

by Steve William

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Outdoor Kansas For Kids

ur department has made a concerted effort over the past two years to introduce more youth to Kansas' great outdoors. The "Pass It On" program focuses on getting youth and past participants involved in our hunting heritage, while the new "Water Works Wonders" program is designed to encourage folks to make fishing and boating a recreational priority. The Kansas Wildscape Foundation (Wildscape) is combining both of these programs, along with a host of other outdoor family activities, into the inaugural "Outdoor Kansas for Kids Day," on September 8, 2001.

"Outdoor Kansas for Kids Day" (OKKids) is about getting kids outdoors and having fun. While the message is simple, Wildscape, a not-for-profit foundation focused on providing outdoor recreational opportunities in Kansas, is working hard to get Kansas youth and their families away from the computer and television for a day and into the out-of-doors

Wildscape and its program partners plan to have more than 10,000 Kansas kids hiking, canoeing, fishing, biking, hunting and birdwatching on OKKids Day at each of Kansas' 24 state parks, dozens of city and county parks, and at numerous private sites throughout the state.

Harland Priddle, Wildscape executive director, is excited about the event, "For some kids, this may be a new experience, an introduction to the beauty and enjoyment of the outdoors. For others it may be a reawakening or reinforcing of their outdoors interests."

Our department already has OKKids Day events planned at all of the state parks. As usual, our park managers are going the extra mile to organize a wide range of activities. From our viewpoint, OKKids is a win-win situation. Important outdoor legacies like hunting, fishing, boating, and camping are at the forefront of activities, giving KDWP the opportunity to showcase our public lakes, marshes, trails, and resources of our state parks. Contact the department at (620) 672-5911 for state park sponsored OKKids activities.

The Kansas Recreation and Parks Association (KRPA) endorsed OKKids at their annual meeting, and many of its 240 members are signing up to host events. With KRPA behind the program, Kansas' city and county parks also become excellent venues for OKKids activities. I would like to thank Laura Kelly, executive director of KRPA, and all of their members for supporting this worthwhile program.

Finally, Wildscape is proud to announce that Governor Bill Graves is also involved in OKKids Day. Details are still being worked out, but Governor Graves has agreed to host an event on the grounds of Cedar Crest, the Governor's Mansion, and to participate in the event with his daughter.

One of the great virtues of the program is that nearly any outdoor activity fits into the mission: Getting kids outdoors and having fun. While many of the sites and events are set, others are being added every week. It should also be noted that anyone can participate on their own, with or without a planned event or at a designated site.

Let's make September 8 a special day for Kansas youth. Take your child, friend, or neighbor outside and enjoy the beauty of Kansas outdoors. You'll be glad you did.

For more information on getting involved with OKKids Day, please contact Wildscape at (785) 843-9453, or call your local parks and recreation association.

Wildscape is a non-profit organization focused on their mission: "To conserve and perpetuate the land, the wild species and the rich beauty of Kansas for the use and enjoyment of all."

Hur Williams



- July/August 2001 Vol. 58, No. 4 The View From Here Outdoor Kansas For Kids by Steve Williams To Catch A Hummingbird A banding effort will teach us more about the amazing and beautiful hummingbirds. by Jan Hall The Misunderstood Wasp You see their nests of mud in garages and barns, but do you know what's inside? by Hermann Nonnenmacher **12** Lovewell State Park: Jewel Of The North Tucked away in far northcentral Kansas, Lovewell State Park is a popular get-away. by Lisa Boyles **18** Courage To Live Disabled shooters enjoy outdoor fun and inspire everyone involved with their courage. by J. Mark Shoup **74** Bugs Are Cool A school project on insects teaches that bugs can be pretty interesting critters. by Jill Parsons A Wealth Of Information 28 The Wildlife Education Reference Center by Roland Stein Legacy Of Life 30 The WILDTRUST donation program benefits wildlife and those who enjoy it. by Mike Miller 32 **Conservation Officer** Continuing series profiling the men and women who enforce wildlife-related laws. by Matt Stucker The Wild Currents
 - Backlash On Grins And Needles

by Mike Miller

edited by J. Mark Shoup



About the covers Front Cover · A male ruby-throated hummingbird is one of Kansas' most beautiful birds. Mike Blair photographed this rehab specimen with a 105mm lens set at f/16, 1/250 sec. Back: Hunters and helpers enjoy a day of hunting on the LaSada Controlled Shooting Area near Russell. Mark Shoup took the photo with a 55mm lens, @ f/16, 1/125 sec.









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To Catch A Hummingbird

by Jan Hall *Pittsburg*

photos by Mike Blair

Tiny birds and tiny bands make this very tedious work, but it's a labor of love for one southeastern Kansas woman. Bands and information recorded during capture will help us learn more about these amazing birds and their migration. It's another sweltering August day in Pittsburg, with afternoon temperatures above 100 degrees. Almost everything has crawled to a stop, except in my front yard. Here, dozens of hummingbirds chase one another to compete for flowers and feeders. These smallest and most aggressive Kansas birds are fascinating to most people, and especially to me. They come every year at this time.

Sweating, I patiently wait for an opportunity. Sitting motionless on the front porch, I watch as a hummer approaches my trap. The Hall hummingbird trap, designed by my husband and me specifically for catching these small birds, is about the size of a bushel basket.



The agile flier hovers momentarily near the contraption, then enters it to drink from the feeder. I release the trap's string, and a veil of red netting drops around the bird. Reaching inside, I gently catch the excited occupant, take it out, and place it in a mesh holding bag. It's one of many hummingbirds that I'll band during this late-summer and autumn migration.

I'll never forget the first time I held a tiny hummingbird in my hand. What a thrill! Jim Johnson, a master hummingbird bander from Branson, Missouri, taught me how to catch and band hummers in 1988. For two years under his gentle, skilled guidance, I worked as a subpermitee before applying for and receiving my own federal master hummingbird banding permit. I have banded the tiny birds in Kansas and Missouri for more than 12 years.

Banding helps add to the knowledge about these fascinating creatures, particularly regarding migration, longevity, and local movements. Very little is known about the natural history of hummingbirds. They make up one of the largest bird families with more than 320 species. However, hummingbirds are found only in the Americas, and half of these birds live in tropical countries near the Equator. There are only about 17 species that regularly enter and breed in North America.

Hummingbirds are best known for their unique flight ability. Wings move at 78 beats per second in normal flight, allowing a hummingbird to fly forward or backward, straight up or down, or even sideways.

or Hummingbirds are also the only birds that can truly hover. To maintain the high energy needed to sustain this amazing flight, hummingbirds must eat half their weight in food each day. If humans burned a comparative amount of energy based on weight, the average man would need to consume 285 pounds of hamburger daily. A hummingbird's diet consists of tiny insects and spiders for protein, and nectar from flowers for instant energy. They eat every 10 to 15 minutes.

Only a few hummingbird species are seen in Kansas, with the most common being the Rubythroated. This is a small species, weighing an average of three grams — about the same as a penny. Ruby-throats are the only hummingbirds that nest here. Rufous hummingbirds are becoming more common in late summer and early autumn, but remain sporadic visitors to Kansas. A few other species show up in western parts of the state on an irregular basis.

Ruby-throated hummingbirds are beautiful. Adult males are marked with a brilliant red gorget on the throat. Females are slightly larger and have a dull, grey-white throat. In late summer, it's difficult to distinguish immature males from females without a careful, close-up examination of their feathers.

As with most hummingbirds, Ruby-throats are polygamists. Males arrive first in spring, showing up in Kansas in early to mid-April. Females follow one or two weeks



In spite of their high energy levels, captured hummingbirds settle quickly to feed from the hand. They must eat half their weight in food each day.





later. After mating, the female builds a compact nest about the diameter of a quarter. It is constructed of downy plant fibers, spider webbing, and lichens. Normally, two navy-bean-sized, white eggs are laid that hatch in The author catches hummingbirds in a special trap she helped design. Sitting nearby with a trigger device, she waits for a bird to land at the feeder (below), then drops the net and gently gathers the bird by hand.

about two weeks. It takes another three to four weeks before fledglings leave the nest. The adult female tends them for several more weeks before they are on their own. Some females will nest two and occasionally three times during a season.

By late summer, hummers begin to migrate through the state. Contrary to a popular myth, hummingbirds do not migrate riding on the backs of geese. Ruby-throats overwinter from southern Mexico to Costa Rica and must build fat reserves to help them make this long flight. Most nearly double their weight to prepare. In August and September, they are especially attracted to food sources provided by humans.

One way to attract hummingbirds is to plant a microhabitat in your yard. The best flowers are reddish in color, with long tubular shapes and little scent, such as honeysuckles, trumpet vines, and salvias. Hummingbirds are also attracted to feeders filled with sugar-water. The recommended mixture is four parts water with one

Wildlife & Parks

part white, granulated sugar. Red food coloring should not be added. Most hummingbird experts agree that this additive serves no benefit. After all, nature's own nectar is clear, and it is the flowers' color that attracts hummingbirds. The brightly colored feeders are attraction enough.

The sugar-water solution should be changed every 3 to 4 days to prevent health problems for the birds. Hummingbirds will not become dependent upon

feeders. They will continue to feed at flowers and eat insects, though the feeders will concentrate them within easy viewing distance and provide a popular food source.

Don't remove feeders in the fall until one or two weeks after the last hummer is gone. A normal, healthy hummingbird knows when it's time to migrate. Hummingbirds, like all

other neo-tropical birds, have a built-in system that tells them when it's time to leave. The hummers seen at feeders in late September and October are often young birds that may have had a late start. Maintaining feeders through this time will give them the extra energy they need for the journey south.

Banding hummingbirds never loses its fascination for me. Even though hummingbirds seem highstrung and are constantly on the move, they calm down quickly once captured. Many methods can be used to restrain a bird



A captured hummingbird must be restrained while it is banded. The author uses a paper towel, tacks, and a corkboard to efficiently secure the bird in place.

while banding. I prefer to use the simple poncho method. The bird's head goes through a tiny hole in the top of a poncho-shaped wrap, with the bird's wings held tightly along-side its body. This restrains the bird and allows me to use both hands during the banding process.

Hummingbird bands, unlike the prefabricated bands for other bird

species, arrive from the Bird Banding Laboratory in Laurel, Maryland, printed on a thin aluminum sheet. Preparing them for use is tedious and time-consuming. Each band must be individually cut, smoothed, and shaped. When complete, each tiny band will identify a bird with one letter followed by five numerals.

The band is placed on a bird's leg with a special plier. It is checked for correct fit, and then the bird is weighed and measured. The hum-

mingbird is also checked for parasites, physical abnormalities, and injuries. Pertinent information is recorded with the band number, and a report is submitted to the Bird Banding Laboratory. Prior to release, each bird is fed sugar-water. Many freshly-banded hummers return immediately to the feeder where they were trapped, and some



Banding a hummingbird is a delicate process. Each band must be individually cut and shaped by the trapper. Bearing a code that tells trapping date and location, the tiny band is applied with a plier.



Band information includes weight, measurement, and health of bird. The band weight is insignificant and does not affect behavior. Banded birds are marked with paint to help identify them in flight.





are never seen again.

A federal auxiliarymarking permit allows me to place a small mark of paint on top of a banded bird's head. The tiny leg bands are impossible to see when trapping hummers, and the paint dot makes it easy to tell which birds are already banded. The non-toxic fabric paint stays on the bird for about two months. This year, as a result of this marking method, an Oklahoma birder reported spotting one of my hummingbirds along its southbound migration, 139 miles southwest of Pittsburg.

Another of my banded birds was found

dead in Frazee, Minnesota, in June of 1996. This was 542 miles northeast of Douglas County, Kan., where I had banded the immature male the previous September. The bird had likely returned to its place of birth as an adult male. Hummingbirds have a

remarkable memory and return to breed and nest in the same locations annually. They may even recall the location of favorite feeders along their migration route from year to year. The average wild hummingbird lives three to five years, but some have been known to survive as long as 12 years.

As a hummingbird researcher, I often receive calls for hummingbird "emergencies." One of the most common of these occurs when a hummingbird gets trapped in a garage. Rarely can hummers find their way out without help. They consistently fly up and just below the ceiling, making it hard for them



Hummingbirds make delightful visitors to a flower garden. Moving their wings at nearly 100 beats per second, they can hover with ease as they feed. Honeysuckle, trumpet vine, and salvia are good flower species to attract resident and migrating hummingbirds.

to notice a lower opening. The solution is to place a feeder near the ceiling where the bird can find it. Once the hummer locates the feeder, it can be lowered and moved below the garage door opening. Then the bird can find its way out.

If a hummingbird falls to the floor from exhaustion, gently pick it up and immediately feed it a small amount of sugar-water. The bird will drink while being held. Don't take it inside, since a hummingbird loose in a house is a greater problem.

Even though hummingbirds are absent from Kansas during winter months, it can be a busy time for me. I also maintain federal and state permits to care for injured hummingbirds. Sometimes hummers get caught in a late autumn snow or ice storm, halting their migration. Other birds may need help because of illness or injury. These must be overwintered in a rehab situation. Most years, I care for one to three hummingbirds in my home. These can usually be released in good health after winter's end, when the northward spring migration has begun.

As a hummingbird researcher, it is important to me to learn as much as possible about these creatures. Travel is a part of the process. I am a charter member of the Hummingbird Research Group. This group, established in 1995, meets every two years so that hummingbird scientists can share information and banding methods. This year's meeting will be held in New Mexico. Besides planning to attend, I also traveled to Costa Rica this spring where I studied hummingbirds with my Costa Rican colleagues.

I look forward to banding Kansas hummingbirds again this fall. Perhaps you'll take an interest and feed these amazing birds as they migrate through the state. If a hummingbird visits your yard, take time for a closer look. If it's wearing a tiny silver bracelet, it may, for only a short time, have been one of mine.

Editor's note: If you should notice a marked hummingbird, the author would appreciate an e-mail at hummer-bander@hotmail.com.



The Misunderstood Wasp

Hermann Nonnenmacher, Ph.D. Pittsburg State University

photos by Mike Blair

Like most insects, mud daubers have a fascinating life story. Docile and unaggressive, mud daubers are feared because they resemble the fierce paper wasps.

oung man," my teacher sighed, "this is your third try. I don't believe you can work clay to save your life!" I couldn't decide if he was sad or amused, but there *was* a problem: My art project, the now unrecognizable object which was supposed to have been my eighth grade earthen masterpiece, was violently frac-

tured. It had been a fish-shaped paperweight before an air pocket inside it exploded while it baked in the kiln. Now, not only were Mom and Dad not going to see my work displayed during open house, there would also be disappointment for parents of other unlucky students whose projects had been nearby. Clay shrapnel had ruined several projects besides mine.

My teacher and I stood before the menagerie of shattered artworks while he advised how this collateral damage would affect my grade. What began as a project to showcase my creative side ended up as an adolescent disaster. My teacher was right. I couldn't work clay if my life depended on it. Fortunately, there



were other ways for me to make a living.

There are, though, creatures of nature whose lives depend directly on their ability to work clay. Perhaps the most familiar are mud daubers. Several species of these wasps live in Kansas, but the black and yellow mud dauber, *Sceliphron caementarium*, usually comes to mind, since most Kansans encounter it frequently.

The mud dauber is a specialized insect whose business might surprise you. It belongs to a group known as solitary wasps which are distinguished by their habit of living and working alone. Solitary wasps normally are docile and reluctant to sting. They build individual nests and work independently to reproduce. Though they may associate in loose colonies, there is no mutual effort to defend nesting areas. Mud daubers and other solitary wasps will seldom attack, even while an intruder destroys the nest.

Yet most people are afraid of them, due to their appearance and habitation of human structures. Mud daubers elicit fear because of their similarity to another common group of wasps — the paper wasps. These build the familiar, honeycombed paper nests that may be home to a number of wasps and a queen mother. Nesting paper wasps work together to provision the larvae and nurse them to adulthood. They are fierce stingers and aggressively defend the nest from intruders. It is these wasps which commonly sting humans and lead to the conclusion that all wasps are dangerous.

When I moved to Kansas from Florida, some of my new friends would present dead mud daubers for my insect collection. Many of the specimens were collected during the hay-hauling season from barn lofts, where they were killed under near-panic conditions. If the hay hauling crew had ever experienced a run-in with a bristling swarm of aggravated paper wasps, it was not a stretch to extend equal fear to the mud daubers as they zigzagged past everyone's heads and faces. That reaction is common but unfounded. There is no reason to kill mud daubers for fear of being stung.

While most species of solitary wasps dig earthen burrows and provision them with caterpillars, cicadas, and other insects, the mud daubers cement their nests in protected sites above ground. The energy required to construct and provision these nests during a few weeks of life is tremendous.

Like butterflies, mud daubers undergo complete metamorphosis, wherein the adult is physically and functionally distinct from the immature stages. The mud dauber life cycle is fascinating.

After emergence, the adult wasp will usually mate. Male mud daubers are not always common. It is interesting that the female can produce viable offspring without mating. If eggs are unfertilized, male wasps are produced. Fertilized eggs always produce female mud daubers.



The familiar black and yellow mud dauber is common in garages and sheds where it builds its earthen nest. Wet mud is necessary for construction, and the wasps make hundreds of trips to gather mud (facing page.) To maintain energy, mud daubers feed on flower nectar or at hummingbird feeders.



Female wasps do all the work associated with nestbuilding and provisioning the young, but males are necessary to produce more females.

Male mud daubers cannot sting, since they do not possess an ovipositor. The stinger is a modification of the female ovipositor used for laying eggs. The sole function of male mud daubers is to mate.

Females build nests by gathering mud at the edges of calm water, such as ponds, creeks, sprinkle-irrigated lawns and gardens, or temporary puddles. Mud is gathered and formed into a small, smooth sphere using the jaws and forelegs. The pea-like ball of mud is carried in flight to the nest site

where it is then pressed into the thin-walled chamber of a single cell. Many mud collecting trips are required to complete one cell, which is about the length and width of an adult wasp.

The worked mud from each trip hardens as it dries and becomes resistant to outside penetration. While gathering and working mud, the wasp produces a series of high-

pitched buzzes. These singing noises are often perceived by people as a sign of irritation or warning, but close observation reveals that mud daubers produce their sounds regardless of company. Each buzz is timed with an energetic, short stroke of effort virtually too fast for the eye to follow. A series of such movements are necessary to work each particle of mud into the nest.

After one or two days of work, a cell is complete. It is then provisioned and capped



Mud daubers are reluctant to sting for defense since they must utilize their venom in provisioning the nest. A single cell in a mud dauber nest may contain 10-12 spiders. Living, paralyzed spiders provide a fresh meal for developing wasp larvae.

before a second cell is adjoined to the first. Herein lies a secret that few people know about the familiar mud nests. Each of the capped cells is filled with crab spiders, usually from the genus . The black and yellow mud dauber hunts especially for these spiders, which are found living on or near flowers. The spiders are camouflaged, ambush predators that feed on small flies, moths and bees that visit the flowers in search of nectar. Although the spiders are difficult for humans to see among the flowers, the female mud dauber efficiently detects her prey. The wasp searches quickly over appropriate plants, tapping her antennae as she goes.

When the female mud dauber locates a crab spider, she stings and

paralyzes it with venom. The venom is carefully applied to avoid killing the prey. The spider must be immobilized, but it must also remain alive to avoid rotting before it can provide food for the wasp larva. Each mud cell is packed with enough spiders to feed a single larva through maturity. Before the chamber is capped, an egg is laid on an enclosed victim, and then the cell is closed.

Immediately, the next cell is constructed and likewise provisioned.



One egg is placed on the body of a spider in each cell. Eggs are visible along the sides of the abdomens in these paralyzed specimens.

The mud nest grows in this way until several cells have been sealed. Then the nest is coated with more mud until the cells within are all covered. It now resembles a dried mud clod rather than a collection of capped cells. The nest may be as large as a child's fist and hard as a rock.

Within a dark, warm, and humid mud cell, the wasp egg hatches. The tiny grub begins chewing through its first victim. Growing quickly, it eats spider after spider until all are consumed and the wasp larva is nearly as large as the cell. Then it forms a reddish-brown cocoon and settles into the pupal stage. During pupation, radical physical changes occur which transform the larva into an adult.

The mud dauber uses its strong jaws to chew out of its cell. The emerging wasp is complete with legs, wings, compound eyes and antennae. The female is now a finely-tuned hunting machine, possessing reproductive and food-gathering senses. The black and yellow mud dauber produces two generations a year in Kansas, with the latter overwintering inside their cells. In spring, these adults emerge and continue the cycle of activities that are easy to observe throughout summer.

Mud daubers feed on nectar, mostly from flowers. Along with other wasps, they also visit hummingbird feeders where they can be a nuisance. Many feeders are equipped with special bee guards to discourage these and other insects.

Study of mud dauber life history often can be accomplished without having to leave one's yard. A garden of native, nectar-producing flowers may attract them. Shallow pools of water and exposed, wet soil may further encourage mud daubers to live nearby.

Though mud dauber nests are often placed in unwanted locations, they can be removed without destroying the immature wasps inside. A chisel or screwdriver can be used to pry the intact nest from a wall, and residual mud can be

washed from structures with a garden hose. The nest can be placed anywhere out of direct rainfall, where wasp development should continue normally. Mud nests that are found on rafters and other out-of-the-way places may be left alone.

Considering the astonishing pace maintained by these wasps, mud daubers are among Kansas' busiest insects. If there is truth to the humorous statement that "work is enjoyable. . . one can sit and watch it for hours," then the mud dauber, a relative of the fabled, industrious ant, will provide hours of viewing enjoyment with a bit of a bonus — it "sings" while it works. That is something the industrious ant never had the time to do while the grasshopper fiddled. The black and vellow mud dauber has time for both work and "music" and we must not forget, her life and the lives of her young depend directly on the ability to work clay. This is a skill that remains, for some humans, an unobtainable goal. 💎





A single mud dauber nest often contains more than a hundred crab spiders. The developing larva eats its way through the living hosts, discarding the spider skins as it goes. When all the spiders in a cell are consumed, the larva itself fills the cell. It forms a pupa and later emerges as an adult wasp.

Lovewell State Park

Jewel Of The

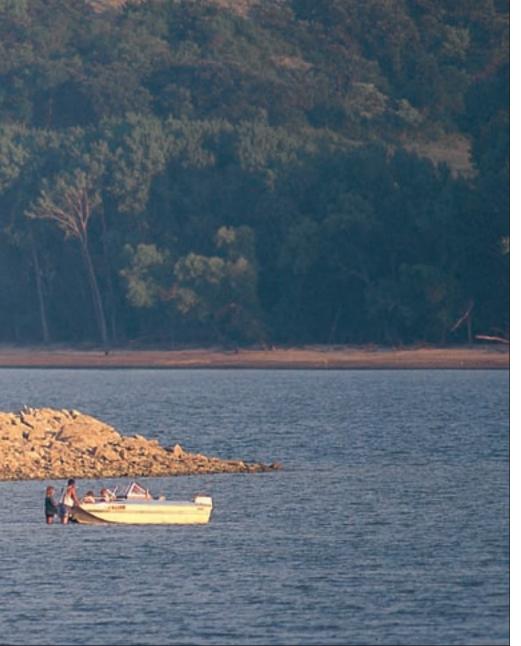
North

by Lisa Boyles office assistant, Lovewell State Park

photos by Mike Blair

In the hills of Jewell County, just south of the Nebraska border, Lovewell State Park has been providing visitors with outdoor fun and relaxation for more than 30 years.

Wildlife & Parks



est is not idleness, and to lie sometimes on the grass on a summer day listening to the murmur of water, or watching the clouds float across the sky, is hardly a waste of time." – Sir J. Lubbock

Nestled in the hills of northern Jewell County in northcentral Kansas lies a haven for Kansas outdoor lovers, but most of them don't know about it. They've heard of and visited El Dorado, Cheney, Wilson, Milford, and Tuttle Creek. But Lovewell? Where is that?

Hugging the Nebraska border on US Highway 36, Kansas Highway 14 turns north, just east of Mankato. This nine-mile stretch of Kansas highway ribbons up and down the rolling hills and crosses the west end of Lovewell Reservoir. A county blacktop then leads 4 miles east, edging the Lovewell Wildlife Area that introduces the lake's serene surroundings. A right turn at the 4-way stop enters Lovewell State Park, a little-known jewel in the Kansas State Park system.

Lovewell Reservoir was completed in 1957 by the Bureau of Reclamation for purposes of irrigation and flood control. The area surrounding the reservoir was leased to the State of Kansas for recreational development. Lovewell State

Park was finished by the State of Kansas in 1965, with primitive roads, restroom facilities, and mostly undeveloped campgrounds. Even in these primitive conditions, early visitation was excellent. Visitors were drawn from miles around by the picturesque surroundings, peaceful setting, and the opportunity to fish, ski, boat, sail, and swim. The high bluffs on the south shore of the reservoir help curtail the prevailing southerly summertime winds, making the area more attractive even in the "Kansas Wind Machine."

Modern shower and toilet facilities, paved roads, marina, and utility campsites came later, and Lovewell's visitation and reputation for quality continued to grow. Visitation peaked in the mid-1980s and dropped dramatically in the drought years of 1990 and 1991, when the reservoir reached its lowest recorded level since the late 1950s. However, since the early 1990s, visitation has steadily increased and may soon surpass the numbers posted in the 1980s.

Last year at Lovewell, there were more than 200,000 visitors. The reasons? A growing constituent base stretching from northern Nebraska to southern Kansas (as well as points east and west from Iowa, Missouri, and Colorado,) facility improvements, shade trees, innovative special events, a unique situation regarding annual reservoir levels, and a dedicated staff.

Lovewell State Park boasts a 1,060-acre blend of tall prairie grasses and designated recreational area. Facilities include 102 utility campsites, nearly unlimited primitive campsites with 75 improved sites and 6 camping shelters, numerous picnic shelters, three shower and restroom facilities, two vault toilets, two dump stations, three boat ramps, a swimming beach, two lighted fish cleaning stations, and a playground which includes a softball field and sand volleyball and asphalt basketball courts. The historic Rose Hill limestone schoolhouse is used as a group shelter for special events (including weddings!) and for nondenominational church services on Sunday morning from late May to early September.

The Parks 2000 Initiative has brought much-needed new facilities and updates to Lovewell. Two deteriorating shower buildings (built in the late 1960s) have been replaced with state-of-the-art facilities. The final Parks 2000 project will provide 15 full-hookup utility campsites (50 amp electricity, water, and sewer) in the Willow Campground of the park. Construction is scheduled for 2001.

Beyond facilities, Lovewell is noted for its wealth of shade. For decades, staff members have been planting, transplanting, and spending countless hours caring for shade trees to provide relief from the summer sun. A small tree nursery was established near the maintenance building in 1998 to



Camping is at the core of Lovewell's many avenues of fun. The state park features more than a hundred utility campsites as well as nearly unlimited primitive camping. The Parks 2000 Initiative will provide additional campsites and improved facilities.

support the constant demand for new trees. Up to several hundred trees are planted each year. Campgrounds and shorelines are teeming with tall, stately cottonwoods, maples, ashes, oaks, and other native trees. Even the swimming beach is partially shaded for those who love the beach, but don't worship the sun!

Lovewell State Park claims many



The Walleye Point Cabin has been an extremely popular overnight rental since its completion last year. The interior is finished with wood rough-sawn from area timber.

innovations, some of which are emulated elsewhere in Kansas' state park system. A special type of picnic table, designed and built by Lovewell's staff, received rave has reviews from constituents and earned the Kansas Park and Recreation Association's "Gadget" Award in 1997. The new design has an elevated work station with lantern holder at one end and is handicapped-accessible. The design has been so successful that

it has been mass-produced for Lovewell and other state parks by Kansas Corrections inmate labor.

Another resourceful idea from the Lovewell Staff was the conversion of the original Walleye Point shower building to a rentable log cabin. The Walleye Point Camping Cabin was completed in April of 2000. Constituents are greeted by a rustic log exterior, but that is only the beginning. The cabin sleeps eight persons and has electricity and heat/air. A picnic table, freezeproof hydrant, campfire ring, and barbeque grill are located just outside the cabin. It is the cabin's interior, however, that makes it so unique. The ambiance is evident as soon as you open the door. Native cottonwood creates a rustic log interior, complete with rough-cut interior siding, a "tree-like" center support post, rustic wood table and "stump-like" chairs, all handmade by the staff. The Walleye Point Camping Cabin was so popular in 2000, that a second camping cabin, Pioneer Camping Cabin, was added in 2001.

The rustic theme was carried on

in a pole shed/picnic facility built in the late summer of 2000. This new gathering area was built with larger picnic/special event groups in mind. This covered picnic shelter has a partially enclosed area for inclement weather or wind, a large counter area for food preparation, and electricity. An AmeriCorps team working at the state park since late December 1999 played a crucial role in the completion of both the camping cabin and pole shed projects. The team also completed sign repairs, transplanted hundreds of trees where more shade was needed, and assisted with Lovewell's many special Two events. of the AmeriCorps team members, particularly talented in woodworking, designed and crafted rustic wood award plaques for all of the special events this past year.

Lovewell's unique special events help set this state park apart from others. All employees are involved in the months of planning, preparation, business contacts, advertising, and finally, implementation of these

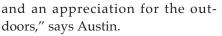
events. All events show the creativity and dedication of Lovewell's staff, and are well attended and enjoyed by constituents. The Kid's Fishing Derby, held during Free Fishing Weekend each year, has been a popular annual event at Lovewell for more than 10 years. Nearly 200 young anglers participated last year. Participants register at the park office in the morning and fish until 3 p.m., where their daily catch is checked in. More than \$1,000 in prizes were donated for the



Lovewell State Park offers a walk-through archery range set in native prairie. The park's many unique opportunities attract visitors from several states who come to enjoy many forms of out-door recreation off the beaten path.

event by area businesses and awarded to the young fishermen, even if they didn't catch a fish!

Kyle Austin, fisheries biologist, presented a fish identification program for all of the kids after the weigh-in. "The Kids' Fishing Derby is a fantastic event for youngsters, and promotes good sportsmanship



Another long-standing popular Lovewell event is the Fun Day, held each year on the second Saturday in August. Events for all ages include 3-on-3 basketball, co-ed softball, mud and sand volleyball tournaments, turtle and minnow races, a 3-

D archery shoot, log races, and a waterslide contest. The day closes with a barbecue, duck race, and open-air dance. Staff from the state park and Ike's Marina (event co-sponsor) spend the entire day serving as athletic directors for tournament events and races. as referees/umpires, as barbecue cooks, or just "gophering" between events. Says Lynda Eisenhauer, co-owner of Ike's Marina, "It's a lot of work, but we have a great time with it. It's sort of a 'thank you for



Lovewell State Park offers a Bowhunter Education Class held in the fall of each year. The eight-hour class is sanctioned by the International Bowhunter Education Program.

A new event which is rapidly gaining popularity is the Lovewell State Park Sandcastle Contest. The contest is held at Southwinds Beach on the third Sunday of each July. Teams register in the morning and have several hours to create their sculptures. Last year's winning entry, shown at right, was built by a Nebraska family that often visits and enjoys the Lovewell area.





a fun summer' for all of our visitors."

One of Lovewell's newest special events growing in popularity is a Sand Castle contest held the third Sunday in July. Teams register in the morning and then head to the beach to create their sandlot masterpieces. Everything from traditional detailed sand castles to intricate sand sculptures are created on 12foot-by-12-foot lots at Southwinds Beach.

A team of judges begins the difficult task of choosing winners at 2 p.m. Again, generous donations from area businesses supply the grand prizes. In 2000, the top prizes were tickets to Worlds of Fun at Kansas City and FantaSea in Wichita, donated by two area radio stations.

"The Sand Castle Contest is an excellent event for families and individuals, one that encourages good sportsmanship, teamwork, and creativity", says Park Manager Rick Cleveland. "Most of our teams are made up of moms, dads, siblings, and grandparents. It's great fun to watch them all work together and have such a good time!"

Lovewell State Park and Public Lands staff are all avid bowhunters and began offering a Bowhunter Education course at the park in

1997. Held in the fall each year, the 8-hour. International Bowhunter Education Program-certified course utilizes Lovewell's 14-station, walk-through archery range provides hands-on and training on blood trails and tree stands. The ingenuity of Dennis Swanson, Lovewell's maintenance technician. resulted in a challenging Arrow-Eating Iron Deer target, which adds to the fun and tests the skill of even the steadiest of bowhunters. The iron deer stresses the importance of shot placement, as a hit in the vital area of the deer saves your arrow, and a hit outside the vital area shatters the arrow.

The Bowhunter Education class is not just for kids but offers a variety of information that even the most seasoned bowhunters will appreciate. The staff takes special interest in effective bowhunter education. The objective of the course is to instill students with a responsible attitude for themselves, others, the wildlife and environment they hunt. "We are proud to pass on the tradition of sportsmanship and fair chase among the bowhunting community" adds Jon Sanko, park ranger.

Cleveland and his staff are always seeking new and creative ideas for special events. They are currently working on plans to add a campfire cook-off to their summer schedule. No doubt, it will quickly become another popular favorite with Lovewell State Park's constituents.

Lovewell Reservoir is unique with regard to water pool management. The reservoir was created by the Bureau of Reclamation for the purposes of irrigation and flood control, which is true of several other western Kansas reservoirs as well. However, Lovewell is unique because designers had the foresight and resources to devise a way to recharge the reservoir each year. The reservoir is drawn down annually as irrigation season kicks into high gear. The amount of drawdown depends entirely on mother nature and how much rainfall

she provides. However, even after the worst drought when Lovewell may be 10 feet below conservation pool, a diversion canal from the Republican River continues to recharge the reservoir in the fall. There have been exceptions due to other factors, but for the most part, the reservoir is recharged and ready for another year by early spring.

"We have learned to work with the fluctuations," says Cleveland. "Most of our special events have resulted from attempts to bring more people to the park and to give them something to do during the times when boating may not be the best, or fishing is slow." These special events, which are now so much a part of the quality experience at Lovewell, possibly would never have come about without the low water levels as a catalyst.

Lovewell staff also takes advantage of the drawdowns to enhance waterfowl viewing along the reservoir shoreline. Park staff work together with Rob Unruh, public



Lovewell offers an inviting blend of trees, land, and water for the outdoor recreationist. Modern facilities and innovative ideas await campers who visit this Kansas hideaway. Most important is the park's enthusiastic staff, all of whom join together to make Lovewell a rich experience.

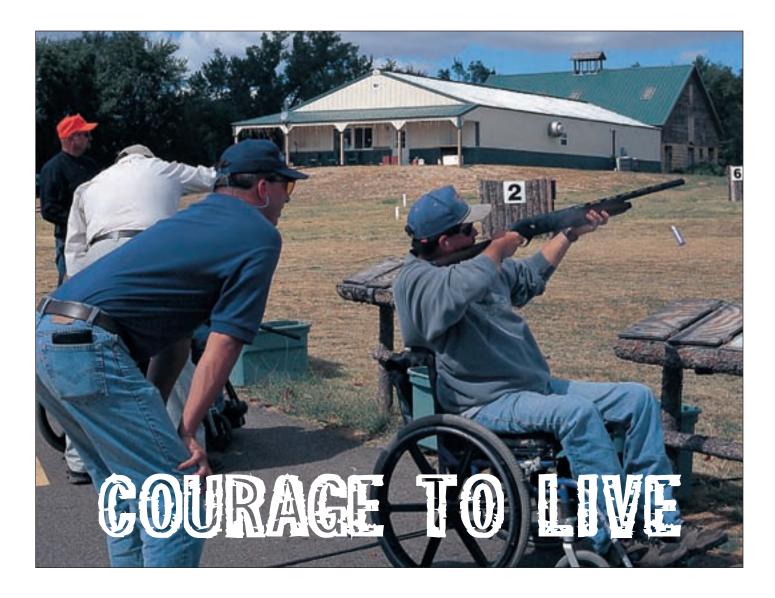
lands manager, to seed millet on the mudflats created during low water periods. Once again, innovation served. The staff modified an airboat, adding spray arms and a seeder, to do the job. Once the millet is established and water levels begin to rise into the grain, waterfowl use along the edges of Lovewell Reservoir is excellent. The annually manufactured habitat also benefits walleye, white bass, and catfish. Young fish utilize this flooded habitat as a safe place to hide and grow, resulting in the quality fishery that Lovewell is known for.

Lovewell is blessed with great natural beauty and fine facilities, but its greatest asset is the staff. "You won't find a more dedicated, innovative, or customer servicedriven staff anywhere," says Cleveland of his staff Sanko, Swanson, office assistant Lisa Boyles and a team of seasonal workers, camp hosts, and AmeriCorps members. Likewise, the staff has high praise for Cleveland, who has worked at Lovewell State Park for nearly 30 years, starting out as a seasonal worker in the early 1970s.

Everything about Lovewell State Park makes it unique. Regardless of the time of year or purpose of trip, visitors to Lovewell State Park know that an out-of-the-way location, beautiful surroundings, quality facilities, dedicated staff, a flurry of fun activities, and rest and relaxation, can be expected. Those who experience Lovewell for the first time quickly become "regulars." If you are one of the many who don't know about this state park jewel, be sure to check it out this summer. You won't be disappointed.

For Additional Information about Lovewell State Park, or to add your name to Lovewell's newsletter mailing list, please contact: Lovewell State Park, Rt. 1 Box 66A, Webber, KS 66970

lovewellsp@wp.state.ks.us



text and photos by J. Mark Shoup associate editor, Pratt

Just getting out of bed and facing day-to-day life takes determination for someone with a disability. To get out and enjoy things that many of us take for granted requires courage, and a little help from friends.

Life shrinks or expands in proportion to one's courage. Anaiis Nin

have never considered myself a brave man although by traditional definitions of the word overcoming fear to accomplish some feat — I may have weakly qualified for a brief moment: skydiving, diving off a 50-foot cliff, tackling future All-American John Zook as a sophomore in high school football practice, getting married.

These acts are perhaps more correctly described as foolhardy than courageous. (Um, with the exception, of course, of marriage.) But last September, I was fortunate enough to witness true courage. The occasion was a disabled sportsman's shooting event sponsored by the Paralyzed Veterans of America (PVA) and the Department of Wildlife and Parks (KDWP) the first three-day event of its kind in the United States. Also the first "Step Outside" (see sidebar) event in Kansas, the shoot was open to veterans and non-veterans with a



variety of disabilities, from loss of a limb to advanced multiple sclerosis.

The event was held at LaSada Sporting Clays range, near Russell. Participants had the opportunity free of charge — to shoot sporting clays, trap, five-stand, muzzleloading rifles, and bows and to hunt pheasants and deer. A DART computerized laser hunting simulator was also on hand, furnished by KDWP. Equipment, such as shotguns, muzzleloaders, and ammunition, were provided to those participants who didn't bring their own.

All this, thanks to volunteers and donations of equipment, shot shells, food, money, and labor from Lasada Sporting Clays and many companies such as John Deere, Fiocchi Ammunition, Friends of the NRA, and Coca-Cola. Volunteer experts were also on hand to assist shooters, and local Rotary and Kiwanis clubs

provided much of the labor and meals, which were also free. (Other funding came from the PVA, the National Rifle Association, and KDWP.)

From morning to evening, the day bustled with activity on the shooting ranges, with participants free to shoot at all stations. Wheelchairs buzzed about the course, and there was an unmistakable light in the eyes of those streaking by. Some were fine shooters, some were not. All were happy.

The next day morning, participants were carried through the fields on "Gator" ATVs provided by John Deere. Some sat comfortably in a seat by the driver while others were strapped to the vehicle's bed in their wheelchairs. One multiple sclerosis sufferer had a helper to steady his gun. For many, it was the first time they had hunted since that most pivotal moment in their lives.

Late that afternoon and evening, the shooting stations were reopened, and the participants shot until their arms hurt. No one complained. Others chattered about the coming morning's deer hunt. (Only four would participate in this. Apparently, the others were hooked on the shooting stations.)

"So," you may be asking at this point, "a bunch of guys got to have a great time shooting and eating for free. What's so brave about that?"

For those of us unburdened by physical handicap, it may be difficult to understand that many disabled people fear going to the grocery store, much less attempting to participate in an activity they may have once enjoyed but now feel is impossible for them.

"A lot of us just hole up (after a disabling injury)," said Garden City native Mike Dyer, vice president of the Kansas PVA, on the day of the LaSada shoot. Dyer was paralyzed from the waist down in a 1968 motorcycle accident in Vietnam (ironically while on R&R). "Their disability defeats them. Just getting out and doing things becomes a chore. When you first get hurt, you don't think you can do anything. Now, I've been all over the United States at shooting events."

The longer a disabled person stays sequestered, however, the harder it becomes to take the challenge of coming to an event like this. Thus, when 21 participants showed up for the Lasada PVA shoot, it was considered a success. But it didn't happen overnight.

The seed for this event was



Bruce Scott, director of Sports and Recreation for the Paralyzed Veterans of America, briefs participants. Shooters enjoyed sporting clays, trap, five-stand, and muzzleloading rifle shooting.



planted when two like minds met in 1998 at the Governors' Symposium on America's Hunting Heritage in Pennsylvania. There, Kansas statewide hunter education coordinator Wayne Doyle, a retired Marine lieutenant colonel, met Lew Deal, an active-duty Marine lieutenant colonel. Two Marines in a crowd of mere mortals will soon find each other out, and such was

Larry Gerlach, Deal would find a new calling in life. Gerlach had become wheelchair-bound in 1983 when a truck bomb exploded his headquarters in Beruit, Lebanon, killing 244 Marines under his command. Deal was also in Beirut, in charge of a Cobra gunship detachment. His unit left just one day before the fatal attack. But this

Above: Satisfied shooters pose amid a litter of spent shells at the 5-stand. **Left:** Johnny Atherton, a double-amputee, prepares for a sporting clays shot from his customized 4-wheeler.

the case with colonels Doyle and Deal.

At that time, Deal executive was officer of the Weapons and Training Battalion at Quantico, Virginia. Because of his friendship with another retired Marine "light" colonel named tragedy and Deal's friendship with Gerlach inspired both vision and action.

With help from the PVA, Deal developed wheel-chair accessible deer stands throughout Quantico's 50,000 wooded acres. And it didn't stop there. Deal's work at Quantico and his efforts to bring the concept to other military bases led to passage of the 1998 Disabled Sportsmen's Access Act, which directs the Department of Defense to develop disability access on the more than 30 million acres of land it manages.

With their common military backgrounds and interest in promoting hunting opportunities, Doyle and Deal had much to talk about. Back home in Kansas, Doyle later contacted Deal about putting together a disabled shooting event in Kansas. (Deal had since retired and become director of Outdoor Sports Development for the PVA.) Doyle knew that LaSada had excellent handicap-accessibility and felt that a disabled shooting event there would dovetail quite nicely with the department's Pass It On program.

In his new PVA position, Deal had been working with the National Shooting Sports Foundation's Step Outside program. With some 15,000 spinal cord injuries each year mostly among young people — the Step Outside folks were quite receptive to PVA's efforts to promote shooting sports for the disabled. In the summer of 2000, Deal flew to Russell and met with Ron Young, who, with his wife and son's family, owns LaSada.

"He was all for it," said Deal. "His initial comment was that we should just get this thing going."

Young started by calling local volunteers and businesses, and Deal — with the help of Young, Dyer, and Oklahoma PVA member

Johnny Atherton — gave a pitch to the local Rotary Club. Before long, help was enlisted from the Elks, Rotary, and Kiwanis clubs; the Hays Chapter of the Marine Corps League; the Kansas Friends of the NRA; the John Deere, Subway, and McDonald's companies; and 4-H volunteers. The Young family would add a great deal to the effort, as well.

Bruce Scott, director of Sports and Recreation for the PVA in Washington, D.C., attended the LaSada event and was impressed. "Every time we find a facility like this, we try to let our membership know," Scott told me. That membership includes some 20,000 nationwide, 200 in Kansas.

Scott is a disabled veteran,

but like many at this event, his waist-down paralysis was not the result of combat. He was injured as a civilian when an oil storage tank blew up. Like Dyer, he knows that it is difficult for disabled people to get out and do ordinary things, let alone take up sports that can be difficult for able-bodied folks.

"It's a problem getting people out," Scott says of the disabled. "It's an effort to go to 7-Eleven, much less something like this. If you were to ask me out to a restaurant, I would say I'd get back to you. Then I'd check it out first to make sure it is accessible."

Tom Richey, of Oklahoma City, believes it may take more than courage before many people force themselves to become involved in life — and fun — again: "It's not that God gives us more than we can handle. It's just that when we are not handling it that we have forgotten to ask His help."

Some disabled people develop an

attitude of embarrassment, not just about their condition, but about the limitations it can place on them in public. If a facility isn't equipped to handle their needs, they don't want to deal with it. But events like this Step Outside shoot can help.

"The reason this event is important," Scott explains, "is that it gives folks a chance to say to themselves and others, 'We did it. You can do it.' It's therapy."

Like the others here, however, Scott has not let his disability define him. When in rehabilitation after his accident, the PVA contacted him because he is a veteran. This eventually led to his current position and work as a professional tennis umpire. He umpired the 1989 and 1990 U.S. Open and the 1991 Australian Open. He also helps organize the National Wheelchair Games, the largest wheelchair sporting event in the nation, comprising 16 different sports, from ping pong to basketball to air gun



A little help from my friends: wheelchair-bound shooters form a chain-link caravan between sporting clays stations. John Deere provided ATVs to help with transportation.



After the target shooting, some of the participants hunted pheasants on LaSada's controlled shooting area. The Gators were crucial to getting hunters in the field.

competition.

But events like the LaSada shoot, although not nearly as large and glamorous, are just as important to Scott.

"I did a lot of hunting as a kid," he explained. "A lot of these guys did. But most of us have never shot sporting clays or 5-stand. This is a whole new opportunity. And it's great because the rules are the same as for the able-bodied, but it's convenient for the disabled. I commend LaSada for taking accessibility into consideration when they built this place."

Indeed, handicapped accessibility is one shining feature of the LaSada facility. From the clubhouse to the 5-stand, trap, sporting clays, and muzzleloader ranges, the paths are smoothly-paved and easy to maneuver for the wheelchairbound. Each station along the path is equally accessible.

This is no accident. In 1996, the Youngs contacted Johnny Atherton for advice about developing a new shooting area. Atherton, from Enid, Oklahoma, had lost both legs in a gas explosion in 1981. Ron Young had met Atherton on the shooting circuit and knew that he was an avid shotgunner with 17 years of competitive shooting under his belt. What better person to advise on the development of a shooting range with accessibility to the disabled?

Young also contacted Mike Dyer, and between the two of them, he had some of the best consultants one could ask for. With their advice, the Youngs were able to build a course that rivals any for handicapped friendliness.

Although Atherton was an invaluable resource for the Youngs, he might not have been but for a

stubborn friend. Atherton explained his reluctant entry into the shooting sports

"I had hunted game before my accident," he said, "but I'd never shot targets even though I live 7 miles from the local gun club. One day, a friend dragged me out to watch. He said, 'You're gonna do this.' And I said, 'I can't!' He just said, 'You can!' It took two years, but

he finally got me out. I've been shooting ever since."

To see Atherton today, zipping from station to station on his customized four-wheeler, spinning around on strong arms to face the target area — and seldom missing — you'd never believe he had once been reluctant to shoot. This amiable man doesn't even act as if he has a disability. He would surely be the type of man John F. Kennedy referred to in Profiles In Courage, when he wrote, "For without belittling the courage with which men have died, we should not forget those acts of courage with which men have lived."

Atherton's "act" is a life example for others, although he makes little of it. He's just having fun.

"I've met a lot of nice people while shooting," he explained. "This kind of event makes you want to get out and do things again. I was like everybody else and thought I couldn't do anything. I was wrong."

Atherton's experience and attitude are reflected in the enthusiasm of all the participants, whether firsttimers or old-timers. "He's the guy who got me into this, and now I'm trying to get him into fishing," said Tom Richey.

In 1983, Jim Canfield, of Great Bend, lost his left arm to cancer. As a participant and promoter of the LaSada shoot, he believes in the power of getting people to do things they have always done. Canfield, however, doesn't really see himself as disabled. "I just do the things I want to do," the avid trap and skeet shooter and 3-time One-Arm Dove Hunt winner told me. "I'm here because Ron asked me to show people it can be done."

Folks were ready to believe it. Indeed, enthusiasm was the underlying theme of this event. And while the volunteers may have gotten much out of it, the shooters were truly grateful.

"It was awesome!" said Rusty Lathrop, sports director for the Mid-America PVA Chapter in Oklahoma. "This place is so accessible, it's unbelievable."

Gary Dornbrack, of Westville, Oklahoma, echoed these sentiments. "I've never been exposed to sport shooting. I've never hunted pheasants before, either, but it was great!"

Bill Kokendoffer, from Paden, Oklahoma, agreed. "This was so well-organized for a first-time event, it's just like they have done it before."

Of course, events such as this are about more than shooting. They help people with physical disabilities to build relationships with others, realize they are accepted by most able-bodied folks, and learn where they can do things to stay active. Ultimately, it's about finding the faith and courage to nurture one's life.

That courage can be found in

opportunities like the LaSada Step Outside event. For those who provide such opportunities, the benefits are unexpected and uplifting. For those who participate in them, life itself expands in abundant proportion.

Step Outside events are the brainchild of the National Shooting Sports Foundation (NSSF). This is a massive promotional effort to provide outdoor opportunities for newcomers and seasoned veterans of the shooting sports and other outdoor activities. For more information on Step Outside programs, visit their website at www.stepoutside.org.

For more information on PVA events and publications such as "Yes You Can," visit the PVA website at www.pva.org.

For information on future Kansas PVA events, phone Rusty Lathrop at 1-800-321-5041.



BUGS ARE COOL

by Jill Parsons Mrs. Shinkle's English 1, Pratt High School

photos by Mike Blair

Catching insects for a 4-H project turns into a long-term hobby for this teenager, and it has opened up a world of fascinating study.

was having fun catching fish at my aunt's pond in Barber **L**County when something caught my eye. It was even neater than fishing. There was a bright green insect with long, lacy wings and big, brown eyes. It was faster than a speeding bullet. It was a Green Darner dragonfly. Some might call it a snake doctor, a mosquito hawk, or a devil's darning needle, but technically it is a dragonfly. When over the water, or anywhere for that matter, dragonflies are REALLY fast and hard to catch. I had to have it for my insect collection.

But catching it was a problem. The dragonfly hovered over the water where I couldn't reach it. Fortunately, my uncle had put out tires in his pond so that fish could lay eggs in them. I grabbed my insect net while my dad grabbed the back of my shirt. Then, I stepped onto one of the tires, swung the net, and caught the dragonfly. It was beautiful. Its lacy wings were clear and veined, there was a light blue spot behind its wings, and there was black on both sides of its tail. While I held the Green Darner, it worked its strong jaws to try to bite my finger.

I was so excited at catching the insect that my whole family stopped fishing. We put the Darner in a jar and headed for home to pin it. Now, seven years later, the dragonfly is still one of my favorite insects in my collection.

I'm 15 years old now and more interested than ever in insects. I exhibit my collection as a 4-H project at county and state fairs, and the entomology project has helped me learn valuable information about these fascinating animals in Kansas. I have always particularly liked dragonflies and damselflies for their bright colors. But study of the insects has revealed so much more. Now, I know how fast a Green Darner really is - 60 mph forward or backwards — and how it catches and eats mosquitoes on the wing. I've also learned how it lives the early stages of its life beneath the water as a gill-breathing immature, later to crawl up a plant stem and emerge as the beautiful flying adult that breathes air. There are similar interesting facts about all kinds of insects found in Kansas.

Insect hunting falls under the science of entomology. Insects are unique creatures. They don't have internal skeletons like most other animals. Instead, insect muscles attach to an exoskeleton. The insect's skin covers this hard outer shell, and muscles are attached to its inner surface, rather than to bones. This is also true of other arthropods, like spiders and scorpions. However, insects are distinguished by further unique characteristics. They always have three sets of legs and three body segments. Often, they have wings. There are more insects than any other living things. As a group, they are sometimes called bugs, but this is confusing, since only one order of insects comprises true bugs.

Some insects are common, such as Lady Bugs, while others are hard to find, such as Black Witch moths. Catching a rare insect is cause for excitement to an entomologist. My four favorite insects are the Green Darner Dragonfly, the Luna Moth, the Tarantula Hawk, and the Ruby-Spot Damselfly. Some of these are favored for their color, and others because they are hard to catch.

Entomology is a year-round project, even though few insects can be found during winter. Spring, summer, and fall are the active collecting seasons, but winter allows time to pin and identify the catch.

Collecting the insects, especially dragonflies, is my favorite part of entomology. To catch flying insects like butterflies, moths, and dragonflies, I use a lightweight net that I can run with and swing fast. This type of net has light mesh fabric you can see through, so it's easy to tell when you catch the insect. But I also use much heavier nets to catch insects resting on leaves and grass.



Long-handled nets provide the surest and safest means of catching insects. Butterfly nets are sheer and light, easy to swing but also easy to tear on vegetation. Heavy sweep nets can be chopped through vegetation to catch a host of plant dwellers.

This type of net is called a sweep net and uses heavy material that can be beaten through vegetation without tearing. To sweep, you simply walk along and chop the net



Pinning an insect correctly is partly art and partly science. Sometimes a dozen or more pins are needed.

back and forth through the weeds. It's amazing what you'll find by doing this. Froghoppers, grasshoppers, beetles, and lots of other strange insects can be caught by sweeping.

There are other ways to collect insects besides using nets. Insects live in all kinds of habitats and can be caught by hand and placed in a jar. It's a good idea to use caution, though, since some insects bite or sting. Learning about insects helps to know which kinds to watch out for.

I find some insects by pulling bark off dead trees or rolling logs or rocks. Night-flying insects are attracted to lights and may be found at places like swimming pools, ball parks and tennis courts. At campgrounds, lighted restroom facilities usually attract a surprising variety of moths and nocturnal insects.

There are several special tricks that entomologists use to attract and collect insects. Some of these are sugaring, hanging blacklights against a white sheet at night, and creating bait sites. Sugaring is an exciting adventure that attracts an assortment of colorful moths and insects by day and night. A mixture of rum, stale beer, and sugar produces a sticky goo that can be painted on trees, posts or logs. The fermented mixture produces an odor that lures insects from some distance away. Then they can be caught as they drink from the smelly mixture.

Last summer, my sister and I spent a memorable July night using this technique to catch two brightlycolored underwing moths that we hoped to get for our collections. We entered a woodlot along a creek just before dusk and painted the syrup on several dozen trees along a trail. Then we went to a movie and returned with flashlights at about midnight to check for insects. We found a variety of small moths and beetles, and then our hopes were rewarded. At several trees near the end, our lights picked up the diamond eyes of the underwing moths as we approached in the darkness. These large and beautiful moths made the effort worthwhile, and we probably couldn't have collected them without sugaring.

Another useful technique is hanging a white sheet at night and illuminating it with a lantern or spotlight. Some kinds of insects are attracted to lights in darkness, and they can be caught as they land on the bright fabric. Ultraviolet light is particularly attractive, and if available, a blacklight makes the best light source.

Like all animals, insects are attracted to food. Various types of bait traps can be used to help catch insects. Some kinds of beetles can be caught by burying an open gallon can flush with the ground surface and baiting it with bits of meat. As the meat spoils, it puts off odors attractive to the beetles. Trapped insects fall into the can and cannot



Pinned specimens are allowed to dry for a week or more. During this time, they must be protected from pets, rodents, and other insects. After drying, the insect is ready for identification, labeling, and display.

climb its slippery walls. Discarded fruit can also be used as bait. Fruit can be piled on the ground to ferment, luring many kinds of insects to the sweet odor. Many times, simply throwing a watermelon rind into suitable habitat will attract flying insects such as wasps, flies, and butterflies.

Once an insect is caught, it must be handled carefully. The legs and antennae of some insects are easily broken, and wing scales of moths and butterflies rub off easily. Grabbing an insect usually results in a damaged specimen, and damaged insects are normally useless in a collection. When possible, allow a netted insect to crawl directly into a container or collection vial without handling. Or, place the jar or collection bag over the insect and allow it to crawl in before capping.

The collection container may also damage the insect. Large flying or jumping insects are stressed when placed into glass jars. Since they can see out, they will beat their wings or jump against the glass until body parts are damaged. Butterflies, moths, and dragonflies should be placed into a dark container like a paper bag. The subdued light of a bag helps them to relax and avoid damage. Glass jars and plastic tubs are best for beetles, bugs, and crickets which are not likely to hurt themselves.

Collected insects should be killed as soon as possible. Entomology scientists often use kill jars loaded with various chemicals like ethyl acetate or carbon tetrachloride. These kill the insect in a matter of seconds, but the chemicals are hard to obtain and dangerous to use. Most amateur entomologists kill insects by freezing them. Insects are cold-blooded, but they can't survive a deep freeze. Collection bags or jars can be placed into the freezer for several hours until the insects are frozen solid. Specimens can be stored this way indefinitely and thawed later when time permits pinning.

Pinning is the most important part of displaying insects. Special pins are used to hold the insect in a display case. These are longer, sharper, and easier to work with than sewing pins. Insect pins are available through county agricultural extension offices, or through distributors of scientific supplies.

The process of pinning and drying an insect is called mounting. Blocks made of wood, foam or styrofoam are used to hold an insect in its proper resting position. Mounting blocks have grooves of various depths to allow the insect's body to rest at the proper height while drying. Wings and legs are spread on the mounting block's flat surface. An insect pin should be inserted through the insect's body to hold it in place, but for positioning legs and antennae, regular straight pins work fine.

Mounting is the most difficult and time-consuming part of preparing insects for display. It requires a certain art and skill that grows with experience. Before beginning, one must know how the insect sits naturally, and also the scientific rules for pin placement. Except for butterflies, moths, dragonflies, damsel flies, and really tiny insects, every insect's legs and antennae need to be positioned correctly. It may take several dozen pins to hold the insect in a desired position.

Wings are spread on many insects to show wing color and veination for accurate identification. Good mounting technique uses strips of waxed paper to hold the wings in position. The strips are pinned down outside the wing margins to avoid pinhole damage.

After mounting, an insect needs to dry for up to 10 days. While it is drying, the insect should be pro-



Identification can be the most difficult part of collecting insects. Large, colorful specimens are easy to picture key, but the multitude of small and drab insects are harder.

tected from animals such as mice, cats or living insects, which might eat the drying specimens. If the mounting block and insects are temporarily kept in a shoe or boot box, they should be fine. When the mounted insect is dry, all pins except for the mounting pin are removed.

Displaying your insects provides the chance to show off the hard work you've done, as well as provide opportunity for further study. Cigar and cardboard boxes lined with styrofoam can be used for display, but they are susceptible to damage. Wooden display cases offer more protection because they have a glass or plastic cover. These transparent covers make it easy to see the protected specimens inside. In either type box, moth balls can be pinned or fastened into corners to protect your collection from Dermestid beetles which invade collections and eat pinned insects.

The ultimate goal of collecting insects should be to learn about these common animals. It can be a lifetime study because there will always be insects you don't have. If you decide to exhibit your collection at fairs and other competitions, ribbons and other prizes are given for levels of achievement.

Entomology is a fun and educational hobby that is inexpensive and can be done at home. Materials are simple and can often be made from scraps in the shop or sewing room. Chasing insects can be time-consuming, but the knowledge learned and accomplishments achieved are worth every second.



A Wealth of Information

by Roland Stein wildlife education coordinator, Pratt

photos by Mike Blair

The Wildlife Education Service Reference Center sends thousands of videos, films, books and learning kits to teachers and youth leaders each year — all for free!

W uild it, and they will come," is a line from the movie, *A* Field of *Dreams*. An Iowa corn farmer hears a voice telling him to build a baseball field for the all-stars of yesterday. "Build it, and they will come." He did, and the people came to watch.

I don't know about voices, but the Pratt Reference Center began with similar beliefs: If we provided the information, people would come. From humble beginnings in 1973, the reference center has been providing resource materials to schools, Hunter and Boating Education classes, conservation groups, youth leaders, and home schoolers. It is part of the department's mission to inform and educate people about the management and wise use of our natural resources.

The first catalog contained a listing of 35 16mm sound films. Today's catalog lists more than 4,000 titles, including books, software, filmstrips, game kits, learning kits, slide series, video learning kits, cassette tapes, records, posters, laser discs, video tapes, and even now, 16mm films. Just the "Bird" category alone includes 40 books, three software programs, six filmstrips and game kits, 14 learning kits, 25 films, 42 posters, four records, 10 slide series, and 43 video tapes. Within each category, resources are divided by media type, and each listing includes a short explanation of the item, including title, suggested grade level, and description of content. Some of the more popular items include the marvelously-Eyewitness illustrated and Zoobooks (many of the Eyewitness books are also available on video),

the Skins and Skulls learning kit (our most requested item), the Amazing Animals video series, and the award-winning Naturescope activity guides.

Exploring topics from animal behavior to endangered species is just a phone call away — (620) 672-0776, Monday-Friday, 8 a.m.-5 p.m. Items may also be checked out through the department's web page - www.kdwp@wp.state.ks.us, or you can e-mail requests to refcenter@wp.state.ks.us. Materials are available on a first-come, first served basis. Items may be kept for three weeks, and extensions can be requested. The only cost is return postage. We encourage that materials be insured, especially if the items are valued at more than \$100. You can also request the current Reference Center Catalog through any of the contacts listed above.

Wildlife & Parks



Skins and Skulls Learning Kits are the most requested among more than 4000 free items available for loan from the KDWP Reference Center. Items can be checked out for three weeks at a time. The only cost is return postage and insurance.

Speaking of the Reference Catalog, it has been updated many times. If you have one in a yellow plastic binder, it's time to get the updated version. Users who are listed in our database receive update addendums automatically. The last one was mailed out in March 2001. There is also a Reference Center Professional Catalog, which lists the resources appropriate for the Hunter and Boating education courses, for camping and hiking, and for fishing and hunting. This is a great resource for youth activity groups such as Scouts, 4-H groups and YMCA groups.

In 1993, a satellite reference center was opened at the department's district office in Lenexa. The resource selection is similar to that in the Pratt center, but the mode of operation is different. Materials must be picked up at the office at 14639 West 95th St. Materials may be returned in person, or they may be mailed back to the office. Materials are not mailed out of this address.

A 1992 survey asked users what they would like to see added to the

Reference Center. At that time, materials on recycling topped the list, followed by pollution, weather, water, and human impact on the environment. The survey also told us that demand for certain types of media were fading, particularly 16mm films and slide series. We have been replacing those types of media with video whenever possible. In the last 10 years, 284 videos and 25 software programs have been added to the reference center catalog. Upgrading, adding new listings and replacing items is a continuous process. In the last two years, more than 230 new and replacement items have been purchased.

Currently, videos are the most requested items, followed by learning kits, resource books, and posters. In 2000, the number of customers and items requested decreased for the third straight year. It's possible that the internet and special television programming could be reducing the demand for reference center materials.

The Pratt reference center has been operated for 21 years by Maxine Crosley. She and her assistant Jack Durall maintain the materials and fill all orders promptly. The Lenexa District offices center has been operated by Marie Crisper for the last four years. The staff keep busy. They have averaged checking out more than 3,000 orders each year. We built it and they came and we're glad they did.



If you've ordered any materials from the Pratt Reference Center, you've probably corresponded with Maxine Crosley, who has operated the center for 21 years. Crosley will retire this summer after 32 years with the department.

ILDTRUST is a program of the Kansas Department of Wildlife and Parks that administers donations and memorials to the department. Small or large, donations to the department can leave a lasting legacy for wildlife, wild places and the Kansans who enjoy them. WILDTRUST donations fit into five categories: land, property, services, memorials and funds.

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Land donations to WILDTRUST have provided thousands of acres of outdoor recreation for Kansans. Land can be donated directly to the department, or donors may reserve a life estate wherein they pass title to the State, but occupy the property until death. Owners may grant the State a Conservation Easement that preserves the natural or undeveloped character of the land while retaining private ownership.

Property donations include tools, materials for use in specific projects and equipment. Conservation groups and organizations often donate property for specific programs such as law enforcement, habitat improvement, youth fishing clinics and wildlife education.

Donations of services can include use of storage facilities, office rent, harvest of forb seed, slip rent for law enforcement boats, hauling of gravel and planting trees. Service donations are often the result of a contact between a department employee and a conservation group or business and can sometimes ensure a project is completed when budgets are tight.



Memorials can be established to commemorate a person who enjoyed the Kansas outdoors. WILDTRUST memorials can be general in nature, or they may be designated to specific programs, projects, state parks or wildlife areas. Funds can be given to the department for a variety of programs. Virtually all funds are placed in specific accounts and spent on the project the donor requests. WILDTRUST accounts are not subject to normal budgeting procedures and can be spent at any time, but formal expenditure guidelines must be followed.

Once a WILDTRUST account is created, department personnel responsible for the project ensure a timely expenditure of funds. WILDTRUST accounts include: Hunter Education, Hatchery Improvement, Youth Fishing Program, Nongame, Habitat Development and Operation Game Thief.

WILDTRUST donors are recognized in a variety of ways. Donors of property, services or funds totaling between \$250 and \$1,000 may receive a limited-edition art or photo print. Donors providing more than \$1,000 will may receive a framed and matted print.

Donations to WILDTRUST can help ensure that future generations enjoy the Kansas outdoors. For more information call Mike Theurer at the Pratt office, (620) 672-5911, or contact your nearest Wildlife and Parks office.

Conservation Officer

text and photo by Matt Stucker conservation officer, Larned

Continuing series profiling the men and women who enforce wildlife-related laws.



In southwestern Kansas, life sometimes moves at a slower pace. However, our conservation officers in that region don't see it that way. If they move slowly, they can't cover their assigned districts.

Bruce Peters is stationed in Lakin, the county seat of Kearny County. Besides Kearny, his district includes Hamilton, Greeley, and Grant counties. This adds up to more than 3,000 square miles to cover, with a population of approximately 16,000. When Peters started in September of 1966, he was given the assignment of taking care of Lake McKinney, just outside of Lakin. The lake had 3,000 surface acres of water and wintered more than 100,000 ducks. Although the department lost the lease on the lake in the early 1970s, the waterfowl don't seem to mind and still use the lake every season. The Arkansas River also flows through Peters' district, which adds diversity.

Peters will tell you that the area has excellent hunting. In his district you can find both mule and white-tailed deer, antelope, scaled and bobwhite quail, pheasant, and fairly good populations of waterfowl during season. Even though most of the hunting is on private land, the Walk-In Hunting Area (WIHA) program has increased access for hunters. Hamilton County alone has more than 30,000 WIHA acres, which draws hunters to the area and makes hunting season a busy time for Peters.

One of Peters' more memorable cases happened during duck season. Mallards were trading back and forth from Lake McKinney to a local duck club. Peters heard plenty of shooting coming from the duck club, so he decided to check things out. After a mile walk in to the hunting area, he found hunters over their limit of mallards. None would confess to shooting any of the ducks, so he wrote them all tickets and carried the ducks to his truck. It took two trips get everything to his truck. By the time he got to the courthouse to file the tickets, the group had already been there to pay the fines. So much for claiming innocence.

Another case Peters remembers could have been dangerous. About 6 p.m. on Halloween night, a farmer heard shots behind his house. When the farmer got there, he saw a car with out-of-county plates. Assuming the culprits were after deer, he called Peters. By the time the officer got there, it was dark and rainy and visibility was limited. Peters approached the area slowly with his lights off so he wouldn't alert the suspects. Suddenly, in the dark haze, he realized there were people in front of his truck. When he turned on his lights, they ran a short distance and were barely visible in the headlights. The men spoke only limited English vocabulary and Peters didn't speak Spanish. All carried rifles and appeared scared. He couldn't get them to put their firearms down until a sheriff's deputy arrived. When they got the individuals back to the sheriff's office, they were able to interview them. They didn't admit to shooting anything, and because Peters didn't have any evidence, they were released. The next day, Peters and another conservation officer entered the area and quickly found knives with blood and deer hair on them. It took nearly four hours to find the deer. The danger of this situation was enhanced because of the language barrier.

Cultural diversity in this region of the state and the resulting language barrier is one of Peters' biggest challenges. With a large district and diverse constituency, Peters relies on the help of concerned, ethical hunters. In this wide-open region, it may appear that people are moving slowly, but if you're a conservation officer, you'd better cover some ground.



Edited by Mark Shoup

NAME THAT TROUT

Editor:

Along with my regular fishing partners Dan Michael and Ken Kissel, I have recently started trout fishing at Mined Land Wildlife Area Unit #30 (Cherokee County). We have been catching a trout that is a bright yellow in color.

We'd like to know a little more about those yellow trout. They are bigger than the others and put up a better fight.

> John Michael Iola

Dear Mr. Michael:

The yellow trout you caught in the Mined Land Wildlife Area is called a golden rainbow by Bob Krause at Crystal Springs Trout Farm in Cassville, Missouri. These golden rainbows are a result of crossing a rainbow and an albino rainbow. Bob tells me the albinos have a blue color, and the golden offspring are capable of reproducing. They have stocked several hundred golden rainbows in the past three stockings, so you may be lucky enough to catch another. Good luck.

--Rob Friggeri, district fisheries biologist, Pittsburg

THANKS FOR PASSING IT ON

Editor:

As I looked over the latest issue of *Kansas Wildlife and Parks* magazine, many happy memories came to mind. As I read the articles and again enjoyed the great photography of Mike Blair, my eyes began to flood over in remembrance of my dearest friend who first introduced me to Kansas and this fine magazine. An avid sportsman throughout his life, and a true gentleman in every way, my best friend E. "Lee" Haring was called to his promise Oct. 14, 1999.

Your magazine articles and pictures are the most expressive and enlightening of any outdoor sporting magazines around. Although I have not lived in Kansas but have only been a visitor, I have long enjoyed the arrival of your magazine.

From the conservation officers in the field to the parks personnel to those who work to produce the final draft of each issue of this fine magazine, and to the good folks I have met there, I want to express my sincere gratitude. Your magazine chronicles the fabric of some of the best things in America.

In renewing my subscription, I am again reminded of the love that Lee had for his home state. So, as he did for me, I will do for another, and in the words of Steve Williams, I will "pass it on." I am quite sure that someday, somewhere, I will again fish in the company of my dear friend and, if he has anything to say about it, the place will look something like Kansas.

> Al Borrego LaPorte, Indiana

HEADS TO B&C MUSEUM

Note: The following letter from the director of big game records for the Boone and Crockett Club was sent to Region 5 Law Enforcement Supervisor Charlie Ward after he arranged for the donation of two confiscated deer heads to the group.

Dear Mr. Ward:

On behalf of the Boone and Crockett Club, Fred King (chairman of the club's Museum Committee), Mark Steffen, and myself, I would like to thank you for donating the typical and nontypical whitetail deer antlers to the club's National Collection of Heads and Horns. Words cannot express how much we appreciate your generosity and thoughtfulness because we have been looking a long time for trophy-quality whitetails for the collection. It was ironic that the National Collection was void of whitetail deer examples for so long because they are the most ubiquitous big game animal in North American today.

The collection, which was established in 1906 by the New York Zoological

<u>letters</u>

Society at the Bronx Zoo, was "dedicated to the vanishing big game of the world." The Bronx Zoo expected to be the leading authority and repository for examples of the extinct animals of the world. However, the club became the caretakers of the collection in 1976 when the zoo lost interest in it. These animals did not go extinct, as predicted, because of the conservation efforts of hunter-conservationists across North America.

At the turn of the century, the situation for big game animals must have looked pretty grim to William T. Hornaday, the founder of the National Collection. Mr. Hornaday, a hunter himself, believed the pump shotgun was "the devil's tool." It makes you wonder what he would say today with all the technological advances in hunting equipment.

Both of these trophies will take their rightful place in the Boone and Crockett Club's National Collection at the Buffalo Bill Historical Center in Cody, Wyoming, once they are mounted. They will be viewed there by nearly a quarter of a million visitors each year.

Thank you again for your donation. Your generosity will be noted on the plaque that will accompany both specimens in the museum.

> Jack Reneau Missoula, Montana

CO THANK YOU

Editor:

At the Kansas Traditional Archers Association spring rendezvous down by Wichita, one of your conservation officers, B. J. Thurman, was in attendance. Initially, I wasn't even aware he was there to represent the Kansas Department of Wildlife and Parks. I thought he was just a fellow traditional archer there to have a good time and participate in the weekend activities. However, much to my surprise, the next morning B. J. was there in uniform, right next to an official state vehicle with a display of deer antlers the department had confiscated from poaching activities within our state. Mr. Thurman spent the whole weekend answering questions, relaying stories, and in general, keeping us informed about the upcoming changes regarding deer hunting in the state of Kansas.

I felt that B. J. most wholeheartedly represented the Department of Wildlife and Parks in a very positive light. In fact, this was the first time I have ever seen the department represented in such a fashion. He has an outstanding professional attitude, and he was able to communicate with fellow sportsmen.

Please pass on our heartfelt appreciation to B.J.

> Joe Meyeres Olathe

GUIDE GUIDELINES

Someone told me that Wildlife and Parks had changed the requirements for the guide's license. If I guide for an existing licensed hunting outfitter for 5 days and earn \$1,000 do I need a license?

> Jeff Ehlers Sherwood, Arkansas

Dear Mr. Ehlers:

In a nutshell, yes, but if you only plan to work for someone else, you could choose to get an associate guide permit (same basic requirements, but cheaper). Anyone providing commercial guide services is required to have either a commercial guide permit or an associate guide permit. "Commercial guide services" means providing, offering to provide, arranging for, or assisting with hunting or fishing activities for others on a commercial basis. This can include providing pack or riding livestock, transportation other than by a commercial carrier, or equipment or facilities, if these things are provided in conjunction with hunting or fishing.

Recent amendments to the law help describe what constitutes commercial guiding by defining "commercial basis" as meaning that the recipient of the services agrees to provide valuable consideration as compensation for the guide services, and the services are provided as part of a business relationship. A business relationship may include things like advertisements, written agreements of the terms of payment, or the fact that the guide has hired employees who help provide the guide services. Basically, if guiding occurs as part of a business, as opposed to guiding for friends or family, a commercial guide permit is required.

There are a number of exceptions to the requirement, however. A person does not need a commercial guide permit if the guiding is done on a licensed commercial shooting area; if the guiding is on the guide's own private land or on farm or ranch land leased by the guide for farming or ranching purposes; or if the guiding is part of an educational or not-for-profit event approved by the department.

The old exemption for "provisional" guides has been removed from the law. That old exemption was based on an arbitrary number of days or amount of money received, rather than whether the guide is operating as a business. Under the new law, if it isn't part of a business, then there are no permit requirements of any kind, and therefore no special exemption is required.

Other recent changes in the law establish a minimum age of 16 years for commercial guides (associate guides can be any age), and state that wildlife violations outside of Kansas might be grounds for denial of a guide permit.

--Clint Riley, attorney, Topeka

HATS OFF TO MANAGEMENT

Editor:

As a nonresident hunter visiting your state for the first time this year, I want to applaud your current management practices. I am much more interested in buck quality than quantity. That is why I came to Kansas, along with my money.

I have hunted deer for 16 years in 12 different states, and I believe Kansas offers the best trophy buck deer hunting in the US. I'd like to encourage you to maintain the superior herd by continued strict management practices. It was a little disappointing this year when I saw all these deer permit quotas increased. I am not in favor of this. I'd like to see fewer buck tags going to us nonresidents. A Kansas buck tag every other year is good enough for me, as long as the current quality is offered.

I am completely against the issuing of transferable landowner buck tags. These are sold by farmers at inflated prices, encouraging leasing and outfitting practices. I'd rather my money go to the state, with the additional funds going toward the outstanding Walk-In Hunting Area program. This was a fantastic idea and it works for everyone. I greatly enjoyed my hunts on several of these properties this fall. Keep up the great program!

> Ken Zimny Crown Point, Indiana







TAGGED ON TURKEY

On Nov. 19, 1998, I (Todd Pesch) was contacted at approximately 5 p.m. by the McPherson County dispatcher. The dispatcher had received a 911 call about a man who had shot some turkevs on Craig Anderson's land in Northwest McPherson County. The vehicle this man was driving was a white dual-wheeled pickup bearing a Kansas license tag. I was driving westbound on highway K-4 when I passed this vehicle, which was eastbound.

I turned around and stopped the vehicle. As I approached the vehicle, the driver got out. I informed him that I stopped him because I had received a call about a man who had shot some turkeys driving a vehicle matching this description and tag number. I asked the driver if he had any turkeys in his vehicle. He said, "No."

I asked if he had been hunting, and he again replied, "No."

I noticed two guns in the back seat of this vehicle. I asked the driver for his drivers license. The driver was Albert Brian Brownsberger of Appleton City, Missouri. I asked Brownsberger to step back as I searched his vehicle. I noticed a leather shotshell belt next to the driver's seat and a box of shot shells in the backseat. I pulled both guns from the vehicle and laid them on my truck.

About five minutes later, Jon Hawkinson of the McPherson County Sheriff's Department arrived. Officer Hawkinson watched Brownsberger while I searched the vehicle. The turkeys were missing (and never found), but I noticed a white rag with oil and blood on it and three turkey feathers in the engine compartment of his truck. We transported Brownsberger to the Anderson residence. Anderson identified Brownsberger as the man he had seen carrying a turkey to a white dual-wheeled pickup on his property.

Anderson also took us across the creek where he had confronted Brownsberger, and we found two empty shotshell casings that were the same type that was in the vehicle Brownsberger was driving. Brownsberger was placed under arrest and transported to the McPherson Sheriff's Department.

I asked Anderson to cover the events that had happened prior to making his 911 call. Anderson mentioned he had seen about 60 turkeys walk by his house and across the creek. About 15 minutes later, he heard two shots.

He then drove to the other side of the creek and pulled in behind a white dual-wheeled pickup bearing the Kansas license tag number later reported. Anderson saw a man jump across a barbed-wire fence and trip over an electric fence. This man had a turkey in his left hand and shotgun in his right hand. Anderson asked the man what he was doing. Brownsberger replied, "Hunting turkeys."

Anderson asked the man who gave him permission, to which Brownsberger replied, "Some guy from town."

Anderson informed the man, "This is my his property. I did not give you per-

mission and I have cattle in this creek." He also asked the man if he had a turkey hunting permit, and Brownsberger said, "Yes." Anderson said that he would like to see it. The man replied that it was in his other vehicle. Anderson watched the man throw the turkey in the back of his truck and noticed another turkey, possibly three. The man apologized and said he was sorry for hunting on his ground and mentioned something about his cattle. Then Anderson drove home and called 911.

Brownsberger was charged with the following violations: 1) no hunting license; 2) hunt/take two turkeys without valid permits; 3) hunt in a closed season (fall turkey season began on Oct. 7 and ended Oct. 18, 1998); and 4) unlawful hunt (trespass).

I contacted Judge Ted Ice at his home that evening and he set bond at \$1,000. On Dec. 16, Brownsberger pleaded no contest to all charges. He was fined \$250 for possession of untagged turkeys, \$100 for hunting in a closed season, \$100 for hunting without a license, \$100 for unlawful hunting (trespass), paid \$102 in court costs, bought his shotgun back for \$350, and was ordered to pay the Kansas Bureau of Investigations a \$150 lab fee. He also received a 10-day suspended jail sentence contingent upon being violation-free for six months, and paid \$150 wrecker and impoundment fees, plus attorney's fees.

-Todd Pesch, wildlife area manager, McPherson

OPERATION Game Thief

Hunting season is a time to enjoy camaraderie, fresh air, exercise, and contact with nature. However, nothing can spoil this much-anticipated day more than poachers. These are the people who trespass, litter, take unsafe shots, drink while they hunt, or vandalize. While they represent an extremely small percentage of the hunting community, they give all hunting a black eye.

This season, all hunters and everyone else - should be on the alert for wildlife violations with Operation Game Thief. You can help conservation officers by reporting fishing, hunting, and public lands violations using this toll-free telephone call.

The Operation Game Thief hotline (1-877-426-3343) offers Kansans a simple way to get a quick, efficient response to any illegal activity they see or hear about. (No general information requests can be answered.) All calls received through the Operation Game Thief line are immediately relayed to the conservation officer nearest the violation. Callers remain anonymous. The line is available anytime of the day or night, every day of the year.

People who see a violation should get as much information as possible, including vehicle descriptions and license tag numbers, descriptions of people involved, locations, and the time the incident occurred. The more specific the information is, the easier it is for conservation officers to investigate the case. But observers of violations should never confront violators.

- Shoup

ssues

Colorado Bans Prairie Dog Hunting

In a surprise move on Nov. 16, 2000, the Colorado Wildlife Commission voted 5-3 to ban recreational hunting of black-tailed prairie dogs. It represents a striking policy shift from previous positions. Under prior regulations, prairie dogs could be hunted year-round, with no bag limit and no possession limit. The action was taken after Greg Walcher, executive director of the Department of Natural Resources, asked the Commission to help demonstrate to the U.S. Fish and Wildlife Service that Colorado was taking steps to conserve black-tailed prairie dog populations and that listing the prairie dog as threatened under the Endangered Species Act was unnecessary.

Division of Wildlife staffers and close observers of the Commission thought it might close hunting season for a threemonth period in the spring to protect young prairie dogs, but the complete ban, which takes effect on Sept. 1, 2001, was unanticipated.

Black-tailed prairie dogs are distributed primarily east of the Front Range of Colorado in the eastern plains. The ban does not apply to Gunnison prairie dogs found in southwestern Colorado or whitetailed prairie dogs that occupy habitats in the northwestern part of the state.

According to Todd Malmsbury, a spokesman for the Colorado Division of Wildlife, "The hunting ban will have little impact because sport hunting is not widespread in Colorado, and poisoning and sylvatic plague are bigger threats." However, sportsmen and other conservationists feel that a decision to establish season lengths and/or bag limits for prairie dogs would have been a positive and adequate step.

An irony of the decision to ban hunting completely is that hundreds of acres of prime black-tailed prairie dog habitat are consumed yearly by urban sprawl along the Front Range with little focus on urban growth controls that would help prevent these losses. In addition, prairie dogs still can be poisoned or shot to reduce property and livestock damage on private land.

In Feb. 2000, the U.S. Fish and Wildlife Service found that the black-tailed prairie dog warrants protection under the Endangered Species Act but that other species were of higher priority. The Service will review the status of the black-tailed prairie dog yearly, with the first evaluation completed last spring. For more information, contact Len Carpenter, Wildlife Management Institute, at 970-223-1099.

--Outdoor News Bulletin

Kids Day Sept. 8

Getting kids outdoors and having fun are the cornerstones of a new program recently announced by the Kansas Wildscape Foundation, a nonprofit foundation focused on providing outdoor recreational opportunities in Kansas. On Saturday, Sept. 8, the organization will conduct the first annual Outdoors Kansas (OK) Kids Day.

Wildscape and its program partners plan to have more than 10,000 Kansas kids hiking, canoeing, fishing, biking, hunting, and birdwatching on OK Kids Day at each of Kansas' 24 state parks, at the facilities of over 100 city and county parks, and at numerous private sites.

"We are very excited about OK Kids Day and what it means for the kids of our state," says Harland Priddle, executive director of Kansas Wildscape. "For many of them, it will be an introduction to the beauty and enjoyment of the outdoors; for others, it will be a reawakening or reinforcing of their outdoors interests."

A partner with Wildscape is the Kansas Department of Wildlife and Parks, which will host OK Kids Day events at each of the 24 state parks it manages.

"Our park managers are putting together a wide range of activities for our young guests," explains Steve Williams, secretary of the Department of Wildlife and Parks. "We're excited about showcasing the many lakes, marshes, trails, and resources of our parks. Outdoor traditions -- whether they involve camping, hiking, fishing or hunting – are important legacies for our state, and that is what OK Kids Day, and our department's "Pass It On" program, are all about."

The Kansas Recreation and Parks Association endorsed OK Kids at their annual meeting and many of its 240 members are signing up to host events. Laura Kelly, executive director of KRPA sees OK Kids as a natural extension of their programs. "Getting kids involved in learning skills

Wildlife & Parks

and having fun outdoors promotes an active, healthy lifestyle," she says.

Kansas Governor Bill Graves has agreed to host an event on the grounds of the Governor's Mansion and to participate in it with his daughter.

While many of the sites and events are set, others are being added every week. "Virtually everyone we talk to about OK Kids wants to get involved," says Priddle. "The beauty of the program is that each partner organization can plan and conduct the types of outdoor activities consistent with their missions and their facilities. We'll also be encouraging individual adults to just take a kid outdoors on Sept. 8, even if they don't go to an organized event site."

He added that an OK Kids website will soon be functioning and that a calendar of statewide sites and activities will be published in mid-summer.

For more information, contact Kansas Wildscape Executive Director Harland Priddle at (785) 843-9453. '

> --Chad Luce, public information officer, Topeka

Top Naturalist

Last March, Mike Rader, conservation worker at Wilson State Park, won the Naturalist Award at the Region 6 National Association for Interpretation Conference in Manhattan. Region 6 is comprised of member naturalists in Texas, Oklahoma, Kansas, Missouri, Arkansas, and Louisiana.

Among the 130 naturalists attending, approximately 50 persons elected to take the Great American Naturalist Quiz, a challenging written exam that requires identification of tape recordings. slides of wildlife species, and actual specimens. Everything from insects, reptiles, and amphibians to plants, mammals, and mussels are included on the test. Despite the complexity of the test, Rader achieved his high score the first time he entered the competition. Most other winners have taken the test multiple times before attaining this honor.

"Among his other duties, Mike was instrumental in founding the highly successful ECO Meet held at Wilson State Park," says Alan Stark, Regional Parks Division supervisor for the Kansas Department of Wildlife and Parks. Mike also provided support in assisting ECOmeets to get underway in other parts of the state.

"I'm truly excited for Mike and for the department," adds Jerry Hover, Parks Division director. "Mike is one of the best. He continues to make a difference in the quality of life."

Rader has been with the Department since 1989.

At this same conference, Wichita's Great Plains Nature Center also won the Outstanding Site Publication Award for their "Faces of the Great Plains" poster. This is the first time this award has been offered in regional competition. The poster will now be submitted for national competition.

--Shoup

Carbon Cleanup

The Mine #19 Tipple Site, located on Mined Land Wildlife Area's #28 and #29 sites, was used from 1950 to 1974 to clean coal prior to transport. Although mining has ceased for more than 25 years, the environmental problems associated with this site remain.

Approximately 180 surface acres of slurry and coarse coal refuse exist on this site. Earthen berms intended to contain this material are eroding. Due to the acidity, sulfur, and mineral content of the waste, the site poses environmental problems for Deer Creek, Lightning Creek, and the Neosho River drainage.

One estimate to clean up the environmental liability was \$2.4 million. Fortunately, the coal content of the slurry and coarse coal refuse is adequate to warrant carbon extraction, for which a market exists.

It became evident that a private company could economically remove the coal from the waste material, reclaim the area, and make a profit – all at no cost to the department. In 1998, the project was put out for bid. WATCO, Inc., was awarded the bid and soon began working on the required permits.

The long permitting process required is nearing completion. KDWP, the Kansas Department of Health and Environment, and WATCO will soon have a reclamation plan that will permanently restore habitat and benefit the wildlife and human constituents of this site at no cost to the taxpayer or license buyer.

Some of the highlights of the reclamation include the construction of 82 acres of wetlands and a 16-acre pond, replacement of fescue and unvegetated areas with 280 acres of native grass and prairie flowers, and the removal of all steep-sided slopes and an existing acidic dump. For more information, phone (620) 231-3173. *--Mined Land Wildlife*

Area Newsletter

FREE FOOD PLOT SEED

The Ark Valley Chapter of Quail Unlimited has once again done a great job of making seed available for food plot plantings, setting a new chapter record of more than 72,000 pounds of seed provided for habitat. This included 54 bags of alfalfa, 564 bags of sunflower, 114 bags of forage sorghum, 42 bags of millet and sudan, and 858 bags of milo.

The Ark Valley Chapter hopes to exceed 80,000 pounds next spring. The seed will be located at Haper's, Inc. in Wichita, behind the Rusty Eck Car lot on west Kellogg, just west of Tyler Road

All seed is free. For more information, call Royce Harper at (316) 773-7711 to arrange a time to pick up seed.

--Shoup



hunting

Scholastic Trapshooting

The National Shooting Sports Foundation (NSSF) has announced a partnership between the nation's clay target governing bodies and sportsman's clubs across the country to launch an aggressive shooting sports program for students in junior high and high school. Supported by NSSF grants and affiliated sportsman's clubs, the Scholastic Shooting Program will feature team competition in trap, skeet, and sporting clays.

Aimed at increasing interest in the shooting sports, the program will emphasize safe firearm handling and shooting skills and provide competition at the local, state, and national level. The inaugural competition will be a trap event known as the Scholastic Trapshooting Program.

Joining NSSF in this effort is the Amateur Trapshooting Association (ATA), including its affiliated state associations, and state wildlife agencies in a partnership with more than 120 ATA-affiliated gun clubs in 20 states. More than 60 teams have signed on for this first-of-its kind program.

Anyone who would like to sponsor a team through a company or store, or would like additional information, should phone Scott Moore at (203) 426-1320 or email smoore@nssf.org.

--Shoup

SQUIRREL TIME

June 1 marks the opening of the first small game season of the year in Kansas. Squirrel season begins on that date and runs through Feb. 28. The daily bag limit is five, and the possession limit is 20.

Kansas is lucky to have two species of squirrels. Fox squirrels can be hunted throughout Kansas wherever fruit- or nutbearing trees can be found. They are at home in windbreaks and wooded riparian corridors, as well as larger forested tracts. Large, leafy nests in trees are a good indication of population density. Fox squirrels are active at midday and spend a good deal of time on the ground. Mature fox squirrels may weigh up to 3 pounds.

Gray squirrels are limited to the forested regions of far eastern Kansas. They are smaller than fox squirrels, averaging just over a pound. They are also considered more difficult to hunt. Grays are most active near sunrise and sunset.

Both squirrel species are usually hunted with small bore shotguns or .22 rifles. They are most active on calm, sunny days, and may remain in dens when the wind exceeds 20 mph. Hunting may be best in early fall, when squirrels are busy storing nuts, but many hunters enjoy summer squirrels. Treed areas with plenty of mulberries are a favorite squirrel hangout. Due to sharp senses which help squirrels detect danger, many hunters select a stand in a feeding location and sit quietly to watch for game.

Excellent squirrel hunting opportunities can be found on wooded public hunting areas and Walk-In Hunting Area land (leases start Sept. 1 or Nov. 1), and there is typically little hunting pressure. Permission to hunt on private land may also be easy to obtain due to lack of competition from other hunters. (Permission is required to hunt any private ground.)

Squirrel hunting is a great way to get



into the field before the major hunting seasons open, and it can also be a pleasant way to introduce a youngster to Kansas hunting. FORT RILEY DEER

The 2001 Fort Riley firearms deer season will consist of three segments. The season's dates are Nov. 23-25, Dec. 19-23 and 27-30. There will also be an early season for muzzleloader deer hunting Sept. 15 - 28. There will not be a Jan. 2002 deer season on the fort.

Fort Riley will issue a limited number of "firearms deer carcass tags." One-half of these carcass tags will be reserved for military and one-half for the general public. Hunters must possess a separate Fort Riley firearms deer carcass tag for each Kansas deer permit they possess, as well as a Kansas hunting license and a Fort Riley access permit. Also, no deer may be taken on a Fort Riley carcass tag without a corresponding Kansas permit or Kansas game tag that allows the taking of the same type of deer.

All firearms brought on-post must be registered with the Provost Marshal's Office (PMO), Bldg 221.

For detailed information on hunting deer at the fort, request a copy of Fort Riley's 2001 Firearms Deer Fact Sheet by emailing afznesn@riley.army.mil or phoning (785) 239-6211.

--Shoup

-Shoup

UNDER CURRENTS



R olks in milder climes and more urban landscapes may have their own thrills – from big-time sports to road rage – but those who have never known the mix of sublime fear and regeneration of spirit wrought by a Great Plains spring thunderstorm have not lived. In late May, such storms roll through southcentral Kansas with mercurial ferocity.

One Friday afternoon, my wife phones me at work just to let me know that she, Logan and Will, and their friends Joel and Jake Eastes are holed up in the neighbor's basement one-half mile south of Mole's Elbow, our little farm. "There's a tornado between Belpre and here, heading our way," Rose warns, "so be careful coming home."

We have no basement, and our good neighbors have kindly opened their doors to us for just such spontaneous entertainment.

By the time I get home, however, that devilish genie of a storm has vanished into its lamp, leaving only wisps of smoke in the air. Rose is cooking in the kitchen, and the boys are romping in the backyard, so I find my favorite chair and begin reading a book. Soon, however, new clouds rumble our way. Rose paces from room to room, peeking out the windows. Head down, I try not to notice, but Rose has herded the boys inside, and they're playing computer games.

"Mark, come look at this!" Rose demands. I like thunderstorms, but they make Rose nervous, and this emotion is compounded by the fact that we live in the country without a basement. My assurances about the safety of our crawl space somehow don't comfort her.

"I'm coming," I answer condescendingly, but when I step outside, I realize this could be more than your run-of-themill, tree-splitting, lightning-charged, hatripping thunderstorm. Dark, foreboding clouds loom low and rotate above the house.

"Alright," I grumble, feigning nonchalance. "Let's go back to the Shrack's if it will make you feel better." This announcement puts the boys in a state of excitement bordering on sheer joy. They are all smiles as we pile in the van. With Rose behind the wheel and a black hole tailing us, we plow through the mud like Robert Mitchum in "Thunder Road."

Having survived the ride, we are welcomed at the Shracks', and the boys are immediately back where they had been a couple hours before – in Phil's den playing pinball and pool. They're having a great time, and Rose is comfortable enough to stay upstairs and enjoy the downpour, the bending cottonwoods, the lightning flash and thunder roll. I sit on the porch and breathe in the cool, moist wind.

But the show is over in 30 minutes. By the time we get back home, the sky is clear blue above and to the west. A rainbow arcs across the eastern sky while the dark monster boils in the distant south. Not a breath of wind.

As if they had just stuck their fingers in a light socket, the boys bound out of the car and into the yard. "Let's go swimming!" Will yells.

"Yes!" The enthusiasm is unanimous.

The boys round up old suits and charge out to the pond, our new golden retriever hot on their heels. Sensing a Kodak moment, Rose digs out the camera and follows. Back in my favorite chair, I watch her out the window. "The book will have to wait," I sigh out loud. "I've got to see this."

I've been through a lot this evening, so

I figure I'll just ride out on the golf cart.

In the pond, the boys float on unsplit firewood, but they soon discover the joys of bare dirt mixed with three-quarters of an inch of rain dumped in 30 minutes. They take turns charging this mudslide, both attempting to stay upright and intentionally belly-sliding. Rose makes them wash off for one posed snapshot, then they're back at it, laughing and taunting each other.

Rose moseys back to the yard, but I linger, watching the boys race back and forth, the dog following, turning from one to the other, wagging her tail. *This is why I built the pond*, I think.

I'm about to leave when the boys' activity suddenly becomes muted but still intense. They gather in a circle, bent over, covering themselves in mud from head to toe. *Now THIS is a Kodak moment*, I think. I wheel the cart around, race to the house, grab the camera, and race back just in time to catch the boys heading into the trees with "spears" from last year's giant ragweed in hand.

"Stop!" I yell, and they charge back, crouched and menacing, spears cocked. "Alright, alright," I command, backing up. "Line up for a shot before you go running off into the wilderness." Reluctantly, they line up, but striking a pose is not problem. Like great Zulu warriors, they put on their most ferocious faces while I snap a couple of shots. Then they're off to attack the British at Islandwana.

As the sun sets, I coast to a stop on a trail with overarching elms. Clouds still swelling in the south, this spot is unadulterated peace. Cattails and unmowed fescue rim the shimmering pond, the greens deepened by rain and evening light. Saturated moss has painted the branches above. The only sounds are natural: frogs chirp; wrens, orioles, robins, meadowlarks, and quail sing. A yellow-billed cuckoo hammers out his repeating call, like something out of a tropical rain forest.

Nothing can describe the fresh, moist aroma of the air at a moment like this. Soon, it will be time to wash the boys back into the 21st century and shoo them off to supper, but for now, I'm just alive, energized by this one cleansing moment, a vibrant child of the very source from which all Creation springs.



Fish Care Guidelines

Keeping fish alive in the livewell is something anglers are always concerned about. Tournament anglers are especially conscious of the need to keep their fish alive. One tournament organization shares guidelines to help anglers keep fish healthy. Operation Bass provides the following for information to help in an effort to promote better care of fish.

There are two sides of the coin when it comes to keeping fish healthy in a tournament. All of the procedures centering on the weigh-in are important. However, the bass spend a much greater amount of time in the livewells of anglers than they do during a weigh-in, so here's a comprehensive list of steps you can take to keep your catch alive and healthy.

Fill your livewell at your first stop. It will be cooler and better aerated than later on. Use water from open lake areas with good water quality.

Set your aerator switch to manual (continuous operation). Run the aerator all day. If your pump only runs on a timer, run it as frequently as possible.

Handling fish is also critical. Land fish quickly and handle them as little as possible. Grasp fish by the lower jaw and hold them vertically. Bend the jaw as little as possible. Wet your hands before touching a fish. Support large fish with a wet hand under the belly. Use soft, knotless nylon or rubber landing nets. Don't allow fish to touch the boat carpet. When deep hooks cannot be removed, cut line five or six inches above the hook. Don't keep fish out of water longer than you can hold your breath.

Fish in forward livewells are more likely to be injured from bouncing while travelling in rough water. Monitor livewell temperatures. When water temperatures are below 75 degrees, pump fresh water as often as your system will allow. When water temperatures are above 75 degrees, recirculate live well water rather than pumping in hot lake water.

Use ice to cool water and slow your fishes' metabolism. One eight-pound block of ice (one gallon plastic jug) cools water in a 30-gallon live well about 10 degrees for three hours. Block ice melts more slowly than chipped.

Add one-third cup of non-iodized salt per five gallons. It helps maintain electrolyte balance and reduces the effects of stress. You may also use other livewell products to maintain metabolism.

Drain half of the livewell water every three hours and refill with fresh water to remove waste byproducts like carbon dioxide and ammonia.

--Kansas Angler Online

Summer Bass

Soon after the bass spawning season ends in early June, the heat of summer begins to warm things up. Water temperatures continue to rise, and the bass seem to scatter out from the creeks all over a lake. Because of this scattering, there are fewer concentrations of bass, and fishing gets tougher.

When the dispersal begins, the bass move to any location that provides them with habitat, shade, cool water, and plenty of oxygen. Try submerged brush at the lower ends of creeks or in the mouth of the river feeding a reservoir. Concentrate on riprap areas, rocky areas, weedy areas, or brushpiles in 15 feet of water or less. Occasionally, bass are found schooled up chasing shad in open water or in the backs of coves. At times during the summer, bass fishermen have found bass in 20 to 30 feet of water, concentrated on or over a dropoff or brushpile.

Summer black bass fishing differs from spring fishing in that the best fishing times are early morning and evening, rather than midday. Cloudy and rainy days are much better than clear days. Sometimes, even night fishing during the summer proves fruitful. There is very little that is more exciting than topwater fishing on a warm night under a full moon.

Bass are more active during the summer and will chase a bait readily. Any type of rod and reel will work using moderate line sizes – 10- to 17-pound test. Fly rod fishing also works during this season when bass naturally feed on insects. The best artificial baits during summer are plastic worms of any color; larger spinner baits (chartreuse, white, yellow); crank baits (chartreuse, silver, blue, or shiny colors); and topwater lures. A variety of pop-

fishing

ping bugs work with fly rods.

Many summer bass have been taken on natural bait like worms, minnows, crickets, and grasshoppers. Although a boat is not necessary, mobility is important if you're interested in catching good numbers of fish.

-Tommie Berger, fisheries biologist, Sylvan Grove

Lure Retrievers

Long ago, I learned to make a lure retriever to save plugs hung on stuff on the bottom of the lake. In most farm ponds, I could get my expensive plugs back. There were many times I stripped and went swimming to get a plug lose from a stump or rock out of my reach. As I got older, I found I could order or buy lure retrievers and keep my clothes on. I also found I could make my own and save even more money.

Retrievers come in a variety of styles. One of the easiest to use is one that clips on your line and slides down to knock the plug loose. The problem with this style is you may lose the plug knocker and the plug. I made my own by getting a big split ring, adding half a dozen 6-inch pieces of light chain like key chain and a heavy three ounce sinker. This is tied to a strong cord, so I can let it slide down the line and hang the plug then pull both lose and back to me. You can also buy one similar to this. These will work to any depth the cord will reach. You can use a variety of cords, even a dog leash.

For lures hung in shallow water – 15 feet deep or less – a pole retriever works well. Although a little more difficult to store in the boat and to use, it works, and I keep one in my boat. It will also pull lures out of trees. Of course, none of us would ever cast up into a tree, but it works for that, too. A pole retriever would be somewhat difficult to make, but the one I have has more than paid for itself.

Lure retrievers are great; I won't leave home without one. With plugs costing \$5 to \$10, they are well worth the effort to make or buy.

--Ronnie Garrison, fishing.about.com



nature

Ducks Need Grass

To grow duck populations, the more grassland cover the better. That's the preliminary finding from new research being reported by Montana State University and Ducks Unlimited.

The research was conducted in the Prairie Pothole Region of the northern U.S. Ducks are attracted to the region because of the abundant wetlands, but their nesting success depends on adjacent cover where hens can hide themselves and their nests from predators.

Many ducks lay their eggs in grasslands a mile or more from the nearest water, and low nest success is the factor that most limits North America's duck populations.

New research findings reveal dramatically higher duck nesting success when eggs are laid in large tracts of grassland. Working on 18 study sites in North Dakota (each 4 square miles), doctoral student Scott Stephens found that sites containing over 70 percent grassland had nest success averaging 32 percent. Nests located in sites with less grassland averaged only 16 percent success.

"We consider 15 percent nest success a break-even point necessary to sustain duck populations," says Stephens. "The high nesting success we observed on study sites with abundant grassland suggests that these are real hot-spots for duck production."

Although more research is needed, Stephens believes that nests located in vast grasslands are more difficult for predators to locate. The types of predators that occupy large grasslands may also be less inclined to eat duck eggs.

Working with the U.S. Fish and Wildlife Service and other partners, Ducks Unlimited protects grasslands by purchasing conservation easements from willing landowners who agree to never cultivate this land. The property remains in private ownership and is typically used for cattle grazing. Joe Satrom, director of land protection in DU's Great Plains Office, says the easements are very popular with landowners. "It is truly a win-win program that is good for the rancher and for conservation," says Satrom. "We continue to have a long waiting list of landowners who want to participate."

> --Ducks Unlimited News release

Beaver Rebound

B 1900, three hundred years of exploitation had eliminated the beaver from much of its range. An estimated 60 million beavers throughout North America before settlement were reduced to roughly 200,000. In the early 1900s, state fish and wildlife agencies began reintroduction efforts, and once federal aid funds became available through the Wildlife Restoration Act, beaver restoration made real progress through restocking programs and controlled harvest.

By the 1950s, populations were making a dramatic recovery. Today, beaver have re-inhabited favorable watersheds throughout their former range.

The beaver is considered a keystone species that brings about far-reaching changes to stream communities. By constructing dams and ponds, beaver create a complex mosaic of habitats that benefit waterfowl, muskrat, mink, raccoon, woodcock, turkey, fish, amphibians, insects, and a host of other animals. Beaver ponds increase total water area, stabilize stream flow, serve as catchments for runoff and eroding soils, and enhance water quality. On some intermittent streams in the West, beaver activity has restored year-round flow.

Still, beaver also have detrimental impacts. They can kill trees and inhibit regrowth, alter plant succession, decrease dissolved oxygen, interfere with fish migration, and flood spawning gravel beds. Beaver can flood roads, forests, and croplands; damage irrigation ditches and fish ponds, and block culverts, causing considerable economic damage.

Complaints about nuisance beavers increased as populations rebounded, prompting a need to manage populations through more liberal harvest regulations and relocation efforts. Biologists in many states expect beaver populations to continue to increase in the next 10 years. Thus, wildlife managers and landowners need to balance beaver control with the long-term benefits of beaver colonies in the landscape.

--America's Wildlife: The Challenge Ahead





notes

2001 DEER

K ansas hunters will see many similarities, and a few changes, from previous deer seasons this year. Among the changes for the 2001 deer season are the following:

• Resident hunters will be able to purchase Whitetail Either Sex permits at any time through the season, rather than applying by mid-July, as required in previous years. (Whitetail Either Sex permits can be purchased at department offices.) Resident firearms hunters interested in hunting mule deer will still need to apply for Any-Deer permits by July 13.

• Firearms permits for white-tailed deer may be used during both the regular firearms season and the muzzleloader-only season, with equipment legal for those seasons.

 Hunters may purchase as many as four deer game tags (white-tailed antlerlessonly) without having to obtain a deer permit as a prerequisite to that purchase. The game tags are valid for use statewide, except that no more than two of the tags are valid in deer management units 17 and 18. As in the past, game tags are not valid for use on department-owned or managed wildlife areas, but may be used on private property, including Walk-In Hunting Areas.

• A preference point system was established for Any Deer firearms permits, ensuring more equitable distribution of mule deer hunting opportunities.

As in recent years, hunters will be limited to no more

than one antlered deer permit per hunter. The application deadline was May 31 for all categories of nonresident deer permits, and July 13 for resident Any-Deer firearms and muzzleloader permits. All other types of deer permits may be purchased through Jan. 12, 2002.

Season dates are Sept. 15 - 28 for early muzzleloader season, Sept. 29-30 for youth and disabled hunters season, Oct. 1 - Nov. 27 and Dec. 10 - 31 for archery hunting, Nov. 28 - Dec. 9 for firearms hunting, and Jan. 1 - 13 for the extended whitetail antlerless-only season.

--Mathews

ALTERNATIVE HUNTER EDUCATION

Plans are developing for the Hunter Education Section's fall series of field days to support this year's pilot program for alternative delivery of hunter education. Anyone wishing to take the alternative delivery hunter education course must contact the Pratt Operation Office, (620) 672-5911.

The agency will send those interested a copy of the Kansas Hunter Education Manual, directions for completion of the individual study portion, the Kansas Hunting and Furharvesting Regulations Summary, and a wildlife ID guide. They will pick the field day site that fits their schedule.

Once at the field day site, they will be given a 25-question pre-test on which they must score 22 correct answers to go on. Those who pass the pre-test will then be given instruction in firearms, gun safety, field handling, and reviews of wildlife management, game laws, and responsible hunting. There will be a field course, which will give the instructors an opportunity to evaluate the student in actual field conditions.

There will also be a livefire event for familiarization and another opportunity to evaluate gun-handling skills. The students then will take the same test as students in any other hunter education class, with the same passing score required.

The Hunter Education Section hopes to have field days available in each of the agency's five regions this year, near each large population center. Exact locations and dates will be posted on the department's website -www.kdwp.state.ks.us -- in early July.

-Wayne Doyle, statewide hunter education coordinator

ONLINE SHOOTING RANGE HELP

S hooting range managers and developers can now access comprehensive information to build the success of their operations through the National Shooting Sports Foundation's (NSSF) National Association of Shooting Ranges' Rangeinfo (NASR) website.

This site provides a listing of suppliers and consultants on shooting range issues, a complete NASR catalog of guidance publications and videos, a classified section of "help wanted" and "ranges for sale," a chat room where operators can share tips and techniques, and an area where state wildlife agencies post their shooting range development programs and grant applications.

An electronic reference library contains more than 200 articles and papers covering all aspects of developing and operating a successful target shooting facility. With more than 10,000 visitor sessions a month, the Rangeinfo site is gaining high marks from the shooting sports community as a valuable tool to help build modern, customerfriendly shooting facilities.

For more information, visit the website at www.rangeinfo.org.

-National Shooting Sports Foundation

NEW SUBSCRIPTION NUMBER

In an effort to more efficiently manage staff time and to streamline the subscription process, Kansas Wildlife and Parks magazine has subcontracted its subscription service. For information on subscribing to the magazine, renewing a subscription, or checking on the status of a subscription, phone 1-800-288-8387.

Most subscribers will notice no change in their service, but others - especially those who are making changes or new subscriptions - may experience some inconvenience during the change over. While there may be a few glitches in the transition, this process should eventually speed delivery and subscription changes while saving license buyer money. Thank you for your support and patience during this change. --Shoup

nature's notebook

by Mark Shoup

Pollination Partners

Flowering plants produce seeds through a process called pollination. While some flowers have both male and female plant parts within the same flower, many others rely on the environment to carry pollen from male to female plant parts, making seed production possible.

Wind plays a big part in this process, but perhaps the most fascinating pollination comes when birds or insects feed on pollen and carry it from one flower to the next. It's also a process that's easy to observe. This kind of relationship is called "symbiosis," meaning that it benefits both species. The plant gets pollinated, and the critter gets fed.

How do birds and insects know where to find that delicious pollen? Of course, the answer is in the flashy flower. Bright colors attract the animals, and they are rewarded with a meal. It's like putting out a neon sign that says, "Eat Here." To enhance this attraction, flowers are also blessed with attractive aromas, some strong enough to attract humans.

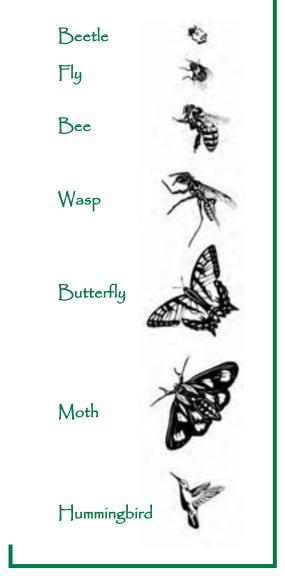
In Kansas, pollinating birds are few and far between. In some areas of the state, ruby throated hummingbirds can be found, and they

Paper Flowers

Conduct this activity on a warm, bright day when insects are most active. Make paper flowers using a variety of bright reds, oranges, yellows, greens, blues, and whites. Glue the flower on a stick and place it in a vacant lot or field.

For 10 or 20 minutes each day, note what birds or insects show interest in what flowers. From these records, decide what colors are most attractive to each insect or bird. Which color was the most popular?

Compare your results observing real flowers.





are vigorous flower feeders. A few other hummingbird species occasionally show up in the Sunflower State, but they are rare. Trumpet vine is one plant that particularly attracts hummingbirds. Oranges and reds are their favorite colors.

By far the most numerous pollinators are flying insects, particularly butterflies and moths. The large sphinx moth, in fact, is often mistaken for a hummingbird as it zips from one honeysuckle flower to their rapidly-beating wings keeping them airborne even while feeding -the honeybee must land to feed. When you see this activity, take a closer look. You might find the bee inside the flower, its legs covered with pollen.

Unlike these other critters, butterflies have no sense of smell, so they rely on bright color to find food. Butterfly milkweed planted in your backyard is a sure-fire butterfly magnet. In late summer and early fall, butterflies of all variety will literally smother Autumn Joy sedum.

Your local library should have a number of different books that can show you how to plant a butterfly garden in your backyard. Planting a butterfly garden is not just fun, it provides hours of entertainment each summer as these most beautiful of insects discover your home.

To find out what kinds of insects in your area are pollinators, try the exercise on Page 43.

the next, never landing. Bees are also very active and seem to be attracted mostly to blue and yellow flowers. In fact, many honey growers are paid to put their hives on alfalfa fields because the bees enrich the field's growth through pollination. The end product may find its way to your breakfast table!

While hummingbirds and sphinx moths flit from flower to flower --





On Grins and Needles

We do you discipline a 2-month-old Lab puppy? I've been wrestling with this question for several weeks now. In fact, the question has changed to, "How do you discipline a 4-month-old Lab puppy?" Part of my problem is that I can't get angry at this pup. He grins. As soon as he senses I'm going to get angry, he lays his ears back, sits down, and puts on his most convincing innocent look. Then, he grins.

I know you can't extend human emotions and expressions to a dog, but I swear this puppy can grin. He's always happy, and his exuberance for life rubs off on everyone around him. Everyone except the old Brittany, who has bore the brunt of pup's needle teeth. My wife and I can say "No" loudly and sternly enough to stop the biting. The Brit can't actually say "No," and however his growls and barks translate, they get little reaction from the pup. The old Lab gets respect, probably professional courtesy — you know, one of his own kind. But the Brit is treated like a big, orange-and-white chew toy.

This pup has done plenty to make us angry, especially to my wife. Household decorations such as strategically placed teddy bears, pillows, and brick-a-brack, have all been moved. Pup has walk-by pickups down to an art. He hardly even slows as he passes a Beanie Baby perfectly placed in a small wooden bowl under a table. He just ends up with something purple sticking out of his mouth. We decided that discipline would be a calm but stern "no" and then the behavior would be corrected. After all, he doesn't know all the house rules yet. But it generally sounds more like "Heeeyyy, noooo, don't dooo that — Mike, look what the little monster is doing. Get him!"

As I start toward him, he stops and the Beanie Baby kind of slides from his mouth. I can't help but laugh. He just has that effect on me. He looks at me as if to say "Sorry. I didn't know this was against the rules, too." My wife intervenes, seeing that I'm not taking this lesson seriously. She talks as mean as she can, shakes her finger at pup, and tells him in detail why he shouldn't do this ever again. Of course, he sits, gives her a killer innocent look — and grins. She melts, and before she's even finished with the scolding, she's scratching his ears and telling him how precious he is. That's his cue to roll on his back and beg for his belly to be scratched. Which, of course, she does, all the while giggling and sweet talking. She looks at me and sighs as he waddles off to another adventure. "Watch him," she says to me with a scowl. "He's a little monster."

He's also developed a wave. His feet are bigger than most full-grown Labs — to swim better while retrieving ducks, I hope — and he uses them whenever the innocent look and grin don't get immediate results. It comes right after the grin, when he perceives that I'm still angry. He raises the colossal paw in a big round-house wave, as if to say, "C'mon, I'm not that bad." It works, too. I usually chuckle, losing all effectiveness of my discipline.

"You're going to spoil that dog rotten, you know," my wife will say. And she'll go so far as to point to the similarities between me and pup. "Let's see," she muses, "he loves to carry the TV remote around, he leaves his toys in the last place he played with them, and he snores loud enough to wake me up."

"Yes," I snort. "He's a man's dog."

It's true. He does carry the remote around. He doesn't chew on it, just carries it. Somehow, he knows it's important. His favorite toys are assorted shed deer antlers we have in a basket by the television. The antlers are some of the few things he can chew on without getting yelled at. But one antler is never enough. He'll chew on one for a while, then go back and select another. Pretty soon, there are antlers scattered throughout the living room and kitchen. And she's right, the pup can sound like a chain saw at night.

But the important things are that he's retrieving like a champ, he loves the water, he's laid back, and learns fast. Who knows what will happen between now and next fall, but so far, I'm laughing a lot — and looking forward to duck season.

