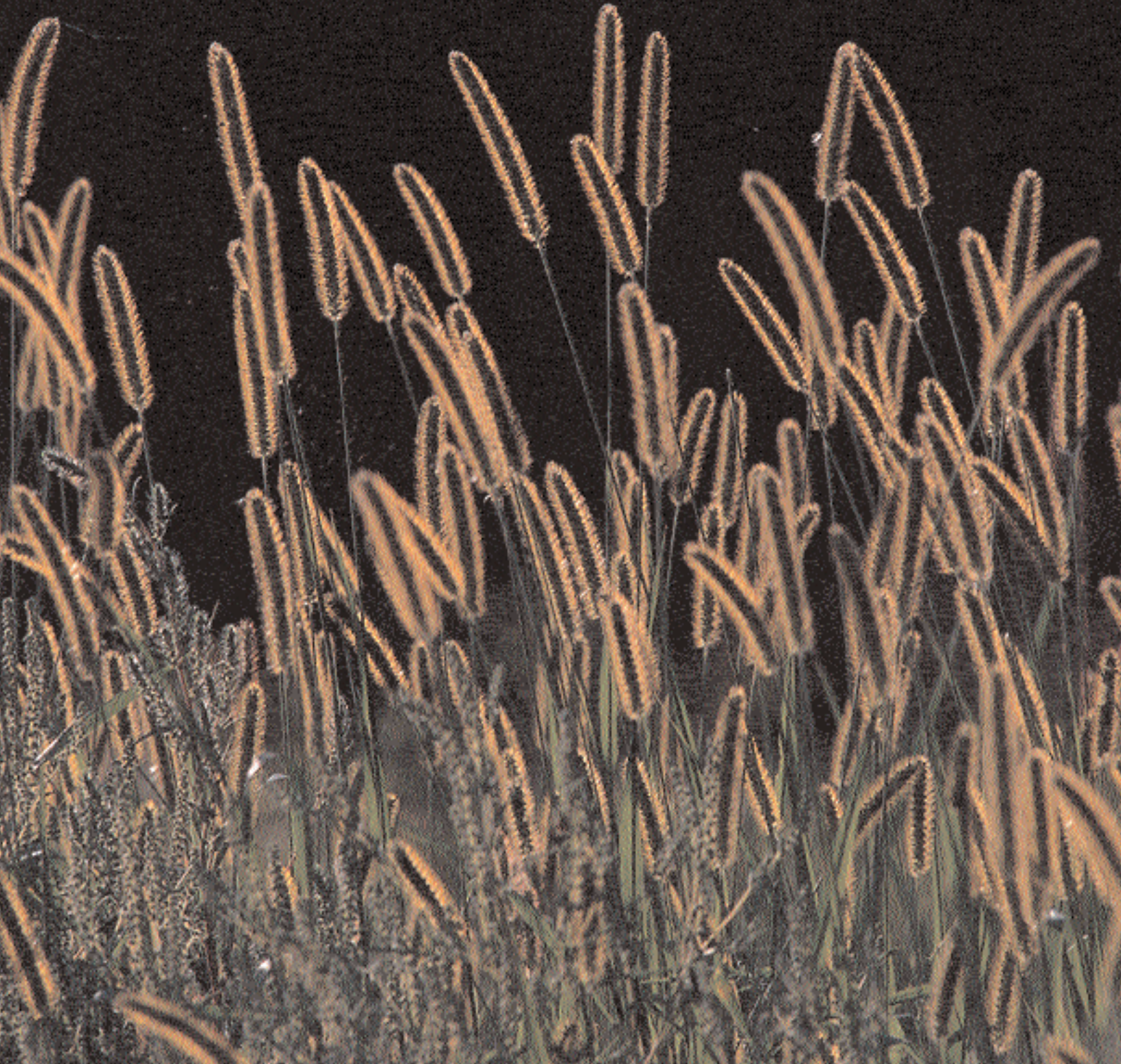


# KANSAS

*Wildlife & Parks*

JULY/AUGUST 2000

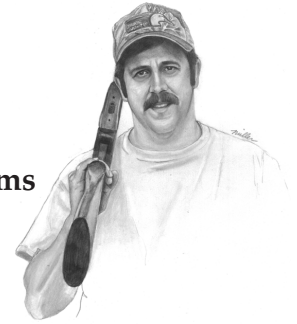
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## The View From Here

by Steve Williams



# Deer Management 2000

I commend Kansas deer hunters for the tremendous job they have done harvesting antlerless white-tailed deer the past few seasons. Regulated hunting is our most effective tool in controlling deer numbers, and through hunters' efforts, we are turning the corner on reducing deer numbers in problem areas of the state.

I would also like to thank the generous landowners who open up their land each year to hunters. With so little public land in Kansas, landowner cooperation is imperative. Hunter access to private property remains the most important factor in controlling deer populations.

If landowners find it difficult to locate hunters, the department has a list of more than 4,000 individuals that are willing to harvest antlerless deer on private lands. And if hunter harvest is insufficient, landowners can apply for deer depredation permits. These permits are free and allow the landowner, or a designated agent, to harvest a prescribed number of deer outside of normal season dates. For more information on these programs, call (316) 672-5911, or your nearest KDWP office.

This coming season our agency will again ask deer hunters to focus the majority of the hunting pressure on antlerless white-tailed deer. Unlike past years when leftover buck-type permits could be purchased after the initial draw, this season all leftover permits will revert to whitetail antlerless-only. This change will further emphasize the harvest of does, while enhancing Kansas' renowned trophy buck population.

The extended whitetail antlerless-only season has been increased to 14 days for this season. All unfilled deer permits revert to whitetail antlerless-only for this season, and hunters may use any legal equipment. Hunters with a primary permit will again be able to purchase up to two game tags, but this year hunters who didn't purchase a primary permit may buy the \$10 game tags after Dec. 31 to use during the extended season. When you add in a primary permit, two leftovers, and a unit archery permit, sportsmen will be allowed to harvest up to six deer, five of which must be antlerless deer.

Through actions taken by the Kansas Legislature, resident landowners, and all tenant/managers who own or manage 80 or more acres were allowed to apply for an any-deer nonresident permit through May 31. If the landowner, tenant, or manager receives a nonresident permit through the random drawing, they may transfer

the permit to anyone, with or without compensation, provided the transferee does not have a Hunt-Own-Land, Statewide Archery, or Firearms/Muzzleloader primary permit.

KDWP opposed the provisions of this legislation that now allow landowners to sell permits. Our agency is interested in reducing deer numbers, not in promoting hunting to the highest bidders. I appreciate and support a landowner's right to make money on their property, but allowing a profit motive to enter into the deer management equation may exacerbate access problems and actually encourage the harboring of deer on some property. The bottom line is simply this: KDWP is heading down a road to reduce deer numbers. This legislation takes us down a different road, with no convergence in sight.

I am the first to admit that our current deer permitting process can be confusing. Many have likened it to building an addition onto your home. We started with one room, and as opportunities increased, we added on to the house. After several regulatory and legislative changes, it's hard to get to every room!

With this and other factors in mind, our department will be undertaking a major project over the next few months, entitled "Deer 2000". Agency personnel will be hosting public meetings across the state to discuss past, present, and future deer management in Kansas. Various conservation groups will be represented at these meetings, and the public is encouraged to attend. "Deer 2000" will not only provide KDWP an opportunity to promote the programs that are already in place to reduce deer numbers, including deer depredation permits and the hunter referral system, these meetings will also provide everyone with an interest in our deer resource a forum to voice their ideas.

It is our agency's goal to manage deer populations at levels compatible with their habitat, and acceptable to the public. I firmly believe the "Deer 2000" meetings will help us reach that goal. By combining the ideas and opinions of the various stakeholders with the biological expertise of agency personnel, the department will be well equipped to update Kansas' deer management plan.

*Steve Williams*

# KANSAS

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**About the covers**  
**Front:** Backlit foxtails catch the light of a morning summer sun, hunting of a hot day ahead. Mike Blair filmed the shot with a 400mm lens, @ f/16, 1/125 sec. **Back:** A fast hand is useful during bullfrog season, one of summer's most choice outings. Mike Blair captured this nighttime action with two flashes and a 55mm lens, @ f/16, 1/60 sec.



**Editorial Creed:** To promote the conservation and wise use of our natural resources, to instill an understanding of our responsibilities to the land.  
**Equal opportunity to participate in and benefit from programs described herein is available to all individuals without regard to race, color, national origin, sex, religion, age or handicap. Complaints of discrimination should be sent to Office of the Secretary, Kansas Department of Wildlife and Parks, 900 Jackson St., Suite 502, Topeka, KS 66612.**





# The Resurrection Of Cedar Bluff State Park

by J. Mark Shoup  
*associate editor, Pratt*

photos by Mike Blair  
*photographer/associate editor, Pratt*

*When the bird of wonder dies, the maiden Phoenix  
Her ashes new-create another heir  
As great in admiration as herself.*

*—William Shakespeare*

If you are traveling north on U.S. 183 toward Hays, take a left on K-4 at La Crosse. Drive west until you reach K-147. Then head north. The scene begins to change, subtly at first, from relatively flat farmland to the rolling landscape of the Smoky Hills — so named, one must assume, because of the blue-gray shimmer above the most distant hills in this region.

This is big-sky and stone-post

country, rugged shortgrass prairie where early settlers figured hot summers and cold winters and building miles of fence with 500-pound limestone monoliths worth the trouble for the beauty of living here.

Ten miles north of K-4, you round a steep hill on a sharp curve, and the scene is breathtaking. In front and to the east, the Smoky Hill Valley stretches in all its pastoral

glory, relatively untouched by time. To the northwest lays a stunning scene of man-made beauty — Cedar Bluff Reservoir. This reservoir and the state park that serves it are works of art carved by the hand of man with the unqualified, and quite unexpected, help from Mother Nature.

The reservoir was completed in 1951 as a source of irrigation and municipal water supply, with the

added benefit of recreation. By 1962, Cedar Bluff State Park had been completed. With few outdoor recreation areas in this arid region, the park attracted visitors in droves — campers, hikers, and boaters, as well as fishermen. Cabins were built on public ground overlooking the lake; a local marina opened its doors, and the future seemed bright.

As fortune often turns, however, the light dimmed as water flowing into the reservoir slowed during the 1970s. According to a Bureau of Reclamation (BOR) study completed in 1984, groundwater mining and agricultural practices such as terracing, stubble mulching, and pond development stemmed water flow. And of course, irrigation was taking water out.

By 1981, the lake had dropped 43 feet, and the flaming western Kansas sun had parched land once bathed in deep, clear water. In 1992, the 6,800-acre reservoir had been reduced to a mere 900 acres with a maximum depth of 12 feet.

As the lake dried up, so did visitation to the state park. Access to this now-small lake was a problem, with boat ramps and camping facilities far from the water's edge.

Lynn Davignon, a long-time fisheries biologist with the agency, said that at the time, "I thought it would never come back."

Although the future looked bleak, in the interim dry years, the Kansas Department of Wildlife and Parks would obtain a majority of the water rights to the lake as the BOR forgave past debt of the local irrigation district. KDWP paid the BOR some \$360,000 to help cover that debt. Wildlife and Parks also agreed to pay part of BOR's annual operating costs on the dam.

For park users of western Kansas, the foresight of this agreement would soon become apparent.

The first rains came in the spring of 1993, bringing almost as much water into Cedar Bluff Reservoir as had come in the entire decade of



Just 10 years ago, Cedar Bluff covered less than 900 acres. The receding water level left most park facilities far from the water's edge and unappealing to campers.

the 1980s. Amazingly, above average rainfall continued the following two years and through much of the 1990s, bringing the lake to full conservation pool in 1998.

Brush, weeds, and timber were flooded, creating the richest aquatic habitat the lake had ever experienced and ideal conditions for a revival of the fishery. The resulting restoration of water level and fish populations brought visitors streaming back to Cedar Bluff State Park, with real hope that this jewel of the high plains has returned for more than an extended visit.

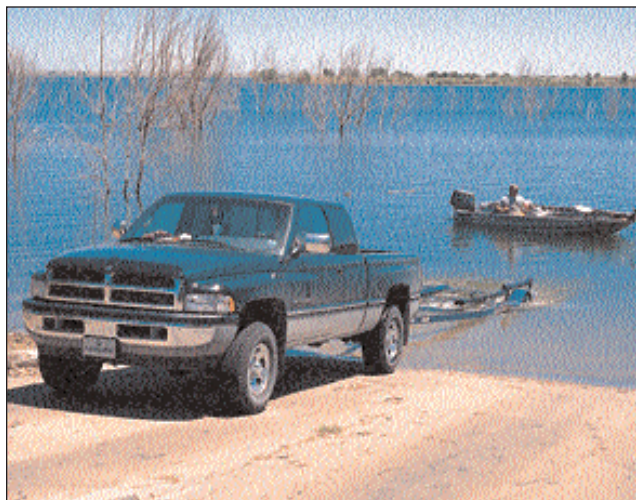
The water-right agreement had been a hand well played. In 1991,

Cedar Bluff State Park had a mere 50,000 visitors the entire year, generating \$34,000 in revenue. By 1995, 155,000 visitors generated \$103,000, and in 1999, the park entertained 245,000 guests and collected \$214,000 in revenue.

Park manager Troy Brown, who took over this area in 1994, acknowledges the role of Mother Nature in reviving interest in the park. He also understands that it takes the hard work and dedication of folks working at and associated with the park for a successful park revival, which is still in progress.

"The park's success is absolutely tied to the water level, as well as to the fisheries. Lynn has been doing a great job of helping publicize this," Brown explains. "We've been doing a lot of radio and TV interviews. And we've had great help from our Friends Group, the Cedar Bluff Die Hards."

The Die Hards, which boasts about 50 members, organized in 1995 and began raising money almost immediately. They offer aluminum recycling bins in the park, maintain sailboat mooring areas near both North Shore and South Shore areas, and operate a firewood sales program. In a unique arrangement, the Die Hards also



Today, the lake covers more than 6,000 acres, much of it flooded timber, and provides excellent fishing. Renovation of park facilities is ongoing, and visitation is skyrocketing.

operate a dry-dock storage facility for campers and boats. To avoid conflict with area business, however, they have agreed to charge more than the local marina.

Through their efforts, the Die Hards have accomplished much. In addition to proposing and accepting

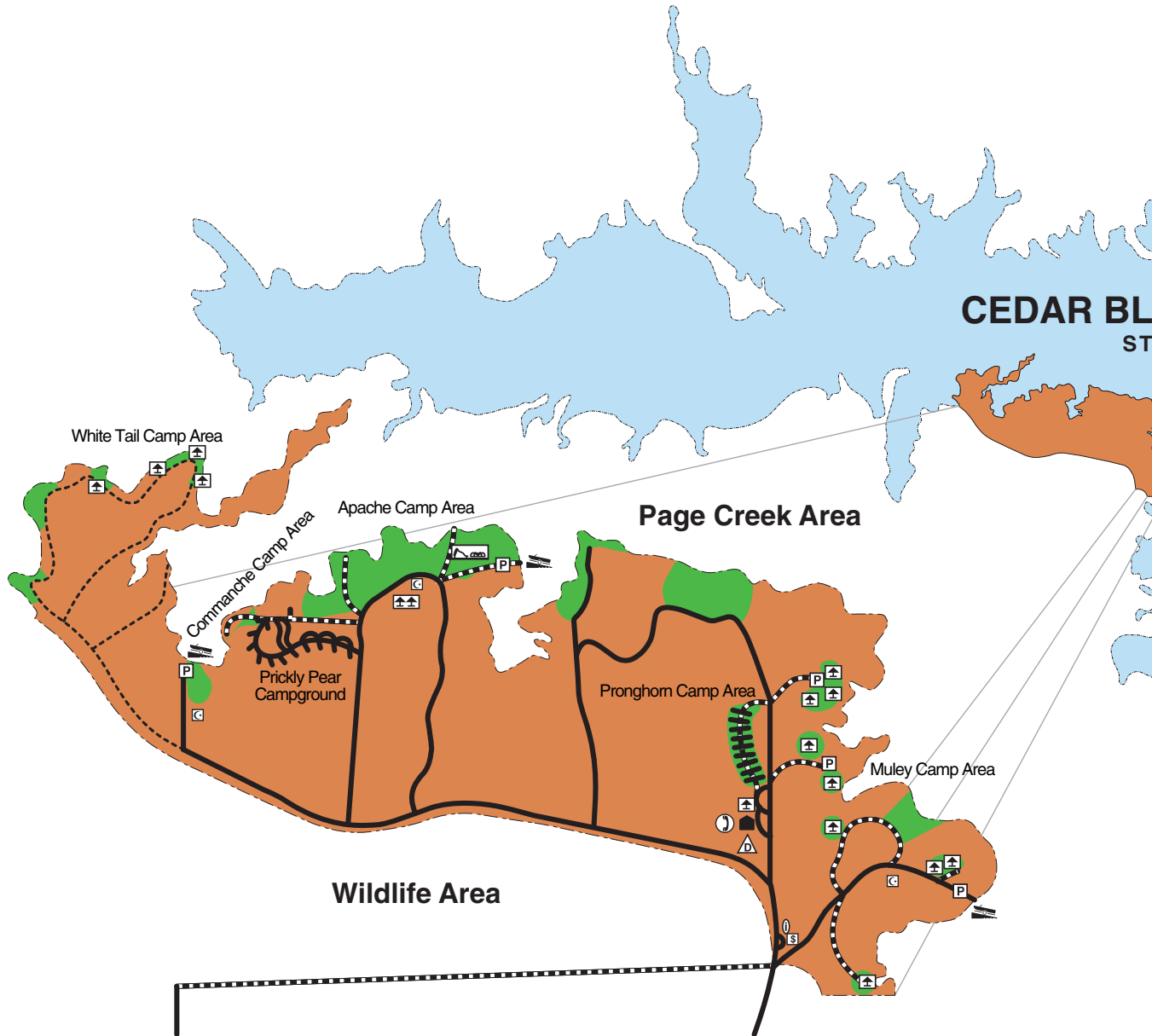
new projects that cost money, they provide volunteer labor for new projects, as well as maintenance. This group has been invaluable to the park.

“The Friends Group is starting to get a lot of younger, energetic members who are pretty much willing to

help us do whatever needs to be done,” Brown explains.

In 1999, the Die Hards helped renovate two showerhouses, held two general work days, and worked and provided refreshments for the Cedar Bluff Park Pumpkin Patch Halloween event. In addition, they

# CEDAR BLUFF STATE PARK



deposit funds generated from the two primitive rental cabins at the park and pay for upgrades and repairs on the cabins.

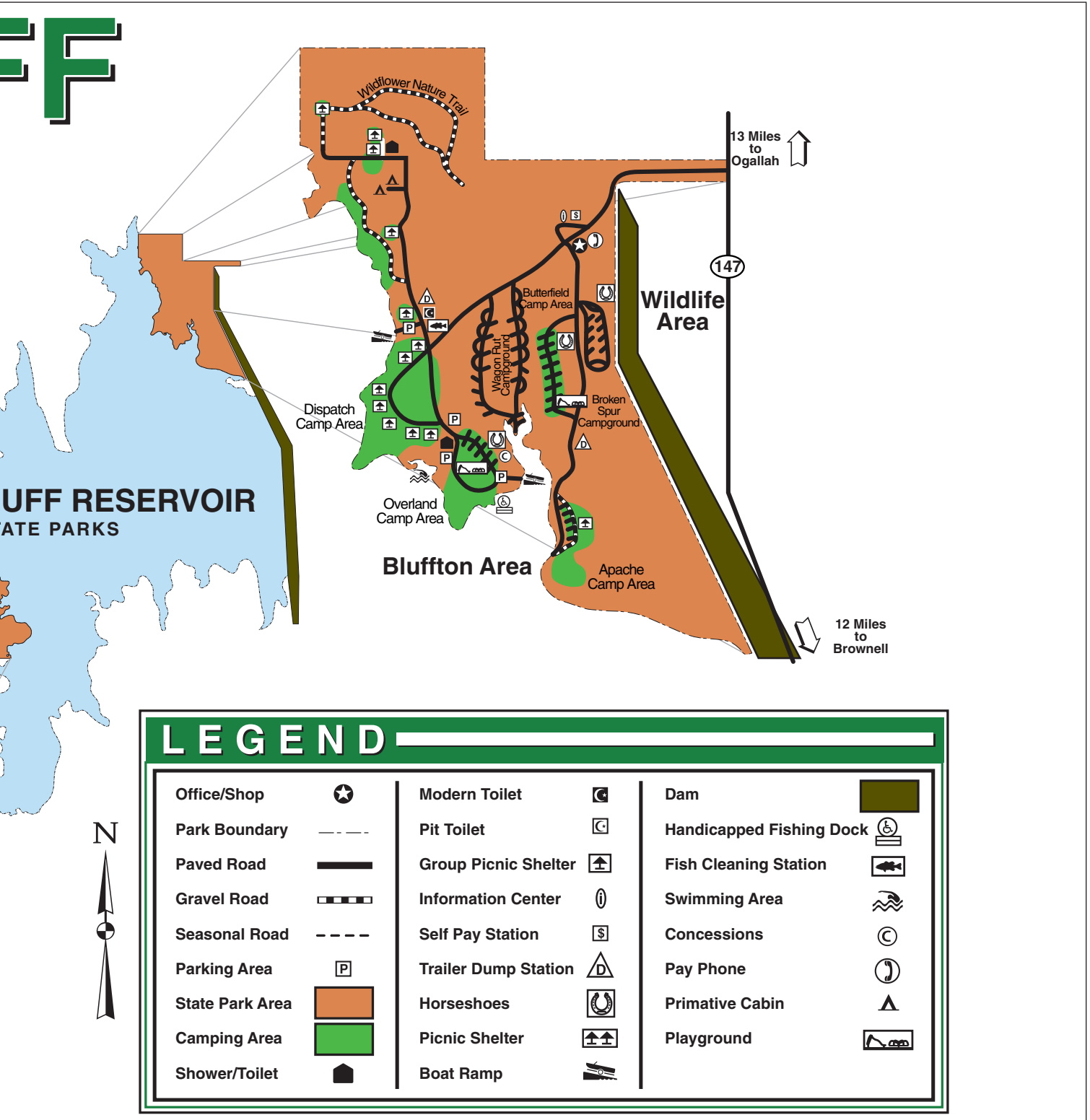
Past Die-Hard projects include purchasing playground equipment for Overland and Butterfield campgrounds, purchasing tools and law

enforcement radios for park personnel, putting benches in the community shelter in the North Shore park, and providing labor for various projects.

The Cedar Bluff Lake Association, while not technically a Friends Group, also has been a great friend

to the park in recent years, according to Brown.

The Lake Association has contributed funding for a boat ramp enhancement project and purchased a courtesy dock to complement the ramp. They also provided funds to help construct a fishing dock and





Friends groups play a key role in the renovation of Cedar Bluff State Park. With only 3.5 full-time staff positions, park manager Troy Brown utilizes these groups to make many improvements.

donated money along with private individuals to assist the department with the construction of the North Shore Community Shelter. (This shelter is available for groups to rent and hosts Sunday church services from Memorial Day through Labor Day.)

“The Lake Association also brings a lot of visitors to the park each May with their annual Fishing Tournament and in August with their Fun Days. In January, a Wakeeney businessman and Lake Association member came to me with the proposal to move Wakeeney’s Celtic event, TH’ Gatherin’, to the park,” Brown said.

Designed to resolve feuds in ancient Europe, this event is an assembling of descendants of the clans and tribes of ancient Celtica from which the progenitors of many area residents migrated. This year’s Gatherin’ was held May 6 and 7 and included Celtic games and athletic competition, folk bands, food and drink, and authentic Celtic merchandise.

Western Kansas Bassmasters, out of Garden City, has also shown appreciation for the revival at Cedar Bluff State Park. In the late 1990s, the group sent Brown a letter asking

what they could do to help the park. The result was a new courtesy dock, making 2000 the first year the park has had a courtesy dock at every boat ramp. Such effort from a group more than 100 miles away shows just how important this park is to the folks in western Kansas.

One other group adds a valuable social-service dimension to Cedar Bluff State Park. Dream, Inc., located in Hays, is a nonprofit organization with a goal of providing intervention, treatment, and counseling for children of chemically-addicted families. One of the group’s programs sponsors a camp for these



All boat ramps in the park are now equipped with courtesy docks for convenient loading and unloading.

youth at their building on the west end of the North Shore.

Several years ago, they took over an abandoned dormitory and converted it to a summer camp to council youth from chemically-addicted families. Dream, Inc., is a Friends Group for this building, which may also be rented by the public when not in use.

Just east of Dream, Inc., is the Cedar Bluff Christian Service Camp. This group conducts summer church camps for youth, servicing some 25 churches in the state.

The 950-acre Cedar Bluff State Park is split into two areas — the North Shore (Bluffton) and South Shore (Page Creek). Currently, the

park has 121 utility campsites, three shower houses, two vault toilets, five boat ramps, one beach, one fish cleaning station, one fishing pier, two group shelters, 30 picnic shelters, and two playgrounds, as well as numerous primitive campsites.

Cedar Bluff is also one of four state parks in Kansas with cabin rental. (The others are Eisenhower, El Dorado, and Lovewell.) The cabins are primitive, offering no water or electricity, but they are equipped with solar lights obtained through a Kansas Corporation Commission grant. Each cabin has a lantern, gas stove, water jug, two tables with six chairs, and five beds, equipment primarily endowed by the Coleman Company. Originally designed for hunters, the cabins are available year-round with heat provided by wood-burning stoves. With the lake up to normal levels, the cabins are in demand throughout the summer. Rental is \$25.50 per night plus a \$5 reservation fee.

In addition to these facilities, approximately \$1 million will be spent over the next three years for further development. A portion of this money will come from the Kansas Legislature’s Parks 2000 pro-



gram, with the remainder provided by the federal Sport Fish Restoration Act fund's Motor Boat Access program and the Bureau of Reclamation.

On the North Shore, projects in year 2000 (some already completed) will include an Americans with Disabilities Act (ADA) accessible courtesy dock at the Marina Cove boat ramp.

Thirty new electric and water campsites have been installed at Wagon Rut campground near the park office this year, and new showerhouses will be built in both the Overland and Butterfield areas. A temporary boat-mooring dock was placed in Marina Cove, and the breakwater in this cove has been extended. Also on the North Shore, at the Cove 1 boat ramp and parking lot, a third lane will be added to the boat ramp, and the parking lot will be extended. A campground will be constructed south of the park office.

In the South Shore area, 2000 projects include placing rock and grading at the Comanche boat ramp parking lot, installation of a new light at this area, and an ADA-accessible courtesy dock at the Muley boat ramp. An additional floating fish-cleaning station will be built near the Muley boat ramp, and 17 electrical and water hookups have been constructed at the Prickly Pear campground. A new showerhouse will be built near the Apache area and a courtesy dock added at the boat ramp. This area will also receive a new parking lot and night light.

In addition to all the improvement projects in the park, some 60 special events are held each year, including bass tournaments, weddings, public dances, special picnics, community service programs, TH' Gatherin', and yes, work days.

While all this activity is exciting for the staff at Cedar Bluff State Park, and pleasing to constituents, it can be quite a chore to keep up with. Still, the park is well maintained with a total staff of 3.5 full-time employees, five summer aides, and two summer rangers, who

might quietly appear at any campground during the summer. (This patrolling philosophy has not only made the park safer, it has made park patrons feel more secure.)

With the park split as it is, Brown and crew must do a lot of running back and forth between the areas, which is about a 20-minute drive. This is in part due to the fact that a sometimes-precarious, unpaved county road is the only access to the south shore. Brown sees this as one of the few major needs yet to be addressed for this now otherwise rejuvenated area.

"With no paved road to the South Shore boat ramps, a lot of activity is concentrated on the North Shore," he explains. "But this is a county road. The county might be willing to give us the road if we had the funding to pave it."

The issue of this road aside, one might ask how so much is being accomplished at Cedar Bluff. The answer is a highly-dedicated staff, starting with Brown. He has gone out of his way to look for new ideas and please local businesses and interest groups, while balancing the needs of the park — a difficult task in any circumstance. As with all the parks I have visited and written about over the years, I can't say

enough about how impressed I am with the dedication, energy, and innovative spirit of these folks. Brown sums it up in his description of Steve Seibel, the area's general maintenance and repair technician, a summary that could apply to the entire Cedar Bluff staff:

"I've got the best GMRT in the state," Brown declares. "He not only knows maintenance, he knows the history of the area. He sells permits, plans projects, and innovates. His philosophy matches mine, which means looking for new things to draw folks in."

All this talent and hard work have resulted in what Brown believes is the park's greatest asset — diversity. From full-utility campsites to primitive campgrounds, from the swimming beach to the summer youth facility, from great fishing to great hunting — Cedar Bluff State Park has it all.

It was not always so, but like a phoenix rising from the ashes of her own funeral pyre, Cedar Bluff has risen from the dead, surpassing her former glory days as a haven for the souls of western Kansas who hunger for outdoor recreation. Today, that hunger has been satisfied. ♡



Mark Shoup photo



# Are Our Fish Safe To Eat?

by **Randall Schultz**

*fisheries research biologist, Emporia*  
and

**M. Steve Cringan**

*environmental scientist, Kansas Department of Health and Environment, Topeka*

photos by **Mike Blair**

*photographer/associate editor, Pratt*

***If you eat fish from urban streams and rivers, you need to be aware of fish consumption advisories issued jointly by the Kansas Department of Health and Environment and the Kansas Department of Wildlife and Parks.***

Whether you fish our state's urban streams and rivers or are simply concerned with the environment, fish consumption advisories for parts of certain Kansas rivers and streams likely have you troubled. The advisories, which are jointly issued by the Kansas Department of Health and Environment (KDHE) and the Kansas Department of Wildlife and Parks (KDWP), are a result of the pesticide chlordane.

The two agencies recommend avoiding consumption of bottom-feeding or bottom-dwelling fish (carp, catfish, bullheads, freshwater drum, sturgeon, buffalo, and sucker species) from the following locations: *The lower Kansas River from the I-435 Highway crossing (Holliday) to the confluence with the Missouri River in Kansas City (Johnson and Wyandotte counties); Antioch Park Lake (south) in Antioch Park, Overland Park/Merriam (Johnson County); Cow Creek and major Cow Creek Branches of Pittsburg and Cow Creek downstream of Pittsburg to Lawton (Crawford and Cherokee counties).*

For the following locations, the recommendation is one five-ounce

meal per month or twelve five-ounce meals per year for the species listed above: the Arkansas River within the City of Wichita and downstream to the confluence with Cowskin Creek southeast of Belle Plaine (Sedgwick and Sumner counties); the Little Arkansas River from the Main Street Bridge immediately west of Valley Center to the confluence with the Arkansas River in Wichita (Sedgwick County); Cowskin Creek in Wichita and downstream to the confluence with the Arkansas River southeast of Belle Plaine (Sedgwick and Sumner counties); Cow Creek in Hutchinson and downstream to the confluence with the Arkansas River (Reno County); The mainstem of the Blue River from the U.S. 69 Highway crossing to the Kansas-Missouri state line (Johnson County); the Kansas River from Lawrence (below Bowersock Dam) downstream to Eudora (Douglas and Leavenworth counties); the mainstem of Kill Creek from the confluence of Spoon Creek to the Kansas River (Johnson

County); and the Cottonwood River within Emporia and downstream to the confluence with the Neosho River (Lyon County).

The consumption advisories are not new for these waters. Previously, “consumption limitations,” less restrictive than current listings, were in effect for some of these locals. Advisories were lifted when chlordane levels in fish were believed to have decreased.

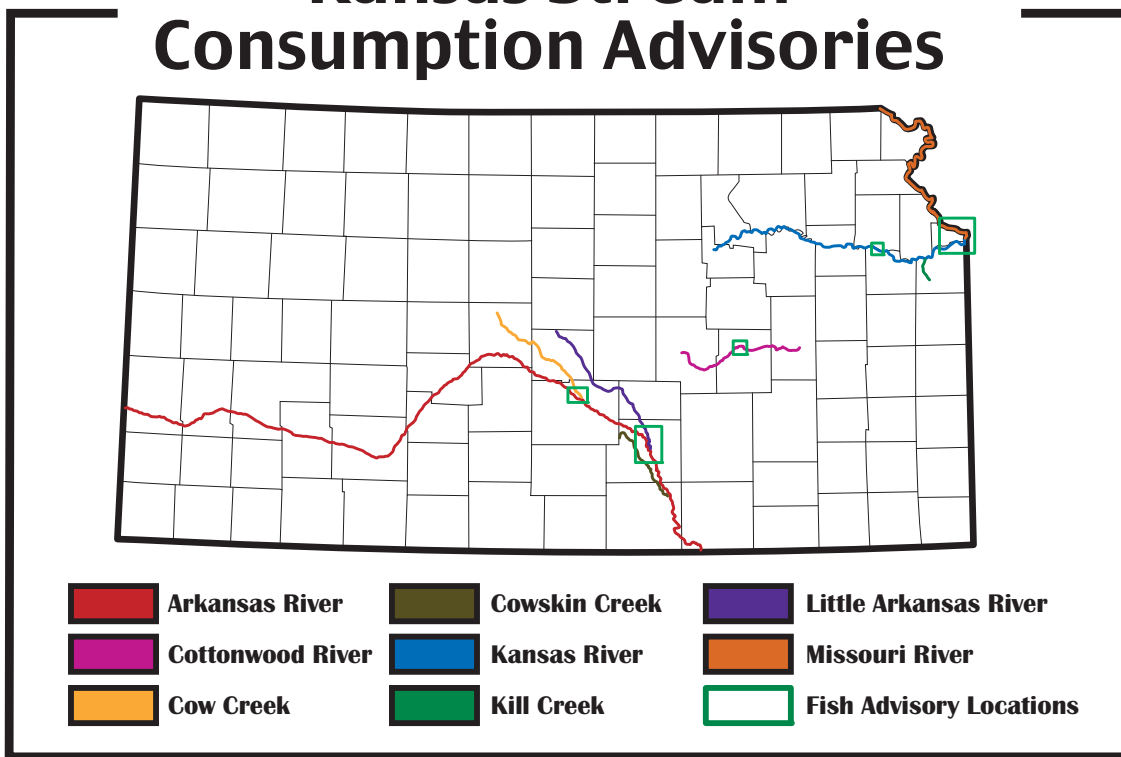
As KDHE, the Environmental Protection Agency (EPA), and other states have intensively monitored fish tissue quality, much has been learned about contaminants in fish. Past KDHE fish consumption advisories were issued and rescinded with less data than that used to issue the current advisories. The risk assessment of these advisories is conservative, or protective of consumers. While the risk assessment techniques may be criticized as too conservative, their primary purpose is to make people aware of the data,

provide a worst-case risk estimate, as well as provide guidelines on eating fish while reducing risk.

These advisories do not mean that Kansas fish as a whole are unsafe to eat. People most at risk are those who utilize fish caught in urban areas as a large proportion of their diet. The “typical” Kansas angler spends the least amount of his or her time fishing flowing water. Fish in lakes, particularly non-urban lakes where most Kansans fish, do not appear to have significant levels of chlordane.

Officials from KDHE and KDWP annually collect as many as 50 samples of fish from up to 20 locations across the state. These samples are then analyzed by EPA and KDHE laboratories for a variety of pesticides, organic chemicals, and toxic metals. The fish targeted for analysis are channel catfish and carp. Both are bottom dwellers and bottom feeders and have high fat levels, as opposed to fish such as

## Kansas Stream Consumption Advisories



The fish consumption advisories are generally restricted to flowing waters in urban areas – Wichita, Hutchinson, Emporia, Lawrence, and Kansas City. Anglers most at risk are those who regularly eat bottom-feeding fish taken from these waters.

bass, sunfish, crappie, and walleye, which are low in fat. Because many toxic substances accumulate in the sediment of a river and in the fatty tissues of fish, catfish and carp are good indicator species of overall water quality.

Minimum data requirements for issuing an advisory include a minimum of three duplicated (three to six fish each) fillet samples of bottom-feeding fish collected over a three-year period, and an average quantity of the contaminant in excess of the level of concern. Most advisories will be issued with considerably more data, including larger numbers of duplicate or triplicate samples, sample analysis between different laboratories, multiple species of fish, and more than three years of sample collection. Lifting or changing an advisory will require a reduction of the contaminant to an average quantity below the level of concern for a three-year period.

The data used for the advisories is based on raw, uncooked fillet samples with the skin removed. The "no consumption" water bodies exceed chlordane levels which have the potential to cause non-carcinogenic toxic effects at consumption rates of less than three five-ounce meals per week. Water bodies in the "consumption limitation" advisories have a lesser degree of contamination, but it is recommended that caution be exercised in the amount and frequency of consumption. These water bodies have chlordane levels which could potentially cause non-carcinogenic toxic effects at rates of consumption greater than three to seven five-ounce meals per week. All urban streams are included in this category because of the general trend of these waters being contaminated with chlordane.

Chlordane is the chemical of most concern in Kansas fish. Commercial grade chlordane is a mixture of various chlorinated hydrocarbons which is typically 50 percent pure chlordane. The remainder is heptachlor (actually more toxic than chlordane), chlordene, nonachlor, and several other

closely-related compounds. These multiple characteristics make the chemical difficult and costly to trace in the environment.

Chlordane is an insecticide that was produced solely by Velsicol Chemical Corporation of Rosemont, Ill. This product first came on the market in 1947 as a by-product of U.S. Army nerve gas research. Because it was inexpensive, toxic to a variety of insects, and persistent in the environment, it came to be widely used as a pesticide for both farms and homes. Chlordane was commonly used as a soil insecticide in row crops, especially corn, as a termiticide for wooden structures, and as an insecticide for homes and gardens. The EPA labeled chlordane as a restricted chemical in 1978. Although agricultural use of chlordane was prohibited that year, existing stocks of the chemical may have been applied to row crops until the early 1980s. By 1983, the only significant EPA-permitted use was as a termiticide legal for application around and under foundations to prevent termites from entering homes. When alternative termiticides were registered for use by the EPA in 1987, chlordane was banned altogether the following year. Chlordane was one of the last

of the persistent organochlorine chemicals to be used for pest control in the U.S. Related insecticides that have been banned or severely restricted in use include aldrin, dieldrin, endrin, heptachlor, and DDT.

The registration of chlordane was not suspended because of its accumulation in fish tissue, but rather because it was believed the application posed a direct threat to humans following termite treatment of homes. The EPA found that chlordane and heptachlor were a hazard to people because of their potential carcinogenicity, other health effects, and the persistence of chlordane and heptachlor residues in soil, food, and human fat and breast milk. Velsicol Corporation's own data showed chlordane and its compounds can contaminate household air for at least one year. Because chlordane was sprayed on U.S. crops and sold in home and garden sprays from the 1950s until the 1970s, all Americans are likely to have some level of chlordane in their fat tissue.

The reason chlordane is a concern to those who consume fish is because it has leached through the soil and into streams and lakes where it has concentrated in fish.



Bottom-feeding and bottom-dwelling species such as carp, catfish, suckers, drum, and sturgeon are the species most susceptible to chlordane contamination.

Chlordane has been widely detected in U.S. freshwater fish. At least 21 states, among them Kansas, Missouri, Nebraska, Iowa, and Oklahoma, have some form of fish consumption advisories related to chlordane contamination. No fish have ever been found in Kansas with chlordane contamination levels which are likely to cause acute or short-term health effects. Consumption advisories are based on concerns over possible increased cancer risk and non-carcinogenic toxicity such as liver damage from long-term fish consumption.

The human risk associated with chlordane contaminated fish is based on experiments on laboratory animals and the best estimates of toxicologists. Chlordane contains anywhere from 40 to 100 compounds, and differing chlordane compositions can have different toxicities. Many of the components of chlordane are unidentified and therefore untested. And because people cannot be intentionally exposed to differing concentrations of the chemical, toxicity risk must be based on experimental laboratory animal exposure.

A unique cooperative study, conducted by the Missouri Department of Health and St. Louis University, actually compared the amount of chlordane and its breakdown products in the blood of study participants who ate fish from different water bodies. Blood was drawn from 256 participants in three groups: those who ate few fish or fish from waters without advisories; those who ate one pound or more of fish per week from waters with an advisory to limit fish consumption to one meal per month; and those who ate one pound or more per week of fish from a river with a no consumption advisory.

Study results gave no clear relationship between the amount of chlordane in fish and the amount in the blood of people who ate the fish. Those who ate contaminated fish did have higher levels of chlordane-related chemicals, but the participants that ate fish from the most contaminated water bodies did not



All of the consumption advisories are for urban waters, most of them rivers and streams. However, fish in many urban lakes are uncontaminated and safe to eat.

have higher chlordane-related chemicals in their blood than those who ate less contaminated fish. None of the study participants had chlordane levels high enough to cause sickness. The highest levels of chlordane found in participants' blood still were at levels 100 times less than what is known to cause immediate health concerns. Therefore, the study did not show that those who ate chlordane-contaminated fish were subjecting themselves to a great health risk.

Potential shortcomings of the Missouri study may include not measuring chlordane concentrations in fat reserves of the study individuals and not controlling for past exposure to chlordane through residential termite treatments. Residential real estate has a high average turnover rate, and excessive or inappropriate use of chlordane may, in part, mask a relationship between fish consumption rate and blood levels of chlordane. Analysis of chlordane levels in blood may not represent the best measure of individual exposure. Individuals undergoing weight loss, yoyo dieting, or metabolic changes may have greater exposure from fat reserves than measured blood levels may show at a given point in time. Such complicating factors make it

difficult to tease out relationships, even in well-designed studies. Results from the Missouri study do not mean that we can disregard chlordane as a health risk, but it does show that the level of risk may not be directly related to the level of contamination. Clearly, there are more questions to be answered.

So, what does all this mean to the Kansas angler? The good news is that the majority of fish from Kansas waters contain low levels of contaminants and are healthy to eat. Of course, fish with low levels of fat such as sunfish, crappie, bass, and walleye have a lower tendency to accumulate pesticides, and are the safest to eat.

The bad news is that certain fish from some areas in the state need to be avoided, or at least consumed in smaller amounts. This is especially true for pregnant or nursing women and children, who may be at a higher risk to contaminants.

Of course, advisories are simply recommendations. For those who choose to consume fish from the bodies of water posted with consumption advisories, there are ways to reduce risk. Again, the most important way to reduce risk of chlordane and other contaminants is to eat less fatty fish and abide by consumption amounts listed. Also,



Most Kansas anglers fish in lakes and ponds. But those who fish rivers and streams, especially within an urban area, should be aware of the consumption advisories.

smaller fish should be considered “keepers,” adhering to regulations, and larger fish released. Larger, older fish may have more time to accumulate contaminants in their flesh.

When fishing in urban areas, choose stream or river areas above cities. Fishing urban lakes is an excellent alternative to rivers and streams because fish in urban lakes have been found to be either free of detectable levels of chlordane or have levels of chlordane much lower than their stream counterparts.

Properly cleaning fish affects the amount of contaminants left in the fish. First of all, consume only muscle tissue. Skin, organs and eggs are high in fat, which accumulates contaminants. If the fish are cooked whole, remove the skin. Fillet your catch when possible, and trim away fatty areas, such as the belly area, muscle along the length of the back, and the dark lateral line area.

Since most contaminants accumulate in the fatty tissues of fish, the method of cooking must also be considered. Deep-fat frying should be reserved for fish believed to contain few contaminants because this method seals in the fats, and thus the contaminants. Fish should be grilled, baked, or broiled to allow the fats to drip away. When frying, do not reuse the oil, and when

poaching, do not use the broth.

For those people who may have consumed fish caught from the posted streams and rivers unaware of the advisories, there is little cause for concern. Consuming chlordane-contaminated fish does not pose an immediate health concern: consumption only slightly increases a person’s chance of contracting cancer later in life.

The Missouri Department of Health has calculated that if a person were to eat 64 pounds of fish contaminated with 300 ppb (parts per billion) chlordane (the Food and Drug Administration’s “level of concern”), per year for 70 years, their chance of contracting cancer increases by 1 in 100,000. The EPA, however, would estimate the increased risk to be closer to 4 in 10,000 at this consumption rate. Many assumptions are involved in any risk assessment. The EPA methodology would provide a worst-case assessment, the Missouri assessment could be considered more realistic but may be considered less protective of consumers.

Comparatively, the chance of getting hit by lightning is 1 in 1,000,000, the chance of being killed in a car accident is 1 in 1,600 if you drive 10,000 miles per year for 20 years, and the chance of dying from smoking 10 cigarettes per day for 20 years is 1 in 10.

Obviously, the risk associated with eating chlordane-contaminated fish is low compared with other more common activities. However, it is an involuntary risk and therefore unacceptable to members of the public who are uninformed. The degree of risk is a personal decision.

The scare associated with DDTs persistence in the environment has led to the development of chemicals that break down more quickly and have less long-term environmental impact. Since the registration of chlordane was only recently suspended (spring 1988), it will be detected for decades. The banning of DDT in 1972 has not eliminated it from the environment, but the levels are minuscule compared to when it was in use. Chlordane is expected to follow this same pattern.

Significant declines in chlordane have been observed at all Kansas locations monitored. The primary fish contaminants of human health concern in Kansas and in most states are the pesticides chlordane and dieldrin, polychlorinated biphenyls (PCBs) and mercury. Chlordane, dieldrin, and PCB residues in fish tend to follow similar patterns: elevated levels in fish tend to correspond to urban areas, the more fatty bottom-dwelling fish tend to have higher levels of these contaminants, and they are all declining. The remaining contaminant that is being closely watched is mercury. Unlike the pesticide contaminants, mercury tends to accumulate in muscle tissue and may be as high or higher in the site feeding, less fatty fish than in the bottom-dwellers. Mercury appears to be increasing in Kansas fish, as well as throughout the country. While there are a number of past and present mercury sources in the environment, many researchers consider the combustion of fossil fuels to be the most significant source of this apparent increase. The KDHE, KDWP and EPA continue to monitor fish tissue quality across Kansas. Updated advisories will be made as the ongoing data collection warrants. ♡

# Sweet Tradition

by Tammy Davis

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photos by Mike Blair

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***Passed down from more earthy generations, picking fruit and making jellies and jams was once a common practice. Today, it is done more for family fun and carrying on the tradition***



It began with a wish to share part of my past, and joined with a passion for delicious jelly. On a hot and humid July morning, I gathered my husband and children to head out plum picking. We traipsed through the pastures, looking for ripe berries. Within a few minutes, the girls were bored and returned to the van to play. The plums were just beginning to ripen, and we were able to collect about two gallons of red and not-so red fruits before all were tired of the adventure.

In my own family, the use of wild berries for various fruit preserves has passed down generation to generation. My great-grandmothers canned fruits and vegetables and always made tasty jellies and jams. My grandmothers continued the tradition, sharing the fruits of the land with their children and grandchildren. For many years during my childhood, my mother and aunts seldom purchased jelly

from the store but relied on wild berries to make delicious jellies. I remember the fun of picking plums and wild concord grapes for these preserves. My entire family, along with aunts, uncles, cousins, and grandma, would gather at the creek where the berry bushes grew. We would spend hours picking the fruit, eating while we picked, until the buckets were full. This was followed by a grand time splashing in the creek, chasing each other, and enjoying a cookout. Later, I would help my mother clean and stem the berries for jelly making. I observed the process as she made jar after jar for our fall and winter supply. While I and my cousins have grown up and gone our own ways, family members still make jams, jellies, and marmalades from wild berries, such as chokecherries, raspberries, currants, blackberries, and crabapples.

I wanted to share these experiences with my own family. After

our initial picking, I jumped right in to clean the fruit. I enlisted the help of my oldest daughter, while the youngest dabbled in a sink full of berries. I had never made plum jelly on my own, but I had purchased the pectin and jars and was ready to go. We sorted the harvest, carefully removed the stems, and filled the pot with only the best plums, discarding the rest. I will never forget that first batch. I carefully measured the ingredients, following the recipe to the letter. When it said to bring the juice to a boil, I did. When it said to add the sugar all at once, I did this and stirred furiously.

It boiled over and filled the entire top of my stove. Of course, the burner was raging at its highest temperature. The sugar mixture burned right on. While I panicked in fear of my children's safety, I finally removed the pot to clean the mess. Out of the entire batch, I managed to rescue enough of the mix-



Gathering is part of the fun. Native Kansas fruits include plums, mulberries, blackberries, currants, and grapes, among others. Some jell naturally; others need added pectin.

ture for six jars — six runny jars of jelly. My family, already skeptical of “Mom’s desire for homemade jelly”, was becoming more and more convinced that purchasing the grape version off the grocery shelf was preferred — that is until the next day when they first tasted our efforts. Dinner was quickly replaced with toast, butter, and jelly, as we all ate piece after piece. They, too, fell for the delicious, homemade jelly.

Although it took nearly a week to completely clean the stove top, the fetish for Mom’s jelly had begun. After two more pickings, I made a dozen batches for our own use and for Christmas gifts. Even though we didn’t venture out as a family to gather the berries, the rest of the process became a family adventure through berry cleaning, cooking, jar turning, and labeling.

Jellies and jams can be made several ways. Easiest is by adding purchased pectin, but some cooks prefer to utilize the fruit’s natural pectin. Using purchased pectin for jellies and jams lessens the cooking time, because it contains additional acid that is necessary for firm jellies. However, if time is not an issue, jellies and jams can be successfully made with the natural pectins of many fruits. Apples, crabapples,

gooseberries, some plums, and grapes have high natural pectin contents that easily jell. Other fruits with lower pectin contents may be trickier, unless mixed with those having adequate pectin. Peels and cores should be cooked with the fruit to add more of this important jelling agent. Using firm fruits will produce a successful jelly-making session.

It’s probably best for beginning jelly-makers to use purchased

pectin. I do, and doubt that I will experiment with natural pectin because the other is so easy and produces such good results. Instructions for use are on the pectin package.

Lessons from my first season as a jelly maker were numerous. I learned that the recipe is important, but each cook I questioned had a different method of following a recipe. I soon discovered that a basic recipe is only the beginning of a great jelly, and individual methods make it more special. I became less concerned with finding perfect fruit and used both ripe and less-than-ripe berries. When I ran out of plum juice, I added cranberry juice. If one batch was firm but another was runny, we ate it just the same. We found that jelly which didn’t set up spread much easier than jelly that was very firm. Most importantly, I learned that the burner temperature does not have to remain on high, and that the sugar can be added a little at a time.

Today, approximately 1 billion pounds of fruit spreads are commercially produced each year. American consumption per capita is a surprising 4.4 pounds a year. With 37 flavors to choose from, the most popular are grape jelly and strawberry jam. Red raspberry jam, grape



Though berry picking is hard and often hot work, the fun of a family outing is remembered long after the stains are gone. Long sleeved shirts can help protect from cuts and scratches, and insect repellent is a good idea when wading through tall vegetation.





The sweet aroma of fruit like sandhill plums whets the appetite for tasty, homemade jelly. Jams and jellies make special gifts, and remind us of a summer adventure.

jam, apple jelly, apricot jam, peach jam, blackberry jam, and orange marmalade follow closely. These fruitful spreads make up more than 80 percent of the total U.S. production of jams and jellies. Despite the convenience of purchasing jelly at a grocery store, many still cling to the past with pride, continuing to walk the pastures looking for colorful berries with which to make their own jarred, jewels of sweetness.

As for me, I will venture out to the thorny thickets to gather plums for homemade jelly that my family loves. I have to admit a sense of pleasure as I retrieve those beautiful jars of jelly for our own use or for gifts. More importantly, the tradition is a loving reminder of the celebration of life my family shared during my youth. While my children will not experience the large family gatherings, I hope that they gain a new appreciation for this piece of history.

The making of jellies and jams began centuries ago. Returning Crusaders are believed to have introduced jam and jelly to Europe. By the late Middle Ages, they were quite popular. In the 16th century when Spaniards arrived at the West

Indies, cane sugar was first used to make these popular fruit preserves. Fruit preserves were included in the world's first recipe book from the 1st century, written by Marcus Gavius Apicius. In 1561, marmalades were created for Mary, Queen of Scots, as a seasickness potion. From this time on, marmalades and fruit preserves became a delicacy for royalty. It wasn't until the late 17th century that early New England settlers began preserving fruits with honey, molasses, and maple sugar. Natural pectin was extracted from apple parings to thicken the preserves. Recipe books for jams were first published during this century. 🍷

## Making Jelly

Preserves can be made from many wild Kansas fruits. Jams are preserves that include fruit, while jellies are made from clear, strained juices. Fruits with copious seeds (like most of the berries) are best suited to jelly; if they are made into jams, at least a portion of the seeds should be removed. Some fruits

have natural pectins that allow the juices to jell with a low sugar content. These produce the tastiest, fruitiest preserves. Other fruits with low pectin contents must either be mixed with more suitable fruits, or receive added pectin from a box.

Fruits with high natural pectin contents include: apples, crabapples, quince, red currants, gooseberries, plums, and cranberries. Fruits requiring additional pectin include: Strawberries, blueberries, peaches, apricots, cherries, figs, pears, raspberries, blackberries, grapes, and pineapple.

Blackberry jelly is a traditional favorite that can be made from a common Kansas plant. The following recipe can produce a tasty, homemade treat.

2 qts. blackberries (or enough to make 5 cups of juice)  
1 box commercial pectin  
7 cups of sugar (3 pounds)  
Yield: 7-8 cups jelly

1. Sort, stem, and wash firm, ripe berries. Crush thoroughly. Place prepared fruit in a damp jelly bag or use several thicknesses of damp cheesecloth to form bag. Twist bag to extract juice.

2. To improve clarity, refilter through dampened clean cheesecloth. Measure juice with standard liquid measuring cup and pour 5 cups blackberry juice into an 8 qt. saucepan. If juice yield is slightly short, add water to pulp in jelly bag and squeeze again.

3. Mix pectin into juice. Bring to boil over high heat, stirring constantly. Quickly stir in sugar, and continue stirring as mixture reaches a full, rolling boil for 1 minute.

4. Remove from heat and skim off foam. Pour at once into hot glasses or jelly jars. Leave 1/4 inch head space at top of jar.

5. Seal jelly with 1/8 inch hot paraffin or lids as indicated in pectin box instructions. It is important that homemade jelly be properly sealed.



# Going To School On Spotted Bass

by

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***While the spotted bass is also called the Kentucky bass, it is native to eastern Kansas waters. Popular with anglers for its tenacious fight, it also wins points for the beauty of its habitat — pristine streams meandering through the Flinthills and southeast Kansas. Researchers recently uncovered some secrets about spotted bass populations and where they live.***

**T**he spotted bass (*Micropterus punctulatus*), also known as the Kentucky bass, is a member of the sunfish family Centrarchidae. This family includes other important sportfishes, such as the largemouth bass, smallmouth bass, bluegill, white crappie, and black crappie. Spotted bass and largemouth bass can look similar,

especially when they are young. However, the spotted bass has an upper jaw that does not extend beyond the eye, its shortest spine on the spinous dorsal fin is more than half the length of the longest spine, there are several rows of spots near the belly, and small scales are present on the cheek. The spotted bass is native to Kansas, but only in the

Arkansas River system.

Some of the most popular spotted bass fisheries occur in reservoirs in the southeastern United States. Though largely unknown, regional Kansas streams can also provide outstanding spotted bass fishing. Dr. Frank Cross said it best in his book *Fishes of Kansas*, “Spotted bass in Flint Hills streams .

.. afford some of the finest angling to be found in Kansas."

Spotted bass do provide excellent fishing, but there is circumstantial evidence that their numbers are declining in Kansas streams. The Kansas Cooperative Fish and Wildlife Research Unit (Division of Biology, Kansas State University) with support from the Kansas Department of Wildlife and Parks began a series of research projects to study spotted bass in Kansas streams. Early stages of the research focused on characteristics of native spotted bass and the factors that influence their occurrence in streams. Currently, we are studying the behavior and habitat use of spotted bass.

In 1995 and 1996, 16 locations were sampled on 14 streams in the Neosho, Verdigris, Arkansas, and Walnut River basins. The streams were selected because historical records indicated that they had spotted bass. Each stream was assessed for water chemistry and physical habitat variables, with a particular interest in the effects of water clarity on spotted bass populations. We also wanted to know if the type of stream bottom (mud, gravel, or bedrock) or amount of submerged wood debris influenced spotted bass populations. Several years of hard work in the field and laboratory provided some answers.



Researchers implanted spotted bass with transmitters so they could be tracked through the year. They learned that quality stream habitat with woody structure held most bass.

Spotted bass densities were low in most of the streams sampled. Estimated densities varied from one fish per acre to 86 fish per acre. Some of the highest spotted bass densities occurred in Shoal Creek, Spring Creek, and Otter Creek.

Interestingly, of all the variables measured, wood debris in the stream was the most important factor that influenced spotted bass density. As the amount of wood debris (snags and rootwads) increased, so did the density of spotted bass. Spotted bass are site-feeding ambush predators, and the wood provides an area for concealment. The wood also provides a location for spotted bass to hide from predators such as herons or flathead catfish. Wood in a stream can also reduce the movement of water and provide an area with low flow. Low flow areas are important for stream-dwelling fishes since energy is conserved when fish do not have to fight the current to stay in one spot.

One important question of the study was how fast spotted bass grow in Kansas streams. We removed several scales from each fish sampled to determine its age and growth rate. Fisheries scientists age fish scales in a manner similar



A stream model will help researchers learn more about favorable spotted bass habitat and help design plans for habitat alteration that may increase bass densities in streams.



Collected fish were aged, and researchers learned that a 14-inch spotted bass was likely seven years old. Angling experiments showed that up to 26 percent of a spotted bass population could be caught from a sample area in a short time. To protect populations from overharvest, there is a statewide 15-inch minimum length limit on spotted bass.

to counting rings on a tree stump. During the winter, fish grow more slowly, and this slow growth is represented on the scale by a dark ring. The number of dark rings are counted to determine age and estimated growth rate from year to year.

Spotted bass sampled in the study grew almost 4 inches during their first year of life. On average, spotted bass are 12 inches long by age 4 and 14 inches by age 7. A magnificent 14-inch spotted bass taken from a Kansas stream is no kindergartner. Spotted bass in streams grow slightly faster than spotted bass in state fishing lakes. The difference in growth rates is related to density. Densities of spotted bass in the state lakes we studied were higher than in the streams. Food resources are more limiting in the state lakes, so growth rates are slower.

Even though spotted bass grow well in Kansas streams, this is offset by low densities. The study team

was concerned that spotted bass could be easily overharvested because of low numbers and the species' aggressive behavior. In 1996 and 1998, an experiment was conducted on several streams to determine the vulnerability of spotted bass to angling. Streams were blocked with nets to keep fish in study areas. Next, we fished these areas using a standardized set of lures (jigs and small crankbaits). After fishing, blocked areas were sampled with electrofishing equipment to estimate density. Density estimates allowed us to determine what percent of spotted bass were caught in blocked areas. Fishing effort in the study varied from three to five hours. In that short time, up to 26 percent of an entire spotted bass population within a sample area was caught. On average, we caught 11 percent of a population in 4 hours. Therefore, it's possible that a spotted bass population could be depleted in 36 angler hours. This information is important because it

shows that spotted bass are vulnerable to overharvest and proves the importance of conserving stream-dwelling spotted bass. The statewide 15-inch minimum length limit on black bass is an important measure to help prevent overharvest of stream-dwelling spotted bass populations.

Currently, spotted bass research is concentrated on understanding and describing movement patterns and habitat use of this species in Otter Creek (tributary to Fall River on the Fall River Wildlife Management Area). In this fishery, 35 spotted bass have been implanted with radio transmitters. Once a fish is so equipped, we can track its movement and habitat use. In more than 3,900 locations of tagged fish, it is clear that spotted bass prefer deep pools that contain a lot of woody debris. This is additional evidence that woody debris is an important Kansas stream habitat feature for spotted bass. Many of the tracked spotted bass stayed in

one or two pools year round, and rarely moved out of their “home pool.” This attraction was particularly evident following a 100-year flood event (the largest flood since the 1950s). In 1998, we tracked nine spotted bass a week prior to the 27-foot flood and found them in the pools they normally used all summer. Two weeks after the flood, the same fish were found in the same pools. Many people believe that large floods displace stream fish, but it appears that spotted bass in Kansas can maintain their location during some very large flood events. Not only do spotted bass have home pools, but they have distinct movement patterns throughout the day. Spotted bass are most active between sunrise and sunset, and don’t move much during the night. We observed a spotted bass moving as much as 1,000 feet to get to a location where it would spend the night. Spotted

bass are an amazing stream fish because of their unique movement patterns and habitat use. If you catch and release spotted bass in your favorite stream, there is a good chance you have caught the same fish several times.

Next in this research program is to develop a prominent spotted bass stream fishery. The goal is to increase the quality and quantity of instream habitat used by spotted bass. Hopefully, by increasing habitat, we can improve stream quality and support a high-quality spotted bass population (quality in terms of size and numbers). Next year, the study will experiment with various habitat modifications. The importance of woody stream debris is now obvious, but increasing wood habitat in streams and keeping it in place can be a difficult task. Hopefully, large boulder habitat will prove as useful as wood habitat for spotted bass. We will test

these choices in a laboratory’s artificial stream. Once the effect is known, habitat improvements will begin in Otter Creek.

Spotted bass are truly a jewel of the prairie streams. They provide a recreational opportunity unparalleled by other fish in Kansas streams. Spotted bass not only provide recreational value, they may be good indicators of water quality and watershed conditions. The decline in spotted bass numbers is closely linked to agricultural and urban development. High-quality streams are hard to come by these days, and for spotted bass and other stream fishes, this is a problem. Reducing the pollutants from agricultural and urban runoff will benefit nongame and game species alike. It would be a shame if our children and our children’s children couldn’t enjoy some of the finest angling to be found in Kansas. ♡



Spotted bass are native to pristine streams that flow through the Flint Hills and portions of southeast Kansas. Researchers found that streams with woody structure, such as log jams and root wads, held the highest densities of bass.

A man wearing a light-colored hat and a vest is standing in a river, fishing with a fly rod. The background shows a dense forest of trees under a clear sky.

# *Flyfishing Legacy*

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

**H**e was 7 when he met Mr. Hyde. Albert Alexander Hyde — a Wichita banker so honest that when the Depression came and his banking clients lost their money, he wrote personal notes promising to try to reimburse them. Albert Hyde, a man who later found a recipe in an old book, modified it, and invented a product he called Mentholatum. The same man who carried this door-to-door in a bucket, dishing out small portions for a nickel. Albert Hyde, a man who eventually made a fortune, paid off his promissory notes, and purchased a large YMCA camp near Estes Park, Colorado. Mr. Hyde, good friend of professor J. H. Langenwalter, the father of a seven year-old Kansas boy who had never been fishing . . .

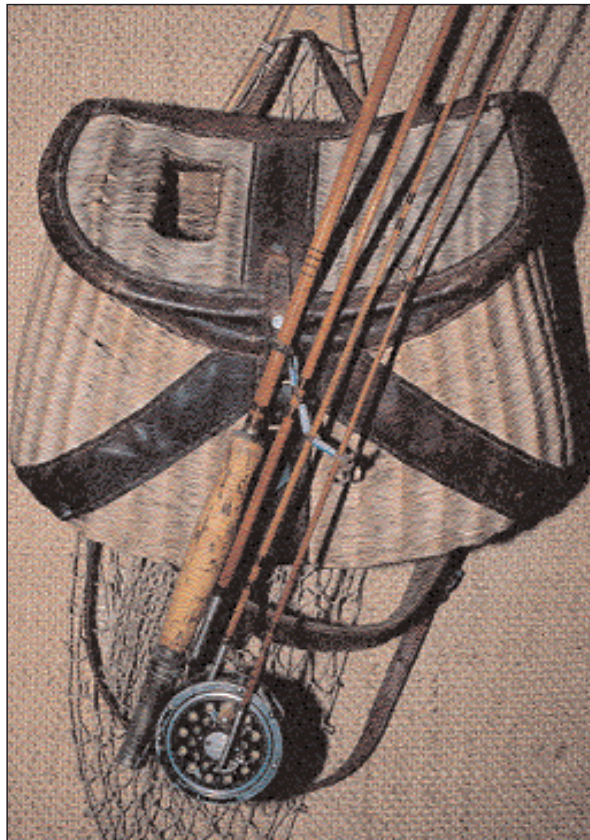
Young Dick Langenwalter met Hyde in the summer of 1925. It was a special time when his family was invited for a month-long vacation to the Estes Park camp. Surrounded by the beautiful scenery of the Rockies, the boy began each day with his dad and Hyde in morning devotions, joining them on their knees in prayer. One morning after this sunrise event, Hyde produced a fly rod and prepared for a day of fishing on a nearby river. The boy, sensing an adventure, hovered near his new acquaintance as gear was loaded. Hyde noted his interest and got permission to take him along. No one knew it at the time, but that day would forever change young Langenwalter's life.

"I climbed into that big car along with Hyde and his driver," remembers Langenwalter, now 82, "and we drove to a small stream and sat on a wooden raft. He taught me how to cast and where to throw. Soon, I was catching fish. We spent the day and talked of many things. He told me how to be a gentleman, and how to make money. I'll never forget him."

Fishing seemed to the boy as natural as the rushing waters of the mountain stream. Hyde showed him how to strike a fish and fight it gently with the supple rod, all the while extolling the importance of character in a man. Young Langenwalter soaked it in, reveling in the Colorado adventure a world away from his Wichita home. The day of fishing and mountain glory passed, and due to his mentor's busy schedule, the pair never fished together again. But the magic wasn't over. A few mornings later, Hyde's driver came by to fetch the youngster and take him to town for a new flyfishing outfit. At Hyde's expense, the driver purchased a bamboo 6-weight fly rod complete with extra tips, a wooden landing net, a willow basket, and a

handful of flies. The boy was overwhelmed.

Armed with his new gift fit for a man, young Langenwalter spent the rest of vacation flailing a small creek with the oversized gear, forever entangling himself with the sport of fishing. He used the valuable equipment for years, often reminded of an important man who gave him more than a hobby. The fly rod, net,



and basket now hang on his wall as a tribute to a special friend from long ago.

A lifetime later, Langenwalter recalls fishing trips from around the world. He's never gotten past a love for flyfishing, though like most anglers, he also uses other gear. A walk-in closet holds his fishing tools, which include 13 fly rods and a store of fly-tying paraphernalia. The rods are mostly bamboo, balancing perfectly with the feel of fine instruments. Each is weathered from decades of use, with a physical sense of the many hands that used them — Langenwalter's own, his

children's, and those of his friends. Written in their histories are bass, crappie, sunfish, trout, wipers, and stripers. In their strokes are the whispers of travel. His is an exciting legacy of fishing.

Interwoven is a career of business experience ranging from archeology to hardware to flowers. Dick Langenwalter first worked in Arizona on an archeological dig to study Native American artifacts. "They hired a group of Apache Indians to help with the dig," he remembers. "One of them fell in love with a shirt I wore — it wasn't really a shirt, but rather a colorful pajama top. He kept after me to let him wear that shirt, so I jokingly asked what he'd give to assure its return. He gave me a turquoise ring that his father had taken in an Apache raid on the Navajos during the late 1800s. When we finished the dig, we were to supposed to swap back, but we never did."

Langenwalter fingers the ring he still wears 60 years later, remembering that he kept up his flyfishing then and also in California where he attended junior college, sold lumber, and fished the trout streams near Fresno. "After that, I came back to Kansas and opened a hardware store in Hutchinson.

Along with the hardware, I sold sporting goods equipment, and I always made time to hunt and fish. After 30 years in the hardware business, I sold out and opened a Hutchinson floral shop that's still in operation."

Known regionally as a respected sportsman and member of various hunt clubs, Langenwalter was appointed to serve as a Kansas Fish & Game Commissioner during the years of 1976-1980. His reputation for introducing new people to hunting and fishing was widely known. Not only did this help expand enthusiasm for the outdoors, it also provided Dick with

good hunting and fishing companions through the years.

"Years ago, I met a young architect in Hutchinson named Ken Miller and got him started fly-fishing. About the same time, I was fishing with Charlie Lutz, the owner of a local sporting goods store. The three of us got to where we would load up and leave Hutchinson at 5:00 pm Friday, drive all night to Colorado, and fish for trout until noon on Sunday. Then we'd drive back and go to work again Monday morning. Those were good times," remembers Langenwalter.

He also taught his children to flyfish at early ages, and was often accompanied by his wife, two daughters, and a son. "Of all my fishing memories, my favorite is a late-summer week in northcentral Colorado with my son Ric. He was about 18 at the time, just before leaving home. We had access to many miles of river seldom fished. Since there was so much good water to cover, we didn't fish side by side. Even so, spending time together, with me realizing the fisherman he'd become while growing up, made it a special time. We caught a lot of trout."

Such memories often outweigh things like size of fish. Even so, when asked about big fish episodes, Langenwalter smiles and remembers plenty of encounters. "My biggest rainbow was 27 inches long and weighed about 8 pounds. I was using a bamboo rod with a light tippet, and you can't 'cornfield' a big fish with gear like that. I've never been so careful fighting a trout — I really wanted to land that one," he said. Decades ago, Langenwalter also took a Colorado brook trout that was 22 inches long, a feat unlikely to be duplicated now. The beautiful fish, which took him half an hour to land, hangs in his office to remind of that special day.

At a 1970s social event,

Langenwalter was approached by a Hutchinson newcomer hired to oversee the Dillons Stores. "I understand you know a lot about fly-fishing," said Joe Pichler, who later became president of Kroger in a corporate merger. The two hit it off, and Langenwalter began to fish with his younger friend in Kansas and Colorado. Pichler became an accomplished flyfisher, and when he moved back east, he joined the exclusive Castalia Trout Club



Company of Ohio that dated back to the 1880s. Langenwalter and his wife Florene fished the club as Pichler's guests on a number of occasions.

"You can't throw a fish back at Castalia," smiles Langenwalter. Each fish is kept and recorded for club records that date back to the beginning. Each day, you put your fish in a box, and they are cleaned and frozen for your return home. I got to where I tried to let a trout escape before I actually caught it."

Fishing at Castalia proved to be good therapy for Florene when she was recently diagnosed with an illness. Pichler called Langenwalter to inquire about her and ask if a fishing trip would help take her mind off of treatments. When she agreed, Pichler sent a jet to Hutchinson to pick them up at noon the same day. A few relaxing days on the stream helped deal with a

difficult time, and now Florene is doing well.

This is but one example of how Langenwalter's selfless interest in others eventually returned to him. Those who teach others to fish are always appreciated and never forgotten. "I've given flyfishing instructions many times," he remembers. "All you have to do is learn to count to three with the rod. One, you pull the line off the water with a backward snap of the wrist. You rest on the two count. On three, you cast forward." These instructions take a little practice, and Langenwalter was always willing to share his gear and expertise, allowing a student and new-found friend to get the hang of it. Many under his tutelage took up flyfishing even before the sport enjoyed its current popularity in warmwater states like Kansas.

Now in his senior years, Langenwalter fondly remembers a lifetime of fishing and teaching others. "My fishing days are about over now," he says. "Last fall on a beautiful afternoon with my hunting dog, I decided that I'd shot enough game and caught enough fish. I still enjoy going to the duck club or stream and talking with the guys. But I'll probably leave the guns and rods in their cases this year," he says with no regrets.

"I'm glad that Mr. Hyde took the time with me so long ago. I've really enjoyed all the outdoor experiences, and it's been fun to help others learn in the same way."

Albert Hyde, Dick Langenwalter, our dads, and older friends have passed down a heritage of wonderful outdoor opportunities. Even as the world changes, days afield are timeless from lifetime to lifetime. We owe it to the past and future to remember and to pass this legacy to the next generation. May the chain never be broken. ♡



# Family Froggin'

by Dustin Teasley  
*illustrator, Pratt*

photos by Chris Hase  
*stream fisheries biologist, Pratt*

*Hunting bullfrogs is traditional summer fun, but bring along some first-timers and throw in some youngsters, and you have a downright entertaining way to spend a summer night.*



Summer. For many Kansas sportsmen, the hot season signifies the end of outdoor activities. The end of turkey season. The end of the spring spawn and prime fishing weather. A long wait for cool days and renewed fall hunting and angling. Even so, summer provides exciting opportunities for those willing to brave its conditions. Chief among these is frogging.

Bullfrog hunting is the save-all for both hunters' and fishermen's off-season blues. Frogging fulfills the desires and needs of both groups. It's referred to as hunting, but requires a fishing license. No

pole or gun is needed — just a flashlight, a bag, a lot of bug spray, and a couple of friends to share in the fun. Oh, and did I mention quick hands?

Bullfrog legs make great table fare and are a favorite at game feeds and summer cookouts. With a daily bag limit of 8 and a possession limit of 24, bullfrogs provide a bountiful season that begins July 1 and runs until October 31. These tasty amphibians are an adventure to hunt and offer the perfect way to extend outdoor experiences through what is commonly a summer lull.

There are many legal ways to take bullfrogs, including dipnet,

gig, hook and line, bow and arrow, and crossbow. Catching bullfrogs by hand at night is the choice of many hunters. It requires extra skill and does not mortally wound a frog which might escape or be released in the event that few frogs are found.

I have many good memories of frog hunting. As a kid, I went with my father and brother to hunt our neighbor's farm ponds. Six years ago, I went with some friends and we invited a couple of college girls along. I've been married to one of them now for almost two years.

For the past several seasons, I've

hunted with friends and their children that recently moved here from Alaska. This has added a whole new dimension to the sport. Not accustomed to being around kids, I was at first worried about my ability to show a family of five how to hunt for bullfrogs. Preparing for our first night out, I gathered all the necessities: a handful of flashlights with plenty of batteries; a change of clothes; plenty of towels; two or three laundry bags to serve as frog sacks (preferably without holes in them); and plenty of insect repellent.

On the evening before opening day, the kids called me, double-checking to make sure the trip was still on. I reassured them and set a time to meet. The next evening on the way to my hunting spot, the kids quizzed me on everything from how to catch frogs, to whether snakes and turtles would bite them. As we unloaded, the bugs reminded us that the first step in bullfrog hunting is to apply insect repellent. Next came the flashlight and battery check. Armed with the proper gear, we headed for the marsh.

Dressed as they were in old clothes and tennis shoes, I knew the kids would have no problems getting wet and muddy, but I worried about mom and dad. As in the movie *Peter Pan*, I wondered if they had lost a youthful sense of adventure that didn't mind playing in mud and water, and getting dirty and grimy. Hesitantly, the whole group trudged into the murky water which was a little cold at first. Sounds of disgust came from everyone as the mud slowly engulfed our shoes and began its way up our legs. Then there was laughter as someone fell in and christened their whole body with muddy water.

Soon, Ehren, 9, the oldest of the kids, pointed to the muddy bank 20 yards down the shore. He had spotted the first frog of



With small hands and short legs, this youngster invented his own frog catching method – the two-hand pounce. It was effective, but usually required complete submersion.

the night. It was a big one, eyes glowing from the light of Ehren's flashlight. Everyone was silent as the youngster started his stalk on the critter. Slowly he walked toward the frog. Coaching from behind him, I was as nervous as he was. Closer and closer he came, keeping his light shining into the frog's eyes to keep it stunned. Four feet away,

Ehren stopped and prepared himself for a cat-like pounce. Lunging forward and grabbing at the frog, he buried his hands in mud halfway up his arms. Unable to pull his hands free of this sticky situation, he sat down in the muddy water to extract himself, finally showing the prize in his hand. Everyone erupted with excitement. Frog season was



Missed! Some refinement of the two-hand pounce method was required, and even then it wasn't 100 percent effective. But, hey, what frog catching method is?



Success! A big croaker is ready for the sack. What could be more fun for a young boy – muck from head to toe and a giant, slimy frog in hand? This must be heaven.

officially underway.

As we worked around the marsh, I took turns with the kids until all had caught at least one. The middle child, 7-year-old Caitlin, was my second student. She was a little apprehensive about the whole thing, but a good sport. After missing the first three frogs, she became discouraged. However, taunting from her older brother about his prowess as a frog hunter urged her to continue. Her first frog was a dandy and over the next couple of hours, she hunted diligently.

Taylor, the youngest frogger at 5,

waited patiently for his turn. I didn't know how he could catch a frog. His hands were not that big, and at times, even I have trouble hanging onto a wiggling bullfrog. But as I found out, he could improvise. To my utter amazement, he caught a frog on his first try, and it might have been the biggest of the night. His method did have one flaw, though. He got real wet. His fall-forward-and-push-into-the-mud technique put him underwater a couple of times, but he managed to catch his share.

After the kids were trained, it was the parents' turn. While Mom

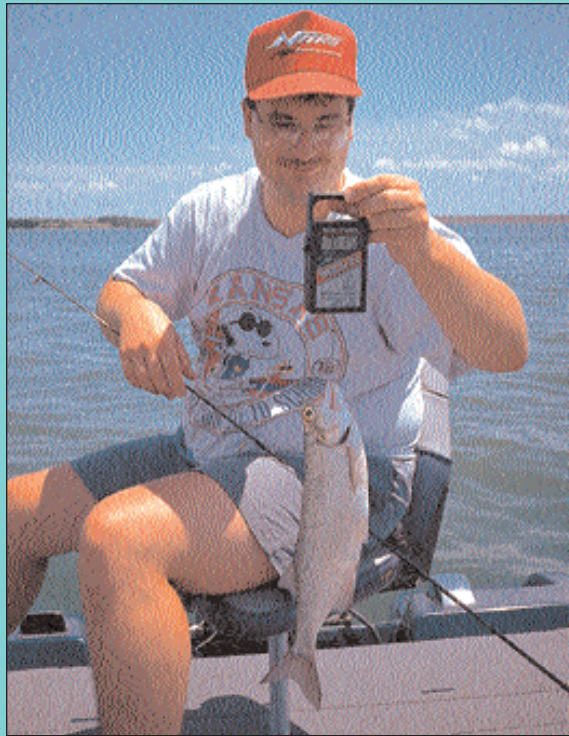
enjoyed watching the kids catch frogs, dad was already on his way to a night's limit. With a little coaching, I finally talked her into trying it. Her first attempt was half-hearted, as she clearly missed the frog. Not until she got fully drenched in mud and water did she begin catching them. I told her that being in tune with the natural surroundings helped her move more quickly, which helped her catch frogs. She didn't buy my line, and despite my bad attempts at humor, she turned out to be a pretty good frog hunter.

As we waded around the marsh through foot-binding smartweed and eight-foot walls of cattails, we came upon the motherlode. Trees overhung the shoreline to prevent the growth of vegetation, and only mudflats were seen. As we shined our lights onto the mud banks, the reflections from frog eyes were unbelievable. There must have been a hundred or more bullfrogs. When the kids saw the eyes, they became excited like they had just been given free reign in a candy store. Over the next hour or so, everyone had a chance to catch frogs.

Night turned into early morning, and the kids began to feel the crunch of a long night out. Everyone was covered head to toe with mud and water. Wet and tired, we returned to the vehicles, dried off, and changed clothes. On the way home, we relived the adventures of the evening.

With Fourth of July only a couple of days away, I decided it would be a fitting end to have a cookout and serve frog legs. The fried legs went over great, and everybody reminisced about our hunt a few days before.

Our next outing is in the works, and I am sure that everyone is anxious to hunt bullfrogs again this year. Bullfrog hunting is a sport the whole family can enjoy, or it can be an interesting way to weed out squeamish girlfriends. Any way you look at it, frogging is fun. It is a sport where kids can be kids, and adults can be kids again. ♡



# KANSAS' TINY TARPON

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

***Common only to a few northern Kansas reservoirs, goldeye are often considered pests. Enterprising anglers, though, are finding these hard-fighting members of the mooneye family fun to catch.***

The chartreuse floating stick bait had just hit the water and the concentric rings of impact began to fade. I twitched the lure to imitate a wounded bait fish and the water exploded. The attacker hit the lure with such fury that the 6-inch plug was knocked several feet into the air and the hook-set missed its mark. The bait settled, seemingly dazed and was hit again with the same violence. This time the hooks found their mark, and the fight was on. I was enjoying "tarpon" fishing,

Kansas style.

The fish took off like a runaway freight train. It made leap after spectacular leap, its silvery body glistening. The drag on the ultralight reel sang a strained tune and the fish began to tire. I lifted it into the boat and admired its courage as it tried to free itself. I removed the hooks, flipped the fish back to the depths and couldn't wait to cast again.

Kansas "tarpon," better known as goldeye, can be described by

imagining a cross between a shad and a piranha. Their outward appearance resembles an elongated gizzard shad with the typical deep body. The large scales have a golden luster on the front of the fish and a light blue tint near the tail. They have a terminal mouth with rows of needlelike teeth. Their eyes are yellow, reflect light and have a large pupil making them very prominent. A deeply forked tail resembles that of a channel catfish.

Goldeye occur only in North America. They are usually found in muddy water and are common in large rivers, small lakes, ponds, and marshes. Their Kansas distribution covers the main systems of the Missouri, Kansas, Blue and Republican rivers, and the lakes associated with them. Milford and Lovewell reservoirs have the most notable populations.

These fish are ferocious predators and resemble a school of small garbage disposals swallowing everything in sight. They seem to have no strong food preference and will eat whatever is most abundant. As young fish, they feed on small surface and aquatic insects and graduate to gizzard shad and other small fish as they mature. During the summer, much of their feeding takes place in open water near the surface.

Kansas goldeye are the Rodney Dangerfield of the aquatic world. They are considered an extreme nuisance by white bass and walleye fishermen due to their aggressive nature and bait-stealing prowess.

However, goldeye can be used to assure fishing success, something especially important when introducing youngsters to the activity. When my twin nephews were 3 years old, they learned the fun of fishing by standing on the front of the boat taking turns reeling in goldeye after goldeye, some nearly being cranked through the rod guides in all the excitement.

And you don't have to be a youngster to enjoy the battle with these ferocious little fighters. A pleasure boat outing a few years ago found my wife and I and

another couple on Milford Lake simply enjoying the day. Fortunately our wives wanted to go back to the beach and soak up a few rays so Adam and I snatched poles out of the rod box and headed to the middle of the lake.

It didn't take long for us to find our quarry, or vice versa, more accurately. For the next 2 hours, we caught and released over 150 goldeye, each a 1-pound mirror image of the other. We even got into some friendly competition to see who could catch the most on consecutive casts, the biggest and the most during a 15 minute period. I won the most bizarre bait contest when I caught one on a floating green glob with hooks that used to be a frog before it melted away one hot summer day in my tackle box. They're like Mikey — they'll eat anything!

Catching these tarpon impersonators doesn't require a bunch of fancy equipment. A boat is handy but not absolutely necessary. Goldeye schools occasionally push shad into shallow coves and can be caught from shore. However, a boat offers many more options searching stretches of open water.

Graphs and other fish finders can be left at home. The sight and sounds of a flock of feeding seagulls are all you need to point you in the right direction. These birds congregate to pick up dead or wounded shad and are easily seen from considerable distances. The peak of this activity occurs in June, July and August.

It's important not to spook the fish when you approach them in a boat. Although not quite as leery as white bass or stripers, they will often sink to the depths after a scare and emerge somewhere else. Use a trolling motor set on low to get within casting distance, or use the big motor at trolling speed to get close and then shut down.

Kansas tarpon fishing, unlike other types of fishing, doesn't require a sensitive rod and reel to detect hits. You could probably feel one hit using a pool cue and weed eater string. However, if you want

to maximize your fishing experience, ultralight equipment is the way to go. A 5-6 foot rod and 4-6 pound test are ideal to feel every lunge and jump.

Choice of baits isn't a problem, as long as it resembles a shad. Don't bother wasting money on live bait, as artificial lures are just as effective. Stick baits, rattle traps, jigs (use marabou since goldeye often strike short and bite the tails off of plastic baits), small crank baits, and spoons all work well.

Now that you know how to catch them, you might wonder what to do with them if you land a few. Actually, most Kansas anglers lump them in the same category as carp as far as palatability is concerned. Low fish on the taste totem pole may be unjust for both, but especially goldeye if you consider their appeal elsewhere.

Canada fishermen used to catch thousands of pounds of goldeye commercially in the early 1900s, incidental while fishing for whitefish, walleye, and northern pike. Goldeyes have never been acceptable as fresh fish, and many compared the taste to that of a brown paper bag. Initial catches were used for dog food, bringing only a penny per pound.

The goldeye market skyrocketed in 1911 after it was noted that the flavor was enhanced when smoked after freezing. Its appearance on transcontinental trains did much to popularize smoked goldeye and it quickly became a gourmet delicacy. Commercial production peaked in the late 1920s when more than 1 million pounds were caught each year. Catches have declined since then, and in 1965,

6,897 pounds of goldeye had a market value of \$.27 per pound. The entire processed fish sold retail for \$2 per pound.

Although not considered a sport fish in Kansas, the goldeye is classified as such in several other states. Due to the ease of catching these fighters, Kansas tarpon fishing is being enjoyed by many Kansans each year, but isn't likely to ever generate the interest of other Kansas fish species.

So if you want to enjoy some terrific fishing and fast and furious action, grab your ultralight and head to Milford or Lovewell reservoirs on a calm summer afternoon. You might be pleasantly surprised at the amount of fun you can have with Kansas tarpon. ♡



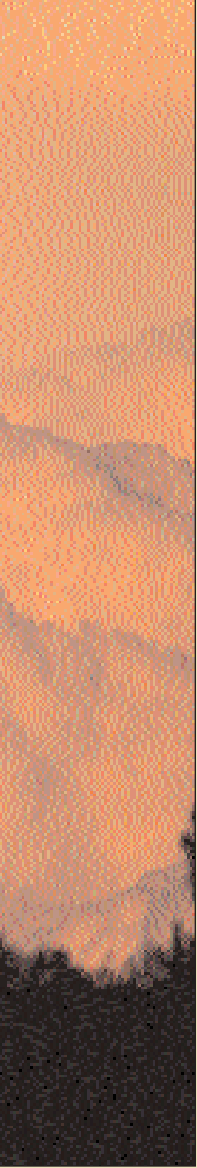
Although they're not considered a sport fish, goldeyes can actually be a blast to catch and can be a perfect fish to get youngsters hooked on fishing.



photos by Mike Blair



# Summertime



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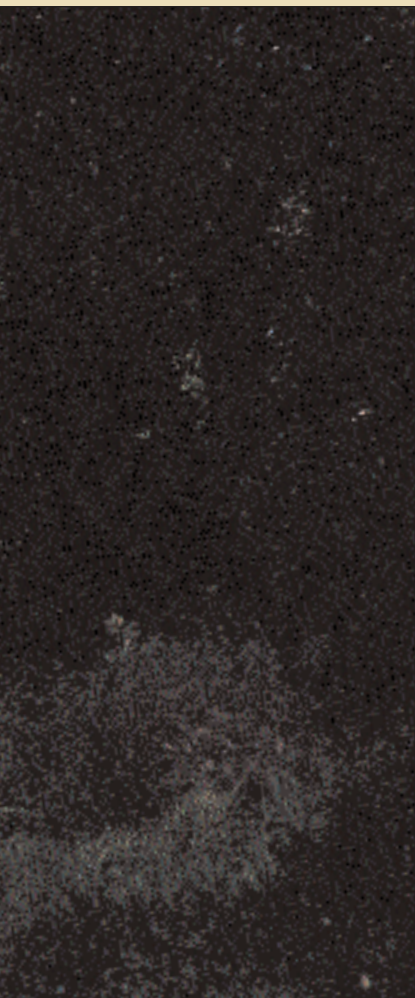
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# Conservation Officer

text and photo by Mike Ehlebracht  
*conservation officer, Great Bend*

***Sixth in the series profiling the men and women who patrol our state, enforcing wildlife and outdoor recreation laws.***



Been there. Done that. The phrase kind of sums up veteran conservation officer Jim Kellenberger. In the world of wildlife law enforcement, Kellenberger has seen a lot of water go under the bridge. He has been a Kansas officer for more than 35 years, witnessing the department go from the Forestry Fish and Game Commission to the Kansas Fish and Game to its current Kansas Department of Wildlife and Parks. He has been called a game warden, game protector, and conservation officer. Some segments of the public have come up with their own catchy names, but we won't mention them here.

Kellenberger is regional supervisor for all of southwest Kansas, working out of the Dodge City regional office. Kellenberger supervises nine officers in a region that covers 28 counties.

With three and a half decades of experience, you know Kellenberger can tell some good stories. He has many cases he's proud of, including the case that finally caught up with a known deer poacher. It went to trial on 12 charges and resulted in guilty verdicts on all counts. Kellenberger was also chosen to assist in a joint operation with the U.S. Fish and Wildlife Service in Louisiana that focused on illegal waterfowl hunting. He felt good about that job. Waterfowl poached in Louisiana are the same waterfowl that migrate through other states. He felt the operation had an impact.

Although he didn't tell me about this case, I happen to know that Kellenberger and another officer may be the only officers in history to arrest a train. As I understand it, some railroad employees were shooting pheasants from the front of a train, so Kellenberger and

another officer stopped and held the train until they could take care of the situation. Reminds you of the days when passengers shot buffalo from the trains. He's been around a long time, but not that long.

In the "Oops" category, Kellenberger told of the time he was slipping through the willows around a lake trying to get close to some fishermen. As he approached, he noticed that one of the men was pushing the other man's head under the water. Kellenberger rushed to rescue the poor man only to learn that he'd interrupted a deep-water baptism. Oops.

Thirty-five years of law enforcement experience gives Kellenberger an edge, but he still finds his job challenging. Managing 28 counties with only nine officers will always be a struggle. He still takes pride in protecting the state's wildlife resources and teaching children the correct way to handle themselves in the field.

His interest in hunting and fishing is what got Kellenberger started in the wildlife field. When he's not in uniform, he's an avid bird hunter. Did I say "avid?" I meant to say "rabid." Kellenberger will lose more shells in a season than most hunters will shoot. Okay, that may be a slight exaggeration, but you get the point.

Kellenberger is married and the proud father of four grown children, to whom he passed on his love for the outdoors. With only a few years to retirement, he'll soon have plenty of time to pass on that love to his grandchildren.

It's hard to imagine Kansas wildlife law enforcement without Jim Kellenberger, but I guess that day will come. Where are we going to find another guy who can stop a train for wildlife? 🐾

Edited by Mark Shoup

## PASS IT ON

Editor:

My father, John Kendall, recently passed away, but his family had always shared his copy of *Kansas Wildlife and Parks* magazine. As a young child, before your name change, I can remember sitting on Dad's lap and him reading your magazine to me.

As a result, I am one female who was raised to fish and hunt right along with any male. I will always have the good memories your magazine helped my father and I share, and I would like to continue to receive the magazine to share with my children and grandchildren.

So although I live in Missouri now – not far from home but just over the line – I am enclosing a check for my subscription.

*Jeannie Eccher  
Lamar, Missouri*

## DEER CAPACITY

Editor:

In the March-April issue of *Kansas Wildlife and Parks* magazine, you published a letter concerning our deer population (Page 33, "Deer Addressed"). Mr. Fox's reply was good and probably accurate except for his alarming statement that "the deer herd in Kansas at this time is at densities far below the environmental carrying capacity of these areas." Because our cropland and roadways are integral parts of a deer's environment, he is apparently suggesting that we should tolerate even more crop damage and deer-related accidents in order to achieve an even greater deer population.

I support the concept of a healthy deer herd but think Mr. Fox's view is insensitive and out of touch with the many Kansans who agree that we do have an overpopulation of deer. I doubt that your agency would be willing and able to reimburse the many Kansans who suffer injury and damage to their vehicles and croplands as a result of our deer

problem.

I think your magazine is otherwise excellent and that your agency has done an outstanding job in managing our wildlife.

*Richard Council  
Independence*

Dear Mr. Council:

**We appreciate your thoughtful comments on Lloyd Fox's letter. However, I believe you may have misinterpreted the intent of his comment in the above quote.**

**All Mr. Fox was saying is that in terms of habitat, deer numbers have the potential to increase. So in those terms, the herd is healthy and not overpopulated.**

**There is, however, another way to look at wildlife overpopulation, and that is in terms of human tolerance, which Mr. Fox clearly acknowledges in his response. As you noted, intolerance of deer numbers is determined by the number of deer-vehicle accidents and crop damage reports, among other things.**

**The department is well aware of conflicts between deer and humans and has, largely at Mr. Fox's recommendation, raised deer permit numbers dramatically over the past five years. As he says in his response, "Kansas has been one of the most, if not the most, aggressive [states] in addressing the recent growth of deer populations" nationwide.**

**Last year, a deer hunter could kill as many as six deer, and some 108,000 deer were harvested. The number of hunters who have this opportunity will dramatically increase again this year. In addition to this and other measures, landowners now have easy access to depredation permits.**

**Mr. Fox was not saying we should tolerate more crop damage and accidents. In fact, he stresses that meetings this year have been designed to determine what size of deer herd Kansans will tolerate.**

**Neither Mr. Fox nor the Department of Wildlife and Parks is advocating management policies that would lead to**

**more deer. In fact, as long as hunters have ready access to land, the department's aggressive policy will stabilize the population to levels acceptable to most citizens of Kansas within a few short years.**

*–Shoup*

## FOR THE PHOTOS

Editor:

If I had an e-mail set up, I'd send you a letter, but since I don't, I'll have to pen one. The 2000 Photo Issue of *Kansas Wildlife and Parks* magazine is beautiful, beautiful, beautiful. The pictures are great, and the layout super. This will be a saver for sure.

Thank you for all the work you do in this agency and on this magazine but especially for this issue.

*Johnnie May Brockway  
Ottawa*

Dear Mr. Brockway:

Thanks for viewing.

*–Shoup*

## FOR THE WORDS

Editor:

Enclosed find my check for 12 issues. I was disappointed in the last issue – no captions telling us about the beautiful pictures. Also, no notes or letters following. Hope you don't have anymore with only pictures.

I've enjoyed your magazine for many years. Can you tell me how to get rid of water lilies in a pond without killing the fish?

*Stan Dolinar  
Wichita*

Dear Mr. Dolinar:

Thanks for the good word.

**To deal with water lilies, try 2-4-D. Add a little ivory liquid to the solution because the leaves are waxy. Spray directly on the leaves on a bright sunny day. They will be gone in a few days.**

*–Shoup*

## OLD DOGS

Editor:

What a nice article on our best friend ("Old Dogs," *Kansas Wildlife and Parks*, May/June 2000, Page 45). Only a true dog person could understand what you wrote. As my golden lies by my feet, I hunt and peck this letter to you. I know we could sit down and tell many stories about how our buddies have made us laugh and wonder. I would give my right arm to read my dog's mind.

I've been a mailman for 14 years and have never been bitten, not to say there haven't been a few close calls. I try to explain to my co-workers that you do not need dog spray, that it just makes a dog mad forever.

Whenever I am told of a truly bad dog, and I reply, "You mean the one I was petting yesterday?" Anyway, next time you see a mailman, ask him or her how many times they have been bitten?

Give Magnum a tummy rub for me.

*Dennis Thomison  
Missoula, Montana*

## LOVED THE PICS

Editor:

I absolutely love the January/February issue of *Kansas Wildlife and Parks* magazine. The pictures were beautiful. This issue is going to be kept where I can look at it when I need a beautiful moment. I see all the beauty in these Flint Hills and just wish I could take these kinds of photos, but your magazine has done it for me.

*Velma Conklin  
Grenola*

## BAT CONTROL

Editor:

I would like to make a few comments about Danny Martin's article on bat control, "Animal Damage Control," (*Kansas Wildlife and Parks*, March/April, Page 23).

Bats are not always gone during the winter months. If the building is warm enough, they will hibernate over winter. Plugging the hole may result in the star-

vation and death of the colony, resulting in a serious odor problem.

Summer control should not be attempted until after the young have matured enough to fly and feed on their own because excluding the adults in a breeding colony will result in the starvation of the pups. In Kansas, it is best to wait until late August or early September. Metal hardware cloth should never be used for exclusion; the metal edges can injure the bats as they leave or try to re-enter. Plastic mesh or clear 4- to 6-mil plastic is a much better choice.

For detailed information on bat exclusion and bats in general, visit [www.batcon.org](http://www.batcon.org), the website of Bat Conservation International.

*Michael Haynes  
Lenexa*

Dear Mr. Haynes:

Thank you for your excellent recommendations. You are absolutely right!

*-Ken Brunson, wildlife  
diversity coordinator, Pratt*

## IF ELECTED....

Editor:

Mark Shoup for President!

*Thomas W. Patterson, DVM  
Bonita Springs, Florida*

Dear Dr. Patterson:

Thank you for the endorsement, which I enthusiastically accept. While our campaign may appear to have gotten off to a slow start, support from citizens of your stature reveal the truth that this is more than just a dark horse campaign launched from a one-horse town in the Midwest. Indeed, Florida is a pivotal state in our campaign, and your support would apparently ensure victory in November.

Again, I am most grateful for your endorsement. (Just wait until I'm elected, and you'll see how much.) And remember our campaign slogan: "A Pheasant in Every Pot!"

*-Shoup*



## FROM RABBITS TO DEER

On March 12, 1999, it snowed in Montgomery County. As I patrolled the countryside, I spotted a vehicle, windows rolled down, moving really slow along hedgerows, which fits the profile of a road hunter. I stayed back, so they wouldn't notice me and watched with binoculars. I was behind them about one-half mile, and they turned around and came back towards me. When they drove up to me, I checked them out.

They had two .22 cal. rifles in the seat with them and three rabbits in the bed of the truck. They said that they had shot the rabbits on some property close by.

The driver of the pickup was from Joplin, Mo., and the passenger was from Oklahoma. The Missouri resident had a Kansas resident license, which he had purchased on Jan. 9, 1999. He said that he had moved to Missouri after he had bought the license. The Oklahoma resident had a nonresident hunting license. I wrote down the information from their hunting and drivers' licenses, let them know that I had been following them for several miles, and said that they appeared to be road hunting.

They said they were just looking around, and I let them go their way.

Later, I did some checking and found that the Missouri resident had lived in that state for two years. When he had purchased his Kansas resident license on Jan. 9, he had lied about where he lived.

Conservation Officer Larry Dawson and I went over to Joplin, Mo., and talked to this person at his residence. We

cited him for misrepresentation to purchase a Kansas resident hunting license and for hunting rabbits without a valid license. He shortly after paid his fines of \$290 in two different counties – Labette, where he bought the license, and Montgomery, where he was hunting.

However, things were not to end there. I got to think-

for misrepresentation to purchase a Kansas resident deer permit. The Missouri man had to pay a diversion fee of \$300, court costs of \$45, a prosecuting fee of \$10, and lost the privilege to hunt in Kansas for one year.

It was also found that he had applied for a Kansas lifetime hunting license, and he was ordered to forfeit his

Lake in Kansas City, Kan. He was a Missouri man who had been drinking. We asked to see his fishing license, and he told us he didn't have one.

Glen checked the man by radio for any warrants and began to write a citation for fishing without a license. He told me that the man had outstanding city warrants totalling \$3,000 and had done time in the Kansas State Penitentiary. I told Glen I'd keep an eye on the man.

While Glen was writing the ticket, the suspect began to walk away. I followed, thinking he might only intend to retrieve his fishing poles, but he passed both poles. When I ordered him to stop, he began to run, and I chased him for about a block and one-half through city yards, crossing two fences, before I lost sight of him. Then I found him hiding in some grass and weeds.

He told me that he had injured his knee. I placed him under arrest and led him to the nearest street, when Glen arrived in our vehicle.

We found a switchblade knife in the man's pocket. We then took him to a nearby hospital for medical attention, but the injuries were minor, so we took him to jail.

The man was charged with felony aggravated weapons possession, obstructing legal process, and fishing without a license. His bond was set at \$5,000, so he stayed in jail for 58 days after pleading guilty to the felony. The other charges were dropped, but he received a 12-month suspended prison sentence, was placed on probation for two years, and paid court costs of \$134.50 and court-appointed attorney fees of \$460.

—Bruce Bertwell,  
conservation officer, Olathe

## DREW A BLANK

While checking fishing licenses at La Cygne Lake in March of 1999, I encountered three individuals who were fishing on the hot water discharge side of the lake. When I approached two of the individuals, one immediately said that he didn't have a fishing license. Another fisherman said that his license was in the truck and that he would have to get it.

As I began to write the first man a ticket, the second gave me all three copies of a blank fishing license. (The hard and pink copies are supposed to remain in the book with the vendor.) I asked him where he got this license, and he said that his mother got them for him that morning before the store opened.

I phoned the store where he said the license came from and asked for sporting goods. The manager, who was the boy's mother, said that she had two licenses missing all three copies. One matched the number on the license her son had given me.

After questioning the boy more, he admitted that he had stolen both licenses from the store. He was arrested and charged with possession of stolen property, possession of alcohol as a minor, and fishing without a license. Bond was set at \$1,545.

I later asked CO Glen Cannizzaro if he could go by the store where the licenses were stolen and check the book to see if there were any other licenses missing. He confirmed that four more licenses were missing out of the book, and reports were filed on these.

There is now a warrant for the boy's arrest for failure to appear in court.

—Terry Mills, conservation officer, Pleasanton

ing, *Why did he buy a hunting license on Jan. 9? Oh yeah. The January deer season opened on January 9. I'll bet he also had a fraudulent deer permit.*

I did some further checking and found that, sure enough, he had applied for and received a resident deer permit from.

I filed a charge in the Pratt County District Court

application fee of \$240.50.

The irony of all this is that all he was originally checked for was rabbit hunting.

—Dennis Knuth, conservation officer, Independence

## CHASE SCENE

On Labor Day weekend a couple of years ago, CO Glen Cannizzaro and I encountered a fisherman at Big 11

## 2000 LEGISLATIVE WRAP-UP

With the 2000 Legislature now adjourned, the following is a summary of changes that impact outdoor recreation in Kansas:

### Deer Permits

**(see accompanying article for more information)** -- The number of antlered permits that may be issued to non-residents for firearms hunting is 10 percent of the number available to residents, and 15 percent for archery. There is no longer any percentage cap on the issuance of nonresident antlerless-only permits.

Kansas landowners and all tenants and managers could apply for nonresident deer permits, which, if obtained, they may sell to any resident or nonresident. (Application deadline was May 31.) Landowners may NOT sell Hunt-Own-Land permits.

**Deer, Other Requirements** -- The department will establish a toll-free telephone number for landowners and tenants to report property damage caused by big game and request information regarding big game control permits and programs that assist in reduction of high local deer populations.

The department will publish quarterly, in newspapers having general circulation in areas experiencing high deer populations, information regarding big game control permits and programs that assist in reduction of high local deer populations.

The department, in conjunction with KDOT, will develop a management plan to address reduction of motor vehicle accidents involving deer in those areas of the state experiencing high numbers of such accidents. The management plan will include methods to identify those areas and methods to inform and communicate with landowners and tenants in those areas regarding measures to reduce local deer populations.

**Minimum Age for Big Game Hunting** -- A person who is 12 years or 13 years of age may apply for big game permits in Kansas, if that person will hunt under the immediate supervision of an adult who is 21 years of age or older. Completion of a certified bowhunter education course is required if bowhunting for big game, in addition to the regularly required hunter education course.

**Penalties for Poaching Big Game** -- In addition to any other penalty imposed by a convicting court, a person convicted of the illegal taking or commercialization of a big game animal will have their Kansas hunting privileges revoked for one year upon first conviction, three years upon second conviction, and five years upon third or subsequent convictions.

In addition to any other penalty imposed by a convicting court, the unlawful intentional taking of a trophy

big game animal shall be punishable by a fine of \$5,000. A trophy big game animal is defined as a whitetail deer with an inside spread of at least 17 inches, mule deer with an inside spread of at least 22 inches, an elk with at least six points, or an antelope with a horn of at least 14 inches.

**Hunter Education** -- A person may still attest to the completion of a certified hunter education course when purchasing a hunting license, without physically displaying the hunter education card to the vendor. Persons younger than 27 must carry the actual card in the field. Persons hunting on controlled shooting areas are now exempt from any hunter education requirements.

**Boating Education** -- Beginning Jan. 1, 2001, any person born on or after January 1, 1989, must complete an approved boater education course in order to operate a motorboat or sailboat on public waters in Kansas. This requirement does not apply to a person operating a motorboat or sailboat accompanied by and under the direct and audible supervision of a person over 17 years old who either possesses a certificate of completion of an approved boater education course or is legally exempt from the requirement. This requirement does not apply to anyone 21 years old or older, regardless of their date of birth.

**Hunting by Written Permission Only** -- Instead of using a sign, landowners may now post land as "Hunting By Written Permission Only" by painting identifying purple marks on trees or posts around the property.

**Controlled Shooting Areas** -- The department may, but is no longer required to, inspect controlled shooting areas that file a renewal application for a permit. Persons hunting on controlled shooting areas are now exempt from any hunter education requirements.

**Park Entrance Fees** -- Beginning Jan. 1, 2001, persons 65 years old and older and persons with disabilities will be required to pay one-half of the cost of a motor vehicle permit to enter state parks in Kansas.

**Taxation of Watercraft** -- In November, the voters of Kansas will determine, by popular vote, whether or not to reclassify the property tax rate of aircraft and watercraft.

For more information regarding legislative changes, please visit the department's website, [www.kdwp.state.ks.us](http://www.kdwp.state.ks.us), or phone (785) 296-2281.

—Chad Luce, public information officer, Topeka

## PARKS 2000

In 1997, the Kansas Legislature approved a \$10 million, three-year, investment in aging parks facilities. The Parks 2000 initiative is entering the second year. The planning and bid-letting process delayed the actual groundbreaking at first, but since completion of that phase, work has proceeded rapidly.

Facilities completed thus far include a new office at Glen Elder State Park that improves visitor accessibility and safety. Planning is underway for office remodeling projects at Meade and Prairie Dog. Two modern restrooms were added at Cheney State Park.

New all-weather showerhouses, to replace some of the old open-air ones, have been completed at Webster, Cheney, Lovewell, Kanopolis, Hillsdale, Fall River, El Dorado, Elk City, Pomona, Crawford, and Perry state parks. Work is in progress on showerhouses at Cedar Bluff and Wilson and an additional showerhouse at Lovewell. Bids will be let on one at Scott State Park this summer. Showerhouses have been renovated at El Dorado, and work on showerhouses at Perry should be done this fall.

Beach houses have been added at El Dorado, Kanopolis and Perry, with a new one at Crawford out for bid. Since the beach house at El Dorado was completed, more people are using the beach. A new swimming beach was constructed at Milford State Park.

Campgrounds at Tuttle Creek, Wilson, Cheney, Elk City,

Eisenhower, Kanopolis, Prairie Dog, Webster, Meade, Fall River, Toronto, Glen Elder, and Pomona have been or will soon be renovated, including improved water lines, some 50-amp electrical service, and leveled, designated camp pads. At Elk City, concrete camping pads in areas prone to high water have brought positive comments and increased use from campers. Glen Elder's improvements will include concrete RV pads with tie-downs. New campgrounds have been added at Cedar Bluff and Hillsdale, while design and bid work is in progress on new campgrounds at Lovewell and Webster.

Boat docks are finished at Meade and Glen Elder, as is the replacement of the underground fuel tanks at El Dorado. New vault toilets were built at Mushroom Rock and Sand Hills State Parks.

Work is nearly complete on the new trailer dump station at Scott State Park.

Work should be done by fall on two new modern restrooms at Tuttle Creek, a new shelterhouse and campground improvements at Toronto, and a new permit station at Fall River. Roadway and parking lot improvements are underway at Glen Elder, while bids will be approved on new vault toilets at Scott and Tuttle Creek this fall.

The Parks 2000 initiative has not only brought about new and improved facilities for the public, it has improved coordination and efficiency within the department.

—Kathy Pritchett, Parks Division secretary, Pratt

## 2000 Deer Regs

**2**000 deer seasons: Archery — Oct. 2-Nov. 28 and Dec. 11-Dec. 31; Firearms — Nov. 29-Dec. 10; Muzzleloader — Sept. 16-Sept. 29 and Nov. 29-Dec. 10; Extended Season (white-tail antlerless only) — Jan. 1-Jan. 14; Youth/Disabled Hunter (new) — Sept. 30-Oct. 1.

During the extended white-tail antlerless-only season, all unfilled permits revert to whitetail antlerless-only permits but retain the unit designation (if applicable). Any legal equipment may be used, but blaze orange must be worn.

The Youth/Disabled season is open to any person 16 years old or younger while under the immediate supervision of an adult 21 or older (adult may not hunt) and any



person with a permit to hunt from a vehicle. Resident and nonresident archery, firearm, and muzzleloader permits may be used during this season. The unit and equipment restrictions on the permit apply, and blaze orange must be worn.

General residents are limited to a single "antlered" or "any deer" permit. All leftover permits will now revert to antlerless-only permits. General residents may obtain one primary permit, two antlerless-only leftovers, two

game tags, and one unit archery permit.

As many as two game tags, valid only for antlerless white-tailed deer, may be purchased by anyone who already has a deer permit. However, after December 31, 2000 game tags may be purchased for use in the antlerless-only season without first purchasing a deer permit.

If a landowner, tenant, or manager has obtained a nonresident permit (application deadline May 31), they may transfer the permit to anyone,

with or without compensation, provided the transferee does not have a Hunt-Own-Land, Statewide Archery, or Firearms/ Muzzleloader primary permit. The landowner must send a completed transfer application AND the actual nonresident permit to the Pratt Operations Office. The Pratt office personnel will process the application, reprint a new permit, and send it to the address specified on the transfer application. This process will most likely take five business days. Hunt-Own-Land permits may NOT be resold.

For more information regarding deer permits, or to obtain a permit application, visit the department's website, [www.kdwp.state.ks.us](http://www.kdwp.state.ks.us), or contact the Pratt Operations Office at (316) 672-5911.

—Chad Luce, public information officer, Topeka

## DOVES Unlimited

In April, Quail Unlimited (QU) established a Dove Hunter wing to encompass wingshooters nationally who have a love for the flashing, darting, and very sporting mourning dove.

Because no viable nonprofit organization is concerned with the preservation of the mourning dove and dove hunting, QU has taken on the task of bringing together dove hunters under the QU umbrella. Now, not only will there be quail chapters that raise funds to preserve and restore habitat for quail, dove chapters will be raising funds to ensure the survival of dove hunting by preserv-

ing and developing prime nesting areas and good habitat, planting dove food plots for migrating doves, and offering more recreational opportunities for hunters, especially young hunters just entering the shooting sports.

More shotgun shells are expended annually on dove hunting than on any other shotgun hunting, with more dove hunters taking to the field annually than any other wingshooting nationwide. These facts have made QU officials take notice.

"This tells us how important the dove is to the American hunter and to the preservation of hunting and the shooting sports in America," says Jerry Allen, administrative vice president and director of operations for QU. "Membership sur-

veys tell us that the majority of QU members are also avid dove hunters."

This move has been widely acclaimed by the shooting sports industry. A limited-edition Dove Hunter shotgun is planned for the near future, along with a limited-edition art print program and collectable dove stamp program.

Membership in the Dove Hunters wing of Quail Unlimited is \$25, which includes a magazine filled with dove field management and shooting tips, dove hunting news, stories, a color Dove Hunter decal, and membership card.

For information on joining or starting a Dove Hunter chapter, phone (803) 637-5731 or write to Dove Hunters, P.O. Box 610, Edgefield, SC 29824.

—Jerry Allen, Quail Unlimited



Kansas is blessed with one of the nation's top trophy-producing deer herds. With strong deer numbers in most regions, it would seem easy to buy a permit and harvest a deer. However, these wary animals are anything but easy marks, as the unprepared often find out too late. A 10-day firearms season can pass quickly, and even the liberal archery season can go unrewarded if hunting sites are chosen carelessly. Now is the time for advanced preparation to ensure a successful deer season.

Preseason scouting allows deer observation before the animals are alarmed by hunting pressure. Summer scouting is a visual exercise concentrated on water and food supplies. Deer are creatures of habit and usually visit preferred sites in the same manner each day. If undisturbed, they travel freely in the late afternoons of July and August. Use of spotting scopes or binoculars makes it easy to watch and learn the habits of even the largest bucks in an area.

Start scouting by driving backroads at twilight to find concentrations of deer. Look for grainfields with ripening crops such as soybeans and milo. Corn fields are excellent feeding

sites but are difficult scouting locations due to their tall cover. Alfalfa fields are also excellent and provide a good view. New wheat is a preferred food come fall.

Locating deer is a big advantage, particularly for hunters looking for trophy bucks. Next, it is important to learn how the animals live and move within their ranges. During fall months, deer are likely to move at dusk, making it necessary to intercept them between feeding and bedding areas. Trails can be located by walking along field edges during midday hours when deer are bedded in cover. By following these trails and looking for telltale signs such as browsed plants or rubbed trees, the amount and type of deer activity can be assessed.

Look for natural ambush sites, such as creek crossings or trail intersections. Bedding areas are usually hundreds of yards from feed fields, and it's wise to stay clear of them. Bumping deer once makes little difference, but repeatedly scaring deer from bedding thickets often results in a total change of habits. Trails that begin to meander when entering thick cover may signal the entry to a bedding area. The best stand sites are situated far enough from bedding areas to allow unobserved entry but close enough so that deer pass in adequate shooting light.

Once stand sites are selected, build blinds or cut shooting lanes well in advance of hunting season. This provides time for the area to settle down and for deer to become accustomed to any habitat changes they may notice. When hunting season arrives, the stage is set.

By watching and planning before deer season starts, a hunter increases the odds for success. Besides this, there is no faster way to build the anticipation for one of Kansas' finest hunting experiences. Make summer scouting a part of your deer hunt this year.

—Blair



# A DOUBLE RAINBOW DAY



by Mark Shoup

It's late May, and I have promised my 12-year-old son, Logan, that I will take him out of school for the spring crappie spawn at Cedar Bluff Reservoir. Not having a boat, we will have to wade unless we can hook up with my friend, Steve Hausler, who writes and photographs for the Hays Daily News and knows the lake like the back of his hand.

I've built this lake up in Logan's mind and bragged about Steve and his boat, but Steve's schedule is erratic. He's on call for all kinds of events this time of year and seldom knows if he will have a day off until the day comes.

With all this in mind, we ready for a trip to the lake. The poles are rigged with new line, and we have plenty of jigs. Logan wants to bring all sorts of odds and ends, including his Boy Scout survival kit. "Why are you bringing that thing," I grouse.

"You never know when we might need it," he smiles. I humor him.

The drive is filled with conversation about everything from fishing lures to brushing your teeth. I even make Logan a bet. "You brush your teeth twice a day for two weeks without me having to tell you, and I'll buy you a lure."

"A bass lure?" Logan isn't going to let me off the hook.

"Sure," I counter. "But if you don't keep brushing for the following two weeks without my telling you, I take the lure back."

"But if I do keep brushing for the next two weeks, do I get another lure?" This kid knows when he has a fish on the line.

"Okay," I agree, silently calculating how this might affect the family budget.

We reach the lake about 10:30 in the morning. It's a much cooler day than the previous few, when reports had anglers hauling big female crappie out of Boy Scout Cove by the bucket. "I hope the weather hasn't pushed the fish to deeper water," I muse.

"It's still going to be fun," Logan counsels. When we reach Boy Scout Cove, Logan is reaching into the bed of the pickup before I'm out the door.

"Oh no!" he exclaims. "Your good rod got broken!" In fact, both my rods are broken. I have left two window sash weights in the bed of the truck, and they have apparently rolled across and broken both rods. "Maybe you can fix it, Dad."

I take a deep breath. "You're right, Logan. I'm not going to let a broken rod spoil this trip."

I have an ultralight and a medium-weight rod, so I snip 18 inches from the ultralight's tip, fit it into what remains of the medium-weight rod, and tape it secure with bandaids from Logan's survival kit. *A bandaid ultra-lightning rod*, I think, admiring my handiwork.

Logan is casting from the bank now, and I wade into the water.

He smiles at this and follows suit, grinning from ear to ear. But after about an hour of jiggling half-submerged salt cedar, we have caught nothing. I'm discouraged.

Logan, meanwhile, delights in wading, and he's stalking a pod of spawning carp. Suddenly he screams, "Dad, I caught a carp!" The 3-pound fish gives him quite a tussle. He couldn't be happier.

After two hours, I have caught one crappie, and a storm rolls in. Just ahead of the rain, we shed wet clothes and hop into the truck. A dark cloud tries to follow me in, but Logan is having too much fun to allow it. Having exchanged his cold, wet jeans for dry, he now finds the warmth of the cab and rain beating on the roof exhilarating. "It's cozy, cozy, cozy in here, Dad!"

*What is with this kid?* I think. *Because he's fishing, he's happy though wet and cold. When he's not fishing, he's happy because he's warm and dry.*

About this time, the cell phone rings. "Mark, it's Steve," comes the voice out of thin air. "Meet me at the marina at 2:30." This is good news, but as we cross the dam, lightning strikes to the north.

In the marina, Steve is calmly eating a sandwich to the tune of rolling thunder. "Sorry I dragged you out here, Steve."

"Oh, this will pass over," he says nonchalantly. "We'll give it awhile and then load up." Meanwhile, Logan examines the colorful lures on sale and marvels at a 6-foot styrofoam bass hung from the ceiling.

Sure enough, we're on the lake within an hour, ripping across the water in Steve's Ranger. This is a totally new experience for Logan. I'm sure that if he doesn't stop grinning, he'll pull a muscle.

Naturally, Steve takes us right to the crappie - bigger crappie than Logan has ever caught, and more abundant. So goes the afternoon. Between catches, Logan is full of questions about fish and fishing, which Steve patiently answers. He shows Logan how to tie a knot and admits that he doesn't know whether black and white crappie can cross - in the wild or artificially.

The discussion even turns to college. At 12, Logan is split between the Air Force Academy and K-State. I mention that he could fish Milford and Tuttle Creek at K-State. Steve adds that Colorado has trout fishing, but Logan notes that Cedar Bluff is near Ft. Hays.

"Okay," I say. "Let's not make any college decisions based on fishing lakes." Steve and Logan allow as how it makes good sense to them, and we all laugh.

After four and one-half hours on the water, we end the day catching a couple of smallmouth off the dam. As we drift by, a crusty old float-tuber, line snagged in the rocks, warns, "I hope you've got wheels on that boat, 'cause I'm gonna pull the bottom outta this lake!"

The clouds have finally broken, and the western sky opens in all its evening glory. Logan drinks in the scene, commenting that Kansas, not Montana, should lay claim to the title, "Big Sky Country." To the east, a double rainbow arcs above the dam.

It's 9 p.m. by the time we finish cleaning fish, thank Steve for his hospitality, and pull onto the highway. As we cross the dam, Logan notes absently, "I've overcome my fear of high places."

"Well, good," I answer. "Now did this day live up to your expectations?"

"More," he replies, fighting back sleep. I sigh and reflect upon the joy that living brings the young, and am thankful that it has been shared with me again. It has truly been a double-rainbow day.

WILD  
SAUGEYE?

**S**augeye are a fertile hybrid made by fertilizing walleye eggs with sauger sperm; therefore it is likely the eggs could be fertilized by a walleye or another saugeye to produce young. The fish produced will continue to be a saugeye but will likely have more characteristics of the walleye because walleye eggs were used for the original hybrid. Genetic analysis of walleye populations in North America have shown that sauger genetic material occurs naturally in some walleye populations where the two species co-exist, so these species have been cross breeding in the wild. This is an indication that these two species are closely related.

—Tom Mosher, aquatic research biologist, Emporia

LEBO CITY LAKE  
REOPENS

**L**ebo City Lake, newly renovated and located just off Interstate 35, about 12 miles east of Emporia, is rated as the one of the top channel catfish lakes in the state, with fish as large as 5 pounds. It's also good for wipers and other species.

The lake is open everyday from 7 a.m. to 9 p.m. All anglers, regardless of age, will need a city fishing permit.

For more information, phone Lebo City Hall at (316) 256-6622 or check their website, [www.skyways.lib.ks.us/towns/lebo](http://www.skyways.lib.ks.us/towns/lebo).

—Mathews

Hooked On **WIPERS**

**“T**he hardest fighting fish that swims, pound for pound.” I know you’ve heard this claim before – for just about every fish there is, except maybe crappie and walleye. But in this case it’s true – I swear on the Angler’s Bible.

The artificially-created wiper is the result of striped bass eggs fertilized with white bass sperm. They don’t reproduce, so populations are maintained through length and creel limits and annual stocking. While many fish hybrids have been experimented with, the wiper is one that works.

Most Kansas anglers are well aware of the hard-fighting nature of the white bass, which are present in most of our reservoirs. But a big white bass might weigh just 2 pounds. However, the white bass’ cousin, the striped bass, can get big, say 40 pounds, and is known for its power and long runs when hooked. Cross these two sport fish and you get the added bonus of hybrid vigor, which makes the progeny grow faster and fight harder than either parent. Wipers might be the perfect hybrid, blending the desirable characteristics of both parents, and they get big; the state record weighed more than 20 pounds!

You probably have good wiper fishing nearby. Because of their popularity with anglers, wipers have been stocked in reservoirs and lakes across the state. According the Fishing Forecast 2000, the best wiper reservoirs include Sebelius, Webster, Milford, Cedar Bluff and Kanopolis. The better small lakes include Lebo City Lake, Gridley City Lake, Middle Creek State Fishing Lake, Shawnee County Lake, Jeffery Energy Center Makeup Lake, and Marion County Lake.

The best time to catch wipers is late spring and summer. Find shad, and you’ll find wipers. Anglers enjoy outstanding wiper fishing on windy points when the wave action congregates shad. Cast white jigs, soft jerk baits, topwater plugs, or rattling crankbaits. The best fishing is often when wind prevents safe boating. Simply wade out on long main lake points on the windy side of the lake and cast into the wind – and hang on tight. The wiper has a well deserved reputation for jarring strikes.

In mid- to late summer, wipers will often be found mixed with white bass schools chasing shad on the surface. This activity usually starts in July and lasts through early September. The large schools of young-of-the-year shad are generally found in the main part of reservoirs. The white bass and wiper schools pin the shad against the water’s surface, and all heck beaks loose. On calm days, look for the disturbance on the surface as whites and wipers erupt. When wave action prevents you from seeing this activity, watch for gulls, which will circle above and pick up scraps of shad left by the marauders. Quietly maneuver your boat as close as possible without spooking the feeding fish. Cast surface plugs, jigs, and spoons right into the activity, and again hang on. Silver, white, and chartreuse lures that imitate shad work best. Try to match the size of lure to the size of the most abundant shad.

When there is no visible sign of surface activity, switch to live bait. Live shad and green sunfish are popular baits, but lots of wipers have been caught by catfishermen using night-crawlers and liver. Live bait should be still-fished or drifted near the bottom. Look for wipers in deep water near main lake points, river channel drop-offs, and mid-lake humps or submerged islands.

Wipers swim with the power of a striper and the tenacity of a white bass. A smooth drag and quality line is absolutely necessary, and even with that, you’ll break off occasionally because of their sheer power.

Try wipers in a lake near you, and if you catch one, you’ll come away a fan. In fact, you’ll be the next angler to tout the wiper’s fight – “Pound for pound, the hardest fighting fish that swims.”

—Miller

## WHAT'S BUGGIN' THE FROGS?

Frogs and toads are having their reproductive woes these days, but we just don't know why. Some of their eggs eventually transform into adults, but others aren't so fortunate. Some just never develop. Still others turn into malformed tadpoles or adults due to parasitic flatworms, called "trematodes," that can infect tadpoles and cause deformities. And some eggs and tadpoles will succumb to agricultural chemicals.

As adults, frogs and toads still are vulnerable to most of these threats, as well as other parasites and bacterial or viral infections. Additionally, these mortalities and deformities can be aggravated by each other.

But now there's a new pathogen on the landscape—a fungal disease known as Chytridiomycosis. Although it has appeared in Colorado, so far this fungus has not been identified in Kansas. But, truth is, we just don't know yet. Being able to answer some of these questions is important to understanding how the environment affects all of us.

So how do you recognize a frog and toad die-off or an unusually high number of malformations? Scientists in Kansas focus on any area where three or more individuals are affected. However, anyone who observes dead amphibians in one small area should be cautious. Toxic substances that kill animals can also kill humans. If you observe any unusually large number of dead animals, call authorities, including your nearest KDWP office or staff person.

Frogs and toads with missing or extra limbs or other weird, unnatural-looking growths on their bodies probably are not indicative of a toxic chemical threat. Such deformities are the result of past exposure to chemicals or a trematode earlier in the amphibian's developmental stages. But malformed amphibians should also be reported. Contact the nearest KDWP office or the state's Amphibian Abnormalities Coordinator, Eric Rundquist, at the KU Museum of Natural History (785-832-9093).

For overall population trend assessments, KDWP has sponsored the Kansas Amphibian Monitoring Program for three years. Coordinated by Joseph Collins of the Center for the Study of North American Amphibians and Reptiles in Lawrence, the program has more than 80 volunteers running 100 census routes. Conducted from March through June, these counts are designed to develop baseline information on relative population levels of calling amphibians. In a few years, we can start to make sense of what really is happening.

In the meantime, you can do your part by being observant, and careful if necessary, in identifying potential problem situations involving these interesting amphibians.

—Ken Brunson, wildlife diversity  
coordinator, Pratt

## WILDFLOWER LANE

Drivers along U.S. 69 highway from Fort Scott to the Johnson County line may enjoy a progression of native wildflowers this season, thanks to the efforts of Linn County wildlife biologist Tom Swan. The flowers are part of a Prairie Education Project initiated by Swan to generate awareness and interest in native plants along Kansas highways.

Swan received a \$20,000 grant from the Kansas Department of Transportation to develop the project.

In 1996, Swan selected six sites along the 70-mile route by driving the highway to locate ideal planting areas easily seen from both directions. Sites were initially prepared by burning and spraying to kill fescue and brome grasses that would compete with the new wildflowers. Seeds were obtained for 20 wildflower species from nurseries throughout the Midwest, and these were drilled in January so that early snows and rains could help establish them. Wildflower seeds were mixed with little bluestem and sideoats gramma grasses to enrich the prairie flavor of the project. These grasses are

more compatible with native wildflower species than the cool-season grasses normally planted along highways.

Plots were designed to ensure a progression of native blooms throughout the growing season, representing many colors. It took several years to complete all plantings. Success ranged from fair to excellent, with some sites producing highly-colorful displays. Maintenance — such as light burning, discing, and mowing — continue to keep grass from out-competing the wildflowers.

Local interest has been strong. Western Resources and Quail Unlimited helped provide initial funds when a temporary problem delayed grant money used to plant the first plots near Fort Scott. Local KDOT mowing crews have been helpful in protecting the planted sites.

"You've got to have cooperation at both the state and local levels in a project like this," Swan says. "Those mowing the rights-of-way can make or break a wildflower planting. The guys I work with have been extremely helpful."

Wildflower plots along 69 highway are marked with special signs about the project.

—Blair



**PASS IT ON**

It takes hunters to make hunters, and department field staff are doing their part. After hosting two successful youth pheasant hunts in January, Glen Elder State Park hosted a youth rabbit hunt in February. With help from Mike Nyhoff and Kurt Reed, the Waconda Lake Association organized the hunt, selecting nine area youngsters to hunt what was termed an obscenely high rabbit population. With one-on-one instruction, the group of young hunters took 58 rabbits! The youth also learned how to clean their rabbits, before enjoying a fried rabbit lunch.

In April, Haven wildlife biologist Craig Curtis organized a youth turkey hunt. Nine young hunters were selected to hunt in the turkey rich region surrounding Sandhills State Park. The youth arrived on Friday night to meet guides, get outfitted with camo, and pattern shotguns. Although the following morning was wet and windy, three of the hunters took gobblers, and several others experienced close encounters. Several department personnel helped with guiding, including Brad Odle, Steve Adams, Curtis, Marc Murrell, and Mike Miller.

Events like these occur at wildlife areas and state parks across the state, and each provides youth with valuable outdoor experiences, as well as personal rewards for the participating adults. Each event fits into the department's "Pass It On" hunter recruitment and retention program.

—Miller

**HUNTER ED CLASSES**

Kansas' 1,500 volunteer hunter education Instructors are gearing up for the normal fall rush for hunter education courses statewide. Each year, there are about 350 classes held across the state. Most of these classes are held from August through October. The best time to take a class is in August and September because these classes do not fill up as fast as the October classes. Also, earlier classes allow the student to hunt the earlier seasons.

To avoid disappointment, it is recommended that students sign up for classes as soon as possible. Information about

courses is available from any Wildlife and Parks office, the Department website, [www.kdwp.state.ks.us](http://www.kdwp.state.ks.us), or the Hunter Education Section in Pratt.

—Wayne Doyle, *Hunter Education coordinator, Pratt*

**STAR PARTY**

On Sept. 28-Oct. 1, the Kansas Astrophotographers and Observers Society (KAOS) will host its annual Great Plains Star Party at Scopeville, 75 miles southwest of Kansas City. This is the largest astronomical event in Kansas and Missouri and will include family activities for one, two, or all three nights of camping under the stars.

This event has gained notoriety as a weekend for astronomers of all ages. Although the group caters to the serious amateur astronomer, the recreational astronomer will enjoy the opportunity to educate himself on all aspects of this hobby. Daytime activities include programs by expert astronomers, telescope making tips, and home-style meals. But the highlight of the event is the dark skies of Scopeville on a high, flat grassy plain in the heart of the Osage Questas.

For general information and registration, visit the society's website at [www.icstars.com/HTML/GreatPlains](http://www.icstars.com/HTML/GreatPlains), or phone (913) 897-0235.

—Shoup

**BOTTOMS DEDICATED**

The 10-year, \$18 million renovation of Cheyenne Bottoms was completed earlier this year. This effort made a number of significant changes to the physical design of the area to increase water management and conservation capabilities. On May 10, the Department held a celebration at the central Kansas wildlife area to offer thanks to all who contributed.

The get-together included an area open house from sunrise to 5 p.m., bus tours of the property throughout the day, a buffalo burger barbecue for invited dignitaries, and plane tours for special guests.

The high point of the event was the dedication ceremony in the afternoon. Speakers at the dedication included Governor Bill Graves, Wildlife and Parks

Secretary Steve Williams, Ross Melinchuk of Ducks Unlimited, John Cooper representing the North American Wetlands Conservation Council, Carol Lively of the Region 6 U.S. Fish and Wildlife Service office, Al LaDoux of the Kansas Water Office, and Alan Pollom, state director of The Nature Conservancy. Several state legislators and local officials, as well as representatives from the Kansas Congressional delegation, were also present.

With the renovation completed and some much-needed equipment added in the last 10 years, the area is well on its way to recovery from years of little water and undersized equipment.

—Karl Grover, *public land manager, Cheyenne Bottoms Wildlife Area*

**SOUTHEAST QUAIL PLIGHT**

The first meeting of the Southeast Kansas Quail Working Group (SEK-QWG) was held at Chanute on April 1. The first item of business was to write a Conservation Priority Area (CPA) request. The SEK-QWG members then edited, corrected, and submitted the CPA through the National Resource Conservation Service (NRCS) in early June.

The working group grew out of a Quail Initiative meeting held in February to address the issue of declining quail numbers in southeast Kansas. Participants were land management professionals, Quail Unlimited representatives, representatives from the Kansas Department of Transportation, the U.S. Fish & Wildlife Service, Kansas Farm Bureau, landowner/operators, and others.

Immediately following the Quail Initiative Meeting, work was begun on writing the CPA request for Conservation Reserve Program (CRP) plantings that would benefit quail in Allen, Bourbon, Crawford, and Neosho counties. The CPA request is entitled the Southeast Kansas Bobwhite Initiative Pilot.

If granted, a CPA would make all cropland within the CPA area eligible for CRP practices that benefit the intent of the CPA; thus, potentially a great deal of nesting/brood rearing habitat (up to 60,000 acres) could be created.

—Tom Glick, *wildlife biologist, Pittsburg*

by Mark Shoup

# KANSAS SHRIMP

What's the most fascinating critter in Kansas? The wily coyote? The secretive owl? The graceful deer? How about the seasonal shrimp?

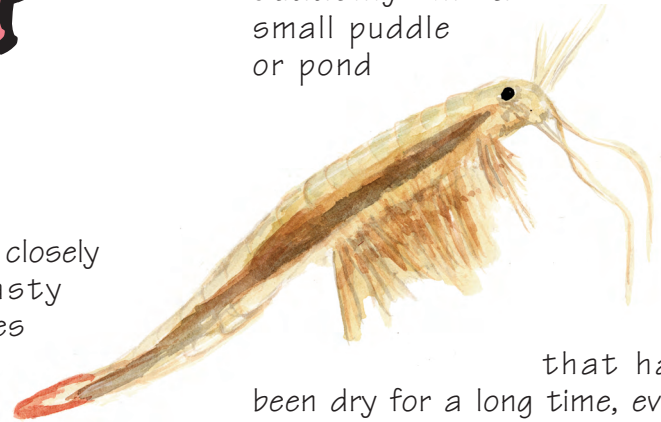
Nope, I'm not pulling your leg. While everyone is familiar with the common crawdad, perhaps the most fascinating but unknown crustaceans in Kansas are shrimp. Fairy shrimp, tadpole shrimp, and

clam shrimp are closely related to tasty marine delicacies such as crabs, lobsters, and shrimp that we all know.

So where are these critters found? In small, usually seasonal waters such as roadside ditches, grassy spring ponds, cattail marshes,

woodland pools, and playa lakes — anywhere except lakes and running water. However, most are only about 1/4 to 1 1/2 inches long, so they are seldom seen unless you go looking for them.

One of the most interesting facts about these critters is that they can appear suddenly in a small puddle or pond



that has been dry for a long time, even years. Scientists have kept eggs in dried mud for as long as 15 years before successfully hatching them!

How can this be? Fairy, tadpole, and clam shrimp eggs are blown, or carried on the bodies of other creatures, to dry spots where they lie dormant until conditions are perfect. These eggs can be frozen solid or scorched in the dry summer sun without dying. When spring rains fall, the eggs hatch, and these pools come alive with freshwater shrimp. When this happens, a dry, lifeless depression can suddenly become an important source of protein for shorebirds and waterfowl.

Two types of eggs are produced. Thin-shelled summer



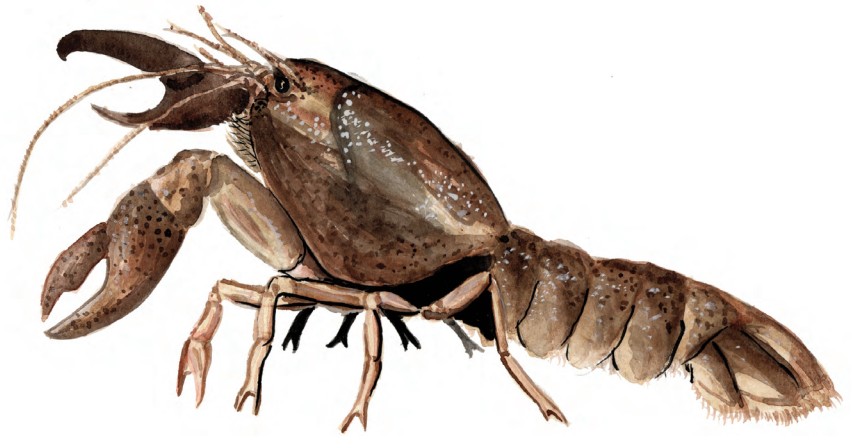
eggs hatch immediately. Thick shelled winter eggs are the ones that lay dormant for so long.

Another fascinating fact about freshwater shrimp is that they don't need both male and female to reproduce. Although both sexes are produced, males are often absent from a population. No problem. Freshwater shrimp are capable of developing fertile eggs that haven't been fertilized by a male — a process called parthenogenesis.

Fairy shrimp look much like their popular marine cousins, and they are the most common of the three. The tadpole shrimp looks just like the horseshoe crab common in many parts of the ocean. Clam shrimp have two shell-like shields that protect the body. All have multiple sets of legs, from a dozen to as many as 70. The fairy shrimp and the tadpole shrimp use these legs to swim, but the clam shrimp actually swims with its antennae.

Most are translucent to white, sometimes tinted a little gray, blue, green, orange, or red. They eat algae, bacteria, zooplankton, and bits of decayed matter in the water. Tadpole shrimp will also eat dead tadpoles, worms, and frog eggs, and some even eat other shrimp.

Although tricky, it's possible to recreate a freshwater

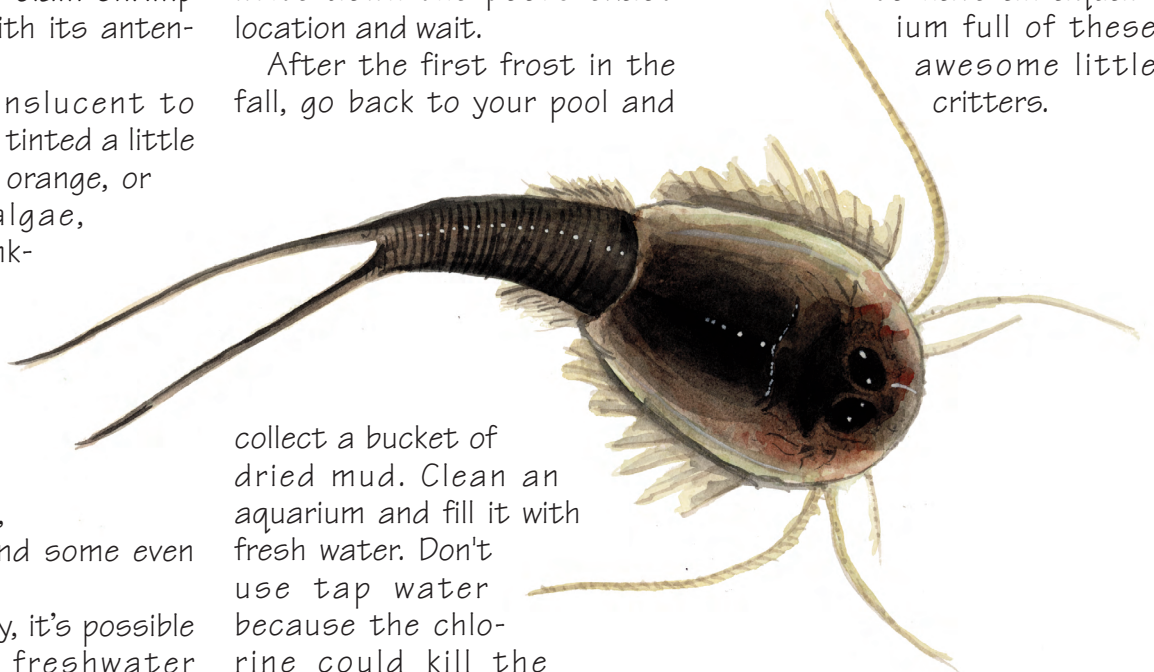


shrimp aquarium in your home or classroom, just to get a better idea of how they look and behave. The first trick, of course, would be to find a pool with freshwater shrimp. Talk to the county extension agent or wildlife biologist in your area. (Shrimp will be absent from any area that has been treated with pesticides.) Once you find an inhabited pool, collect some shrimp just to look at. Then write down the pool's exact location and wait.

After the first frost in the fall, go back to your pool and

shrimp. Melted snow or rainwater would be best. Add the dried mud and place a small amount of fertilizer or fish food in the water. The bacteria and algae that develop from this will provide food for the hatched shrimp.

Keep the water cool to allow early-hatching species the best chance to come on. If you are very lucky, you may be the first kid on your block to have an aquarium full of these awesome little critters.



collect a bucket of dried mud. Clean an aquarium and fill it with fresh water. Don't use tap water because the chlorine could kill the



# Backlash

by Mike Miller

## Easy As Pie My Eye

Years ago, Lennie decided to teach me the secrets of bankline fishing. "It's easy as pie. Don't need no fancy rods, boat, or LCR gizmos. Everything we need's right here. We can go tonight," he said as he rummaged over a workbench littered with wood scraps, nuts, bolts and disassembled power tools.

"I've got some bankline hooks and line here somewhere. Then all we need is some willow sticks that bend just right and some live bait," he added.

"There!" he announced, proudly holding up a rusty hook so big it looked like a gag joke. "We'll need about 15 of them. Help me look."

After we found 13 hooks of varying sizes, we spent an hour looking for the 100-pound-test cord Lennie said we'd need. Finally, Lennie held up an old hammer handle wrapped with some yellowing braided line. "Hah!" he barked. "I've been looking for that hammer handle. Nothing better for dispatching bullfrogs than an old hammer handle. We ought to go frog hunting tonight. I know where some *yeeuuuuge* croakers are."

"What about our bankline cord?" I asked.

"Whatta ya think this stuff wrapped around the frog bat is? We need some bait."

Dabbling worms at the state fishing lake, we soon had more than enough green sunfish swimming in a five-gallon bucket. It was getting late, so we hurried to Lennie's secret stretch of the river.

"I'll carry the hooks and line in my knapsack and scout for willows. You bring the bait and the hatchet," he ordered.

After a half-mile of busting thick riverbank brush, I set the bait bucket down and was working blood back into my fingers when Lennie backtracked to me.

"Quit loafing. I found some willows. C'mon, we're burning daylight."

While I hacked willow poles, Lennie tied line and hooks to them. Pausing to wipe sweat and scratch mosquito bites, I decided that seven or eight bank lines would be plenty. I walked back to see our rigs.

"Jeez, Lennie, that knot's as big as your thumb. What do you call it?"

"Just never mind what it's called. You can't take shortcuts and expect to hold a monster flathead. Here, bait this rig and set it in that deep hole downstream. I'll have another ready when you get back," Lennie ordered as he swatted at a persistent mosquito with his trusty hammer handle.

"Maybe you should set the lines," I said looking at the steep, brushy bank and swirling current. "You know I don't have much experience."

"Naw. You need to learn."

We had seven lines set by dark, and then Lennie said it was time to build a fire and wait for the "monsters of the river" to come out to feed.

"We'll check the lines at midnight, sack our fish and rebait the lines for an early morning run," he said confidently. "Gather some wood while I go to the truck for matches."

Our lively conversation around the fire lasted until Lennie dozed off at 11. No way was I sleeping in a sagging lawn chair while getting eaten alive by mosquitoes. Lennie can sleep in any position and under any conditions. I entertained myself counting how many of the little blood suckers Lennie sucked in as he snored.

At midnight I tried to wake Lennie. "Gromp ohh, frmpts, er where am I? Leave me alone. We don't need to check lines 'til morning. We'll just spook fish if we go now," he mumbled and fell back into a deep sleep.

I finished the night in the truck and went down to the riverbank at sunrise. Lennie was in the exact position he'd been when I'd left — chin resting to the side of his chest, snoring loudly. I felt a tinge of guilt for leaving Lennie on the river and figured he'd be a giant welt, but he wasn't. I guess mosquitoes have some discretion.

While Lennie grumbled about a stiff neck, we excitedly went to check the lines. Our first two lines were stripped of bait, hanging limply in the water.

"Maybe we should have checked them earlier," I suggested.

"Well if you would have woke me up, we would have, Lennie countered. "But you had to wuss out in the truck."

I started to defend myself when we saw our third willow bent into the water.

"We actually got one!" Lennie yelled. "Er, uh, I mean, I knew this was a good hole. Grab the pole and ease that big ole fish up so I can grab it."

But just as Lennie reached to the water, the snake-like head and neck of a giant softshell turtle popped up, the hook snapping free.

"Wheh," Lennie hissed. "I could've lost a finger to that sucker."

That was the extent of our excitement for the morning, but Lennie was unfazed.

"I knew the moon was wrong to catch fish, but at least you learned how easy banklining is," he philosophized. "We'll go again whenever you want."

We'll probably go again — someday. But I'll be sure to invite a novice. I think the secret to easy banklining is having a beginner along to do all the work — I mean learn the secrets.

