fallow period preceding the 2001 harvest provided virtually no significant winter or spring moisture. Predictably, the DMT system wasn't able to compensate for the moisture lost to post-harvest weed growth, given there was no moisture to store, with a resulting net loss of just over $5 per acre.

While these extremes were instructive, it's the averages that count in the long run. The No-Till system ultimately yielded the best, averaging 53 bushels per acre over six years. The DMT system still fared well, with a 44 bushel average, and the Conventional-Till system came in with an average of about 37 bushels per acre. The No-Till system was the top yielder in 5 of the 6 years of the study, with the DMT system best in 1996. Perhaps most significantly, the Conventional-Till system, with its post-harvest tillage, yielded the worst in 5 of the 6 years.

The soil moisture data clearly explain these results. Because the No-Till system controlled weed growth during all phases of the 14-month fallow and maintained erect, anchored residue, it had the most stored soil moisture through the first fall, in spring, and at planting time. The Conventional-Till system prevented moisture loss to post-harvest weed growth, but was not effective at storing moisture thereafter because the stubble was repeatedly disturbed and no longer anchored. As expected, the DMT system had the least available soil moisture by the first fall since weeds had been allowed to grow after harvest. But by spring, the extra upright residue provided by DMT had compensated for the moisture lost to weed growth. At planting time, the DMT system had an inch more moisture stored in the soil compared to the Conventional-Till system. That extra inch nicely accounted for the 7 bushel yield increase of DMT over the Conventional-Till system.

If it's just wheat-yield bragging rights you're after, then read no further. But every farmer knows the bottom line is profit. And that's where the DMT system stood out, thanks to the cost cutting benefits of skipping post-harvest weed control. Troy Dumler, a Kansas State University agriculture economist based in Garden City, handled the economic analysis. He calculated the average net return for the DMT system at $39 per acre and DMT was the most profitable system in 4 of the 6 years. The No-Till system averaged a little over $30 and was most profitable in 2 years. Despite being the top yielder, the No-Till system's profitability suffered from high input costs. The Conventional-Till system came in with an average net return of just $3 per acre and was least profitable in 5 of 6 years.

A stripper header leaves stubble nearly as tall as unharvested wheat. If broadleaf weeds are allowed to grow in this stubble, the resulting cover is tremendous pheasant habitat.

This research shows that post-harvest tillage of wheat stubble is not profitable. And another important lesson is that post-harvest weed growth is not detrimental to profit in the wheat-fallow system. The benefits gained by avoiding post-harvest expenses and growing additional residue will usually outweigh the negative of losing some post harvest moisture. And that doesn't even take into account the wildlife benefits the DMT system can provide.

Favorable for Pheasants!

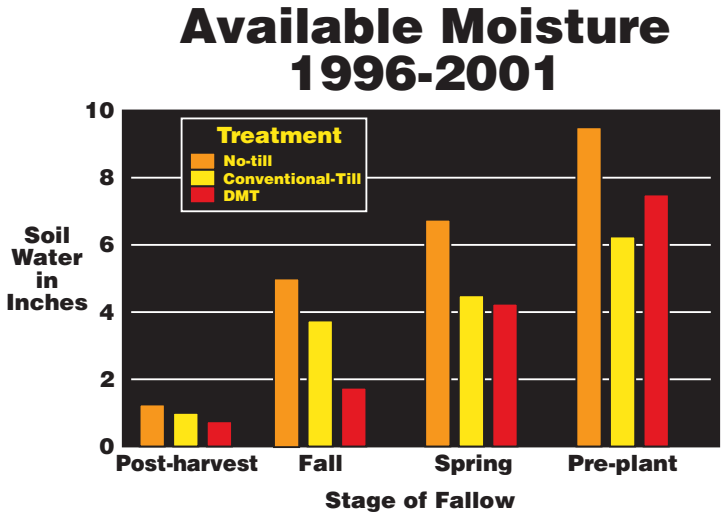
The DMT wheat-fallow system is about as good for pheasant production and survival as any High Plains cropping system could be. Provided the stubble is at least 12-15 inches tall, the weed growth that occurs after wheat harvest can offer ideal brood habitat. Weedy stubble offers a favorable microclimate that's more humid, cooler on hot days, and warmer on cool days. Insect availability is high. What's more, the overhead canopy provided by the weedy stubble not only conceals chicks, but also provides a structural barrier to predators. Simply stated: chick survival is high in undisturbed weedy stubble.

In addition to the brood-rearing benefits, the combination of broadleaf weeds and tall wheat stubble provides excellent protection from cold winter winds. Weedy stubble fields virtually always offer adequate cover, even in the worst of blizzards. Wind driven snow may drift shut the upwind side of a weedy stubble field, but further downwind the field will still furnish quality microhabitats that pheasants will use during severe conditions. Even if they're able to spot a pheasant in this cover, avian predators will find it difficult to crash through the rigid stems of weed species like kochia and sunflower to make a kill. Weed seeds produced the previous summer contribute a vital source of food that supplements the waste grain left by the combine. Being able to forage within this protected habitat, instead of leaving to find food, reduces a pheasant's exposure to predation.

Combine header height makes a difference in subsequent moisture conservation and weed growth. Grassy weeds are more common in short stubble, but sunflowers dominated the tall stubble, shown on the right.

Wheat-fallow, as it was traditionally practiced, had one significant flaw when it came to pheasant production. Weed control in spring is absolutely critical for soil moisture storage during fallow and that control was typically accomplished with tillage. Particularly in years when conditions slowed growth of the green wheat, many nests are placed in the previous year's wheat stubble. Any nests present in stubble are sure to be destroyed by surface tillage. About half of the nests will survive subsurface tillage with an undercutter, provided no treaders are attached, but this alternative still leaves much to be desired. The DMT system virtually solves this problem by controlling weeds with a herbicide during spring. Although some nests will be crushed by the spray rig's tires, this loss only amounts to roughly 5 percent.

While DMT clearly offers great



Taller wheat stubble traps far more snow than the shorter stubble. Snow is important because 80 percent of the moisture received from snow penetrates deep enough into the soil that it can be effectively stored for the next crop.

advantages to pheasants, the wildlife benefits are certainly not limited to this one species. Past studies on the High Plains documented at least 15 bird species nesting in weedy wheat stubble. Research in Kansas also detected more species and much greater winter wildlife abundance in weedy wheat stubble than in stubble where weeds had been controlled after wheat harvest.

Other Considerations

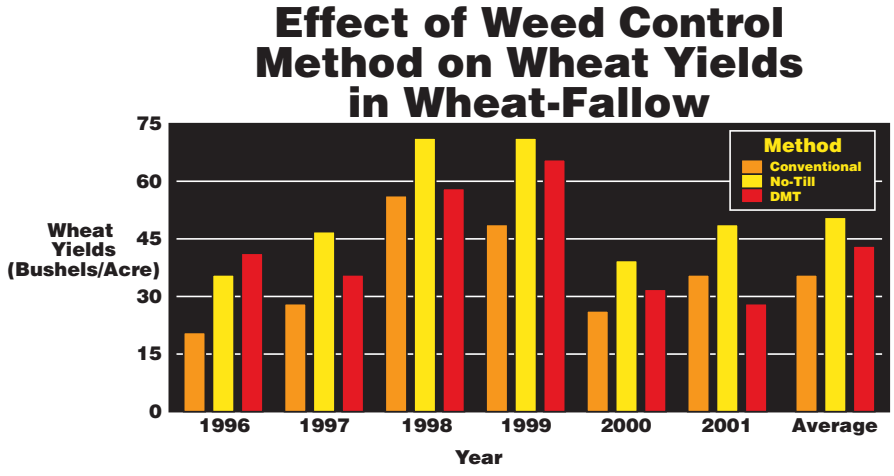
Compared to Conventional-Till wheat-fallow, DMT offers several other agronomic benefits. The reduction in tillage and the added residue in the DMT system, will help conserve organic matter in the soil. Organic matter is critical not only in allowing the soil to accumulate and hold moisture, but it also facilitates moisture utilization by growing plants.

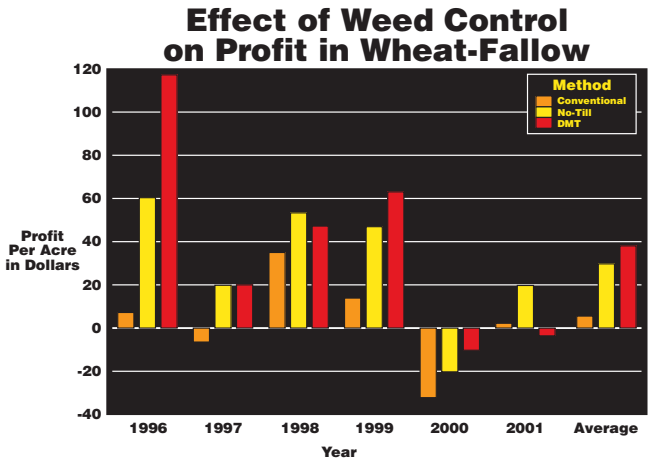
Of course, the reduction in tillage and the added residue provided by DMT reduces wind and water erosion compared to the Conventional-Till system. The No-Till system may slightly outperform DMT in this regard, since the residue is never tilled.

The taproots of broadleaf weeds can provide other overlooked benefits. Taproots are capable of penetrating hardpans, a compacted layer of soil created by repeated tillage operations. The soil channels and improved soil structure left by decomposed taproots not only allow better moisture penetration, but also provide avenues by which crops can tap into that moisture. Weed taproots can also extract nutrients from deep subsoils and release them closer to the soil surface, once the weeds die and decompose.

Broadleaf weeds in DMT tend to suppress the germination and growth of volunteer wheat. That's important since volunteer wheat harbors the wheat curl mite, the carrier of the wheat-streak-mosaic virus. In contrast, post-harvest tillage or spraying operations create an ideal situation for volunteer wheat germination; all that's needed is one significant rain. In practice, post-harvest weed control almost inevitably necessitates a second control treatment to kill the volunteer wheat released by the first treatment.

Some farmers have concerns that weed seed will build up in the DMT system and eventually cut grain yields. This concern isn't supported by the evidence. A 27-year study done in the Texas Panhandle showed that yields in wheat-fallow were unaffected by letting weeds go to seed. Efforts to reduce weed seed banks in the soil almost inevitably lead to shifts in the types of weeds that grow and virtually never eliminate of all types of weed seed. Successful elimination of one weed species simply opens the door for other species. The weeds that result from such shifts often cause more problems than the species they replaced.





Who Should Use DMT?

Farmers who currently use wheat-fallow are the best candidates for implementing DMT. The DMT system offers an opportunity to substantially increase profits over conventional wheat-fallow systems with little or no investment in new equipment, with reduced expenses, and with a very low chance of crop failure.

But DMT wheat-fallow isn't for everybody. Many High Plains producers have already made substantial investments in expensive no-till equipment and are committed to more intensive cropping systems with row crops. Given favorable moisture conditions, more intensive systems offer more profit potential than DMT. However, these intensive systems also require greater inputs and financial risk. That's particularly so if drought or excessive mid-summer heat significantly impacts row-crop yields.

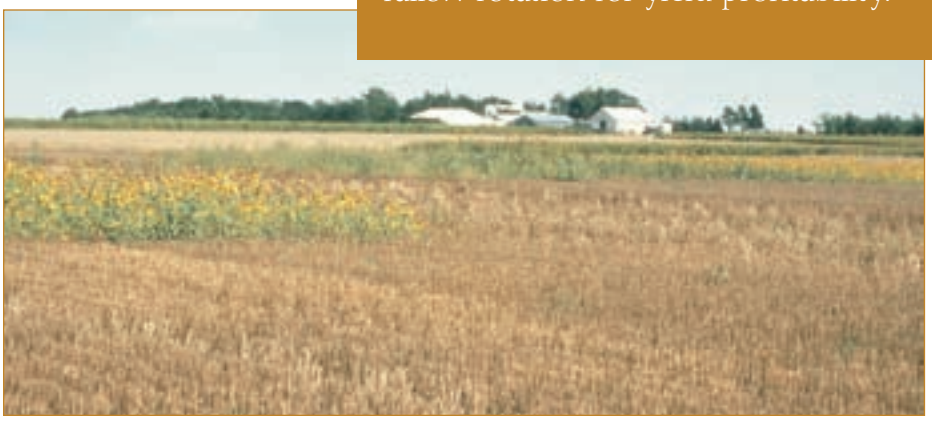
Of course, DMT's greatest applicability is to drier areas of the High Plains where more intensive cropping systems are less feasible. But even in High Plains regions with somewhat more precipitation, DMT may have greater potential on less productive soils than row crops.

If long-term temperature trends continue, the High Plains may experience increasing frequency and severity of drought. Dr. John Heinrichs of the Fort Hays State University Department of Geosciences in Hays has analyzed 1901-2000 temperature and precipitation trends in the state of Kansas. He found that, over the last century, temperatures on the High Plains of western Kansas have increased an average of over 2 degrees Fahrenheit. Precipitation also increased in some areas, but warmer temperatures will increase evaporative moisture losses, potentially creating drier overall conditions. These trends suggest that DMT wheat-fallow could play an increasing role in High Plains agriculture.

If producing wildlife, particularly pheasants, is important to a High Plains landowner, then DMT wheat-fallow should be considered. A growing number of landowners treasure the chance to offer their families and friends a great place to continue the hunting tradition.

Implementing DMT wheat-fallow is a great way to boost pheasants numbers on High Plains properties. Not only will DMT produce far more birds, but these fields are also likely to attract pheasants from surrounding lands. Integrating practices like strip cropping and federally-subsidized grass wind strips or grassed terraces into a DMT system, can create properties with maximum hunting potential that are also financially solid models of soil and water conservation. If you own or manage cropland on the High Plains and pheasants matter to you, take that first step to contact us — we'll be glad to help.

Research at K-State's Southwest Research Extension Center at Tribune compared Conventional-till, No-till, and Delayed Minimum-Till (DMT) variations to wheat-fallow rotation for yield profitability.



Cobalt Boats

by Jeff Glines
Pittsburg

Jeff Glines photo

A world-renowned boat maker calls Neodesha home, employing the rural area's residents for their family values and work ethic. The company and employees have a tremendous impact on the region's economy.

Some of the best advice I have ever received came from my father's best friend when I was 14 years old. "Boy", he said, in that gravelly, Marlboro influenced voice, "the secret to a happy life is not money and possessions. The secret is to find out WHERE you want to live your life. Then go there, find work, and enjoy yourself. You only work 40 hours a week, more or less. If you find a place to live that you like, then you have 128 hours a week to rest and play." That seemed like wise information for a teenager. But as I have grown a bit older, and wiser maybe, I have added a second verse: "Find out where you want to live your life, AND find a good job when you get there. That gives you 168 hours a week of enjoyment." Think about that for a second — total happiness with work and play.

Southeastern Kansas is an outdoor-lovers dream. This region offers fishing, hunting, hiking, camping, bird watching, fossil hunting and more. In this rural landscape dotted with small towns, you can easily clock out from your job at 3 p.m. and be fishing on a local pond by 3:20 p.m. For folks who are new to this area of Kansas, the trick is to find a suitable job to fund your outdoor adventures. And that's where companies like Cobalt Boats of Neodesha come in. Cobalt Boats has been a fixture in this far corner of Kansas for the last three and a half decades.

"I built my first boat in Chanute in 1968," Pack St. Clair, the founder of Cobalt Boats, told me. "We moved to Neodesha in 1970 thanks to an incentive package the community leaders offered to us at that time."

Standard Oil had recently closed the doors to its refinery, and it gave 400 acres, along with buildings and offices, to the city. Some of the community leaders of Neodesha took an active role in recruiting new businesses to town to provide industry and employment for its citizens. One of those companies was Cobalt Boats.

"Neodesha gave us free rent and even helped us physically move here from Chanute," St. Clair continued. "We were just a start up business then and struggling some."

Neodesha, nestled on the

A sleek Cobalt model skims across Elk City Reservoir during a test outing. Neodesha is just north of the lake. Mike Blair photo

banks of the Fall River, isn't where you expect to find the home of a multi-million dollar company with dealers in Europe, Australia, Russia and other countries around the world. But in fact, small town values and the family atmosphere in Neodesha are exactly why Cobalt Boats and its product line of 18- to 35-foot luxury boats has been so successful.

Bret Chilcott, Cobalt's Director of Marketing and Customer Service, tried to explain the employee way of thinking at the factory. "The work ethic, the care for a quality product, and the mentality here is much different than that of other boat companies," Chilcott said. "The craftsmen here in southeast Kansas understand what an honest day's work is. They understand why it is important to be at work on time, and they understand team work. They understand Cobalt owners demand and expect premium quality. Our belief is to not compromise on anything that may reduce the boats quality."

The city of Neodesha believed in Cobalt boats back in 1970, and the gamble has paid off with more than 750 jobs and a weekly payroll of approximately $500,000. Employees from a 50-mile radius come to Neodesha to work hard, collect their weekly paychecks, and spend their money at local and regional businesses. Those earnings amount to a yearly influx of $15 million in wages alone, adding to the area's solid economic base.

"If Cobalt was not here, we would not be in business," John Botts, owner of Pin Action Lanes bowling alley in Neodesha told me. "And it's not just me, but a lot of our local businesses benefit from Cobalt. We actually started a Cobalt League here at the bowling alley for employees. I would say that at least a third of the people who bowl here work at Cobalt. Cobalt's monetary impact is not really measurable. It's not just the money that they spend here or their employees spend here from wages, but when you have a local company that pays taxes on payroll and real estate, that money also goes back into the community for goods and services."

"If a person gets paid $300 a week," Botts continued, "he is going to put some money back into the community for recreation, go to the local convenience store and buy gasoline, sandwiches and other stuff. If Cobalt wasn't here, people would be leaving Neodesha for work, and other communities would be receiving the benefit of those wages."

The relationship between Cobalt Boats and the community is clearly one of mutual benefit. The company provides wages and economic benefit to the region, and the people provide the detailed labor required to build prestigious boats.

"Neodesha is an unusual town for a small community," said Paxson St. Clair, president of the company and the son of the founder. "Neodesha has more than 1,400 jobs for about 2,500 residents. The community works very well with local industries, and we have some real good people working here. We have about 750 employees now."

Alan Buchanan, who has worked at Cobalt Boats for the past 28 years, is an example of a local resident staying home to

Cobalt founder and owner Pack St. Clair moved his company to Neodesha in 1970. photo courtesy Cobalt Boats

work in southeastern Kansas.

"I started working in the upholstery department, then to fiberglass, then on to engineering, customer service, subassembly, mold maintenance, you name it I guess. I am good at everything; I just haven't found anything I am not good at! I just enjoy it here. I grew up around here and it was nice to stay home and work. I can remember, and I'll never forget this, I had worked here for two days, and Pack, the owner, came by and knew my name and my wife's name. That was a big impression; that somebody who owned the company knew my name before I had even met him. He (Pack) has always been real good about that, knowing employee's names, families and kids."

And thanks to the presence of Cobalt, Buchanan was able to raise his two boys in Neodesha's small town atmosphere. "I've got two boys who were able to grow up on a farm just like I did. We were close to town so they could come into Neodesha to go to school and do what they wanted to do. It is much nicer raising a family here than in the city."

Cobalt's 750 employees build 18- to 35-foot luxury boats at the Neodesha plant.

Another long-time employee, Debbie Rash, a 20-year veteran, lives in Cherryvale. She also has been positively influenced by the family atmosphere at Cobalt and continues to make the 40-mile commute everyday.

"Jill and Pack St. Clair buy Christmas presents for all the employees' kids every year. In fact, Jill used to buy and wrap all the presents by herself, up until we got to be too big. When I first started here at Cobalt, there were about 200 of us workers. We're just a big family here."

Delmer Raida, a 19-year veteran who drives to Cobalt each day from his home in Thayer added, "I like the job and it's hard to beat the people who work here. This is one of the better jobs in this area, and people are willing to drive quite a ways to come work for a company with good benefits, vacation, and a good job. We get a lot of people coming from small towns in southeastern Kansas like Caney, Independence, Parsons, Fall River and more."

Kevin Leggett, a design craftsman on the Research and Development team, doesn't commute to work, but he has traveled a long distance to join the small town life in Neodesha. "I lived in Las Vegas from 1958 to 1998 — 40 years total. My wife is from Neodesha, and I met her in Vegas. She hated living in Las Vegas. After 40 years, I was ready for a change, too. I love it here, and I wouldn't go back to Vegas for anything in the world. I started here at Cobalt in June of 1999 and my wife works here also. There is a world of difference between here and Las Vegas obviously — no gangs, little crime. This is a great place to raise a kid."

From humble beginnings of seven employees and an uncertain future to a worldwide boat-building business with 750 employees, Cobalt Boats of Neodesha has become a destination for southeastern Kansas residents bent on staying home to work and play in the small town atmosphere. I can see that old family friend now, blowing smoke out of the Jeep window. I tell him about Cobalt Boats and a small smile creeps across his face. "Told ya so", he says.

The author is a freelance outdoor writer from Pittsburg. He writes a regular column for the Pittsburg Morning Sun.

The family values Cobalt promotes in this photograph are the same values southeastern Kansans have, making Neodesha an attractive place for the company.

Those Amazing State Record Fish

(and how to catch them)

by Scott Waters
district fisheries biologist,
Glen Elder Area Office

Jason Heis had a hunch where he might find a big smallmouth bass while fishing a club tournament at Milford Reservoir on August 15, 2004. After a couple of fruitless hours searching the normal haunts, Heis decided to try the face of the dam. This area normally yields many smaller fish, and most anglers don't think of it as a trophy hotspot. After nearly 30 minutes of fishing on the dam, Heis cast a 4-inch Senko worm and hooked up with a fish that would change the record books. Several nervous minutes and acrobatic jumps later, Heis' fishing partner managed to net the fish and the rest is history. Heis found what he was looking for and caught a 6.68 pound smallmouth bass. This fish surpassed the previous record of 6.37 pounds, also caught at Milford Reservoir, seven years earlier. Heis has secured his spot in the record books — for now.

Each record fish has its own unique tale which has been passed around among friends and family members. But one thing these anglers and their fish have in common is the recognition as the best of the best, and the achievement of one of the most difficult challenges for any sportsman. Most anglers will never catch a state record fish. But record fish are worthy of recognition in the angling world. In fact, experts agree that the angler lucky enough to land the new world record largemouth bass and break the 73-year-old record could receive up to $1 million in endorsements, appearances, and interviews!

While digging through the current Kansas records and archives, I found some interesting facts. KDWP recognizes 36 fish records of which three are black bass (smallmouth, spotted, and largemouth), two are crappie (black and white), four catfish (channel, flathead, blue and bullhead), four sunfish (bluegill, green sunfish, redear and warmouth), and three hybrid species (wiper, saugeye, and green/bluegill sunfish). The two largest records in the state are the paddlefish (144 pounds) and the flathead catfish (123 pounds) while the smallest are the yellow perch (1.06 pounds) and the warmouth (1.17 pounds).

The oldest record to date is the black crappie caught by Hazel Fey back in 1957. Some other long-standing records include the bluegill (1962), white crappie (1964), northern pike (1971), bigmouth buffalo (1971), and longnose gar (1974). The newest records, set in 2005, include a 22.39-pound wiper caught in the Perry Reservoir spillway and a huge 73-pound white amur (grass carp) reeled in from a farm pond last August. In fact, nine of the current records were set this century. Thirty-two of the records were caught by males, three were caught by females, and the record northern pike is claimed by a husband and wife fishing team. The breakdown of current records by water type includes 12 caught in federal reservoirs, 7

caught in smaller state-owned waters, 6 caught in rivers, and 11 caught in private farm ponds.

As expected, most of the record fish were caught using hook and line (30), but setlines accounted for three of the records with the drum and sturgeon caught on trotlines and the bigmouth buffalo caught on a bankline. Also, the spotted gar and shortnose gar were both shot by bowfishermen. Finally, the bighead carp was snagged in the Neosho River by a paddlefish angler.

Records for newly introduced species or species which suddenly gain in popularity are broken more often than records for established species. For instance, sauger and saugeye were first stocked in Kansas in 1988 — by 1997, the state records had been broken nearly 10 times for each species. Today's current records were established about nine years ago, so things have slowed. Wipers were introduced into Kansas in 1977, and the record books were changed at least six times by 1987. However, the current wiper record is only the second new entry in the last 18 years, so these records are much tougher to break after the initial establishment.

Smallmouth bass fishing has exploded in recent years due to their hard-fighting nature and the decline of largemouth bass in many reservoirs. This increased interest in smallies has resulted in four new state records since 1996, and don't be surprised to see that mark broken in the next year or two.

One species that does not have a record yet is the white perch. Biologists wish this nuisance species would not have been accidentally introduced into Wilson and Cheney reservoirs, but it's probably here to stay. A lucky angler can make history by establishing the first state record white perch for Kansas. Other species that don't have state records yet include brown trout, rock bass, longear sunfish, bowfin, and river carpsucker.

Three of Kansas' state records are also recognized as world records. The flathead catfish caught by Ken Paulie from Elk City Reservoir in 1998 made headlines everywhere as it shattered the old state and world record. As is the case with many state records, Paulie wasn't fishing for flatheads, but he was in the right place at the right time. Clinton Boldridge was carp fishing at an Atchison County pond on May 5, 2004 when he hooked into a monster paddlefish that shattered the old state record by 54 pounds and beat the previous world record by nearly 2 pounds. Also, the 2.36-pound green sunfish caught from a farm pond back in 1982 still stands as the best ever.

As much as anglers will try to get their names in the record books, the end result is still largely luck. Fisheries biologists handle thousands of fish each year during test netting, electrofishing, and seining. My guess is that most would say they've never caught a state record. In fact, researchers in

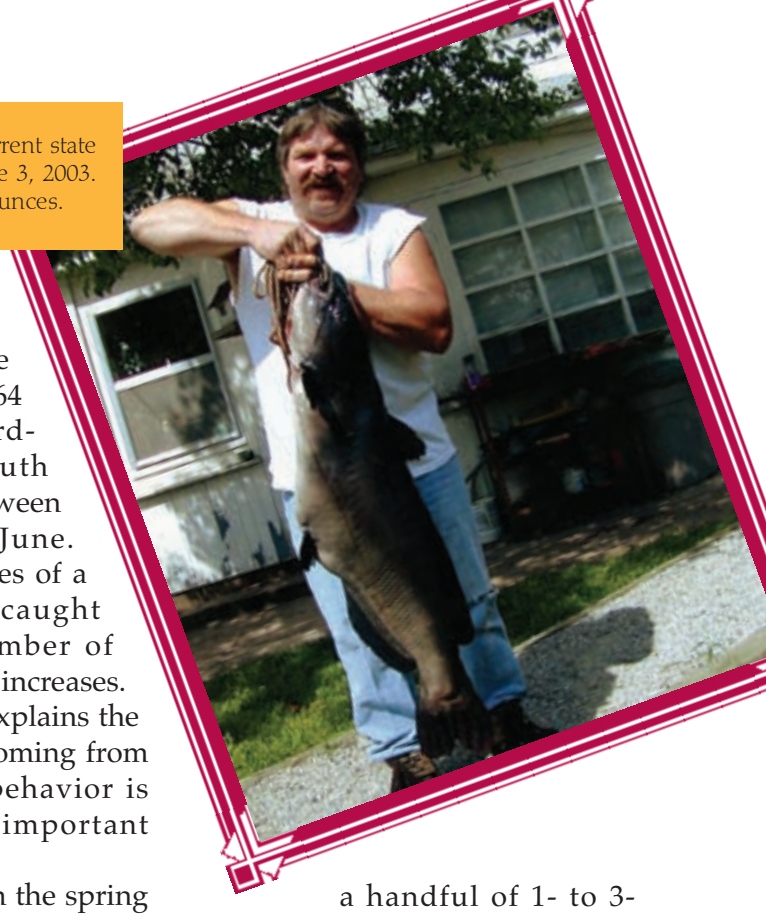
Dustin Ritter proudly holds the current state record walleye. The monster fish weighed 13 pounds, 2.56 ounces and was caught from Wilson Reservoir on April 17, 1996.

Texas recently published the results of a study on the odds of catching a record fish. For largemouth bass the odds of catching a state record are 1 in 120,735,294 angler-days, smallmouth bass 1 in 38,484,375 angler-days, and striped bass 1 in 30,814,286.

This does not mean anglers can't tilt the odds in their favor. Four important things you should remember when pursuing big fish are location, timing, technique, and persistence.

Actually, the first key could be location, location, location because you can't catch what isn't there. If you are pursuing large walleye, you need to determine what lakes have the the highest density of trophy fish. KDWP publishes an annual *Fishing Forecast*, which ranks sportfish species by density, but it also provides a Lunker Rating. The Lunker Rating is based on the number of fish caught per sampling effort considered trophies for that species. According to the 2006 Fishing Forecast, a trophy walleye angler should spend time at Cheney, Hillsdale, or Lovewell reservoirs (see Page 27).

Timing is also a factor. Based on the catch dates of the current state records, May is the best month with 12 records; July is a distant second with 5 records; April and June are close behind with 4 records; next is March and August with 3 apiece; November has 2; while September and October have yielded one record each. A five-year summary (2000-2004) of Master Angler Awards revealed 63 percent of qualified crappie were caught in April and May, 41 percent of the walleye were caught during May, 46 percent of the white bass were caught in April, and 64 percent of the award-winning largemouth bass were caught between March and June. Obviously, the chances of a record fish being caught increase as the number of anglers on the water increases. While this partially explains the majority of records coming from April to July, fish behavior is probably the most important factor.



Rick Barnow, of Humboldt, holds the current state record channel catfish he caught on June 3, 2003. The 38-inch fish weighed 36 pounds, 8 ounces.

Most fish spawn in the spring or early summer. Walleye and white bass begin spawning when water temperatures reach the low to mid-50s, usually in late March. Crappie, smallmouth, spotted, and largemouth bass will follow when temperatures approach the 60s, while bluegill and catfish will finish up the spawning season in May and June when water temperatures rise to the 70s. Fish are more aggressive, less cautious, and usually more accessible to anglers during the spawning season. White bass make their spawning run up rivers above reservoirs and concentrate in specific areas. These concentrated fish are easier to locate. The same can be said for walleye moving to dams and other rocky areas in the spring and largemouth bass moving shallow to construct nests.

Technique is the third factor to keep in mind if pursuing a state record fish. Special tackle and bait aren't required to catch a handful of 1- to 3-pound channel catfish, but to catch a 35-pound-plus channel cat takes special gear. The most important idea to keep in mind is to think BIG. The same techniques used for small channel cats probably won't yield that record fish without luck. Targeting waters with big fish and using larger tackle and bait will probably yield fewer fish caught, but the odds will be better for catching a lunker.

Finally, there is persistence. Catching a trophy-sized fish requires planning, specialized gear, and time. And even if you never catch that state record fish, your catch can still be recognized. KDWP's Master Angler Program rewards anglers for catching lunker fish. Minimum lengths have been set for all species and only a picture is required so catch-and-release can still be practiced. A custom certificate will be sent to all anglers who send an application and photograph to the Pratt

Clinton Boldridge is all smiles as he stands next to the Kansas and world record paddlefish. Boldridge caught the 144-pound giant while fishing for carp in an Atchison lake on May 5, 2004 .

office. See the current Fishing Regulations Summary for an application and minimum requirements.

With all of this said, the next state record bluegill will probably be caught by a largemouth bass fisherman casting a half-ounce spinnerbait, or the historic black crappie record will be broken by a little girl fishing with worms in a farm pond. Heis' record smallmouth is the exception to the rule as he was targeting that species and had intentions of catching a large fish needed to win a tournament.

Remember, most anglers don't go fishing with the goal of catching a state record fish. It's something all view as a great accomplishment, but the odds long. Most anglers are satisfied with a fun day on the water, enjoying time with friends and family, and maybe even catching a few fish. In the end, that's what fishing is all about.

If you catch a potential state record fish, the first thing you must do is weigh it on certified scales -- before it is frozen. Then, contact a KDWP office so that a fisheries biologist can officially identify the fish. The biologist will provide a state record fish application.

Current State Records

Largemouth bass – 11 lbs., 12 oz.
farm pond, 03/20/77
Kenneth M. Bingham, Topeka

Spotted bass (Kentucky) – 4 lbs., 7 oz.
Marion County Lake, 04/16/77
Clarence E. McCarter, Wichita

Striped bass – 43 lbs, 8oz.
Wilson Reservoir, 05/18/88
Chester Nily, Sylvan Grove

Smallmouth bass – 6 lbs., 10.88 oz.
Milford Reservoir, 08/15/04
Jason Heis, Salina

Wiper – 22 lbs., 6.24oz.
Perry Spillway, 07/09/05
Chris Wilcox, Eudora, KS

White bass – 5 lbs., 10.72 oz.
River above John Redmond, 04/11/02
Marvin W. Gary, Peculiar, MO

Bass, warmouth – 1 lb., 1.76 oz
Mined Land WA, 04/30/88
Vivian A. Bradley, Pittsburg

Walleye – 13 lbs., 2.56 oz.
Wilson Reservoir, 04/17/96
Dustin Ritter, Hoisington

Sauger – 4 lbs., 12.8 oz.
Melvern Reservoir,11/29/96
Jimmy Barnes, Kansas City

Saugeye – 9 lbs., 12.96 oz.
Sebelius Reservoir, 03/13/97
Raymond Wait, Norton

Perch, yellow – 1 lb., 0.96 oz.
Coffey County Farm Pond, 05/07/00
Walker Trimble, Burlington

Catfish, blue – 94 lbs.
Kansas River, 07/14/00
James Edmiston, Shawnee

Catfish, channel – 36 lbs., 8 oz.
Mined Land WA-Cherokee Co., 06/03/03
Rick Barnow, Humboldt

Catfish, Flathead – 123 lbs.
Elk City Reservoir, 05/14/98
Ken Paulie, Caney

Catfish, bullhead – 7 lbs., 5.4 oz.
Farm Pond, Montgomery Co. 05/15/85
David A. Tremain, Havana

Crappie, white – 4 lbs. 0.25 oz.
Farm Pond, Greenwood Co., 03/30/64
Frank Miller, Eureka

Crappie, black – 4 lbs., 10 oz.
Woodson State Fishing Lake, 10/21/57
Hazel Fey, Toronto

Sunfish, green – 2 lbs., 5.76 oz.
Farm pond, 09/26/82
Fae Vaupel, Russell

Redear – 1 lbs., 11 oz.
Finney Wildlife Area, 07/04/95
Larry Fox, Scott City

Bluegill – 2 lbs., 5 oz.
Farm Pond, Scott Co., 05/26/62
Robert Jefferies, Modoc

Buffalo, largemouth – 54 lbs. 4 oz.
Farm pond, Ottawa Co., 05/24/71
Randy Lee, Minneapolis

Buffalo, smallmouth – 51 lbs.
Farm Pond, Douglas Co., 05/02/79
Scott Butler, Lawrence

Carp – 47 lbs., 1.6 oz.
Carey Park (Hutchinson), 06/10/97
Phil McAmis, Hutchinson

Carp, Bighead – 58 lbs,. 8 oz.
Neosho River, 05/11/02
Richard Cook, Elsmore

Drum – 31 lbs., 4 oz.
Verdigris River, 07/17/82
Arthur C. Hyatt, Coffeyville

White amur – 73 lbs.
Farm Pond, 08/14/05
Caleb Clark, Valley Falls

Gar, spotted – 7 lbs., 12 oz.
Bow & Arrow, Chetopa Dam, 05/13/83
Charles Harbert, Arma

Gar, shortnose – 5 lbs., 15 oz.
Bow & Arrow, Milford Res., 05/04/85
Jack M. Frost, Manhattan

Gar, longnose – 31 lbs., 8 oz.
Perry Reservoir outlet, 05/21/74
Ray Schroeder, Topeka

Sturgeon – 5 lbs., 3.68 oz.
Lovewell Reservoir, 07/04/99
Edwin P. Hood, Mankato

Goldeye – 2 lbs., 4 oz.
Milford Reservoir, 06/19/80
Mike Augustine, Junction City

Paddlefish – 144 lbs.
Atchison Co. Pond, 05/05/04
Clinton Boldridge, Riley,KS

Eel, American – 4 lbs., 7 oz.
Kansas River, 06/23/87
Ralph B. Westerman, Manhattan

Trout, Rainbow – 9 lbs., 5 oz.
Lake Shawnee, 11/14/82
Raymond Deghand, Topeka

Pike, Northern – 24 lbs., 12 oz.
Council Grove Reservoir, 08/28/71
Mr. & Mrs. H.A. Bowman, Manhattan

Birds aren't the only species that flock to Kansas each spring. Avid birdwatchers have discovered the state's birding bonanza.

Birding in the Heartland

by Ken Brunson
biodiversity coordinator, Pratt
photos by Mike Blair

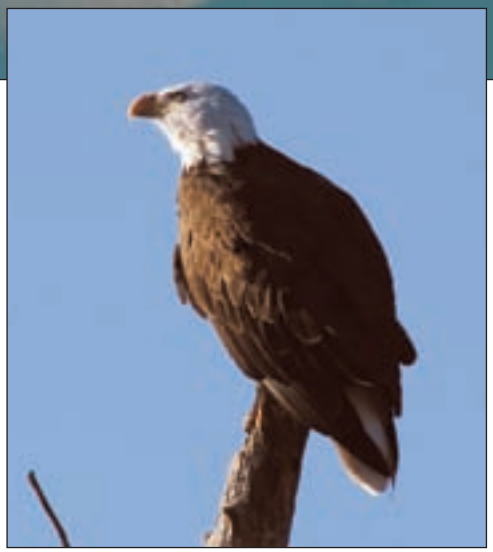
Matt Gearheart and Aaron Mitchell saw a three-toed woodpecker at the Cimarron National Grasslands campground north of Elkhart last July. To a non-birder, this might merit an honorable mention in the Wednesday afternoon yawn contest at the local sports bar. But to birders, it marked a race against time to get to that spot on Highway K-27 as quickly as possible. Ardent birdwatchers agonized each day that they could not get to the southwestern Kansas corner while the unexpected visitor was still there. For about 10 days, dozens of people flocked to see this rare Kansas visitor.

Okay, so it wasn't the fanfare surrounding the rediscovery of the ivory-billed woodpecker in Arkansas. But it was a noteworthy birding spectacle for the Sunflower State. Such events are not uncommon here. It doesn't have to be a rare bird or even a new species for the state – it could be 50,000 sandhill cranes floating in to roost against an orange and turquoise sunset at Quivira National Wildlife Refuge. Or it could be a majestic bald eagle, technically not rare anymore, but rarely seen by thousands of Kansans and millions of others who thrill at the sight of this majestic national symbol in the wild.

Birding spectacles along with Kansas' other natural assets make boring tourism clichés irrelevant. More people are becoming aware of Kansas' natural attractions. Our world-class deer herd and pheasant populations are well known among hunters from across the country. Now this Kansas love-fest is enhanced by the advent of birders flocking to the prairie. They have learned something about natural Kansas that birds have known all along. Humans now follow en masse, armed with the latest field guides, binoculars and checklists. They come for the chance to see rare birds and spectacular concentrations in attractive settings.

Birding, the art of watching and studying birds, has enjoyed dramatic growth in recent years. Surveys on outdoor activity show that birding participation growth is second only to walking over the past couple of decades. A 2001 survey by the U.S. Fish and Wildlife Service shows that 66 million people participated in wildlife watching in the U.S., and more than 800,000 of these folks are in Kansas. Wildlife watching pumps $129 million into the economy in Kansas alone. That is

Kansas' central location gives birders unique opportunities to view species from across North America. During migration, wetlands such as Cheyenne Bottoms Wildlife Area and Quivira National Wildlife Refuge are birding hotspots.



impressive, especially considering that this is a stealth industry developed without any major advertising other than word of mouth. Many folks who formerly could not tell the difference between a crane and a coot are paying attention – including economists.

While known to hard-core birders, Kansas birding has only recently received notoriety. In terms of bird numbers, Kansas outranks every neighboring state except Colorado with 468 species confirmed, and the secret's out. In September 2001, *Wildbird* magazine ranked the Kansas central wetlands of Quivira National Wildlife Refuge and Cheyenne Bottoms Wildlife Area as eighth out of the 15 "best birding locations in North America!" Then in February 2003, *Birding*, the highly respected magazine of the American Birding Association, ran an article by Mark Robbins detailing the incredible 225 species Big Day that he, Mike Rader, and Roger McNeill had on May 13, 2002. Their Big Day total tied for third all-time in the nation. During a Big Day event, a team of up to four birders attempt to identify as many species as possible within a 24-hour period. In the March/April issue of *Wildbird* that same year, Sam Fried extolled the birding virtues of the central Kansas wetlands after visiting the Wings n' Wetland Weekend Festival at Great Bend the previous year. This was a series of grand slams for Kansas birding and put the Sunflower State into the national birding limelight.

The Wings n' Wetlands Weekend festival, held four of the last five years in Great Bend, has been incredibly successful in attracting hundreds of people from across the nation. Held in late April to take advantage of peak concentrations of shorebirds, the festival is building Great Bend's reputation as the Shorebird Capital of the World for birders. While the Cheyenne Bottoms Wildlife Area has been well-known to duck hunter across the country for decades, it took a long time for it to receive similar national attention from birders. At a time when Great Bend was hoping to diversify its economy like so many other small communities, local leaders recognized the growing interest in nature tourism.

According to Cris Collier, director of the Great Bend Convention and Visitor's Bureau, "We needed to diversify our economic development effort, and tourism is economic development. Fortunately, Great Bend leadership looked at these two issues at

the same time and said 'ahhh, Cheyenne Bottoms.' And, as the national trends in outdoor activities continue to grow in the areas of nature tourism, so does our commitment to this endeavor."

She credits the late Gary Gore, killed in a tragic accident last summer, for recognizing the opportunity to capitalize on the area's birding potential.

Future plans are to hold the Wings n' Wetlands Weekend every other year, alternating with another major event Great Bend sponsors in intervening years. And Great Bend's birding festival has been a springboard for other birding and nature tourism events, including the Kansas Birding Festival, held at Wakefield in Clay County. Wakefield is a great site for birding because it is located near the upper end of Milford Reservoir and is close to some of the state's best tallgrass prairie. Where Great Bend is capitalizing on its major wetlands and shorebirds, the Wakefield event is focusing on prairie chickens. However, Wakefield does have its own substantial wetlands in the upper end of Milford.

These two birding festivals should develop into a one-two punch, bringing birders to Kansas annually for unique opportunities: special birds in special places. This spring's Kansas Birding Festival is the next major birding event for the state, scheduled from April 28-30. The premier event will include close-up viewing of greater prairie chickens on their booming (mating) grounds; a rare look at a spectacular breeding ritual that has occurred on the Kansas prairie for thousands of years. Other local birding destinations will include the Milford Wetlands, Konza Prairie, Milford Nature Center and Fish Hatchery, and the Kansas Landscape Arboretum. For more information about this exciting event, go to kansasbirdingfestival.org/ or call (785) 461-5519. For more information about birding opportunities at Cheyenne Bottoms Wildlife Area, go to cheyennebottoms.net/birding_wildlife.html.

Learn more about all the birding and wildlife watching opportunities Kansas has to offer at NaturalKansas.org. Also, go to the Kansas Ornithological Society's website, ksbirds.org/kos/, for more information about birding in Kansas. Several Audubon chapters actively support bird conservation efforts in Kansas and offer regular field trips. Go to audubonofkansas.org/ for more information.

One of the quickest ways to become acquainted with Kansas' feathered friends is to sign on to the ksbird-L listserve – an online discussion group dedicated to finding and watching birds. If you ever thought Kansas might be devoid of an exciting diversity of bird life and bird lovers, you will immediately learn otherwise by lurking and/or participating on this listserve. Go to this site and join up: http://listserv.ksu.edu/archives/ksbird-l.html.

Birding festivals such as the Wings 'n Wetlands Weekend hosted at Great Bend are partially responsible for the growing awareness of Kansas' birding potential. Bird enthusiasts gather from around the U.S. to watch birds in Kansas.

50 SEASONS AND 50 MILLION SEEDLINGS

by Joshua Pease
coordinator of the Kansas Forest Service's Conservation Tree Planting Program, Manhattan

The Kansas Forest Service has been providing low-cost seedling bundles for all types of conservation plantings for 50 seasons.

What in the world could a forest service offer Kansas landowners? While it's true we don't have any state or federal forests in Kansas, we do have more than 2.1 million acres of native forestland in the state. To assist in the management of this resource, the Kansas Forest Service provides assistance to both the private and public sectors with Community Forestry, Fire Management, Rural Forestry, and in Conservation Tree Planting programs.

Of those programs, the Conservation Tree Planting Program, is celebrating its 50th season of offering tree and shrub seedlings to landowners as a low-cost alternative way of creating or enhancing any conservation practice. If sales continue as they have, the program will have sold more than 50 million seedlings by the end of spring 2006, a timely 50th anniversary. Seedlings provided through this program can be used for anything from "Windbreaks to Wildlife, and Anything In Between." The only requirement is the seedlings not be used for ornamental landscaping or resale (except as Christmas trees).

You might wonder how and why a forest service with a tree planting program was ever created in a state such as Kansas. History indicates that although Kansas was never considered a forested state, it is wrong to think of it only as a prairie state. Kansas has always had timber along its creeks and rivers, especially in the east. It is estimated that 4.5 million acres were originally forested.

As settlers became established, they planted trees to protect their homes, barns, and livestock. "Living fences" were even created by planting Osage-orange (hedge) seedlings closely together and intertwining the branches into a tangled mass, which was impenetrable by livestock. However, not a lot was known during that era about "plains forestry." The desire and need for a leader was so strong that in 1887, Kansas established the office of Commissioner of Forestry, the fifth state to do so. The Commissioner primarily dealt with two issues: tree establishment and improving existing woodlands to protect private property and serve as a fuel during winter.

In 1909, the position of State Forester was created within Kansas State University. This position eventually expanded into the Kansas Forest Service which still resides in the University today. The Conservation Tree Planting Program launched its

first season in 1957 with the cooperation of the U.S. Forest Service through the Clark-McNary Act. During its first year, approximately 2,300 orders were received and about 628,000 seedlings were distributed.

Several major forestry projects came and went during the 1900s. Most people are familiar with the Prairie States Forestry Project, which was created by Theodore Roosevelt to establish a massive windbreak from the Gulf of Mexico to Canada. But a lesser-known fact is that Kansas actually had a national forest near Garden City. This was the first attempt by Roosevelt of a large-scale tree planting in Kansas. The goal was to plant a 300,000-acre forest similar to the Nebraska National Forest which was successfully established by hand. According to *Trees, Prairies, and People* by Wilmon H. Droze, despite more than 125,000 seedlings being planted each year from 1908-1915, continued drought prevailed and the project, as well as the national forest, was abolished. Other attempts to encourage tree planting included paying a bounty to landowners for successful tree establishment, giving away 160 acres of land to settlers who established trees on 40 acres of that property, and reducing property taxes for land with successful tree plantings. While all of these programs eventually ended in demise, the efforts of many landowners were successful and millions of trees outlived the programs that prompted their planting.

Today the Conservation Tree Planting Program is still promoting tree and shrub planting for conservation practices and cooperates with several other agencies such the Natural Resources Conservation Service, County Conservation Districts, K-State Research and Extension County Offices, and the Kansas Department of Wildlife and Parks. Through the years, the program set records by selling more than 1.4 million seedlings in a single season in 1964 and receiving more than 7,800 orders in 1981. Last spring the program received about 2,500 orders and distributed more than 578,000 seedlings.

It's a big job to grow trees and shrubs for customers in those numbers. First, seed must be collected from local seed sources or sources proven to be adapted to Kansas. If planting is going to be done in the spring, seed stratification will be required. This means that seed is put in layers of moist media (peatmoss, potting soil, etc.) and kept just above freezing for a required duration. Most species require between 30-90 days of stratification before the seed will germinate. The stratification process "tells" the seed that winter has come and gone and it is safe to begin growing. If fall planting is performed, Mother Nature stratifies the seed during the winter. The seed is planted in rows and is carefully monitored for moisture requirements and insect and disease symptoms.

These catalpa fence posts were harvested from a 500-acre plantation in Reno County near Medora in 1938. Photo provided by Kansas State University Archives (Dept. of Horticulture, Forestry and Recreation Resources)

The photo above shows cultivation of a shelterbelt in Comanche County 1937. Photo provided by Kansas State University Archives (Dept. of Horticulture, Forestry and Recreation Resources)

While some species require two years to grow into a harvestable seedling of about 12-18 inches in height, most species only require one. Plants which are to be sold bareroot can only be harvested when they are dormant. For hardwood species, adequate dormancy is generally obtained a few weeks after

the leaves have fallen off the plants, but for evergreens, chilling hours are recorded to determine adequate dormancy. One chilling hour is equal to one hour below 50 degrees Fahrenheit and the total hours endured is cumulative. For eastern redcedar, for example, approximately 1,800 chilling hours are required on the plants before harvest; otherwise, the plants may experience shock from being disturbed.

To harvest field-grown plants, a lifter is pulled behind a tractor and the lifter performs two operations. First, it severs roots about 16 inches below ground surface with a sharp reciprocating blade. The second action loosens the soil and lifts the seedlings to the surface by means of off-set reciprocating finger-like blades. The blades slide back and forth extremely fast and bounce the soil loose. This action lifts the seedlings to the surface where they are picked up by hand and put into bags. The bags are stored moist at a temperature of around 33 degrees Fahrenheit.

Next, each individual seedling is inspected for abnormalities and damage. Any plant not meeting minimum standards is discarded. The remaining plants are tied into bundles and placed back into a cooler where they are stored until needed.

All orders are packed by hand. Plastic sheeting is placed inside a cardboard box. The plants are then placed inside the box, and moist, shredded cedar is spread over the roots. The plastic is then wrapped around the plants similar to wrapping a diaper around a baby. This prevents the box from leaking and maintains moisture inside the box so roots don't dry out. Orders can be either picked up at the Kansas Forest Service headquarters in Manhattan or they can be shipped via UPS. The plants are not packaged until they are ready to leave the cooler to ensure they are the highest quality upon delivery.

Container-grown plants go through the same steps as above with the obvious exception of having to be lifted from the field. The seed is stratified before it is planted in tubes, monitored throughout the growing season in a greenhouse, and then graded to meet minimum standards. Once all of this is complete, they are stored outside as temperatures allow, or are placed in a cooler until needed.

The Conservation Tree Planting Program offers fall and spring distribution seasons. Because container-grown seedlings do not require dormancy, they can be offered in the fall. However, this limits availability to four species: eastern redcedar, Austrian pine, ponderosa pine, and southwestern white pine. Seedlings cost $50 per bundle of 25 seedlings and orders are taken from the first week of September through the second Monday in October.

Spring is the major distribution season. From December to the first week of May, orders are accepted for more than 30 different species of plants. Fifteen hardwood species are available, including green ash, silver maple, black walnut, pecan, and hackberry. Three species of oak are also offered, including sawtooth oak which has gained recent popularity with wildlife enthusiasts due to

Seedlings are stored in large coolers until they are packaged to be shipped. Photo provided by Joshua Pease, Kansas Forest Service

The tractor above shows the lifter attachment that is used to harvest seedlings from their nursery beds. Photo provided by Joshua Pease, Kansas Forest Service

its ability to begin producing acorns within 5-7 years. Other species include eastern cottonwood, American sycamore, eastern redbud, Siberian elm, thornless honeylocust, red mulberry, and baldcypress.

Windbreaks are the number-one listed use of the seedlings. To have an effective winter windbreak, evergreens must be used. Austrian pine, ponderosa pine, eastern white pine, southwestern white pine, Oriental arborvitae, rocky mountain juniper, and eastern redcedar are available.

The Conservation Tree Planting Program also offers many different kinds of shrubs which play an important role in most conservation practices. They reduce erosion along riparian buffers, provide a dense barrier at the bottom of windbreaks, and play an important role in providing habitat for wildlife. Although many people often associate wildlife habitat with trees, shrubs should be used as a key component, especially when designing habitat for quail and pheasants. Shrub species provided through this program include American plum, caragana (Siberian peashrub), choke cherry, Konza fragrant sumac, golden currant, common lilac, Peking cotoneaster, and sand hill plum. Most of these shrubs are extremely drought tolerant and have very high success rates when correctly planted.

Seedlings are sold in bundles of 25, and shipping does not begin until the second week of March. Bareroot seedlings, regardless of species, are only $17 per bundle. Container-grown species are $45 per bundle. Although there is a minimum order of 50 plants when ordering bareroot stock, even small landowners probably have enough property to establish a conservation planting. In newly developed areas, windbreaks, noise/visual barriers, and wildlife habitat are often lacking. Fifty plants can provide an effective windbreak or visual/noise barrier using only 200 linear feet of property per row and shrub plantings only require half that much space.

Non-plant items are also offered such as protective tubes to discourage rabbits from nipping off the seedlings, weed barrier fabric which prevents grass from growing near seedlings and helps maintain soil moisture, root slurry which when applied protects the seedling's roots by reducing desiccation, and marking flags which not only help you line up your seedlings in straight rows, but also reminds you where seedlings are located when you are mowing.

If you have questions about a forestry related issue or are interested in obtaining an order form, contact the Kansas Forest Service at (785) 532-3300. District Foresters throughout the state can assist landowners in every county. At the service's website, www.kansasforests.org, you will find contact information, program information, seedling availability and ordering information, and a description and picture of every species offered. If you are considering a large planting, there is also a listing of where tree planters and weed barrier fabric machines can be located. The Kansas Forest Service looks forward to assisting Kansans for another 50 seasons and distributing another 50 million conservation seedlings.

2006 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.

WHITE CRAPPIE

IMPOUNDMENT	Density Rating (>8")	Preferred Rating (>10")	Lunker Rating (>12")	Biggest Fish (lbs.)	Bio Rating	Acres of Water
RESERVOIRS						
FALL RIVER	25.75	6.00	2.25	2.26	E	2500
HILLSDALE	24.50	5.75	1.20	1.30	G	4580
BIG HILL	15.60	9.50	0.90	0.98	G	1240
TORONTO	14.00	5.88	3.63	2.54	G	2800
MARION	13.67	10.83	0.67	0.99	G	6160
CLINTON	10.70	3.50	0.30	1.20	F	7000
PERRY	10.63	3.00	0.29	1.01	F	12600
COFFEY CO. LAKE	7.30	3.30	2.30	1.80	G	5000
COUNCIL GROVE	5.63	3.63	0.63	1.53	F	3280
LOVEWELL	5.33	2.11	0.11	0.99	F	2986
LA CYGNE	4.63	2.44	0.31	1.15	G	2600
POMONA	4.31	1.94	0.06	1.74	G	4000
MELVERN	4.00	3.00	0.20	1.10	E	7000
KANOPOLIS	3.63	1.81	0.13	0.95	F	3550
ELK CITY	3.50	1.90	0.60	1.78	G	4450
LAKES						
CARBONDALE CITY LAKE - EAST	122.50	54.50	2.00	1.01	E	265
GOODMAN SFL	50.25	7.75	0.00	0.84	E	40
EUREKA CITY LAKE	31.25	6.00	1.00	1.12	E	135
MARION CO. LAKE	31.00	13.25	1.25	1.21	G	153
GEARY SFL	28.00	9.50	0.25	0.74	G	97
SCOTT STATE LAKE	26.25	1.50	0.00	0.60	E	115
JEWELL SFL	23.20	0.60	0.20	0.88	F	57
SEDAN CITY LAKE-NEW	22.50	4.50	1.50	1.64	G	70
NEOSHO SFL	21.00	5.33	1.33	1.86	G	92
JEFFREY EC-MAKE UP LAKE	17.50	9.80	0.30	0.90	G	125
BOURBON CO. CEDAR CREEK	16.80	6.00	0.20	0.95	G	220
MADISON CITY LAKE	16.50	2.25	0.50	1.02	G	114
MEADE STATE LAKE	16.25	4.75	1.00	1.30	F	80
OTTAWA SFL	15.38	2.88	1.25	1.94	F	138
HERINGTON CITY LAKE-OLD	11.75	4.75	0.25	0.76	G	367
OLATHE-CEDAR LAKE	11.75	3.00	1.25	1.00	F	56
SEDAN CITY LAKE-OLD	11.75	5.75	1.00	1.56	G	55
BOURBON SFL	11.00	8.75	0.75	1.00	G	103
PLEASANTON WEST LAKE	11.00	1.75	1.00	0.99	G	20
HOLTON-PRAIRIE LAKE	10.00	6.00	1.00	1.54	F	78
MOUND CITY LAKE	9.50	5.00	1.00	1.40	G	148
HORTON-MISSION LAKE	9.25	3.75	2.50	1.90	F	154
PARSONS CITY LAKE	9.00	3.50	1.30	1.34	G	980
LOUISBURG CITY LAKE	8.67	3.67	2.00	1.30	F	23

BLACK CRAPPIE

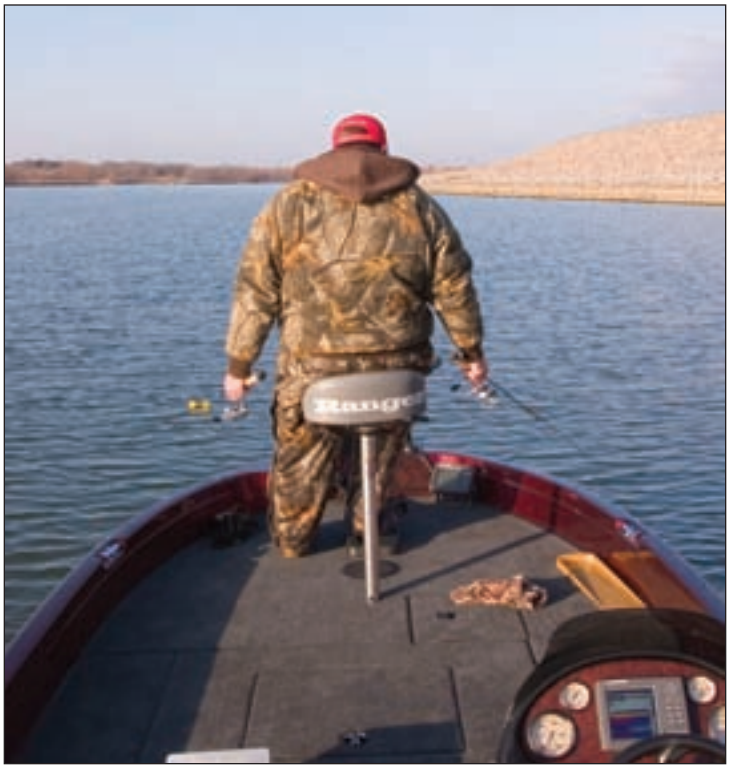
IMPOUNDMENT	Density Rating (>8")	Preferred Rating (>10")	Lunker Rating (>12")	Biggest Fish (lbs.)	Bio Rating	Acres of Water
RESERVOIRS						
WEBSTER	4.38	3.00	2.25	1.51	F	3500
MARION	2.67	1.33	0.00	0.87	P	6160
KIRWIN	1.88	0.38	0.00	0.80	P	4000
LAKES						
GRAHAM CO.-ANTELOPE LAKE	48.25	20.00	5.50	1.29	E	80
MIAMI SFL	36.30	0.50	0.00	0.52	G	118
BROWN SFL	20.50	5.75	0.75	1.01	G	62
KINGMAN SFL	18.75	8.75	3.25	1.32	F	144
BALDWIN - SPRING CREEK LAKE	15.00	1.50	0.00	0.70	F	7
NEOSHO SFL	13.33	0.33	0.33	0.89	F	92
GARNETT CITY LAKE-NORTH	13.00	10.00	0.00	0.70	F	55
JOHNSON CO. SHAWNEE MISSION LAKE	11.83	0.33	0.00	0.50	F	121
SABETHA - PONY CREEK LAKE	11.50	1.00	0.25	0.92	F	171
ATCHISON CITY LAKE #23	11.00	3.25	0.25	1.07	F	39
LEBO CITY LAKE	7.00	4.50	0.50	1.20	G	70
PRATT CO. LAKE	7.00	2.75	0.00	0.83	F	51
CENTRALIA CITY LAKE	5.50	3.60	0.00	0.80	G	400
HOLTON - BANNER CREEK LAKE	5.38	4.00	0.25	0.95	F	535
DOUGLAS CO.-LONESTAR LAKE	5.00	1.50	0.00	0.60	F	195
HOLTON-PRAIRIE LAKE	4.75	0.75	0.50	1.10	F	78
BOURBON CO. LK (HIATTVILLE)	4.40	0.00	0.00	0.34	F	106
MOLINE NEW CITY LAKE	4.00	3.50	0.25	0.83	F	185

FLATHEAD CATFISH

IMPOUNDMENT	Density Rating (>16")	Preferred Rating (>24")	Lunker Rating (>28")	Biggest Fish (lbs.)	Bio Rating	Acres of Water
RESERVOIRS						
SEBELIUS	3.00	2.50	2.50	16.98	G	1500
LA CYGNE	1.60	1.40	1.20	22.54	G	2600
WEBSTER	1.50	1.00	0.50	22.60	F	3500
KIRWIN	1.00	0.00	0.00	3.74	P	4000
MILFORD	0.50	0.17	0.17	22.00	F	16020
LOVEWELL	0.17	0.00	0.00	3.34	G	2986
CEDAR BLUFF	0.00	0.00	0.00	0.00	G	6500
LAKES						
HERINGTON CITY LAKE-NEW	3.00	2.00	2.00	25.00	G	555
OLATHE-LAKE OLATHE	1.50	1.00	0.50	13.30	F	172

BLUEGILL

IMPOUNDMENT	Density Rating (>6")	Preferred Rating (>8")	Lunker Rating (>10")	Biggest Fish (lbs.)	Bio Rating	Acres of Water
RESERVOIRS						
HILLSDALE	9.85	0.00	0.00	0.30	F	4580
LA CYGNE	4.38	0.00	0.00	0.41	F	2600
PERRY	4.08	0.00	0.00	0.37	F	12600
LAKES						
LEWIS-YOUNG PARK LAKE	67.50	0.00	0.00	0.30	P	2
NEBO SFL	24.50	0.00	0.00	0.41	F	38
BROWN SFL	23.75	6.25	0.00	0.62	G	62
LOUISBURG CITY LAKE	18.00	0.33	0.00	0.30	F	23
DOUGLAS CO.-LONESTAR LAKE	16.50	0.00	0.00	0.30	F	195
PRATT CO. LAKE	16.50	0.75	0.00	0.45	E	51
GRAHAM CO.-ANTELOPE LAKE	15.00	3.50	0.00	0.52	F	80
SABETHA CITY LAKE	14.75	0.25	0.00	0.45	F	100
MIAMI SFL	14.50	2.30	0.00	0.40	G	118
POTTAWATOMIE SFL #1	13.50	0.30	0.00	0.40	G	24
MADISON CITY LAKE	12.50	0.00	0.00	0.38	F	114
BOURBON SFL	12.50	0.50	0.00	0.38	F	103
NEOSHO SFL	12.33	0.67	0.00	0.44	G	92
FORT SCOTT CITY LAKE	12.30	0.38	0.00	0.44	F	350
SHAWNEE CO.-LAKE SHAWNEE	11.30	0.00	0.00	0.30	F	416
SABETHA - PONY CREEK LAKE	10.75	0.00	0.00	0.33	F	171
ATCHISON SFL	10.75	0.50	0.00	0.42	F	66
JOHNSON CO. SHAWNEE MISSION LAKE	10.67	0.00	0.00	0.30	F	121
TROY 4-H LAKE	10.50	0.00	0.00	0.35	F	5
TOPEKA-LK. HAMMOND (YMCA)	9.50	2.50	0.00	0.40	G	15
PAOLA CITY LAKE	8.30	0.00	0.00	0.30	F	220
SHAWNEE SFL	8.30	0.30	0.00	0.40	F	135
SCOTT STATE LAKE	8.25	0.00	0.00	0.32	F	115
ATCHISON CITY LAKE #23	7.75	1.50	0.00	0.46	F	39
BALDWIN - SPRING CREEK LAKE	7.00	0.00	0.00	0.20	F	7
GOODMAN SFL	6.50	1.25	0.00	0.35	E	40
MOUND CITY LAKE	6.30	0.25	0.00	0.30	G	148
BUTLER SFL	6.17	0.00	0.00	0.00	F	124
EUREKA CITY LAKE	6.00	0.00	0.00	0.29	P	135
BOURBON CO. LK (HIATTVILLE)	5.80	0.00	0.00	0.31	F	106
LEAVENWORTH SFL	5.80	0.00	0.00	0.30	F	175
GARDNER CITY LAKE	5.60	0.00	0.00	0.40	F	100
LYON SFL	5.25	0.50	0.00	0.43	G	135
SEVERY CITY LAKE	5.00	0.00	0.00	0.19	F	5
KINGMAN SFL	4.50	0.00	0.00	0.33	P	144
CENTRALIA CITY LAKE	4.50	1.40	0.00	0.50	F	400



CHANNEL CATFISH

IMPOUNDMENT	Density Rating (>16")	Preferred Rating (>24")	Lunker Rating (>28")	Biggest Fish (lbs.)	Bio Rating	Acres of Water
RESERVOIRS						
SEBELIUS	7.65	2.82	0.85	8.86	G	1500
KANOPOLIS	6.75	0.25	0.25	10.17	G	3550
HILLSDALE	6.25	0.75	0.00	6.20	F	4580
GLEN ELDER	5.90	0.30	0.30	11.72	G	12586
MILFORD	5.17	0.83	0.17	14.46	G	16020
TORONTO	5.00	1.00	0.50	9.26	G	2800
CLINTON	5.00	0.50	0.30	11.40	G	7000
WILSON	4.00	0.25	0.00	7.63	G	9040
FALL RIVER	4.00	2.00	0.50	9.70	G	2500
COFFEY CO. LAKE	3.90	0.20	0.10	21.20	G	5000
LOVEWELL	3.50	0.83	0.00	7.08	G	2986
CHENEY	3.38	1.25	0.25	15.31	G	9550
KIRWIN	3.36	1.62	0.45	8.59	G	4000
CEDAR BLUFF	3.25	1.50	0.75	17.20	E	6500
MARION	3.17	0.33	0.33	11.66	F	6160
LAKES						
SABETHA CITY LAKE	57.00	15.00	0.00	6.83	G	100
PLEASANTON WEST LAKE	48.00	1.00	0.00	5.40	E	20
CARBONDALE CITY LAKE - EAST	32.00	10.00	3.00	10.80	E	265
SABETHA - PONY CREEK LAKE	31.00	8.00	0.00	8.71	G	171
PLEASANTON EAST LAKE	26.00	5.00	0.00	8.38	E	127
HORTON-MISSION LAKE	25.00	3.00	1.00	11.24	G	154
CLARK SFL	22.50	2.50	0.00	8.82	E	300
GRIDLEY CITY LAKE	22.00	6.00	2.00	12.50	E	33
WOODSON SFL	22.00	8.00	8.00	19.00	E	180
OSAGE CITY LAKE	21.00	4.00	1.00	18.60	E	50
JAYHAWK BOY SCOUT LAKE	19.00	5.00	0.00	6.50	G	30
LEBO CITY LAKE	19.00	7.00	3.00	10.00	E	70
BROWN SFL	19.00	7.00	3.00	14.88	G	62
EUREKA CITY LAKE	17.00	1.00	0.00	4.63	G	135
HOLTON - BANNER CREEK LAKE	17.00	3.50	0.50	10.80	G	535
LEAVENWORTH SFL	16.50	0.00	0.00	5.60	G	175
MELVERN RIVER POND	16.00	8.00	5.00	13.50	E	100
HOLTON-PRAIRIE LAKE	15.00	0.00	0.00	4.74	F	78
GEARY SFL	15.00	3.00	1.00	12.13	G	97
FORT SCOTT CITY LAKE	14.70	3.70	0.70	15.60	G	350
ATCHISON CITY LAKE #23	14.00	0.00	0.00	5.18	F	39
CHANUTE CITY LAKE	14.00	3.00	0.00	9.38	G	80
BUTLER SFL	13.50	1.50	0.00	9.33	G	124
YATES CENTER CITY LAKE-NEW	13.50	1.50	0.50	14.50	E	205
PAOLA CITY LAKE	13.50	0.50	0.00	5.30	F	220
LYON SFL	13.00	1.00	0.00	8.38	G	135
GARNETT CITY LAKE-NORTH	13.00	0.00	0.00	6.00	G	55
HOWARD-POLK DANIELS LAKE	13.00	0.00	0.00	4.41	F	69
OSAGE SFL	13.00	2.00	1.00	14.50	E	140
BOURBON CO. LK (HIATTVILLE)	12.00	1.00	0.00	6.30	G	106
MOUND CITY LAKE	12.00	3.00	1.00	8.60	E	148
SHAWNEE CO.-LAKE SHAWNEE	11.50	1.00	0.00	5.30	G	416
ATCHISON SFL	11.00	0.00	0.00	4.96	F	66
MADISON CITY LAKE	11.00	0.00	0.00	4.19	F	114
SHAWNEE SFL	11.00	2.00	0.00	6.50	G	135
JOHNSON CO. SHAWNEE MISSION LAKE	10.50	0.00	0.00	4.20	F	121
CENTRALIA CITY LAKE	10.50	3.00	1.00	13.40	G	400
MCPHERSON SFL	10.00	2.00	1.00	9.09	G	46
MIAMI SFL	9.00	1.00	0.00	5.20	G	118
PRATT CO. LAKE	9.00	1.00	0.00	9.26	E	51
BONE CREEK LAKE	9.00	1.50	0.00	7.13	G	540
WILSON SFL	8.50	0.50	0.00	5.13	G	110
GARNETT CITY LAKE-SOUTH	8.50	0.00	0.00	5.70	G	25
NEBO SFL	8.00	1.00	0.00	6.94	F	38
BOURBON SFL	8.00	0.50	0.00	8.10	G	103
CHASE SFL	7.50	1.00	0.50	14.40	G	109
JEWELL SFL	7.26	0.00	0.00	4.30	G	57
JEFFREY EC-AUX. MAKEUP LAKE	7.00	0.00	0.00	4.00	F	460
HERINGTON CITY LAKE-OLD	7.00	0.00	0.00	2.71	G	367
OTTAWA SFL	7.00	0.50	0.00	5.93	G	138
CRAWFORD SFL	7.00	2.50	1.00	14.66	G	150
SEDAN CITY LAKE-NEW	7.00	1.00	1.00	8.82	F	70
MONTGOMERY SFL	6.00	0.00	0.00	5.57	G	105
MOLINE NEW CITY LAKE	6.00	1.00	0.00	7.28	F	185
MIDDLE CREEK SFL	6.00	0.00	0.00	4.30	F	280
OLATHE-CEDAR LAKE	6.00	0.00	0.00	3.70	P	56
GARDNER CITY LAKE	6.00	1.00	0.00	6.70	F	100
DOUGLAS CO.-LONESTAR LAKE	5.50	1.00	0.00	7.70	F	195

LARGEMOUTH BASS

IMPOUNDMENT	Density Rating (>12")	Preferred Rating (>15")	Lunker Rating (>20")	Biggest Fish (lbs.)	Bio Rating	Acres of Water
RESERVOIRS						
LA CYGNE	47.20	31.10	7.80	9.21	E	2600
SEBELIUS	38.94	3.85	0.00	1.66	F	1500
HILLSDALE	18.59	6.73	0.32	4.90	F	4580
CEDAR BLUFF	16.67	11.33	1.00	5.88	F	6500
EL DORADO	11.53	2.49	0.00	3.80	F	8000
MELVERN	9.00	4.00	0.70	6.40	G	7000
PERRY	8.11	4.22	0.68	5.95	F	12600
MILFORD	8.00	1.09	0.00	4.06	F	16020
BIG HILL	7.00	3.20	0.20	4.85	E	1240
LAKES						
EMPORIA-JONES PARK NORTH	214.00	20.00	0.00	2.64	G	3
EMPORIA-JONES PARK EAST POND	211.00	0.00	0.00	1.29	G	2
BUTLER SFL	166.67	101.23	7.41	5.55	E	124
TOPEKA-LK. HAMMOND (YMCA)	145.00	10.00	0.00	3.50	G	15
PRATT CO. LAKE	140.38	51.92	0.00	3.50	E	51
POTTAWATOMIE SFL #1	140.00	15.00	0.00	3.30	G	24
PLEASANTON WEST LAKE	138.60	54.30	1.43	4.70	E	20
SEDAN CITY LAKE-NEW	137.25	15.69	3.92	5.07	E	70
SEDAN CITY LAKE-OLD	123.53	76.47	13.24	7.05	E	55
LYON SFL	121.57	11.76	3.92	5.95	E	135
ATCHISON CITY LAKE #8	116.00	60.00	2.00	5.27	F	14
MOLINE NEW CITY LAKE	113.24	16.18	0.00	1.98	G	185
EMPORIA-JONES PARK WEST POND	110.00	30.00	0.00	4.19	G	5
OSAWATOMIE CITY LAKE	110.00	0.00	0.00	1.30	F	21
EMPORIA-PETER PAN PARK	105.88	41.18	0.00	6.17	G	2
SEVERY CITY LAKE	105.00	50.00	0.00	4.30	E	5
ATCHISON CITY LAKE #23	105.00	22.00	1.00	5.48	G	39
BROWN SFL	100.91	21.82	0.91	4.82	G	62
GARDNER CITY LAKE	100.85	34.19	5.13	7.50	E	100
GRAHAM CO.-ANTELOPE LAKE	96.00	6.00	1.00	4.59	G	80
JAYHAWK BOY SCOUT LAKE	94.00	8.00	1.00	5.42	F	30
ATCHISON SFL	93.00	20.00	0.00	2.99	G	66
JOHNSON CO.-HERITAGE PARK LAKE	90.74	53.70	0.00	4.90	F	20
CLARK SFL	89.52	56.19	8.57	7.90	E	300
HOLTON - BANNER CREEK LAKE	85.99	26.57	0.48	6.02	G	535
CHANUTE CITY LAKE	85.70	42.90	2.90	6.30	G	80
SCOTT STATE LAKE	80.88	27.94	0.00	3.28	F	115
LEAVENWORTH SFL	80.70	8.40	0.60	5.50	G	175
COWLEY SFL	78.63	25.95	0.00	2.82	G	84
MADISON CITY LAKE	78.43	21.57	3.92	6.17	E	114
EUREKA CITY LAKE	76.47	18.49	2.52	5.62	E	135
MEADE STATE LAKE	76.09	36.96	4.35	5.02	E	80
BONE CREEK LAKE	75.70	38.50	2.30	2.00	G	540
YATES CENTER CITY LAKE-NEW	75.00	38.00	0.00	3.20	E	205
GARNETT CITY LAKE-NORTH	75.00	26.00	0.00	2.60	E	55
SABETHA - PONY CREEK LAKE	74.29	42.86	1.43	4.63	G	171
OVERLAND PK-REGENCY PARK LAKE	74.19	25.81	0.00	3.80	G	3
DOUGLAS CO.-LONESTAR LAKE	74.00	26.90	1.70	5.90	G	195
GARNETT CITY LAKE-SOUTH	74.00	26.00	0.00	2.60	E	25
COLDWATER LAKE	73.47	12.24	0.00	2.69	G	250
OLATHE-CEDAR LAKE	70.00	40.00	0.00	4.90	G	56
SHERIDAN SFL	67.00	27.00	0.00	2.83	G	67
PRAIRIE CENTER POND	65.38	23.08	0.00	4.90	G	1
HOWARD-POLK DANIELS LAKE	64.00	24.00	0.00	3.64	G	69
WYANDOTTE CO. LAKE	63.22	10.92	0.00	2.70	G	407
BALDWIN - SPRING CREEK LAKE	59.50	21.40	0.00	3.80	F	7
MCPHERSON SFL	59.00	35.00	2.00	4.66	E	46
OSAWATOMIE-BEAVER LAKE	58.60	6.90	0.00	1.70	F	6
JOHNSON CO. SHAWNEE MISSION LAKE	57.14	16.88	0.00	3.40	G	121
MOUND CITY LAKE	56.90	8.60	0.00	1.90	G	148
HOLTON-PRAIRIE LAKE	56.67	18.67	4.67	5.91	F	78
NEBO SFL	56.36	35.45	9.09	6.88	F	38
KINGMAN SFL	56.15	28.46	0.77	4.83	G	144
YATES CENTER-SOUTH OWL LAKE	56.00	26.00	0.00	3.50	G	150

SAUGER

IMPOUNDMENT	Density Rating (>11")	Preferred Rating (>14")	Lunker Rating (>17")	Biggest Fish (lbs.)	Bio Rating	Acres of Water
RESERVOIRS						
CLINTON	4.30	0.50	0.00	1.00	P	7000
LAKES						
HOLTON - BANNER CREEK LAKE	24.00	23.50	9.50	2.03	G	53

SAUGEYE

IMPOUNDMENT	Density Rating (>14")	Preferred Rating (>18")	Lunker Rating (>22")	Biggest Fish (lbs.)	Bio Rating	Acres of Water
RESERVOIRS						
SEBELIUS	27.47	8.69	0.31	5.10	G	1500
KANOPOLIS	7.50	0.75	0.50	5.42	G	3550
COUNCIL GROVE	2.40	0.40	0.00	2.79	F	3280
LAKES						
GRAHAM CO.-ANTELOPE LAKE	72.00	10.00	2.00	4.63	E	80
MARION CO. LAKE	24.00	4.00	0.00	2.25	F	153
CHASE SFL	21.50	2.00	0.00	1.77	G	109
WELLINGTON CITY LAKE	7.00	2.00	0.00	2.02	F	700
PAOLA CITY LAKE	6.50	1.00	0.50	6.20	F	220
GEARY SFL	6.00	0.00	0.00	1.51	F	97
EUREKA CITY LAKE	6.00	4.00	0.00	3.09	F	135
JEWELL SFL	5.73	5.73	5.73	7.09	F	57
SHERIDAN SFL	5.00	2.00	0.00	3.02	F	67
MIDDLE CREEK SFL	4.50	2.00	0.50	5.20	F	280

SMALLMOUTH BASS

IMPOUNDMENT	Density Rating (>11")	Preferred Rating (>14")	Lunker Rating (>17")	Biggest Fish (lbs.)	Bio Rating	Acres of Water
RESERVOIRS						
WILSON	15.66	4.04	0.00	2.28	G	9040
GLEN ELDER	12.59	6.82	0.52	3.40	G	12586
EL DORADO	11.32	3.23	0.27	2.12	F	8000
COFFEY CO. LAKE	8.00	5.00	1.30	2.00	E	5000
CEDAR BLUFF	7.00	1.00	0.00	1.62	F	6500
BIG HILL	4.70	1.80	0.50	3.69	G	1240
MELVERN	4.30	1.40	0.70	3.20	G	7000
LAKES						
JEFFREY EC-MAKE UP LAKE	12.00	1.30	0.00	1.10	F	125
SABETHA - PONY CREEK LAKE	2.14	2.14	0.00	2.64	F	171
BOURBON CO. LK (HIATTVILLE)	1.30	0.00	0.00	0.63	F	106
LEBO CITY LAKE	1.00	1.00	0.00	1.10	P	70

SPOTTED BASS

IMPOUNDMENT	Density Rating (>11")	Preferred Rating (>14")	Lunker Rating (>17")	Biggest Fish (lbs.)	Bio Rating	Acres of Water
RESERVOIRS						
CEDAR BLUFF	43.00	5.00	0.00	1.18	F	6500
SEBELIUS	42.22	26.67	0.00	2.12	G	1500
MELVERN	9.10	1.40	0.70	1.30	G	7000
LAKES						
CHASE SFL	43.54	27.21	0.00	2.00	G	109
BOURBON SFL	38.50	10.80	0.00	1.60	G	103
WILSON SFL	19.80	4.30	0.00	1.63	G	110
HOWARD-POLK DANIELS LAKE	10.00	8.00	2.00	2.87	F	69

STRIPER

IMPOUNDMENT	Density Rating (>20")	Preferred Rating (>30")	Lunker Rating (>35")	Biggest Fish (lbs.)	Bio Rating	Acres of Water
RESERVOIRS						
WILSON	6.13	0.13	0.00	12.70	G	9040
GLEN ELDER	2.10	0.00	0.00	8.50	F	12586
LA CYGNE	0.20	0.00	0.00	3.58	F	260

WALLEYE

IMPOUNDMENT	Density Rating (>15")	Preferred Rating (>20")	Lunker Rating (>25")	Biggest Fish (lbs.)	Bio Rating	Acres of Water
RESERVOIRS						
CHENEY	12.25	9.88	3.13	8.58	G	9550
CEDAR BLUFF	11.25	1.50	0.25	5.56	F	6500
WEBSTER	9.64	0.88	0.55	7.37	F	3500
EL DORADO	8.00	0.20	0.20	6.10	G	8000
KIRWIN	7.27	1.12	0.29	3.50	F	4000
HILLSDALE	7.25	1.50	1.25	8.50	G	4580
MARION	6.00	2.83	0.00	5.32	G	6160
WILSON	5.00	0.63	0.25	5.82	G	9040
LOVEWELL	4.83	1.33	0.67	6.77	G	2986
MILFORD	4.83	0.33	0.17	5.71	F	16020
GLEN ELDER	4.50	0.20	0.00	3.46	F	12586
COFFEY CO. LAKE	3.60	0.20	0.00	3.60	E	5000
SEBELIUS	3.43	0.62	0.29	2.30	P	1500
LAKES						
PRATT CO. LAKE	23.00	3.00	0.00	3.98	G	51
JEFFREY EC-MAKE UP LAKE	10.00	1.00	1.00	7.80	G	125
HOLTON - BANNER CREEK LAKE	6.00	2.00	0.00	5.07	F	535
WYANDOTTE CO. LAKE	6.00	0.50	0.00	2.30	F	407
JEWELL SFL	5.95	4.15	0.30	6.03	F	57
SHAWNEE CO.-LAKE SHAWNEE	5.00	0.50	0.00	4.50	F	416
SCOTT STATE LAKE	5.00	1.00	0.00	4.88	F	115
HERINGTON CITY LAKE-NEW	5.00	1.00	0.00	3.21	F	555
BROWN SFL	4.00	0.00	0.00	1.73	P	62
CLARK SFL	3.50	1.50	0.00	5.53	E	300
LEAVENWORTH SFL	3.50	0.00	0.00	1.70	F	175
JEFFREY EC-AUX. MAKEUP LAKE	2.00	0.50	0.00	2.80	F	460
MOUND CITY LAKE	2.00	0.00	0.00	1.60	F	148
PLEASANTON EAST LAKE	2.00	1.00	0.00	2.50	F	127
BOURBON SFL	1.50	1.50	0.50	5.50	F	103
BOURBON CO. LK (HIATTVILLE)	1.00	0.00	0.00	2.20	F	106
BARBER SFL-LOWER	1.00	0.00	0.00	1.02	G	51
WOODSON SFL	1.00	0.00	0.00	1.30	F	180
BONE CREEK LAKE	0.50	0.00	0.00	2.55	F	540
ALMA CITY LAKE	0.00	0.00	0.00	0.00	F	80

WHITE BASS

IMPOUNDMENT	Density Rating (>9")	Preferred Rating (>12")	Lunker Rating (>15")	Biggest Fish (lbs.)	Bio Rating	Acres of Water
RESERVOIRS						
GLEN ELDER	67.40	30.60	10.50	2.89	E	12586
CEDAR BLUFF	60.00	42.25	11.00	1.99	E	6500
MARION	59.50	43.50	2.00	2.81	E	6160
BIG HILL	51.00	45.00	2.00	1.76	E	1240
KANOPOLIS	34.00	20.75	0.50	1.60	E	3550
POMONA	27.75	13.75	2.75	3.80	G	4000
TORONTO	25.50	15.00	9.00	2.43	G	2800
MELVERN	20.00	12.00	0.70	1.80	G	7000
CLINTON	18.50	11.80	0.30	1.90	F	7000
MILFORD	17.33	16.50	2.33	2.02	G	16020
FALL RIVER	17.00	5.50	4.00	2.87	G	2500
PERRY	15.00	3.00	0.25	1.75	F	12600
LOVEWELL	13.83	10.17	0.33	1.67	F	2986
LA CYGNE	13.80	10.00	0.60	1.60	G	2600
HILLSDALE	12.75	10.50	2.75	2.00	G	4580
TUTTLE CREEK	9.00	4.90	2.30	2.60	F	15800
EL DORADO	8.20	6.00	0.20	1.93	F	8000
WILSON	7.25	4.88	2.38	2.54	F	9040
COFFEY CO. LAKE	5.90	5.40	0.60	1.90	F	5000
COUNCIL GROVE	5.80	2.00	0.00	1.38	F	3280
WEBSTER	4.00	2.82	0.05	1.17	F	3500
KIRWIN	3.94	2.39	0.28	1.85	G	4000
JOHN REDMOND	2.00	2.00	1.00	3.50	F	9400
LAKES						
JEFFREY EC-MAKE UP LAKE	70.00	52.00	0.00	1.10	G	125
PAOLA CITY LAKE	28.50	17.00	0.00	1.30	G	220
CHASE SFL	17.00	15.00	8.00	2.63	G	109
WYANDOTTE CO. LAKE	14.00	14.00	5.00	2.60	G	407
MIDDLE CREEK SFL	10.50	8.00	0.50	1.60	G	280
CLARK SFL	9.50	8.00	0.50	1.25	E	300
JEFFREY EC-AUX. MAKEUP LAKE	8.00	2.00	0.00	1.20	F	460
FORT SCOTT CITY LAKE	7.30	0.00	0.00	0.40	G	350

WIPER

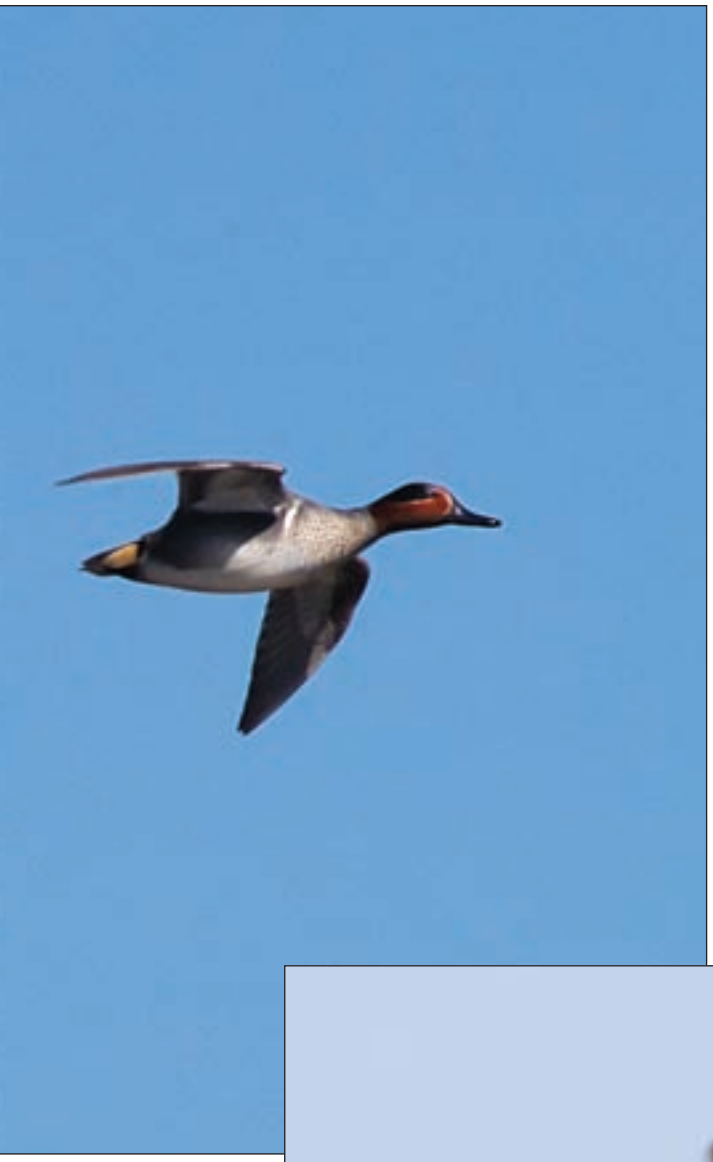
IMPOUNDMENT	Density Rating (>12")	Preferred Rating (>15")	Lunker Rating (>20")	Biggest Fish (lbs.)	Bio Rating	Acres of Water
RESERVOIRS						
MARION	45.67	43.00	3.83	4.97	E	6160
SEBELIUS	39.90	34.52	9.68	5.67	G	1500
EL DORADO	22.67	11.00	0.00	3.15	G	8000
CEDAR BLUFF	18.75	11.00	10.75	9.31	E	6500
LA CYGNE	17.60	7.60	3.60	5.40	E	2600
WEBSTER	15.40	12.62	1.85	14.59	G	3500
POMONA	15.00	12.50	4.75	6.14	G	4000
KIRWIN	12.24	10.36	1.25	3.21	G	4000
CLINTON	8.30	2.00	0.00	2.70	F	7000
MILFORD	8.17	4.33	2.17	6.08	G	16020
CHENEY	8.00	2.50	0.25	4.44	G	9550
LOVEWELL	7.00	4.83	1.33	10.58	G	2986
KANOPOLIS	4.00	1.50	0.50	5.65	G	3550
COFFEY CO. LAKE	2.60	2.50	1.00	4.40	G	5000
JOHN REDMOND	1.50	1.50	0.50	4.80	P	9400
LAKES						
SABETHA - PONY CREEK LAKE	85.00	36.00	1.00	3.97	G	171
MARION CO. LAKE	54.00	20.00	11.00	4.30	G	153
JEFFREY EC-MAKE UP LAKE	29.00	29.00	8.00	10.10	E	125
PAOLA CITY LAKE	24.00	4.00	1.50	7.20	G	220
LEAVENWORTH SFL	21.50	3.50	3.00	5.00	G	175
SHAWNEE CO.-LAKE SHAWNEE	21.50	12.00	2.50	4.60	E	416
MELVERN RIVER POND	21.00	18.00	2.00	4.50	E	100
WELLINGTON CITY LAKE	19.00	17.00	0.00	3.09	G	700
LEBO CITY LAKE	15.00	10.00	8.00	4.50	E	70
MIDDLE CREEK SFL	11.50	1.50	0.00	1.90	F	280
SHERIDAN SFL	11.00	11.00	3.00	9.25	G	67
COLDWATER LAKE	11.00	8.00	0.00	2.85	F	250
PRATT CO. LAKE	9.00	4.00	3.00	5.14	G	51
NEW STRAWN CITY LAKE	5.00	1.00	1.00	4.00	E	3
JOHNSON CO. SHAWNEE MISSION LAKE	4.50	4.00	0.00	4.20	F	121
GRAHAM CO.-ANTELOPE LAKE	3.00	3.00	0.00	2.93	F	80
PLEASANTON EAST LAKE	3.00	3.00	1.00	3.64	G	127
KIOWA SFL	2.00	2.00	0.00	3.00	P	21

The Other Season

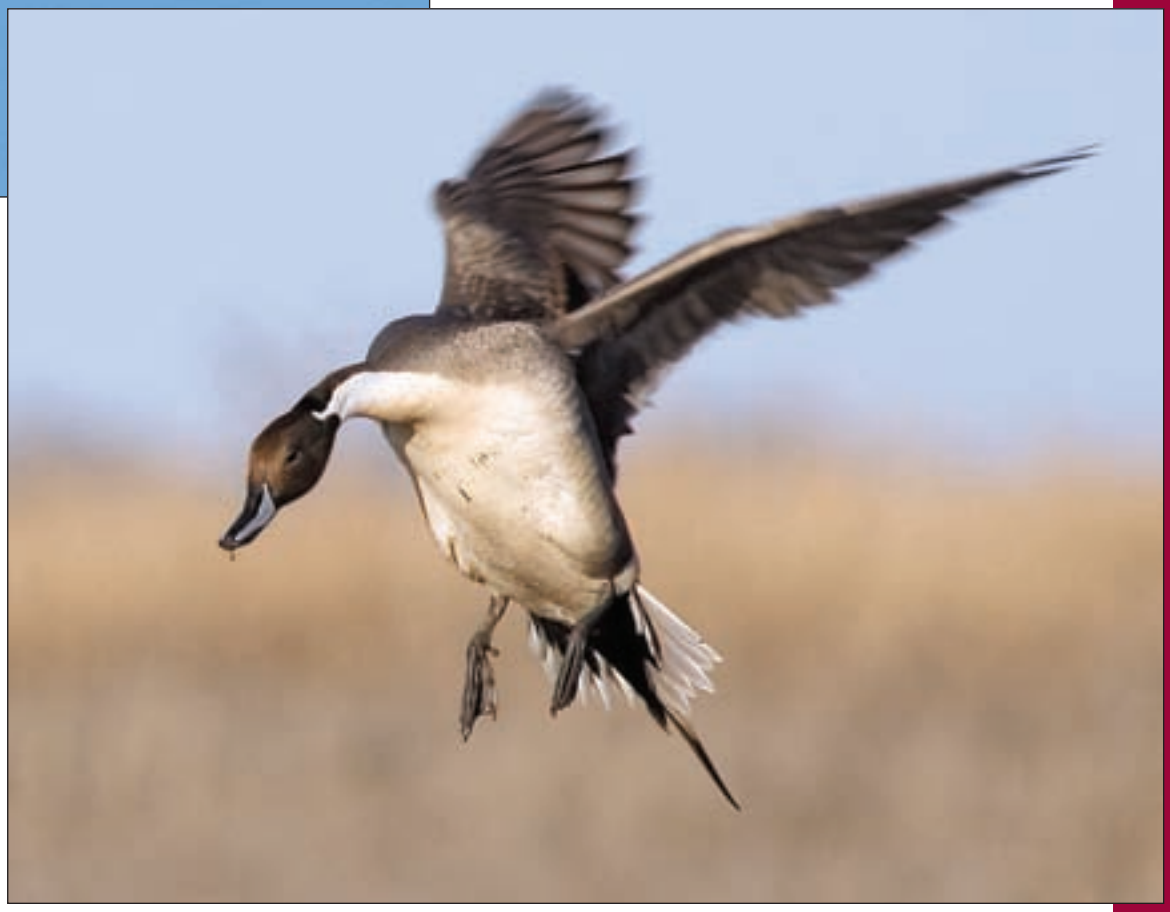
By Mike Blair

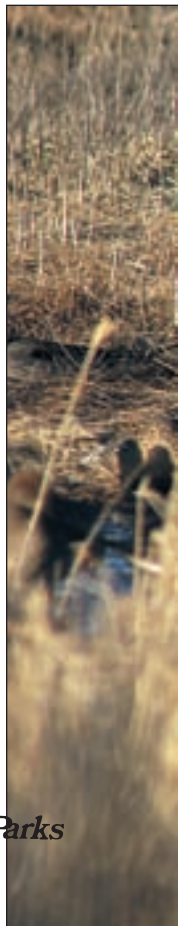
Evening sunlight chased receding clouds and turned them slate blue against the eastern horizon. Wind rustled through cattails, and I huddled deeper into a jacket that wasn't quite up to the chilly breeze. The pool before me lay empty, a rippled mirror that looked lonely without its ducks. I had a grass blind and my Labrador retriever, and that was all. No decoys, no calls, no bait. Shadows lengthened.

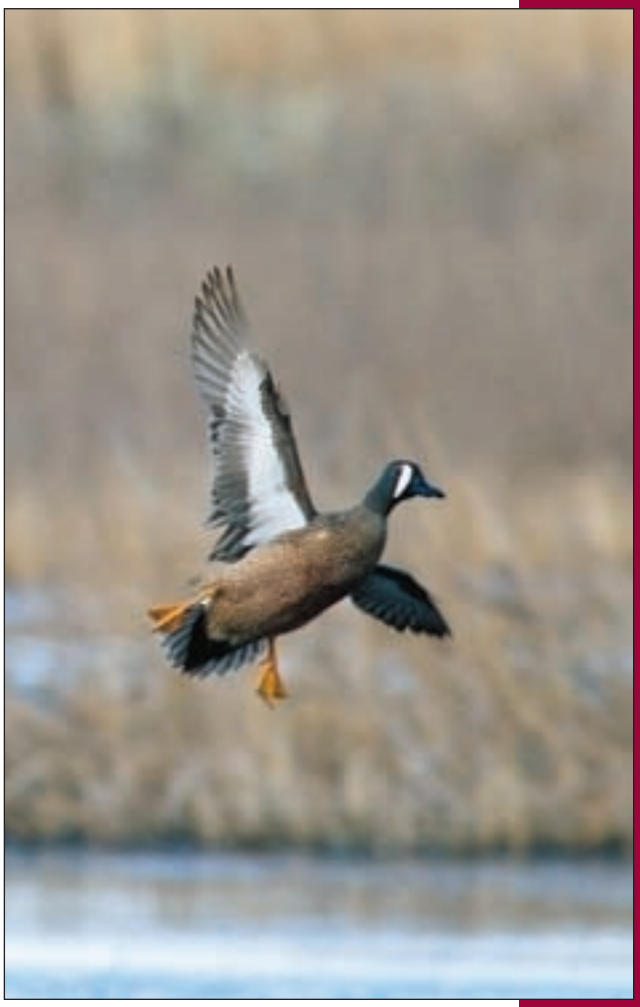
Then they came, waves of mallards, greenwings, and pintails, appearing as golden diamonds on the dark clouds. They hurtled in without circling or hesitation. The smell of ducks filled the air, and thumping wings beat loudly as birds maneuvered in the congested airspace. It was a hunter's dream, waterfowl returning to roost. I shot again and again, and still they came. Nothing fell. The only sounds were air on feathers and duck talk – and the steady click of my shutter. I was hunting all right, but this time, with a camera.



It was the other season, my favorite season, when ducks are dressed in their finest and occupied with courtship. They congregate in ice-out water, eager to head north and get on with spring. It's still early – February and March – but those expecting later migration always miss the best of it. It's a late-winter event, and waiting for mild days relegates your views to the trailing species like bluewings and shovelers. I'm for that too, but I never miss the early push when divers and big ducks light the skies with spectacular rutting flights and fill the marshes with braggadocio. It's the best wildlife show of the year.

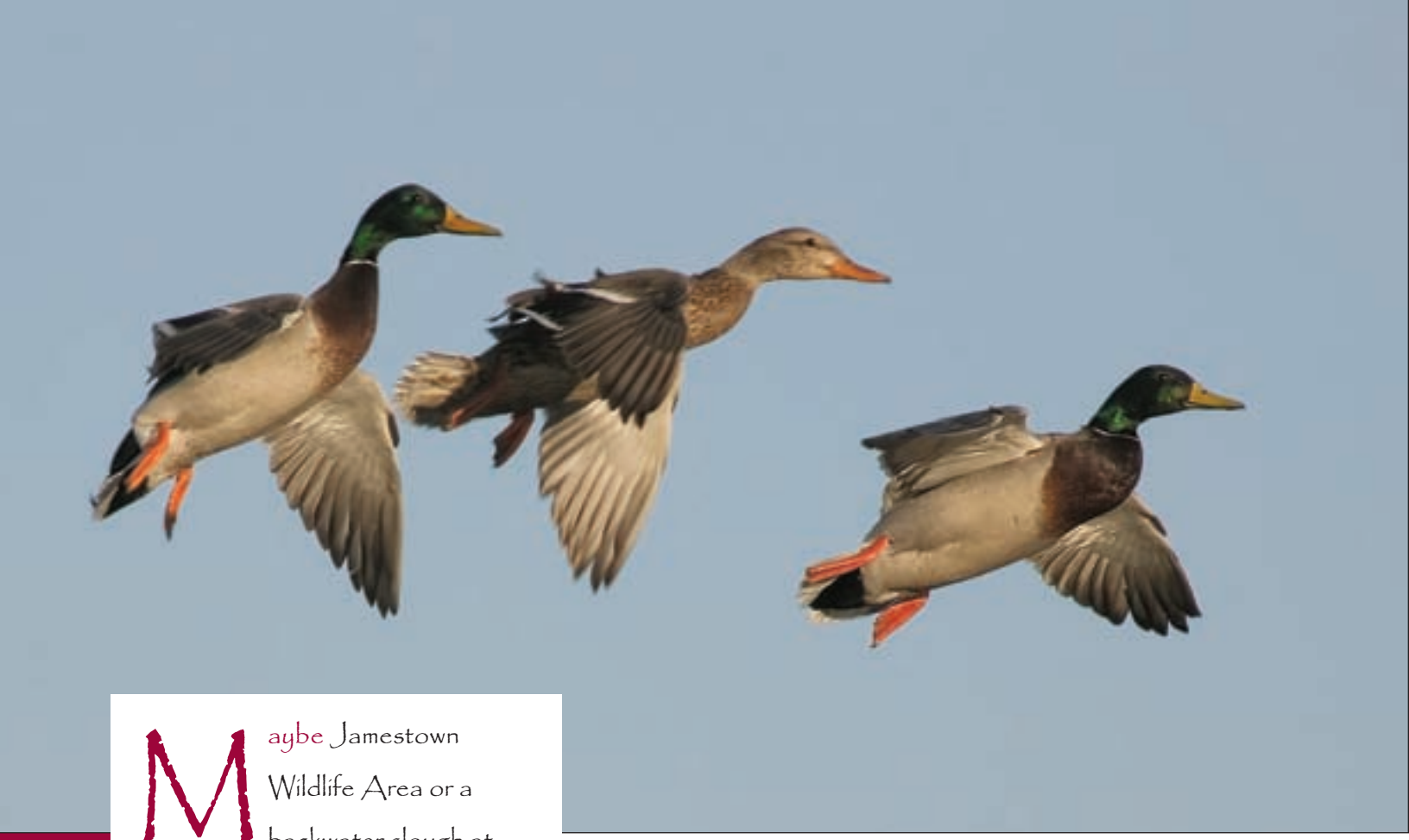






And these moments, with ducks landing by thousands, were good as it gets. The marsh was alive with sound and action. Water splashed onto our blind as birds landed, looking for the last openings in the flooded reeds. Even in shadows, the bright hues of breeding plumage glowed. Gunning season forgotten, the birds showed their best flight tricks as they dove without fear from high overhead to squeeze into the roosting mass. Java and I took it in, thrilled at such splendor and armed with a growing collection of beautiful moments forever captured on film.

This time, we were at Texas Lake Wildlife Area near Pratt. But it might have been Marais des Cygnes Wildlife Area near Kansas City or Cheyenne Bottoms Wildlife Area near Great Bend. It could have been a sunset outing at McPherson Wetlands Wildlife Area or a dawn visit to Atchison's big river country at Benedictine Bottoms Wildlife Area.



Maybe Jamestown Wildlife Area or a backwater slough at Cedar Bluff Reservoir. The point is, it could have been anywhere in the state.

Now, with the sun racing northward toward the equinox, it's time again. I'll be there this evening, waiting for returning birds and thankful for Kansas' great beauty as winter wanes. For all who live here, it's an opportunity whose only cost is to walk into a living scene and become, for a moment, a part of the outdoor world. Join me there in the other season, and you'll never be sorry.

Edited by Mark Shoup

MORE MOVE MUZZLELOADER

Editor:

I would like to agree with the Kent Schaub's "Move Muzzleloader" letter to the editor in the Nov./Dec. 2005 issue of ***Kansas Wildlife & Parks*** magazine (Page 33). I have lived all my life in Missouri and two years ago moved to Kansas after I got married. While I have never hunted in Kansas, I doubt if I will anytime soon just because of the way some of the seasons are set in Kansas. I don't understand the thought of such an early muzzleloader season when it is still so warm out and not having a rifle season to correspond with the rut.

For years in Missouri if you wanted to black powder hunt you had to specify that when you purchased your permit, but at least it was a late season, usually in December.

About 20 years ago, you were allowed one Any Deer permit if drawn by a random selection process or one Antlered Only deer permit, depending on where you hunted. I don't know what Missouri has done in those 20 some years, but now they have unlimited permits, a special late November/December hunt for muzzleloaders, a rifle season that usually hits at the time of the rut, and a very liberal antlerless late season to further allow opportunities to harvest animals while their herd is still at an all time high.

As a Kansas resident, I can walk in to almost any retail store in Missouri or go online and purchase a Missouri Any Deer permit for $175 dollars and any number of antlerless tags after that for $7 each to fill my freezer for gun hunting (not to mention anything about their four-month archery season). I can then use those permits to hunt any of the deer seasons as long as I use the right method specified for the given season.

Missouri went to an experimental antler restriction in about 20 zones in 2004 that made it illegal to shoot deer that didn't have at least four points on a side. That caused a lot of uproar prior to the season. The result was more antlerless deer shot to help thin the numbers and a lot bigger bucks this year because of one extra year of growth, much to the delight of the hunters. (I hope that this regulation applies someday statewide.)

No matter what Missouri has done the last 20 or so years, they continue to hit home runs for their deer hunters while their herd continues to grow. I understand that Kansas and Missouri have quite different landscapes, but maybe Kansas could learn a thing or two from their neighbors by adopting some of the things that have worked out so well across the state line.

As for me, I took a nine-point buck and a doe opening weekend of the 2005 Missouri rifle season with my muzzleloader, and I still had two permits to use later on.

Curtis Hinton
Prairie Village

Dear Mr. Hinton:

A number of proposals are being considered for the Kansas deer seasons, but as you suggest, our habitats are quite different. Missouri has many times the amount of deer habitat, and as a result, many times the number of deer.

If you want big bucks, however, allowing rifle hunting during the rut may have quite the opposite effect. Regarding restrictions on antlers, here is what KDWP deer biologist Lloyd Fox has to say about that topic:

"No large scale project where antler point restrictions have been attempted over a large area and many years has ever been considered a success. When antler point restrictions are attempted over large areas, it is basically one group of people who want big bucks dictating to those who don't care about antler size.

"Also, state wildlife agencies that have attempted antler point restrictions frequently experience complaints that hunters have shot deer and then left them in the woods when they discovered the antlers were below minimum size requirement. In other cases, restrictions have produced smaller racks because the deer with genetics for bigger racks are culled from the herd at a young age."

–Shoup

AWARD WIHA

I recently read of the state's Walk-In programs that lease land for public access by hunters and anglers. The program was briefly described in an article in *Washington Monthly*.

The author of this program should be given a medal for a reasonable, practical solution to a growing problem. As someone who grew up in a rural part of Massachusetts that had a lot of woodland and open fields, I appreciate the value of open space and its wise use. These access programs seem to be win-win situations. It's a win for the farmer, and it's a win for those who like to hunt and fish.

Although I have not had the opportunity to visit Kansas for years, I want to send a $50 contribution to Access Wildtrust and hope it helps a bit to keep this great program going. I would greatly appreciate receiving one of the access program caps and a subscription to ***Kansas Wildlife & Parks*** magazine.

I only hope that your great example is adopted by other states. You should really consider entering this program in the Innovations in American Government Program of the JFK School of Government at Harvard. The program recognizes excellence and creativity in the public sector. Many award-winning programs have been replicated across the country. "Innovations" award winners receive national press attention, serve as models for other programs, and spark research and teaching cases at Harvard and other schools.

Jordan P. St. John
McLean, Virginia

JUST LIKE TEXAS?

Editor:

Lately, there has been a glut of TV hunting programs in which every other show depicts some out-of-state client being guided by some outfitter, killing a giant deer in Kansas. This, in turn, has spawned an army of outfitters who are leasing up land in our state faster than the Cherokee Strip land rush. Long-time resident deer hunters are having traditional hunting places leased out from under them.

I can't blame landowners who are simply taking the money that's being thrown at them, and I realize you don't control hunting shows and outfitters. But you do control the number of non-resident tags, which is what drives all of this. How are all of these guys getting non-resident tags so easily? One video stated, "Getting a tag is no problem. If you don't get drawn, you can get them from the outfitter. The landowner buys the tag, transfers it to the outfitter, who transfers it to the hunter." Is that legal?

The bottom line is that we are heading towards becoming like Texas, where you don't hunt unless you pay an outfitter or pay to be part of a hunting lease. That will be a sad, sad day for our Kansas' hunting heritage.

Rex Heater
Caney

Dear Mr. Heater:

You make some good points – issues that are driving the current Deer Task Force Committee to take a look at our permitting process. The goals of the committee are to learn more about what our Kansas hunters want and to make our permitting system equitable for everyone. I'll keep your email on file with others I've received, and we'll listen to people throughout the state for the next seven or eight months. Next fall, the Deer Task Force Committee will provide a set of recommendations to the Commission and the Kansas Legislature.

It is legal for a landowner to transfer a nonresident permit he has drawn. Half of all nonresident permits are set aside for Kansas landowners.

–Miller

PHEASANTS VS. CHICKENS?

Editor:

I've been reading your magazine for a few months now and have been intending to email you inquiring what birds the ring-necked pheasant, an exotic, may have supplanted in Kansas. Then your recent issue arrived with the answer, "prairie grouse."

I'll modify the question then: given cycles in habitat as you chronicle them and their affect upon pheasant populations, a) would today's improved habitat allow prairie grouse to again thrive, and b) to what extent is "a" being prevented by the success of the ringneck pheasant?

Thanks in advance. (I'm assuming the prairie grouse is different than the prairie chicken, right?)

William Bradley
Jackson, Wyoming

Dear Mr. Bradley:

Greater prairie chicken, lesser prairie chicken, and sharp-tailed grouse are all considered "prairie grouse." Pheasants are sometimes known to lay their own eggs in another species' nest. This happened in an Illinois case where greater prairie chickens were localized on just a few hundred acres of grassland. Pheasant hens laid one or more eggs in the pre-incubation clutch of prairie chickens, in some cases causing the chicken hen to leave her nest before her eggs hatched.

Several recent studies of lesser prairie chickens where there are ample numbers of pheasants but much larger blocks of grassland have shown very little nest parasitism by pheasants. The bottom line is that pheasant nest parasitism does not appear to be a factor that at all limits prairie chicken populations here in Kansas or elsewhere on the Great Plains.

Prairie chickens in western Kansas appear to have benefited proportionally more from the Conservation Reserve Program than have pheasants.

–Randy Rodgers,
upland bird research biologist, Hays

Dear Mr. Rodgers:

What an excellent reply. Thank you very much. I belong to several hunt and fish conservation organizations and appreciate the work they are doing. I'm glad some of it is being done in Kansas, too, along with the federal initiatives and of course your state work. I hope hunting and fishing for visitors and residents – which to my mind is not only "industry" but also a different form of "agriculture" – will continue to grow and develop in Kansas. Thank you again.

William Bradley

Wildlife Officers Scholarships

The Kansas Wildlife Officers Association (KWOA) has announced that it will grant two $1,000 scholarships to students pursuing higher education in Kansas during the 2006-2007 school year. These scholarships help KWOA promote public awareness of the nature and diversity of wildlife law enforcement and help provide educational opportunities for individuals who appreciate Kansas' natural resources.

Applicants must complete an official application form, write a brief resume', and submit a letter of recommendation from any current or retired employee of the Kansas Department of Wildlife and Parks. Applicants may also be required to attend an oral interview with the KWOA Scholarship Committee in early summer this year.

KWOA will accept applications through May 15. For more information or a scholarship application, write Dave Adams, KWOA Secretary, Box 155, Reading, KS 66868; phone, 620-699-3395; or email DaveA@wp.state.ks.us.

—Shoup

Old Cases Resolved!

OPERATION HIGH PLAINS

Operation High Plains was an undercover investigation conducted by the U.S. Fish and Wildlife Service (USFWS) Office of Law Enforcement and the KDWP Law Enforcement Division during the winter of 2002. KWDP received several complaints from hunters regarding a rancher in western Kansas who was using his Super Cub aircraft to chase and harass deer.

Acting on the complaints, the USFWS and KDWP initiated an undercover investigation that ultimately resulted in a federal grand jury indictment of a Scott City rancher and his hired hand for Lacey Act and Airborne Hunting Act violations. An Airborne Hunting Act civil case was also brought against the airplane. Each suspect pleaded guilty to one count of violating the Airborne Hunting Act.

To settle the civil aspect of the prosecution, U.S. District Judge J. Thomas Marten, Wichita, signed a Final Order of Forfeiture for $89,000 in lieu of forfeiture of the aircraft on Sept. 23, 2004. The $89,000 was paid by the rancher.

On Oct. 20, 2004, the ranch hand was sentenced by U.S. District Judge Sam Crow, Topeka, to three years supervised probation, including no hunting in the U.S. for three years and no possession of firearms for three years. He was also placed on home confinement for two months, forfeited a Ruger rifle, and paid a special assessment of $25.

On Nov. 23, 2004, the rancher was sentenced by Judge Crow to three years supervised probation, including no hunting in the U.S. and no possession of firearms for three years. He also paid $15,000 restitution to KDWP and a $25 Special Assessment.

This cooperative investigation between the USFWS and KDWP resulted in the largest monetary settlement of a wildlife case in Kansas history, with fines and restitution totaling $104,000.

—U.S. Fish & Wildlife Service release

FORT RILEY ELK POACHED

On May 7, 2002, KDWP received an Operation Game Thief report that two individuals from Florida had poached two deer and a bull elk while hunting on Fort Riley in Dec., 2001.

A joint investigation by the KDWP Law Enforcement Division, the Fort Riley Game Warden Section, and the U.S. Fish and Wildlife Service's Office of Law Enforcement found that the individuals had legal non-resident deer permits valid for Fort Riley.

The first individual killed a doe on the base without a game tag and hid the animal in his pickup truck. He then killed an 8-point buck. The second individual also killed a 10-point buck that scored 172 on the Boone & Crockett Club's scoring system. The first man then killed a five-by-five bull elk and hid it in the pickup.

Knowing that there was an illegal doe and elk in the truck, the subjects chose not to check in their bucks and drove back to Florida, violating the federal Lacey Act.

During interviews of the individuals, they eventually admitted to their poaching activities.

The first poacher, who was responsible for an illegal doe, elk, and 8-point buck, pleaded guilty to a Lacey Act violation on Nov. 18, 2003, and was sentenced to pay $8,000 in fines and restitution, forfeit a Remington Model 700 rifle with a Leopold scope, perform 100 hours of community service, and serve federal probation for two years, during which time he could not hunt anywhere in the United States.

The second poacher, who was responsible for an illegal 10-point buck, pleaded guilty to a Lacey Act violation on Sept. 21, 2004, and was sentenced to pay $3,750 in fines and restitution, forfeited the trophy buck to Fort Riley, was placed on Federal probation for two years (during which time he could not hunt anywhere in the United States), and was ordered to perform 50 hours of community service.

—Kenny Kessler, Special Agent, U.S. Fish and Wildlife Service, Topeka

Get Caught Recycling

What do former Governor Mike Hayden, television broadcaster Bill Kurtis, Senator Sam Brownback, and former college basketball stars Wayne Simien and Kendra Wecker have in common? They're all promoting recycling in Kansas.

Kansans will soon see (or may have already seen) these regional celebrities on television public service announcements, posters, and other locations as they use their own unique styles to promote a greater role in recycling to conserve natural resources and landfill space.

This effort is part of the "Get Caught Recycling" promotional campaign developed by the Kansas Department of Health and Environment (KDHE). The promotion began in the fall of 2005 and will continue through 2006. More Kansans will join the effort, including crop artist Stan Herd; state spelling bee champions, Kent and Scott Toland of Iola; the president and CEO of Wolf Creek Generating Station, Rick Muench; and Fiesta Mexicana Queen, Melissa Cooper of Topeka.

"Our goal with this campaign is to reinforce the recycling behavior of Kansans who currently recycle and encourage those who don't to join with these well-known Kansans and 'Get Caught Recycling,'" says Bill Bider, director of KDHE's Bureau of Waste Management. "Hopefully, most Kansans will connect with these individuals and recognize that it's cool to recycle."

In 2005, Kansans recycled and composted more than 710,000 tons of materials, enough to completely fill approximately four large football stadiums. Experts believe additional recycling programs and full public participation could double the amount of waste kept out of Kansas' landfills annually.

"We're grateful to every Kansan who recycles in our state, and we're excited to see the potential this campaign has for making recycling a habit for all of us," said KDHE Secretary Roderick L. Bremby. "If everyone does their part to recycle, the impact in Kansas will be tremendous."

During 2006, "Get Caught Recycling" will encourage local officials to promote their own recycling heroes. KDHE will work through its statewide network of recycling organizations to promote these recycling heroes in Kansas communities.

For more information on the 'Get Caught Recycling' campaign, go to www.kdheks.gov. To learn more about recycling in your community, go to www.kansasbirp.com.

—Sharon Watson, KDHE

WILSON RESERVOIR ECO-MEET

On Oct. 12, 2005, the Sylvan Park area at Wilson State Park hosted the Seventh Annual Wilson Lake ECO-Meet. ECO-Meets are competitions in which youth are tested on their knowledge of Kansas' wildlife and plants. The competitions offer a chance for high school students to show what they know and win scholarships. Participants are tested on their general knowledge of Kansas wildlife, as well as one particular group of animals, called the "focus test." The October focus was on Kansas mammals. Both are lab-type tests.

Student teams of three to four members competed in the one-day meet in the following events:

- scavenger hunt – student teams finding examples of Kansas plants and other items;
- interpretive event – student teams giving five-minute presentations based on the format of a Project Wild activity, "Interview a Spider";
- general knowledge of various wildlife species; and
- specific knowledge of a group of animals (mammals, in this event).

In these last two events, students competed as members of a team and as individuals.

To assist in preparation, the student teams were provided study material in advance. They then went to a competition and applied what they had learned. The teams competed for a trophy, medals, and scholarships. Corporate sponsors and local businesses donated to scholarship funds at several regional events and the state meet. These funds are kept in Kansas Wildscape Foundation accounts until the winning students enroll in a college, university, or trade school. The money awarded to students is applied to tuition.

This competition drew 62 students, comprising 16 teams from eight different schools including Ellinwood, Hoisington, Lakeside, Osborne, Russell, and Sylvan Unified high schools, as well as Kanopolis and Ruppenthal middle schools. Winners of the overall team competition $100 scholarships were Marisa Reed, Renee Thompson, Roxanne Wallace, and Miles Wolters of Osborne High School Team A. Second place honors and $75 scholarships went to Sarah Gregory, Nathan Morrison, Joe Prince, and Thomas Standley of Osborne Team B. Finishing third and receiving $50 scholarships were Ashton Archer,

Carlea Nitsch, Autumn Rasmussen, and Jenna Vonada of Sylvan Unified High School Team A.

Kyle Cook of Hoisington High School received two $75 scholarships for first place in each of the two test events. Roxanne Wallace of Osborne won two $50 scholarships for having the second-best score in both tests.

Eight regional ECO-meets were held in 2005, with 24 teams moving on to the state finals at Ft. Larned National Historic Site in Pawnee County on Nov. 2. The results from the state event and all the regional events are posted on the official website, www.ecomeet.org/2005.htm.

Those interested in learning more the about ECO-Meet program may contact Mike Rader at Wilson State Park, 785-658-2465 or MikeR@wp.state.ks.us.

–Mike Rader, conservation worker, Wilson State Park

AQUATIC NUISANCE SPECIES

The zebra mussel is just one species that poses a serious threat to the aquatic resources of Kansas. The Department of Wildlife and Parks urges all aquatic resource users to become informed of aquatic nuisance species (ANS), including Asian carp, New Zealand mudsnails, Eurasian watermilfoil, and white perch. It is critical that all aquatic users follow a few simple precautions to maintain a "zero spread" of these organisms.

Many boaters, anglers, jet skiers, and other aquatic users have heard the devastating news that zebra mussels are thriving in El Dorado Reservoir and the Walnut River in Kansas. Zebra mussels are freshwater, bivalve mollusks that typically have a dark and white zebra-like pattern on their shells. This highly prolific species will rapidly attach to and cover any hard structure in the water. Once attached, zebra mussels are difficult to remove.

Zebra mussels also cause problems by competing for food with young fish and native mussels. Although zebra mussels often make water clearer, the clear water can lead to conditions that create toxic algae blooms. Such algae blooms can kill fish and cause taste and odor problems in human drinking water. The clear water can also allow UV rays to damage fish eggs.

In El Dorado Reservoir, adult zebra mussels can be easily found attached to rocks along the shoreline. Swimmers and waders should wear protective clothing to prevent direct contact with the mussel's small, razor-like shell. The zebra mussel larvae are free-floating and microscopic, which enables aquatic users to unknowingly transport them between water bodies. Once zebra mussels become established, they are nearly impossible to eradicate. All aquatic users (especially boaters visiting El Dorado Reservoir) must drain and clean their equipment before launching in a new water.

It is illegal to import, possess, or release zebra mussels.

The KDWP website is a great source of information to learn what to do when visiting one of the lakes that is infested with an aquatic nuisance species. There are also numerous brochures and informational leaflets available at all KDWP offices. Illustrations of these species may be found in the *2006 Kansas Fishing Regulations Summary*, available wherever licenses are sold.

–Jason Goeckler, aquatic nuisance specialist, Emporia

ASIAN CARP

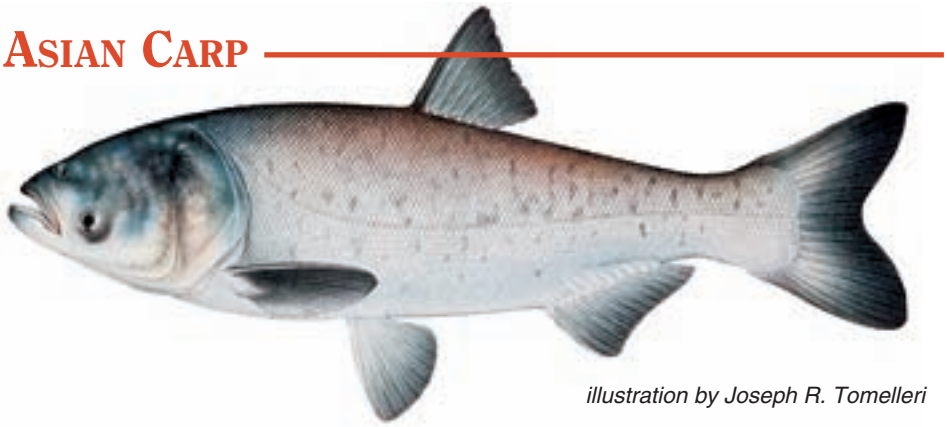


illustration by Joseph R. Tomelleri

TO PREVENT THE SPREAD OF AQUATIC NUISANCE SPECIES:

- learn to identify aquatic nuisance species;
- empty bait buckets on dry land, not into the lake;
- inspect aquatic recreational equipment (boats, trailers, skis, anchors, etc.) and remove any visible organisms and vegetation;
- wash equipment with 140-degree water, a 10-percent chlorine and water solution – or dry for at least five days to remove or kill species that are not visible;
- never release fish caught from one body of water in another;
- do not release aquarium pets. If your family gets tired of its aquarium or aquatic pets, do not release anything from the aquarium (water, plants, fish, or animals) into or near a body of water or storm drain. You could be hurting all of the streams and lakes around the country and killing other fish and animals that already live in the water. If you cannot find a home for the critters in you aquarium, bury them. Dump the water into the toilet or yard, far away from storm drains; and
- contact the Kansas Department of Wildlife and Parks at (620) 342-0658 if you find any nuisance species.

Bunny Hop, Turkey Talk

For some hunters, springtime means more than talking turkey. Rabbit season in Kansas runs year-round, and early spring can be a great time for the avid cottontail hunter. Cottontails are abundant statewide (although concentrations are greater in the central and eastern portions of Kansas) and they are not heavily hunted.

Grassy and brushy habitats produce rabbits like, well, rabbits. Ideal cottontail sites include brambles and thickets, especially those close to crop fields. Abandoned farmsteads with heavy weed growth, dilapidated buildings, and machinery can be cottontail hotspots.

Cottontails are often hunted with beagles, which move the rabbits slowly through cover in front of stationed hunters. This is especially effective in early spring if the state receives a late-season snowstorm and rabbits can be easily seen.

Excellent rabbit hunting can be found on wooded public hunting areas and Walk-In land. Permission to hunt on private land may also be easy to obtain due to lack of competition from other hunters.

Rabbit hunting is a great way to get into the field if talking turkey is not your bag, or it can complement a successful turkey hunt. Cottontail and turkey hunting are also pleasant ways to introduce a youngster to Kansas hunting.

—Shoup

Quivira Hunter Ed Workshop

On Oct. 22 and 23, Quivira National Wildlife Refuge was the site of an event hosted by the refuge, the Friends of Quivira, and the KDWP Hunter Education Program. The event featured several programs. A hunter education class was conducted by local, certified instructors, including Joe Sallee, Mitch Minnis, Todd Wycoff, Ron Richardson, and Gordon Hedrick.

In addition, KDWP biologist Helen Hands of Cheyenne Bottoms gave a presentation on conservation of habitat and wildlife, as well as identification of Kansas wildlife. A key theme of the presentation was the hunter's responsibility to identify wildlife before taking a shot. Whooping crane identification was discussed in detail.

Wayne Doyle, KDWP's statewide hunter education coordinator, conducted a shotgun training course. Incoming and outgoing shots were practiced by the entire class for nearly two hours. Ammo was provided by KDWP, and all 19 students broke targets and received certificates.

Doyle also conducted a waterfowling seminar for 25 new and experienced hunters. The waterfowl enthusiasts rotated through learning stations, including a calling class presented by Steven Hausler, outdoor editor of the *Hays Daily News*. Learning stations also included decoy placement, range estimation, game identification, and practice on clay targets using non-toxic shot.

The Friends of Quivira provided a dinner that included chili and chicken stew, prepared by camp cook Victor Martin.

— Gordon R Hedrick, Friends of Quivira

TURKEY FEDERATION AIDS WALK-IN

The 2006 Kansas spring turkey season runs April 12-May 31, and hunters should have more public land available. The National Wild Turkey Federation's (NWTF) Kansas State Chapter has donated funds to KDWP's Walk-in Hunting Areas (WIHA) program that will increase public spring turkey hunting WIHA to 130,000 acres.

According to Brad Simpson, KDWP private lands coordinator, this was the first time a conservation organization has donated specifically to the WIHA program.

"WIHA is a means of providing public access to private land while giving landowners a way to manage birds in these areas," Simpson said. "With this donation, we'll be able to lease an additional 4,000 acres in northcentral Kansas for turkey hunting."

Kansas' WIHA program was started in 1995 to provide hunters with places to pursue deer, small game, and upland game birds during the fall hunting seasons. In 2001, the spring version of the WIHA program was initiated for turkey hunters.

"In a state with very little public land, Kansas is the perfect place to lease land from private landowners for hunters," said Brandon Houck, NWTF regional biologist for Kansas. "Both hunters and landowners benefit from the Walk-In Hunting Areas program."

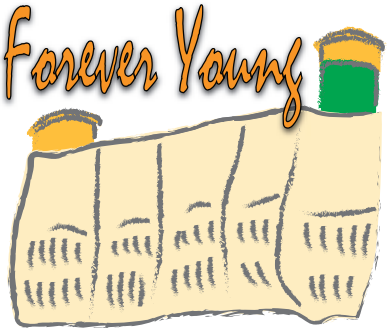
In addition to payment for use, landowners receive immunity from liability when land is leased to the state for recreation. Kansas natural resource officers also patrol the land in the WIHA program, looking for violations from poaching to littering. Landowners can withdraw from the program at any time and receive signs stating that the land has been removed from the program.

Thousands of Kansas resident and nonresident hunters have taken advantage of the spring WIHA program. Available hunting land is marked with signs and listed in an atlas by county.

To learn more information about the NWTF, its Kansas state chapter, or its donation to Kansas' Walk in Hunter Areas program, phone 1-800-THE-NWTF.

—Shoup

Forever Young



by Mark Shoup

When I was in high school in the 1960s, my friends Darrell, Mel, Jim, and I spent most of our autumn and winter free time harassing game birds in Pawnee County. We knew every draw, creek bed, weed patch, pond, or field that might yield a pheasant, quail, or duck. Athletics had conditioned our bodies and youth sharpened our reflexes, so any hapless bird that dared fly in range was meat in the pot come suppertime. We were all good, but Jim was the quickest and deadliest gun in the West. We'd hunt from dawn to dusk and go again the next day if we could.

If we filled our bags early in the day, it was time to show off. We'd drive to the back door of my dad's hardware store, where older men sat around telling lies about *their* youthful prowess afield, and, roused from these memories, they would file out back to admire a pile of wildfowl. If the bag was mixed, the sight would be even more impressive, and we'd suffer, with the smug knowledge of their jealousy, comments such as, "Flock shoot them ducks, did ya, boys?"; "You let them pheasants git in the air before you shot?" or "Them doves weren't on the wire, were they?"

They knew the more they ribbed, the more we puffed up. What better way for men to express mutual admiration?

It was with these thoughts in mind that the four of us reunited on the opening day of the 2005 pheasant season. We had hunted together only once since those bygone days, and the glory was sure to be relived.

We agreed to meet bright and early opening morning at the local cafe, load up on carbs, and hit the field before the birds had a chance. By the time we finished stuffing ourselves on bacon, eggs, hash browns, and coffee, the wind had kicked up, and it was about 10 a.m.

"Just about the right time to catch birds napping," I said. "Don't want to spook 'em too early."

"My thoughts, exactly!" Mel agreed.

Our first stop was a strip of CRP grass about 30 yards wide running one mile, from section line to section line.

"I'll drop you guys off and go around to block," Darrell offered without discussion. Inexplicably, he took his dog.

Anyway, Jim, Mel, and I started down the strip, I in the middle. A 40-mph crosswind howled, but it wasn't cold. About 100 yards in, Jim almost stepped on a rooster, jumped like it had been a snake, and before he could get his rusty old Model 12 up to shoot, the bird caught the wind and was about 80 yards away. One shot, no bird. The next bird got up in front of me, and I shot about five yards behind it, then let up because it was now flying hard in front of Mel. Mel shot once, no bird. Twice, no bird. A three-shot charm dropped the bird in open stubble.

Mel shuffled to the stubble, gingerly stepped over a low electric fence, and walked toward the bird. Suddenly, as if to say *just kidding*, the bird came to life and began running. Mel's fourth shot, however, ended the debacle.

"Four shots, one bird. Not bad, Mel," I ribbed.

"It's birds in bag, not shells on the ground," Mel retorted. "I've got plenty of bullets."

And so our grand strategy for the Big Hunt was devised.

It must have been the hard north wind, but when we finally reached Darrell's truck, we were all huffing and puffing like coon dogs on a hard night. Jim pretended to get a call on his cell phone and said he had to go, so that left Darrell, Mel, and me to fill our bags without the full A-team. Now only eleven birds to fill our bags by noon.

The next field was a CRP quarter of Darrell's right next to milo stubble. "We ought to fill up here," Darrell boasted. "Especially with Shep [his female pointer] along."

Ten minutes into the field, Mel bagged two roosters with two shots, and birds were flushing right and left. "Awwwright!" he yelled. "This is what it's all about!"

His ebullience did not please me in the slightest because I had spent the previous five minutes filling the sky with lead, nary a feather drawn. Shep made a fine point, and Darrell flushed and killed a rooster with one shot. Then I killed two in a row, hard-flying, straight-away shots. *That's more like it*, I thought.

Then really weird things started happening. We were missing shots like old men, which just couldn't be. We were the best shots in Pawnee County, right? Then Mel dropped another bird on shot three, and it fell like a rock in alfalfa stubble about 15 yards from Darrell. A mule deer flushed, and as Darrell glanced at it bounding away, we witnessed the second resurrection of the day. Mel's fourth bird suddenly came to life and flew away.

"Why didn't you go get it!" Mel complained.

"I just figured you'd want to get him yourself," Darrell replied, "beings how you shot him and all."

From there, things got stranger yet. Darrell's dog was pointing birds like crazy, but I think she was really making friends. Pointed birds suddenly flushed wild, and rare downed birds mysteriously disappeared. I think she was warning those birds all along.

By 2 p.m., I was feeling a little light-headed and rubbery-legged. Must have been tons of pollen in that CRP because the other guys didn't look too good either. We had 10 birds, just two shy of a limit each. Great hunting by any standard, but not what we had recalled. We decided that it would be best to leave some birds for next year.

"Great hunt, guys," said Mel. "This is the best I've had in years."

"I never dreamed the three of us would be doing this again," Darrell added dreamily.

And much like a dream it was, a beautiful, great hunt with plenty of birds and old friends bonding. Strangely, though, instead of showing off, we all agreed how nice it would be to have a nap just now.

WHITE OR BLACK?

There are two types of crappie in the Sunflower State, and in springtime, it can be easy to confuse the two. Some anglers believe that any dark crappie is a black crappie, but this is not always the case.

During the spring breeding season, male white crappie can be very dark. This breeding coloration occurs in both species in the spring. Females do not exhibit that coloration. If you catch crappie with the dark coloration, you are catching nesting males. Take some time to look around for the females, which are usually larger and not as darkly colored as the males. Females may stage just off nesting areas, in a little deeper water, before they move to spawn.

The native white crappie is one of the most abundant and popular sportfish in Kansas. Because white crappie are more tolerant of muddy water than black crappie, they are more common. Vertical barring evident in the speckled coloration on white crappie distinguish them from black crappie. White crappie have six spines in the spiny dorsal fin, while black crappie have seven or eight. White crappie are generally found in large schools.

The non-native black crappie has been stocked in reservoirs, and especially in smaller lakes and ponds. Black crappie have a dark green, uniform speckled coloration with no vertical barring. Black crappie prefer clear lakes or ponds and are not as prone to overpopulation as white crappie.

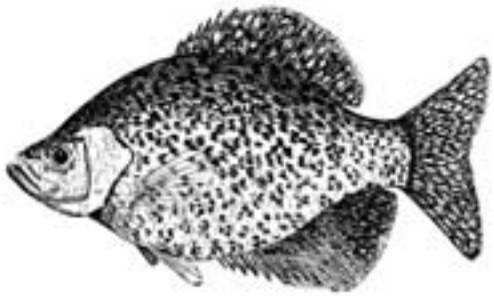
April and May are best months to catch both species, and jigs, minnows, and small spinners are best baits.

—Shoup

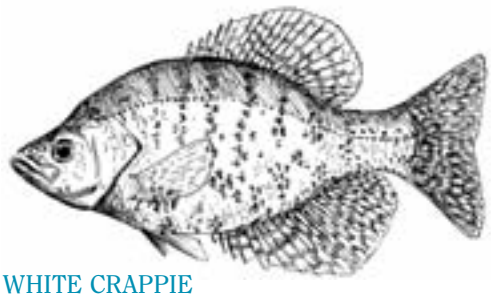
NEW LOOK FOR FISH REGS

Anglers are treated to a number of new features in the *2006 Kansas Fishing Regulation Summary*. Prominent among these is a new format for listing length and creel limits. Instead of the chart featured in previous issues, the 2006 booklet features a paragraph of text for every body of water in the state. This text clearly states the length and creel limits of sportfish found in each water. Each water is listed in alphabetical order according to the five Kansas Department of Wildlife and Parks (KDWP) regions of the state.

Another feature sure to please anglers is a full-color sportfish identification guide, complete with text descriptions and detailed illustrations by renowned fish illustrator Joseph Tomelleri. Look-alike species are grouped together with complementary text to help the angler discern the difference between such closely-related species as white bass and wipers, blue catfish and channel catfish, the state's three black basses, black and white crappie, and others.



BLACK CRAPPIE



WHITE CRAPPIE

Anglers concerned about invasive species now have a much more informative section. Those who want to contact a district fisheries biologist -- about anything from record fish applications to pond management advice -- will find a listing of names and phone numbers of their nearest local biologist. A listing of natural resource officers is also included.

Overall, the booklet should be more user-friendly, with topics grouped by subject matter for quick reference. Various programs designed to improve the overall angling experience are grouped together, as are such topics as fees and general information.

Look for the 2006 booklet at KDWP office or most places that sell licenses or download or view the booklet at the KDWP website, www.kdwp.state.ks.us.

—Shoup

DOUGLAS SFL CLOSED

Last winter, Douglas State Fishing Lake (SFL) was drained for repair of the dam and valve-intake line. A fish salvage order was issued, and anglers were able to take sport fish by a variety of means not normally allowed, without creel limits. Now work has begun on the dam, and by 2007, anglers should enjoy a much better fishery.

While the lake is drained, a water level control structure will be installed, replacing the drain valve. In addition, the upstream drain line will be slip-lined (a trenchless technique for the rehabilitation of buried pipelines), old fencing replaced, an outlet culvert extension installed, and the downstream slope improved. The area around the dam and spillway are closed to the public during construction. The remainder of the area will be open for public use.

Douglas SFL is 44 years old, so the repairs are overdue. The improvements will not only make the lake safer, they should extend its life beyond that of its original construction. If construction and repairs stay on schedule, the lake is expected to be restocked and opened by fall. The lake will be restocked with largemouth bass, channel catfish, bluegill, redear sunfish, and black crappie.

This 180-acre lake – 1 mile north and 3 miles east of Baldwin City – is surrounded by a 538-acre wildlife area that is open to hunting. For more information, phone 785-832-8413 or email richards@wp.state.ks.us.

—Shoup

Robin Redbreast
(*Turdus migratorius*)

It's been called Robin Redbreast (from the nursery rhyme) or American robin, but the first migrating songbird most Kansans spot in springtime is commonly called a robin. Although the American robin is its proper name, it is not really a robin at all. Our robin is a member of the thrush family while the true robin is smaller with red over most of its body. That robin is the national bird of England.

Another misconception about the American robin is that it catches worms by putting its head to the ground and listening for them digging through the soil. Actually, the robin is putting its eye to the ground to catch a glimpse of a worm surfacing, when it snatches the hapless wiggler from the ground. Almost everyone has witnessed this fascinating behavior, easily seen because the American robin, of all American songbirds, is least afraid of humans.

In fact, robins seem to thrive near people. They thrive in cities and towns, and anyone with a lawn has witnessed them hunting. The American robin's range includes all of North America, from Canada to Central America. It is not only the most plentiful American thrush, at approximately 10 inches long, it is our largest.

Next to its habit of letting people approach closely in the open, perhaps the robin's most endearing quality is its melodious and frequent "singing." Campers are often roused in the early morning hours by the robin's song, which features long, rhythmic, paired notes – two or three rising and falling "syllables." Come nightfall, the camper is treated to the same phrases, sounding taps rather than reveille.

Robins generally raise two broods a year. The first, a clutch of three to four blue-green eggs, is laid in early April and has a 12- to 14-day incubation period. Chicks stay in the nest for about two weeks before fledging. A second clutch is laid as late as mid-June. During the second incubation period, young from the first brood often join adult males at a nightly roost. Such roosting can last throughout the summer, but as September approaches, the birds' singing wanes, and flocks scatter to the countryside where they forage on seeds and berries.

By this time, many robins are ready to migrate south although it is not unusual to see a few in Kansas during the winter.

Today, the American robin is protected by federal law, but at one time, they were considered excellent table fare. The great ornithologist John James Audubon considered the meat of the American robin to be among the tastiest of all wildfowl.

–Shoup

Flying Squirrel

The southern flying squirrels (*Glaucomys volans*) are small rodents about 8 to 9 inches long with a 3- to 5-inch tail. They weigh only 1.6 to 3 ounces.

Southern flying squirrels can be found in thickly wooded areas from Central America through the eastern half of the United States and into southeast Canada. They are found in oak-hickory forests in the eastern quarter of Kansas.

Southern flying squirrels live in woodpecker holes and tree cavities. They cannot fly, but they can glide up to 300 feet due to a web of skin extending from their front to hind legs. When gliding, they appear flat and square with a flattened tail that provides an efficient rudder to control aerial maneuvers. Before landing, the tail flips upward, and the squirrel lands, hind feet first with its head up.

Females produce two litters of one to seven young. In the wild, southern flying squirrels may live as long as six years. They forage at night on nuts, seeds, leaf and flower buds, berries, insects, nestling birds, bird eggs, and carrion.

–Great Plains Nature Center

COMMISSIONER PERMIT WINNERS

The 2005 Kansas Legislature approved provisions for annual issuance of a limited number of Commission Big Game Permits. The permits, made available through a drawing process, could be auctioned or raffled to raise money for conservation organizations.

Seven permits were available. Each commissioner drew one ball out of a hopper: 1) Harrington drew the Rocky Mountain Elk Foundation, Wichita Chapter (Elk); 2) Lauber drew the Rocky Mountain Elk Foundation, Greater Kansas City Chapter (deer); 3) Meyer drew the Ducks Unlimited, South Central Kansas Chapter (deer); 4) Dykes drew the Kansas Friends of NRA, Greenwood Chapter (deer); 5) the Sebelius drew Quail Forever, State Chapter (deer); 6) Wilson drew Kansas Friends of NRA, Flint Hills Chapter (deer); and the Johnston drew Kansas Friends of NRA, Nemaha Valley Chapter (deer).

Organizations awarded a permit pay the established fee for the permit drawn. No more than one permit may issued to each qualifying organization, and all applicants were required to submit proof of nonprofit status when applying.

–Shoup

KDWP Secretary Mike Hayden; Bruce Gollnick, Kansas State chair, Rocky Mountain Elk Foundation (center); Dr. James Harrington, commissioner, Liberal.

KANSAS BIRDING FESTIVAL

On April 28-30, the Kansas Birding Festival will be held near Wakefield. The three-day event will feature seminars on birds and birdwatching, guided field trips, a chance for bird lovers to network, food, and much more.

On Friday, April 28, the event will begin at the Wakefield Methodist Church Community Center for registration and guided field trips to the Milford Wetlands, the Republican River Bottoms, the Kansas Landscape Arboretum, and preparation for Saturday's tours. The event on Saturday will begin with breakfast from 4 a.m. to 5:45 a.m., followed by guided field trips, including the prairie chicken field at Fort Riley, the Konza Prairie, the Landscape Arboretum and North Timber Creek, the Milford Wetlands and Republican River Bottoms, and the Kansas Department of Wildlife and Parks (KDWP) Milford Nature Center and Fish Hatchery.

After an 11:30-1:30 lunch break, events will include optional birding on your own; a seminar entitled "Eagles, Terns, Endangered Species"; a bird program by Pat Silovsky of KDWP's Milford Nature Center; and birding at the Kansas Landscape Arboretum. At 7 p.m., a banquet will be held with a keynote address by wildlife photographer Bob Gress, and prizes will be given away.

On Sunday, April 30, breakfast will again be served from 4 a.m.-5:45 a.m. This will be followed by a prairie chicken field trip to Fort Riley, birding in local areas, and "Backroads Adventures" with Rick Dykstra.

Fees and pre-registration are required. For more information, contact Kansas Birding Festival, P.O. Box 175, Wakefield, KS 67487 or visit the website www.kansasbirdingfestival.org .

–Shoup

MOUNTAIN MAN ENCAMPMENT TAKE 2

Last year, the Cherokee Strip Museum held its first Mountain Man Living History Encampment. The event was well attended and had more than 400 school children visit. Because of its success, the museum is in the will conduct its second annual event.

This year's encampment will be a college-style rendezvous. This means that not only will visitors be able to view mountain men in their element, but they will also be able to learn their skills. The encampment will be bigger this year and offer many more camps for viewing. Classes will be held in flint knapping, quilting, survival skills, beadwork, bow making, tomahawk throwing, knife throwing, and archery, among many other skills.

The museum is also planning to have Native American dancing again this year with several adult dancers from across the area who meet once a week in Bartlesville, Okla., to practice and learn tribal traditions. An Arkansas City local, Jim Hammon, will lead the group.

An unusual addition this year will be bagpipers. Lonnie Liljegren from McPherson will be performing, and he is attempting to gather other members of his pipe group to accompany him. This should add a European flavor to the fur trade period.

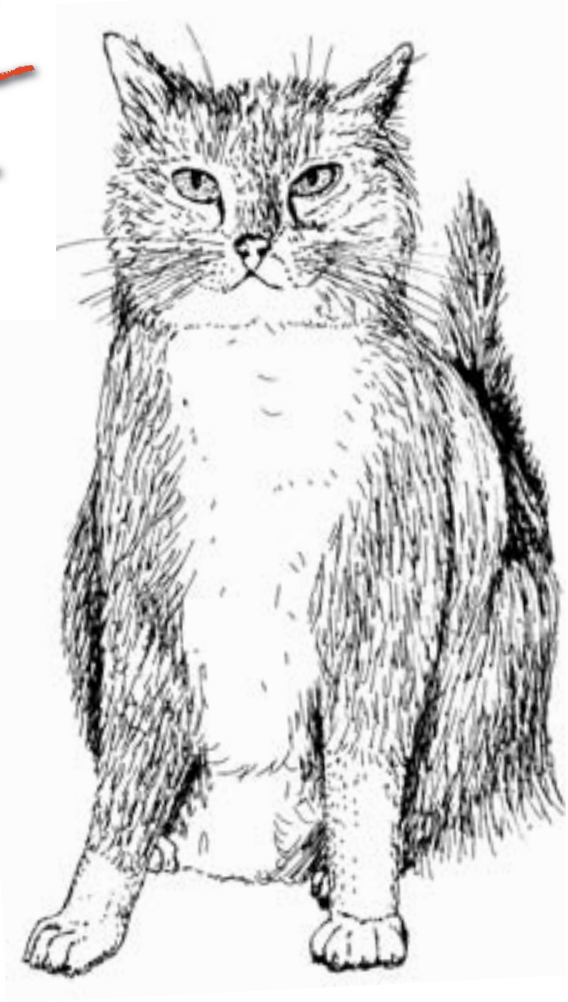
Other possible additions to the event include fiddlers who play pre-1840 folk music from England, France, Scotland, or Ireland dressed in period clothing and pre-1840s era food vendor.

The event this year is scheduled for March 31-April 2. The camp will be open for visitors from 10 a.m.-5 p.m. on Thursday and Friday and until noon on Sunday. Fireside talks will be included on Friday and Saturday evening at 7 p.m. Admission for the event is $3 for children 6-12 and $5 for adults and seniors. For more information, phone 620-442-6750 or visit the museum's website at www.arkansascityks.gov.

– Heather Ferguson,

by Pat Silovsky

All Cats: INDOORS!



Have you ever glanced over at your pet cat and thought it looked like a lion or another of its wild relatives? The common house cat has been domesticated for about 5,000 years, which is a shorter period of time than most other domesticated animal such as dogs, cows, horses, and pigs. Dogs have been domesticated for about 12,000 years. The cat is the only domesticated animal that is solitary in the wild, as opposed to living in packs, herds, or flocks. As a result, cats have remained closer to their wild cousins, especially in their instinct to hunt and capture prey, and free-roaming pet cats kill a lot of birds and other wildlife.

Scientific studies have shown that well-fed cats do, in fact, kill wildlife because the hunting instinct and the urge to eat are controlled by different parts of the cat's brain. Although it may not eat what it kills, the fact that a cat has a full stomach does not mean it won't stalk and kill an animal. Cats with bells on their collars still kill wildlife because cats can learn to silently stalk their prey. In addition, birds or small animals do not always know that the sound of a bell means danger, and bells on cats do not protect young animals that can't get away.

It is true that cats kill mice, but they don't just kill the house mouse, which is not native. Cats kill native songbirds and game, as well as mice such as voles, harvest mice, and others that are food for native hawks, owls, snakes, and bobcats. And cats don't do a very good job of getting rid of house mice because these mice live in small spaces (like inside walls or attics) where cats can't follow.

In Baltimore, Maryland, researchers showed that

Most people don't believe that cats outdoors really do much damage, but the following statements about cats are all myths:

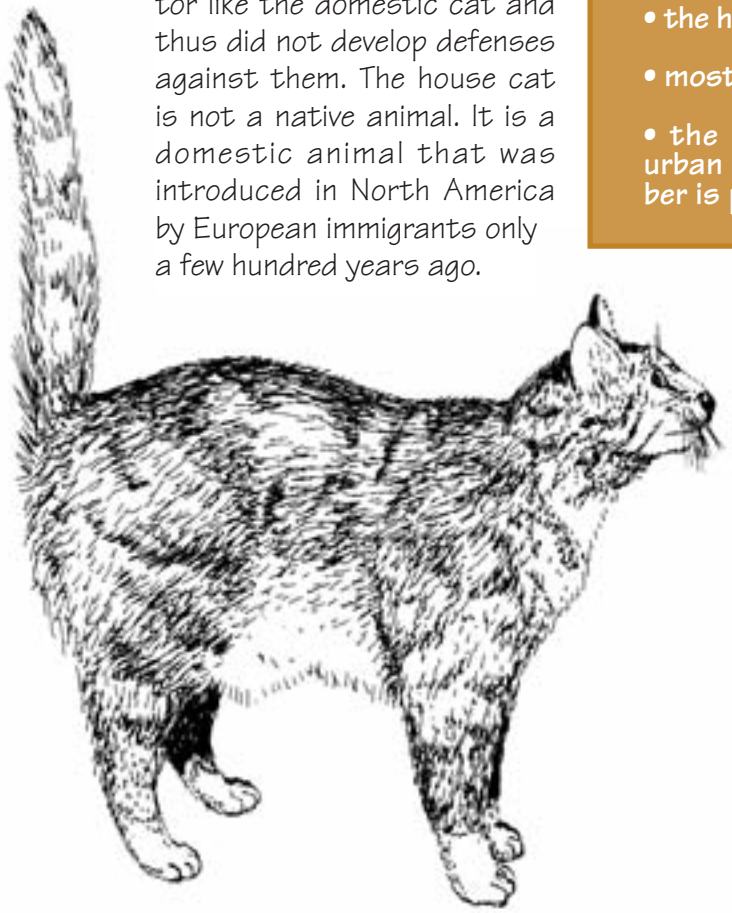
- **well-fed cats don't hunt;**
- **bells on cat collars keep them from killing;**
- **fences keep cats out;**
- **indoor cats just can't be happy;**
- **other cats kill birds, but not my cat;**
- **my cat stays in his yard. It never wanders;**
- **I know where my cat is;**
- **my cat got a bird, but its OK. I saw the bird get away;**
- **my outdoor cat keeps mice out of my house; or**
- **so what if my cat kills a couple of birds? Nobody cares.**

cats did not prey on rats over 6 ounces. In fact, cats were seen eating side by side with rats at garbage dumps.

There are nearly 65 million pet cats in the United States. If each pet cat in the U.S. kills 4.2 birds per year that would mean 273 million birds die each year due to pet cats. If we guess that half of these cats never leave the house, that still leaves about 136 million birds each year to die in the jaws of house cats. These do not reflect the numbers of birds and small animals killed by the growing number of free-roaming, wild house cats living in urban and rural areas.

You may still be saying to yourself, "Birds get preyed on every day by all those natural predators. What's the big deal?"

Remember, wildlife in the Western Hemisphere did not originally have a small, abundant predator like the domestic cat and thus did not develop defenses against them. The house cat is not a native animal. It is a domestic animal that was introduced in North America by European immigrants only a few hundred years ago.



One of the first studies done concerning house cats and wildlife was in Wichita between May 1998 and June 1999. There were 41 cats in the study, and the owners of the cats lived in various areas of the city, including apartment complexes, duplexes, trailer parks, and single-family homes. Here are some of the highlights of the study:

- **34 of the 41 cats (83 percent) produced actual physical evidence of a bird kill (feathers in cat feces);**
- **declawing had no effect on hunting. The top predator cat in the study was declawed. Six of the seven declawed cats in the study produced evidence of a kill;**
- **cats confined indoors at night still killed birds, but the study did suggest that night-time hunters may kill more birds;**
- **most of the study cats did not bring the killed animal to their owner;**
- **cat owners in the study had little information about where their cat really was (proven by radio-tracking of the pet);**
- **the protected bird species at highest risk was the house wren;**
- **the highest risk months for birds were May and June;**
- **most of the birds killed were adult birds, not young; and**
- **the study information suggests that the average urban cat in Wichita kills 4.2 birds per year. This number is probably quite low.**

What should a cat owner do? The best thing you can do for birds, small animals, and your cat is to keep your cat indoors. Most people have lots of reasons for not doing this, but it is easier than you think. Even "outdoor cats" can adjust to being kept indoors. It will take some adjustments, but it is possible. Kittens that are kept indoors live perfectly happy lives. And with patience and time, we can change most pet cats that roam outdoors into happy indoor pets.

For more information about this, see the CATS INDOORS Program online at www.abcbirds.org or do a web search on this important issue.

Backlash

by Mike Miller

Excusing My Way to Better Wingshooting

I started shooting sporting clays about five years ago at the invitation of a friend. It sounded like fun, and it was, but it was also humbling. I wasn't nearly as skilled at wingshooting as I had imagined. I decided to stay with it because, I reasoned, it would make me a better wingshot while hunting.

My friend continued to call, and I was quickly taken by the sporting clays game. I needed a shooting vest, a new shotgun, shooting glasses with different colored lenses for different days, a shooter's bag, extra choke tubes, and shotgun shells — lots and lots of shotgun shells. I was good for the industry.

It wouldn't be so consuming if it wasn't so much fun shooting a shotgun. When you do things right once in a while and the target explodes in a puff of dust, it's really intoxicating.

Improvement came slowly, and I had to swallow my pride. My shooting partners were more experienced and better shots. And while they offered advice from time to time, they didn't appear too concerned when I missed. And I missed a lot.

My first few sporting clays outings went like this: We'd approach a station and one of the group would step into the box. They were polite and never made me go first, allowing me to watch them shoot. We'd view the targets – one would scream from behind some bushes ahead then another would disappear over our heads. "Report pair," someone would announce. While I tried not to show it, I was panicking, wondering how I would break the first target before it disappeared behind the trees. Then one of my "buddies" would calmly load, ready his shotgun, and say pull. Boom, boom. Two targets were reduced to smoke just like that. "That looked easy," I'd say under my breath.

When it came my turn, though, my initial reaction proved accurate. Boom, boom. "Loss, loss," the scorer would say in a low voice so as not to humiliate me. Boom, boom. "Loss, loss," was a familiar refrain. If I asked for help, my friends always chimed in, but they were careful not to be pushy. I soon learned that most of them shot targets with different techniques, so sometimes I'd get completely different instruction. It was apparent I wasn't going to be a sporting clays phenom, but I improved gradually and had a thirst for more knowledge about clays shooting.

Five years later and I'm still learning and trying to get better. And it's still a humbling sport. As soon as I think I've figured certain targets out, I'll miss four in a row. But I think it's made me a better wingshooter in the field; at least I think so on some days. But what I know for sure is that it's provided me with a whole new world of excuses. Sporting clays shooters are nothing if not creative when they miss. Here are some examples I've used without shame.

"Live birds are so much slower than clay targets, I'm shooting in front of everything."

"Darn. I checked the lead and looked at my barrel, which means I stopped my swing and missed behind."

"I lifted my head and shot over that bird."

"I didn't focus on that bird's head, so I'm sure I was behind."

"My gun speed wasn't good. That bird passed my barrel, and I never caught up."

"I have the wrong colored lenses in today. With this light, I really need my yellow ones."

"I lost sight of that bird in the shadows, which caused me to flinch."

So even though I've shot thousands of shells at clay targets, and even though I'm a better shot than when I started, I still miss live birds. I still miss pheasants, because they scare the snot out of me when they explode at my feet. I still miss ducks because they look like they're floating in place when they're not. I still miss doves because they zig when I zag. And I still miss quail because I look at the covey instead of the single.

I'm better than I was, but I can still improve. Another 20,000 or 30,000 targets, and I'll be there. And along the way, I'm sure I'll pick up a couple more creative excuses. It'll be a short summer, so I better get started.

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You can make a difference

Kansas Department of Health and Environment
Bureau of Waste Management

KANSAS DON'T SPOIL IT!

"It looks like all of these are keepers"
– Mike Hayden, Secretary
Kansas Department of Wildlife and Parks
Governor of Kansas 1987-1991

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