

July-August, 1977

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Featuring

The Badger
Wild Bees and Honey
Kansas Canoeing
Bowhunting for Carp

Subscription Blank Inside

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Contents

Editorial Preview
Nature's Bulldozer
Kansas Canoeing
One Man's Opinion
Bowfishing Bonanza
Mother Nature's Sweetener
Canoe Access

Cover Credits

White bass and channel catfish by Ken Stiebben

Editorial ____ PREVIEW



Anderson



Valver



Stiebben



Nighswonger

Here we are again in the dog days of July, half way between the best fishing and the best hunting, but in spite of the heat, our writers have managed to put together a variety of articles that should pass the time until September.

Things start off with something new—a natural history profile on plants. *Kansas Fish & Game's* photographer Ken Stiebben has stalked the elusive Kansas sunflower and brought back some fine color photographs for this piece.

George Anderson follows with another of his wildlife profiles, this one on the badger. The badger isn't often seen, but he's a tenacious predator who takes his prey the hard way—by digging it up. The article is an interesting look at a unique Kansas resident.

Then it's George Valyer with a piece on the honey bee. Valyer sketches the natural history of the bee, details the art of bee tree hunting, and even suggests a method for getting wild honey out of the comb if you'd rather not eat it wax and all. Just reading this one is enough to whet a man's appetite for a plate of baking powder biscuits and a slathering of wild honey. Valyer follows his bee article with a short statement of his thoughts on the hunting-antihunting controversy.

Ken Stiebben has contributed a bowfishing story to this issue in addition to his fine photographs. The carp makes fine off-season sport for the archer, and contrary to popular report, he's not bad in the pan. If questions about bowfishing equipment or technique have kept you from trying the sport, this piece should answer your questions.

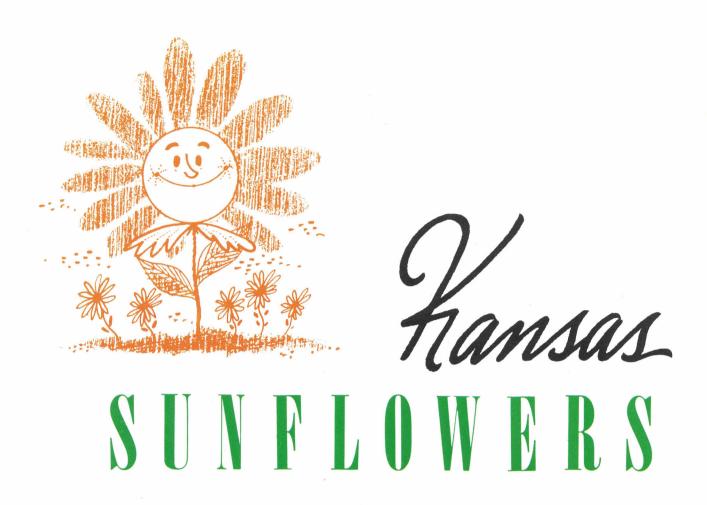
Finally, Jim Nighswonger, president of the Kansas Canoeing Association advises would-be canoeists on the gentle sport of float stream canoeing. Floating is the perfect lazy man's sport—the current does the work while the floater fishes or just watches the bank go by. Nighswonger mentions some of the Kansas streams that his organization has helped open to canoeing and points out that Kansas is a wilder place when seen from a canoe. He also lists some of the blue-ribbon float streams in Missouri and Arkansas that might attract Kansas canoeists. His article and the sport of float canoeing are both worth looking into.

One other item. Vic McLeran, Chief of Fish and Game's Information-Education and editor of *Kansas Fish & Game*, has taken a new job. As of June 1, Vic is the Chief of Information-Education for the Florida Game and Fresh Water Fish Commission in Tallahassee.

Vic joined the Kansas Fish and Game Commission in 1970 and became the editor of *Kansas Fish & Game* in 1971. In 1973, the magazine, under his editorship won third place in national competition with other state conservation magazines.

We'd like to wish Vic good luck in his trophy bass fishing and on his new job, too.

-Chris Madson.



..... The Composites

By Chris Madson
Photographs by Ken Stiebben

A Kansas June has a way of bleaching the landscape. The color of April, whether it was currant, sand plum, May apple, or columbine, starts to fade, and by July, the land and sky take on a dull buff color about the same shade as the dust on a dirt road. Even the grass browns up and crackles under foot.

Then, in the middle of this mid-summer drought and desolation, come the composites. The best-known members of the composite family are the daisies and sunflowers, but they're just the start of the list. Goldenrod, dandelion, Joe Pye weed, iron-weed, the coneflowers, black-eyed Susan, the asters, blazing star and gayfeather, blanket flower, the thistles, fleabanes, cupplant, beggar tick, compass plant, burdock, bachelor's buttons, and the hawkweeds are all composites. The family name "composite" refers to the flower of these plants, actually a cluster of two to several hundred specialized flowers that have evolved to look like a single blossom. The compos-

ites thrive along woods edges, in pastures or abandoned field—anywhere they can get a good, unobstructed look at the summer sun. With this preference for sun, it's no wonder they flourish in Kansas.

In heavy woodlands farther east, most flowers get the main part of their blossoming and growth taken care of before the deep shade of late May sets in. On prairies and in woods openings, however, the shading problem isn't nearly as critical, and plants can flower much later in the year. The competition for light starts fresh every year in such open situations, and the composites are masters at asserting themselves in the struggle with grasses and other weeds.

Studies in Wisconsin prairies have shown that blossoming prairie plants, most of them composites, grow 6 to 12 inches higher than the surrounding leaf canopy. On a tallgrass prairie, the June-blossoming composites may only be 3 feet tall, but that's enough



to get them above the sprouting grass nearby.

By early August, the grass canopy may be 6 feet high, but the August-blooming composite species still maintain an edge—some of them may grow as tall as 8 feet. The composites just don't take kindly

to growing in another plant's shade.

Of course, one of the problems of being a sun lover is dryness. Wind, constant sun, and summer heat steal more water from prairie vegetation than occasional thunderstorms ever bring in. The composites have responded to this mid-summer dessication by developing stiff, tough-skinned stems and leaves that cut down on water loss. They also make extremely efficient use of water during photosynthesis.











These adaptations allow the composites to grow and flower all through the summer, staging a spectacular wild flower display long after the woods flowers to the east have withered. Three or four years ago, I spent a 4th of July on a quarter section of virgin tallgrass prairie. The 4th is usually the beginning of the prairie's best month and a half, and this day was no exception. The sun was heavy, but there was enough wind to keep it from being oppressive and to keep the bugs away. The coneflowers, asters, and some of the wild sunflowers were out; the spikes of blazing star were promising a fine display for later in the month, and the bluestem and Indian grass gave the land motion and a softness. Color? You'll seldom see finer. Yellow, certainly, but white, blue, orange, and shades of purple and violet as well. The composites were there by the thousands, tinting huge swaths of grass, almost as common as the grass itself.

Studies have shown that the composites are the second most common plant group on the prairie after the grasses, and they are the most varied—in some parts of the Midwest, over a quarter of all plant species on native prairie are composites. An eminent plant ecologist, John Curtis, once suggested that, considering the importance of composites on the prairie, maybe the term "grassland" should be scrapped in favor of "daisyland". Looking out over a Kansas prairie in July, I'd find it hard to argue with

him.



NATURE'S BULLDOZER THE BADGER

By George Anderson

NOW WE all know what a bulldozer is, don't we? Those big iron monsters, spewing black smoke, clanking across the earth on shiny steel tracks with a front-mounted blade that moves anything in its way. Another one of man's twenty-ton inventions.

Long before man came up with his marvel in the earth moving business, "Ma Nature" designed one of her own. Her's is fifteen to twenty-five pounds of muscle setting on short, thick legs equipped with heavy claws. The whole package is wrapped up in a loose fitting fur coat and called a Badger.

The Badger is one of the largest members of the family of weasels which are carnivores or flesh-eating animals. Most of the weasels are sleek, quick, graceful, fierce and bloodthirsty.

Badgers on the other hand, are not quick. They are a squatty, slow-moving animal that waddles when they walk. Seeing one lumbering along a fence row reminds you of a miniature, furcovered tank on a search and destroy mission. It is ill-tempered, sullen and a vicious fighter. The badger's thick fur and low center of gravity, powerful jaws and razor-sharp teeth serve notice on most predators to back off.

The general color of the upper parts of the badger is a grizzled steel gray. A predominant white stripe arising on the forehead continues to or slightly beyond the shoulder. The face is marked with dull black and has a whitish patch on each side before the eye and ear.

The hide that nature decided to dress her little bull-dozer in is very loose fitting. Another of the animal's defensive mechanisms. They can almost literally turn around in their skin and attack whatever critter was foolish enough to grab them.

Many a dog has learned too late that just having a good grip on the hide of Mr. Badger is akin to shaking hands with a running chain saw.

Larry Roop, writing in *Wyoming Wildlife*, tells of a fight he witnessed between a badger and a dog. Roop said the account occured in a national park between man and his best friend both losing the first round to a badger.

"Although it was against park regulations, a visitor from one of the more southerly states was letting his Irish setter romp in a grassy meadow without a leash. The dog was attracted to where a spray of dirt was being kicked out of a hole, and when it stuck its head in to investigate, it backed out wearing a badger. After a whirlwind of blurred action like a cartoon comedy, the setter let out a barrage of pitiful noises and high-tailed for its owner."

"Evidently," Roop continued, "the man decided he was going to pound whatever had dared 'attack' his poor canine. The man picked up a stick and headed for the badger. He didn't have to walk all the way. When he got within 200 feet of the snarling, snorting animal, it came to meet him at a run. In something akin to the Watusi dance, the man hopped around like a horse that had just stepped on a rattlesnake. The fellow luckily came out of it with nothing more than ripped trousers, but I'd be willing to bet he never wanted to tangle with a badger again."

We have established that the badger is pugnacious. Another interesting thing about the animal is its ability to dig.

Now if there is anything the badger can do well, they can dig and they can dig fast. All four of the badgers stocky legs are equipped with five claws of about an inch in length. When they get all four going at the same time, aided by their mouth they almost melt into the ground as you watch.

With these high-speed digging talents of the badger, the feeding habits should be easy to understand. Many small rodents are located and consumed by digging into their burrows. A badger can out-dig many small animals such as ground squirrels that try to dig new tunnels away from the pursuing badger. Even prairie dogs come up on the short end of the stick to the big weasel. Rabbits sometimes make their final mistake by taking shelter in a badger den. A tactical blunder in regards to the rabbit.

In Field Book of North American Mammals, Dr. Anthony describes the badger's ability to dig. "A



badger that I once came upon as he began digging out a squirrel was only just below the surface and the ejected earth was flying forth in leisurely spurts. The badger sensed my footsteps as I drew near and immediately changed his tempo. Muttered snarling and rumbling began to pour out of the hole, and a geyser of earth leaped up four or five feet into the air. As I looked on, the height of this earth column dropped almost with the seconds and in a very short time the badger was so deep that no more earth reached the surface and the sounds of his subterranean rage were only faintly audible."

Badgers prepare well for the oncoming winter with heavy layers of fat. Unlike many of their food sources, badgers do not hibernate. As the cold winds of winter blow the badgers sleep becomes deeper and their appetite less voracious. It's of little concern that their favorite food is hibernating under the frozen ground because they could dig them out anyway.

Generally the badger is a solitary hunter but on occasion they have been observed in close relationship with covotes and hawks.

Coyotes and hawks are opportunists and will take advantage of any method in obtaining a meal. A coyote might patiently wait while a badger bulldozes after rodents. Those that escape the digging badger usually won't escape the coyote. Like the coyote, hawks also have been seen following badgers, watching for any escaping rodents.

In Mammals of North America, Victor Cahalane, points out that not all of the badger's meals are dug out of burrows. Badgers have been seen to run down ground squirrels. Usually these swift little rodents can scamper to safety if they have a head start. Eventually some unlucky squirrel is cornered or caught when it trips over a root and then is snatched up and killed with a few shakes.

Even snakes sometimes end up as a meal. According to Cahalane, a California badger was seen to dig up and eat a rattlesnake that had been killed days before. It ate all except the head.

Many Kansans have seen the characteristic burrows and mounds of the badger, but have never seen the badger itself.

I spent almost nine years in the field as a state game protector and drove thousands of miles on back roads in Kansas and can count the badgers I've seen on one hand

Driving around Cedar Bluff reservoir one day with Wes Wikoff, a game protector from Hoxie, we spotted a

big badger crossing the road. The critter had his den in the middle of a small patch of milo stubble and was headed for it when we decided to give chase on foot. Neither one of us knew why we were running a foot race with the beast, but it seemed like a good idea at the time.

We both found that catching the animals was not particularly difficult—it's what to do after you catch it. We decided to do the manly thing. Retreat.

When that old badger realized that he couldn't make the safety of the den, he turned and squared off for the fight. With ears laid back, lips curled exposing the razor-sharp teeth he snarled and growled and called our bluff. After we were a safe distance away he backed the remaining twenty-feet to his den. He proved another trait of the badger. He travels just as fast in reverse as he does forward.

During pheasant season one year I noticed a hunter taking short hops backwards down a fence row. About every fifteen feet he would shoot at something on the ground and then resume his retreat. After three shots I noticed what his problem was . . . a disgruntled badger.

Safely on the roadway the hunter explained he had come upon the badger sunning on the mound of his den and nudged him with his foot . . . "Bad mistake," said the excited hunter. "He had one hell of a bad attitude about the whole deal."

Incidently, none of the shots connected. "Badger Fever."





The only time I observed more than one badger at a time was a female with three youngsters crossing a roadway at night.

The young badgers were about kitten size and just about as cute. The mother wasn't, so I left.

Weasels have an irregular gestation period and the badger is no exception. Their gestation is interrupted after mating by what is called delayed implantation. The embryo develops to the state of a hollow ball of cells. It does not become implanted in the uterine wall, and development ceases for several months. Depending on the climate, the process takes from six to nine months.

When the young badgers, or kits, are born they are almost hairless. Their eyes are closed and they mew like kittens. The eyes open after about 11 days. The kits are weaned at eight weeks of age and are half their adult size, about 15 inches. Only one litter a year is produced by the badger and this usually occurs in May or June.

As a pet, the badger usually is the worst imaginable. Like most wildlife, they're cute for awhile and then they grow up and hidden instincts come to the surface. If you find a kit badger or any babes of the woods, leave them there.

The only den or burrow that a badger will occupy for any length of time is the one the young are raised in. This chamber runs two to six feet below the ground with the main tunnel being as long as fifty feet. Late summer is set aside for house cleaning as a great deal of debris is collected in the den.

Jack Denton Scott, writing in *National Wildlife*, tells of one naturalist that hauled away five cartloads of the annual cleaning debris. The badgers had neatly spread it in a fan shape before the exit.

Occassionally badgers will share their tunnels with a member of the fox family. The badger insists that cleanliness be practiced by their roommates. Failure to comply with this house rule can result in a dislodged fox.

The badgers tolerance of the fox, attest to the animals ability to get along with other members of their environment. They have few natural enemies. No doubt, an occasional sick or weak badger will fall prey to a coyote or large winged-predator such as an eagle but their main problem comes from man.

In their everyday chore of digging out and destroying rodents many excavations are caused by the miners of the weasel family. It's true that these large mounds of dirt as well as the large holes are a constant hazard to livestock injuries and damage to farm machinery. Thus a beneficial animal becomes a much-disliked pest in much of our farming and ranching country.

If we would consider that at the bottom of each of

these badger excavations, a rat, mouse, gopher or other pest was destroyed, we might think twice about condemning the badger because of its diggings. An estimated seven-hundred million dollars in damage by rodents occurs in the United States each year. The badger is one of nature's natural checks on the rodent populations.

Until recent years there hasn't been much feeling one way or the other concerning badgers. Fur prices for the animal, unlike many furbearers, did not com-

mand the higher prices.

For instance, in the early 1930's a good badger pelt would bring an average of \$10.81. The price took a nosedive in the mid-fifties and the same pelt would only bring 50 to 75 cents. During the 1960's and 1970's a good average price would run around \$6. As this profile is being written, the fur market in Kansas is as high as its been for a number of years. Badger is currently bringing an average of \$15.

One of the more popular uses of badger hair many years ago was shaving brushes. Quality brushes utilized the long guard hairs of the badger and the hair used sold for \$85 a pound. With the advent of synthetic bristles, badger hair brushes became part of history.

Trapping has generally been the method used in taking badgers. To go on a hunting trip for badger with

firearms would probably be as exciting as watching ice melt. You just don't see em'.

Years ago, hunting badgers with dogs was thought to be grand sport. As you might suspect, you needed a special dog and they had it. According to Larry Roop in Wyoming Wildlife, the dachshund was the dog. The sawed-off similarity between a badger and dachshund is no coincidence, however, since the German translation of dachshund is "badger dog". These sausage dogs were especially bred for chasing badgers out of their sets or holes and fighting on the badger's level.

Another method was to train small terriers to crawl into badger sets and harrass the badger until hunters could dig them out. This didn't work out too well for the terrier as many got their just reward from the badger while waiting on the hunters to arrive.

The badger is found throughout most of Kansas and their population is probably stable. Even with the higher than usual prices being paid for long-haired fur, the badger will remain doing what they do best. "Pok-

ing holes in the Kansas landscape".

But remember—the name badger comes from the French word becheur, meaning "the digger". The little bulldozer has also added an important verb to our vocabulary: "to badger", is to worry or harrass. If you ever come across one—"Don't Badger the Badger."



Mother Nature's



By George Valyer

RALPH HAD been squirrel hunting that Saturday afternoon. It was a glorious Indian Summer day in early autumn, the temperature was in the lower 70's and everything had seemed perfect to the young hunter. Two fat, young squirrels hung from a loop attached to his belt and he had just caught a glimpse of another one about 75 yards down the creek from where he was sitting.

Remembering that there was an oak tree a short distance from where he had seen the squirrel, Ralph decided to take up a new stand closer to its acorn feast spread especially for bushytails. Walking carefully through the timber, he selected a large, old elm about twenty paces from the oak and proceeded to ease his body down on the ground with his back against its gnarled trunk.

A slight south breeze occasionally rustled its drying leaves and he hadn't been sitting there long when he became aware of a buzzing sound above his head. Easing a little away from his chosen position, he soon discovered the source of the sound. It came from a platter-sized hole about 25 feet above in one of the large branches of the elm and it didn't take the young squirrel hunter long to realize he had located a bee tree. The bees were flying in and out of the hole in a late season flurry to collect as much nectar as possible before the first frost nipped the fall flowers and put an end to their honey-making activities until next spring.

Ralph had heard his father and grandfather talking about bee trees in the past and about the sometimes strange and different tasting honey which came from their cavities. They had also talked about the excitement of robbing these wild bee colonies and how good the honey was on breakfast biscuits and flapjacks. Right then and there, he decided that since this was the first bee tree he had ever found, he just had to have some of that honey. Immediately, he decided two squirrels was enough for that day and, besides, he had a lot to do to get ready for tomorrow.

On his way home, he stopped by George Russel's place to talk to him about the bee tree. George was the fellow who owned the land where he had been hunting

and Ralph wanted to ask him if he had any plans for the cache of honey that he felt certain was in that hollow limb.

Sure, George told him. He knew about that bee tree. In fact, he remembered when that swarm had taken up residence in the old elm. He had been planting corn in a field nearby about five years ago when he noticed a swarm of insects in the air heading for the creek. A couple of weeks later he had seen the bees going in and out of the hole when he had been walking back from the pasture on the other side of the creek. "Yeah," George said, "You can have the honey as long as I don't have anything to do with the 'gittin'. I'll even loan you the ladder but just leave me out of it." "Bees and I just don't get along together."

The rest of the way home, Ralph thought about telling his dad about his find but he decided that since he had found it by himself, he would get the honey by himself and surprise his folks with it. That was where Ralph made his big mistake. The lad had no previous experience with honey bees and he didn't realize how cantankerous they get when they are disturbed.

After church the next day, he asked his father if he could borrow a milk pail and, after dinner, he stopped by the tool shed for a saw. Then he was off for the bee tree. The ladder leaning against the barn at George's place was a little heavier than he thought it would be but he managed to get it to the woodlot and placed against the trunk of the old elm. "This was going to be easy" thought Ralph as the saw began to bite its way into the half dead limb but, before long, the situation took a turn for the worse. The deeper the saw bit into the limb, the more the vibration was carried to the hollow where the bees were and the more agitated they became. With the first pop of cracking wood, one bee found the unprotected cheek of Ralph as he perched on the ladder 18 feet above the ground. He brushed the bee off and, about that time, the limb let go and lit with a 'whomp' on the ground below. The limb split with the concussion and the bees came pouring out bent on vengeance for their antagonist.

By the time Ralph had half climbed, half slid down

the ladder, all thoughts of biscuits and honey were gone from his mind. The only thing he could think of was to get the h____ out of there. His feet were running when he hit the ground and he made a mad dash for the creek where he belly-flopped into the water.

Upon surveying his current situation, he discovered that, besides being wet and slightly muddy, he had a severe burning or stinging sensation on his face and neck, especially around his eyes. In a few moments, Ralph became aware that his face was swelling so he decided the best thing he could do was head for home in a hurry.

By the time he got home, his eyes appeared to be two slits in a puffy mass and, despite himself, his father had to chuckle a bit as he got the story of what happened. It didn't take ol' Dad long to collect his netting and a pair of long gloves and get out to George's place. Properly protected, the salvage of the honey didn't pose any problem for the experienced man and by sundown, he was back home with a full bucket of the sweet stuff.

Maybe by now you are wondering why I've been telling this story. Well, the answer is simple. The whole point is that bees still go wild and find hollow trees and other cavities in which to set up housekeeping and if you are properly prepared, you can get in on some of this natural sweetness with its distinctive flavor. All it requires is a knowledge of the habits of the honey bee and a moderate investment in the proper equipment. From then on, its a matter of luck in finding a bee tree and getting permission from the landowner to harvest it.

One of the most important qualifications for being a wild honey gatherer is knowledge. Like anything else that is worth doing, adequate knowledge of the project is essential for ultimate success. In the case of bees, there is a certain amount of danger involved and you had better realize that danger if you plan to get involved. Although nearly everyone suffers discomfort when they receive a bee sting, some individuals are especially susceptible to the venom contained in the little hypos attached to their posteriors. There are recorded cases where bee stings have resulted in severe illness and even death for humans.

The moral of this story is to always use a bee veil and gloves when you are around the home of these critters. A bee veil is a net which you wear with a wide-brimmed hat. It has a drawstring which can be pulled up snugly around your collar to keep the bees away from your face. Bee gloves are made of heavy canvas and are long enough to reach nearly to your elbows with a tight elastic band around the top to keep an angry bee from crawling inside. Another precaution which a person should take is to wear high shoes or boots and tie your pant legs securely over them to prevent the bees from crawling up inside your pants.

If you are still determined to go after some wild honey, then I suggest that you spend a little time with a commercial bee keeper and learn all you can about the critters themselves. Farmers who keep a few stands of bees to supplement their income would appreciate a little help at certain times of the year and most of them



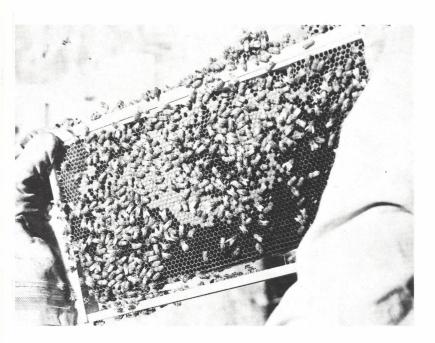
Wild swarms of bees may establish themselves in any protected location. This colony set up under the eaves of a porch in a rural home.

would be willing to teach you what they know in exchange for a day's help. A few beemen get along fine without using special bee gloves and occasionally you find someone who works his bees without a veil. However, if you are new at the game, it is best not to try such a thing. Better to stick with all the protection you can put on—you'll probably sleep better that night.

Another way to learn what you need to know about bees is to get ahold of a good book on the subject. You can buy one from a mail order house or you can probably find one at your local library. Either way, you'll soon learn that the honey bee has a complex social order which follows a strict routine. Whenever someone or some thing disrupts that order, the bees react in a predictable way and its usually nasty.

A normal bee colony consists of several thousand workers, a few drones or male bees and one queen. The honey bee is truly a social insect and its society operates under rigid rules designed to insure the survival of the colony.

The queen is the only sexually active female and is the mother of all the bees in the swarm. The worker bees, sometimes numbering 100,000 or more in a strong colony, are female bees which never developed to the point where they were able to lay eggs; their entire role in life is to gather the nectar and pollen which are used to make honey and wax. The only



A typical frame of honeycomb in a commercial hive contains thousands of individual cells. By late summer, these cells will be filled with honey.

function of the drone bees is to mate with the queen so that she is able to lay daily the 1,500 to two-thousand eggs necessary to keep the colony going during the honey making months.

The worker bee has a relatively short life during the spring and summer. It literally works itself to death in about two months. Thus it is necessary for a new crop of worker bees to be hatching out continuously during seven or eight months out of the year. From the time the first blossoms appear in the springtime until the last ones fade in the fall, the worker bees are constantly working to build up the honey stores so that the colony can survive the winter.

In Mother Nature's scheme of things, the natural instinct of honey bees is to spread by division of the colony. This is accomplished in the springtime when special wax cells, larger than normal, are constructed in the brood comb and the queen deposits her eggs in them. The eggs are normal worker bee eggs but, after hatching, they are fed on what is termed royal jelly. This special jelly causes the larva to develop into a queen bee which is capable of laying the thousands of eggs needed to keep the colony going. These queen cells number only a few, perhaps 10 to 15. The first new queen which hatches out of these cells promptly stings to death all the remainder of the developing queens. This leaves only the old and new queen in the colony.

Since only one queen is tolerated in a colony, the old queen leaves the hive or cavity and a portion of the workers leave with her. This process is known as swarming and the mass of bees searching for a new home is called a swarm. Normally, a swarm will alight on a convenient tree branch or bush until they have located a new place to set up housekeeping. The resulting mass of bees seldom stings and can be handled

easily at this stage of events. Many beekeepers have obtained their start by capturing a swarm and inducing it to enter a ready hive. The secret to getting a swarm to enter a hive is to get the queen to enter—all the workers will follow.

Unless some beeman spots the swarm and captures it, it will probably wind up occupying some hollow tree or a cavity in some deserted house or shed. This is how wild bee colonies are established.

The distinctive flavor of some wild honey comes from the fact that most of the wild colonies are located in remote areas and the flowers from which the bees collect their nectar are the blooms from weeds and wildflowers. The resultant honey is sometimes strong and not mild like that from domestic bees which are placed near alfalfa and clover fields. The honey from other wild colonies may be as mild as domestic honey because of the proximity of the tree or other cavity to orchards or alfalfa fields.

OK, so you're convinced that this wild honey business may have something to offer in the way of sport and good eating. But, how do you go about finding a bee tree? Well, the answer is simple but it does involve a little work.

First, scout around a rural area until you find some blossoms that are attracting bees. Then go to the landowner and tell him of your proposed activity. Ask him if he or one of his neighbors keeps bees. If they don't,

Properly attired and equipped, anyone can handle bees safely. Note the veil, special gloves, and the smoker.





The entrance of an old bee tree is often blackened by years of heavy use.

you're in luck. All you need then is to get permission to find the bees. Bees seldom travel over a mile to collect nectar so you can be sure that the colony is relatively near when you find them working on the flowers in a given field or orchard.

The next step is to place a saucer of honey in the field and watch it carefully for a visit from the bees. When a bee lights and fills up on honey, it will immediately fly back to the colony wherever it is located. Just watch the bee carefully as it takes off for the return flight and note the direction it goes. If you follow the direction without deviation, you'll find the bee tree, cavity or hive.

Of course, if you find that the bees are housed in a hive, the only thing you can do is find another locality and try again. However, if the trail leads to a bee tree or an old deserted shed, you're almost ready for action. All that is needed is permission from the landowner to harvest some of that natural sweetness. Many wild honey hunters have found it easier to get the necessary permission if they offer a share of the honey to the owner of the property.

One hunter of wild honey I know of has an arrangement with a local beekeeper who is occasionally glad to go along on his honey expeditions. If his beekeeping friend has an empty hive, he will take it along to capture the colony while helping to salvage the honey. When a colony of bees is placed in a hive, at least one section of the honeycomb should be cut to

shape and placed in a frame of the hive to sustain the bees while they are adjusting to their new quarters.

To obtain strained honey, the commercial producer places a frame from the hive in an extractor which whirls the honey from the comb by centrifugal force. Of course this is not possible with wild honey since very few hollow trees I know of contain the required frames. The wild honey combs must be placed in a pan and heated to a prescribed temperature so that the wax will melt and come to the top of the container. After cooling, it is a simple matter to remove the slab of wax from the top of the pan. What is left is the pure honey. However, the temperature for the melting of the wax is critical.

The pan of comb honey should be placed in a regulated oven with the thermostat set at 150 degrees. The time when complete melting of the wax occurs will depend on how much honey is in the container but two or three gallons will usually be completely melted in 1½ to two hours. The temperature should then be increased to 160 degrees for five minutes and then the pan set out to cool. Honey should not be heated to over 160 degrees since a decided flavor change will occur at higher temperatures.

Well, there you have it—just another way you can get some mighty good eating from Mother Nature's pantry. If you decide to give it a try, let me know how you come out. But remember, you're strictly on your own. I certainly won't guarantee that you won't get stung.



By George Valyer

Photos by Stiebben

SUPPOSE it was inevitable! First, it was hunting that was attacked as a cruel and inhumane sport. Then it was trapping which came under attack as being a savage and barbarious act. Now, the sportsman who fishes is being zeroed as target for a campaign designed to indict him or her as a heartless being who is indifferent to the suffering of wild creatures.

All of this anti-hunting, anti-trapping or anti-fishing propaganda leaves me just a little confused. I can't, for the life of me, figure out what its proponents are going to eat for the remainder of their lives!

Sure, I know that there are vegetarians and, if they choose what they eat very carefully, they can live a relatively normal life span. But what are they going to do if someone proves that plants have feelings too? Botanists have already determined that music of various types has a definite effect on plant life, either stimulating or retarding growth depending on the intensity of sound and the rhythm or beat. Just suppose someday that someone can prove that a plant feels distress when it is clipped, pulled or plucked? What then?

It is about time for a little common sense and reason to prevail in this mad world of kinky causes and far-out philosophies. The Creator expected man to use some judgment when he gave man dominion over the birds of the air, the beasts of the field and the fishes in the waters. I am sure He did not expect them to be exploited but I am also sure that He expected us to use them and conserve them for the benefit of the human race.

In the dim, dark days of the past, mankind was forced to utilize the wild creatures in order to survive. They provided food for his stomach, clothes for his back and certain tools to help make his existence a little easier. As technology progressed, man was able to domesticate many of the species of animals and plants which were most valuable to him for food and fiber and he became progressively less dependent on wild creatures and plants for his living.

True, today is another time. It is no longer necessary to obtain one's food and raiment from the wild. In fact, all things considered, it is a more expensive way of obtaining meat for the table or a coat to keep a person warm. But there are other considerations besides a full belly and something to keep a person from shivering. Deep within many of us is an inherited longing to return, if only for a brief time, to the days when humans were close to nature. We get untold satisfaction from a close contact with the wild animals, birds or fishes which were essential for survival in days gone by. We experience an instinctive pleasure in trying to pit our wits against the wiliness of these wild creatures and experience a gastronomical delight from the resulting meal when we are successful.

The killing or taking of these animals is no different than the killing of a steer, the butchering of a hog or the dressing of a fish in a commercial processing plant. These, too, were alive and are now dead. Man grew them for slaughter and their eventual end is to be killed. Not necessarily so for the wild creatures—if their natural wiliness allows them to escape the hunter,

OPENING DATES FOR 1977 UPLAND BIRD SEASONS SET

PRATT--Opening dates for the 1977 pheasant, quail and prairie chicken season were adopted by the Kansas Fish and Game Commission at their May 19 meeting in Pratt.

As established by commissioners, the pheasant season will open statewide on November 5 except for a small portion of southeast Kansas. Those portions of Allen, Bourbon, Cherokee, Crawford, Labette, Montgomery and Neosho counties lying east of Highway US-169 and south of Highway US-54 shall remain closed to pheasant hunting.

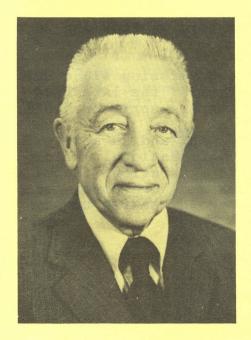
The closing of this area to pheasant hunting reflects a desire of the commissioners to cooperate with sportsmen and landowners in the southeast who are attempting to establish pheasants in that area of the state.

Quail season will also open statewide on November 5 except for that portion of Kansas lying west of Highway US-81 and north of I-70 which will open on November 12.

The 1977 prairie chicken season will open statewide on November 12.

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NEW FISH & GAME COMMISSIONER



Joseph Gregg, Sr.

Governor Robert F. Bennett has appointed Joseph Gregg, Sr. to a four-year term on the Kansas Forestry, Fish and Game Commission. Gregg will replace Arthur Hanson as the Commission's northeast region representative.

Gregg, 64, is a partner in the Morrison,
Gregg and Mitchell Grain Company of Kansas
City, owners and oeprators of grain elevators in Kansas, Nebraska, and Missouri.
He is also past president and a current
member of the board of directors at the
Kansas City Board of Trade and also serves
as a director of the Coca-Cola Bottling
Company of Mid-America. Mr. Gregg has served
as president and is now a member of the board
of governors and executive committee for
Children's Mercy Hospital in Kansas City.

A dedicated waterfowl and quail hunter, Gregg has been a member of Ducks Unlimited for a number of years and belongs to two waterfowler's organizations in the LaCygne area.

STRIPER PROPOGATION A SUCCESS

PRATT--Fish and Game Commission Hatchery Superintendant Verl Stevens reported that half a million day-old striped bass fry are on their way to the Pratt hatchery from Wilson Reservoir.

The shipment marks the first successful artificial propogation of striped bass in Kansas. Propogation efforts in 1975 and 1976 failed when newly hatchery fry died from fungus infections. This year, Stevens and his hatchery crew have controlled the fungus with new sterilization procedures and fungicides.

After a 45-day stay in rearing ponds at Pratt, the young stripers will be used to bolster existing striper populations in six Kansas reservoirs--Wilson, Webster, Tuttle Creek, Cheney, Milford and Glen Elder.

The temporary Wilson hatchery is also producing striper—white bass hybrids. Stevens is hybridizing the striper because it's often difficult to get two stripers for breeding at the same time from the low striper population at Wilson. The hybrid fish get nearly as large as their striper parents; other states have reported hybrids as large as 15 pounds. Three hundred thousand of the white-striper crosses will eventually be released in Marion Reservoir.

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HAWES REAPPOINTED TO FISH AND GAME COMMISSION

TOPEKA--Governor Robert F. Bennett has appointed William G. Hawes of Smith Center to another four-year term as Fish and Game Commissioner for Kansas' northwest district.

Hawes has served on the Fish and Game Commission since May 1, 1976 when he was appointed to finish the term of the late Fred Sears of Colby. Hawes' current term will expire April 30, 1981.

Commissioner Hawes is a life member of NRA and an active supporter of Ducks Unlimited, Safari Club International, Wild Turkey Federation and the National Wildlife Federation. He's a dedicated big game hunter, one of the few who have completed the "Grand Slam" on North American wild sheep by taking trophy bighorn, Dall, Stone and desert bighorn sheep.

SPOTTED BASS RECORD BROKEN

MARION--The spring of 1977 will probably go down as "the year of the bass."

The most recent addition to the Kansas Fish and Game Commission's record book comes from the Marion County Lake where the Spotted Bass record was broken on April 16.

Clarence E. McCarter, Wichita, caught the new record bass while fishing the popular Marion County Lake with a medium popper on a fly rod. The fish weighed 4 pounds, 7 ounces and topped the old record by 5 ounces. The new record Spotted Bass had a girth of 15 inches and measured $18\frac{1}{2}$ inches.

The McCarter fish replaces the 4 pound, 2 ounce specimen caught by Newell Julian of Council Grove. Julian's fish was caught from Council Grove City Lake in 1973.

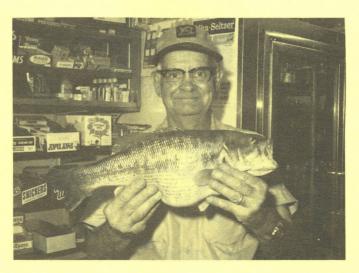
The new record is a dandy fish, but Kansas still has a ways to go for the world record. The current world record Spotted Bass was taken from Lewis Smith Lake, Alabama in 1972 and weighed 8 pounds, $10\frac{1}{2}$ ounces.

Earlier this spring a Topeka angler, Kenneth Bingham, broke the long-standing Largemouth Bass record with an 11 pounds, 12 ounces lunker. A short time later a state record was established on Warmouth Bass. A 14 3/4 ounce specimen was caught by Craig Sonka from a Labette County farm pond. The warmouth doesn't get very large compared to other bass. The world record weighs only 2 pounds.

Other Kansas record bass include: Smallmouth Bass, 3 pounds, 9 ounces from Cedar Bluff Reservoir; Striped Bass, 33 pounds, 12 ounces from Cheney Reservoir and White Bass, 5 pounds, 4 ounces from Toronto Reservoir. This White Bass was a world record until a 5 pound, 5 ounces specimen was caught at Ferguson Lake, California in 1972.

Record Spotted Bass -

4-16-77



Clarence E. McCarter Teal Hunters Must Improve Their Duck Identification!

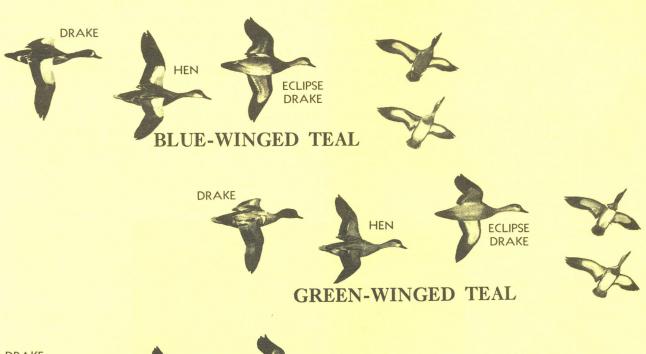
In all game seasons it is the hunter's responsibility to harvest only legal game. Any hunter who cannot be sure of the identify of his target should not shoot or not hunt.

Since 1965 (except 1968), Kansas hunters have been privileged to have a September teal season. This bonus season for waterfowl hunters was permitted only after extensive investigation showed that the blue-winged teal harvest during the conventional seasons of recent years has been extremely low.

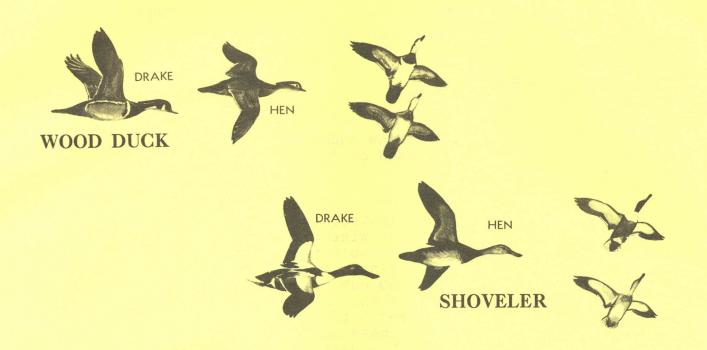
Records show blue winged teal to be one of the most abundant ducks in North America, with a recent breeding population averaging about four million birds. They are our earliest migratory duck thus, as seasons were shortened and set leter in the fall, blue-wings escaped much of the hunter harvest. Although this season is designed to harvest primarily blue-wings, all teal are legal game.

The season has not adversely affected the continental population of any waterfowl species and has provided much hunting recreation, so there is no biological reason why it should not continue.

Since teal hunters do much of their shooting just after sunrise, they do occasionally take illegal ducks. The difficulty of identifying ducks in poor light has been obvious since the first season, but while hunter performance has improved, it must improve more.







We cannot stress too strongly that it is the hunter's responsibility to shoot only teal. If the hunter can't identify an incoming duck he should not shoot. If he can't resist the temptation, he shouldn't even go out on the marsh.

The teal hunter must be able to identify approaching ducks as teal <u>before</u> he fires. This is not too difficult. The species that seem to be most often confused with teal are wood ducks and shovelers. Here's how to tell the difference:

Teal usually fly in low closely bunch blocks that circle and twist in perfect unison as they pass back and forth over the decoys before dropping in. Even at dusk or early twilight, teal can be recognized by this twisting flight pattern. They have a fast wing beat, short tail and fly with neck extended stright ahead. Color patterns are good marks when clearly seen but are often difficult to recognize even in good light, so hunters must learn to identify the teal by their rapid wing beat, extended head, short tail and and low twisting flight. Any duck deviating from such characteristics must be permitted to pass.

Wood ducks and shovelers characteristically have a straight direct flight with a slower wing beat. The wood duck's long square tail is most noticeable and make the bird easy to identify. The shoveler holds its' head high and has a long drooping bill which is also a good identifying mark.

The duck species that will be present in the marsh on opening day are also there before the season. The teal hunter should be able to clear up any identification problems by making a trip to a local lake or marsh before the season. With a pair of binoculars and a little patience, he can easily learn the characteristic flight pattern, wing beat, and silhouette of teal before the shooting starts.

COMMISSION RELEASES WINTER KILL FISH STATISTICS

PRATT--Regional fisheries supervisors for the Kansas Fish and Game Commission, released estimates of last winter's fish losses today.

Judging from these estimates, the smallest Kansas streams and ponds were hardest hit by winter kill. Small streams with normal flows of less than 20 cubic feet per second lost from 75 to 100 percent of their fish. Intermediate streams—those with normal flows of 20 to 50 cubic feet per second—lost between 25 and 75 percent of their fish, and larger streams—those with 50 to 100 CFS flows—suffered 5 to 50 percent losses. Stream fisheries in southeastern Kansas seemed to survive the winter better than fisheries in other parts of the state.

Impoundment losses were similar. In ponds less than 3 feet deep, 50 to 100 percent of the fish population died. Ponds between 3 and 5 feet deep fared a little better, losing 25 to 60 percent of their fish while ponds more than 5 feet deep experienced a 5 to 25 percent decline in fish population.

According to Commission fisheries biologists, the winter kill was due to a combination of factors. Low water levels brought on by recent drought stranded many fish. Thick ice cut down on the size of many lakes and streams, crowding fish into smaller areas and intensifying competition for food and space. Lack of dissolved oxygen also presented a problem. Heavy snow and opaque ice in some areas prevented light penetration, slowed oxygen-producing photosynthesis in aquatic plants, and resulted in a decline in available oxygen. Decomposition of winter-killed plants also reduced the oxygen supply.

The biologists expect stream fisheries to recover on their own as water levels rise and fish move in from up and down stream. In their judgement, stocking can't replenish these streams any faster than they will replenish themselves. The only place stocking will be effective is in the smaller impoundments, they have to fill up again before they can be stocked.

CHANGE OF ADDRESS NOTICE

KANSAS FISH & GAME has a new computerized magazine subscription process which starts with the July-August 1976 issue.

If you move or have a change of address, but want to continue receiving KANSAS FISH & GAME, it is imperative that we have the address label from your July-August 1976 issue or from later issues.

Address labels from issues prior to the July-August, 1976 can not be processed. Simply cut the address label from your July-August issue, attach it to the form below and send it to:

KANSAS FISH & GAME P.O. Box 1028 Pratt, Kansas 67124

Thanks.

Attach magazine address label here. Address label MUST come from July-August 1976 issue, or from subsequent issues.
1st Initial 2nd Initial Last Name NAME
FIRM, TITLE, BOX NUMBER (Leave blank if not applicable) STREET OR ROUTE
STATE ZIP CODE ZIP CODE

LEGISLATURE RESOLUTION ON TRESPASS

PRATT--The Kansas legislature passed the following resolution on trespass on March 29, 1977:

WHEREAS, The legislature takes notice of circumstances which seemingly have caused dissention and animosity among owners or occupants of agricultural lands, hunting and fishing sportspersons and groups thereof and the forestry, fish and game commission relating to hunting and fishing upon private lands; and

WHEREAS, Such circumstances include trespass and unlawful hunting upon private lands, the lack of adequate wildlife habitat and confusion relating to policies and procedures of the forestry, fish and game commission concerning its wildlife habitat improvement program; and

WHEREAS, the legislature recognizes that hunting and fishing upon lands of another is a privilege not a right, that owners or occupants of lands have rights to protect and preserve their interests in their lands and that the forestry, fish and game commission has been delegated powers and duties which were so delegated by the legislature to assure compatibility between such privileges and rights: now, therefore,

Be it resolved by the House of Representatives of the State of Kansas, the Senate concurring therein: That the forestry, fish and game commission is hereby directed, and the hunting and fishing populace and owners and occupants of private lands are hereby requested, to cooperate and communicate among themselves in order to and for the purpose of promoting and maintaining a sense of trust and understanding with respect to the rights, duties and privileges of each such group relating to hunting and fishing upon private lands.

Be it further resolved: That the secretary of state is hereby directed to transmit a copy of this resolution to the forestry, fish and game commission which shall, upon receipt thereof, cause the dissemination of the same throughout the state to the interested parties and cause publication of the same in its magazine and newsletter.

certainly they will survive till they die of old age, severe weather conditions or are taken by a predator.

No animal, bird, fish or, for that matter, human has escaped the eventual outcome. The grim reaper has his way in the end.

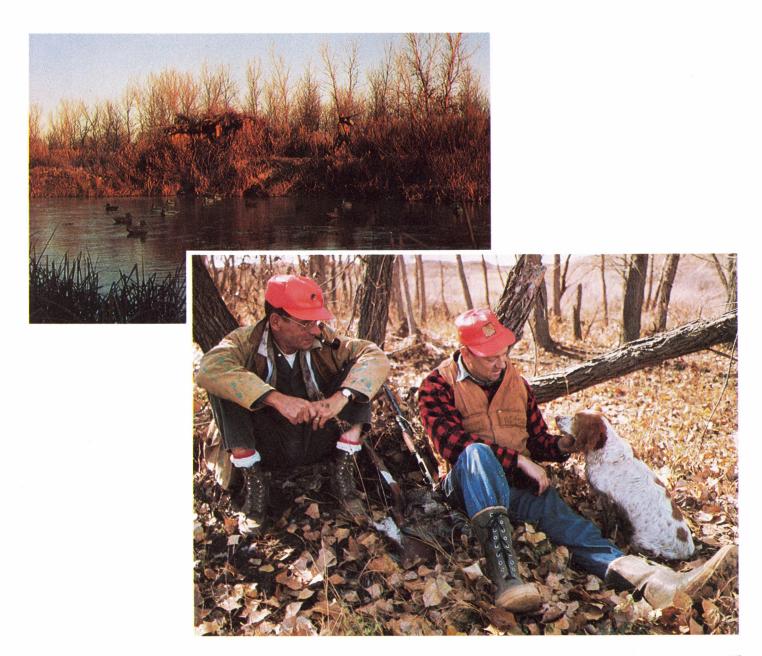
Lest I be accused of being a complete fatalist in outlook, it is best to explain that I grew up on a farm and realize that the chicken I ate for last Sunday's dinner was once a cute and fuzzy chick in someone's brooder house before it grew up and eventually wound up in the local supermarket. I know that the beefsteak I had for dinner last night was once a young calf which enjoyed nuzzling the leg of a 4-H boy or girl. The wild duck I had for dinner last Christmas was once an appealing little ball of fuzz following its mother around on some northland marsh.

The fur collar on my coat which keeps my ears warm in the winter was once a muskrat swimming freely in

some pond, enjoying the warmth of its den. My shoes, belt, and gloves were once a part of an animal cavorting playfully around a pasture or woodland.

It is difficult for some people to understand that a high percentage of the things they use daily were once alive in the form of either animal or vegetable life. There is something completely impersonal about going to a shopping center and selecting their food or the clothing they will wear. Yet, some of these same people would cringe in horror if they were forced to witness the slaughtering of a cow or the skinning of a furbearing animal. Better that they should save their indignation for man's inhumanity to man.

Those who spend their time and money on campaigns to discredit their fellow Americans who hunt, fish and trap could expend their efforts more advantageously in helping the wretched, starving of Southeast Asia or those who are suffering under the heels of



political despots in Africa and South America.

I would probably be the last to maintain that abuses do not exist in the ranks of sportsmen. I realize that all hunters, fishermen and trappers do not live up to the code of the good sportsmanship. The humanistic traits of greed and selfishness are apparent in all facets of society, including those who hunt and fish.

The major deterrent to conservation abuses must come through education and the enforcement of laws designed to make sure that our wildlife resources are not sacrificed to the greed of a few. In the words of Aldo Leopold, "As good sportsmen, we must capture men's minds to the wise use of our natural resources."

Because one apple is spoiled, you do not discard the whole barrel of apples—you just eliminate the rotten one. So, we, as good sportsmen, must eliminate the bad one from our midst through education and public disapproval of his actions. Only in this way can we preserve our traditional heritage of the outdoors we enjoy.

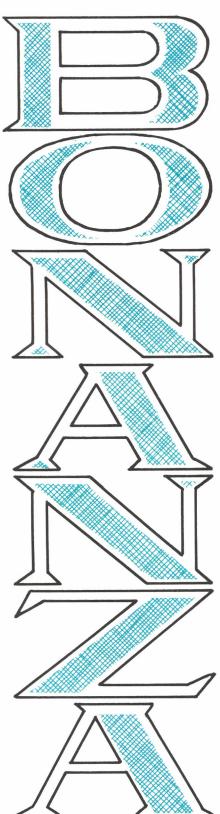
I am certainly not advocating that everyone become a trapper, fisherman or hunter. I believe that this decision should be up to the individual. However, I do advocate that the rights of those who do enjoy these sports be respected. Respect must be earned and that is up to you.





16 Fish and Game

Bulling



Story and Photos by Ken Stiebben

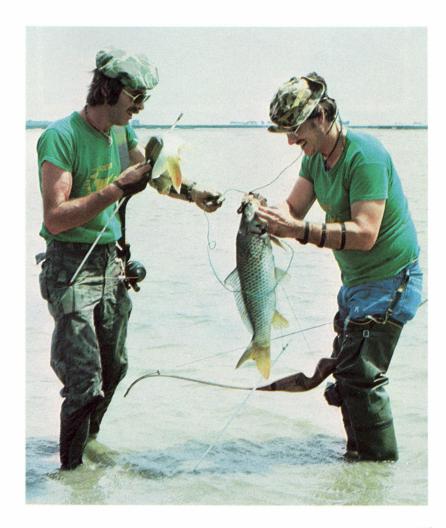
YOU'RE A Kansas bowhunter. You were lucky this year and managed to down a nice deer. So, you have venison in the freezer. Perhaps you've managed a cottontail or two for the skillet.

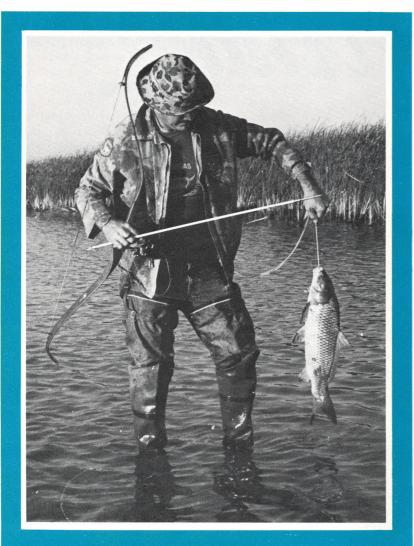
Now comes the long wait.

It's a long time until next October, when you can blow the dust off that bow and begin to think about hunting buddies, campfires and deer.

So why wait?

There's an age old sport called bowfishing, that's increasing in popularity around the state. Now I'm not saying that bowfishing will ever replace big game hunting. But when those game seasons close and the warm spring wind melts the ice off backwater sloughs, it's time to break out the archery gear and search for those big hog carp.









The thing about hunting these big fish is that they can be found in nearly all Kansas waters.

Cross and Collins, in their book *Fishes in Kansas* state that carp reach their greatest abundance in lakes and large rivers. During floods this species spreads rapidly with the rising water.

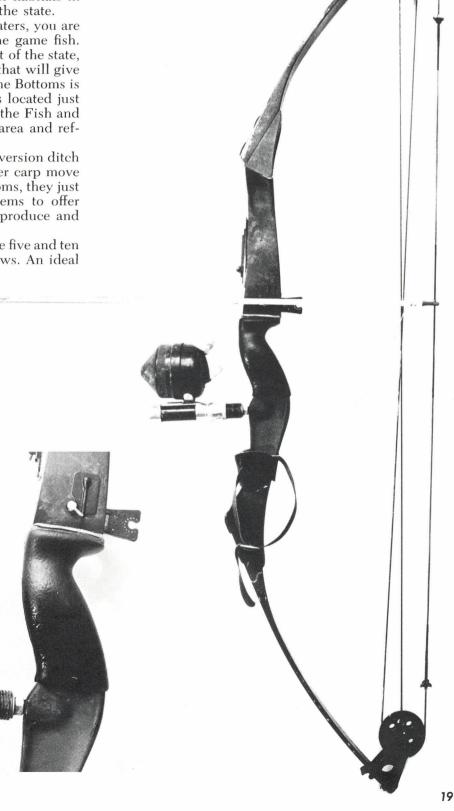
The breeding season ranges from March to July and one carp was found to contain more than two million eggs. These big fish normally do not predate on smaller game fish, but compete for food and alter habitats in ways detrimental to the native fishes of the state.

So by taking these big fish from the waters, you are actually improving the conditions for the game fish.

If you happen to live in the central part of the state, there's a place called Cheyenne Bottoms that will give you all the bowfishing you can handle. The Bottoms is a natural basin of some 19,000 acres. It's located just north of Great bend, and is managed by the Fish and Game Commission as a public hunting area and refuge.

The water source for the bottoms is a diversion ditch from the Arkansas river. When these river carp move into the warm shallow waters of the bottoms, they just naturally plan to stay. The Bottoms seems to offer everything these fish need to survive, reproduce and grow.

And grow they do! It's not unusual to see five and ten pound carp mucking about in the shallows. An ideal



situation, if you plan to take these fish with a bow.

In preparing this article, I found I needed more first hand information. So I called Chuck Gibbs. Chuck is a businessman in Great Bend. He's also an excellent bowhunter and I knew he had tackled some of these big carp at the Bottoms. He informed me that the Kansas Bowhunters Association would be hosting a bowfishing derby at the Bottoms in the near future. He had just talked with Jerry Bratton, president of the bowhunters, and they expected a good turnout. I managed an invitation from the club and promised to meet them in Great Bend for the opening day shoot.

When I arrived in Great Bend, I found about 50 archers present. Most were camped at the inlet camping area, just west of the Cheyenne Bottoms Head-quarters. It was still several hours before the shoot started, so I had time to look at some of the equipment the archers were using.

Now it doesn't take a lot of fancy equipment to shoot carp. A good old fiberglass bow, some string and an

arrow will do the job. And I saw several rigs of this type. I also saw archery equipment that would make even the plains Indian green with envy. Compound bows adapted with closed faced spinning reels—90 pound braided line—solid glass arrows with removeable two pronged fish points seemed to be the order of the day.

I asked Jerry why the need for such a heavy line and why heavy glass arrows instead of wood? He said the heavy glass arrow offers much better penetraton and less deflection from the water. The need for heavy line is for the time you miss the fish and hit a submerged stump. These arrows cost about two dollars and it's nice to be able to retreive them from the bottoms.

One more item to consider is footgear, especially if you plan to hunt the Bottoms. I recommend a pair of old tennis shoes. Hipboots work well if you have a good fit, but loose-fitting boots will give you nothing but grief and blisters.

Normally, the Bottoms is fairly firm underfoot.



However, on occasion you may find yourself sinking right up to your shorts in good old mother earth!

I was invited to follow along with Gibbs and Bratton. We started off across the shallows. The two archers saw carp working about 100 yards out. They slowly moved into postion and in a matter of minutes were surrounded by those big old bugle-mouths.

Jerry scored first with an eight pounder. He threw a few jabbing remarks at Gibbs and Chuck started to take this shoot seriously. I got busy with cameras and the next 30 minutes produced some real action for both archer and photographer. These two bowmen put 14 big carp on the stringer before the rest of the fish spooked out of the shallows.

We decided we'd had enough shooting for a while and wanted to see how the rest of the archers were doing. As I drove around the bottoms I saw almost every possible method being employed in trying to outsmart these big fish.

In one instance I saw a line of about ten archers driving fish ahead of them into some narrows where waiting bowmen could pick the biggest and best shots.

I also saw a lone archer about 200 yards out. He was standing in about eight inches of water and reminded me of a bird dog on point as he was intently watching a big carp swim into range. I grabbed the binoculars and

watched as he drew the compound bow back. A spray of water shot up as the arrow struck. It seemed as if the archer's lips were moving and he was shaking his head as he reeled in the shaft covered with nothing but mud.

The fishing derby was to end the following day and I had work to do elsewhere. I promised to return for the weigh-in and final tally. I was surprised the following day to find that the 50 archers took in excess of 2500 pounds of rough fish. An archer by the name of Larry Holt took over 350 pounds single-handedly.

Be assured that 2500 pounds of rough fish didn't even scratch the surface of the fish available at Chevenne Bottoms.

If you plan to take up off-season bowfishing as a sport, there are a few rules you should be aware of. Remember, only rough fish can legally be taken with bow and arrow. Rough fish are defined as—paddlefish, carp, buffalo, carpsuckers, suckers, gar, drum, and gizzard shad.

There are also some restrictions for the bow and arrow. 1. The minimum bow weight is 25 pounds. 2. The maximum length of the arrow is 30 inches. 3. A line must be attached from the bow to the arrow. 4. The arrow must have a barbed point. 5. You must have a valid fishing license in your possession. Also make yourself aware of the game laws and obey them! If you



want to see your son and your grandson be able to walk afield with gun or bow, then you must do even more.

The Kansas Bowhunters Association has taken a step in the right direction by soliciting donations from their members and using that money to establish a reward fund. The K.B.A. paid \$500 last year for the information that led to convictions. There were five cases involved and the fines from those five cases amounted to nearly \$2,000 dollars. The money from the fines does not revert back in to the Fish and Game coffers, but goes to the school district in which the fines were assessed. K.B.A. has taken a positive step! How about you?

The time has come to no longer be tolerant of a friend when you know he slips out in the dead of night to shoot wild turkeys from their roost; or drives back country roads and blinds deer with a high powered light so he may shoot them with an even higher powered rifle from the comfort of his car.

The time has come to call that friend aside and tell him why you no longer invite him along to share those special moments in the pursuit of wildlife, whether you pursue with gun, rod, bow or camera.





By James J. Nighswonger

Photos by Stiebben

ARE YOU looking for a new weekend activity that you can enjoy alone or with your family? One that requires very little investment, gets you close to nature and can add to your hunting and fishing pleasure? If so, try canoeing! Canoeing has become one of the fastest growing sports in the midwest and it is an activity that can add to your enjoyment of the outdoors in many ways.

Many families are introduced to canoeing by joining a group on a weekend float trip. Such an outing offers a variety of enjoyable experiences: observation of the best in scenery at an unhurried pace, a kinship with your natural surroundings, remote camping and fishing, cheery campfires, gravel bar cooking, observation and study of wildlife and native plants to name a few. Most weekend trips involve a 15 to 20 mile float on a small stream or river with one or two over-nite camps.

in the canoe or left at a base camp.

Kansas, as well as its neighboring states, has some fine canoeing water just waiting for a dip of your

Camping equipment, food and supplies can be carried

paddle.

For example, two canoe trails in Kansas have been designated during the past year. One trail is located on the Arkansas River in the Raymond-Sterling, Kansas area. The other is near Concordia on the Republican River. The Ark River canoe trail is a scenic, sandhill stream offering excellent family canoeing. Outstanding

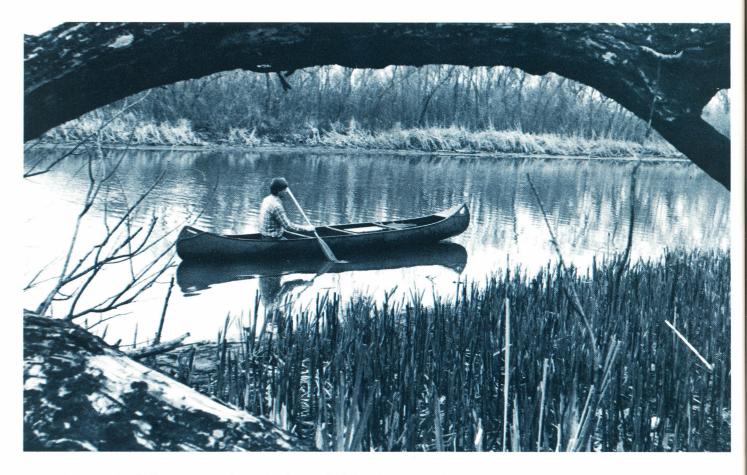
characteristics include numerous clean sandbars for sunbathing, camping and picnics, large cottonwood stands, abundant wildlife, good fishing and reasonably clear water. The trail is 20 miles long and numerous access points allow for floats of a few hours up to two full days with an overnight camp or two.

The Republican River canoe trail is some nine miles in length and can be floated in one day. Or a more relaxing trip could extend through a weekend, allowing time for fishing, fossil hunting, swimming and camping. Permission has been secured from landowners to permit canoeing withing the trail area, camping on sandbars and to leave cars at designated access areas. As with the Ark River trail, this trip offers easy family canoeing. Both trails contain adequate water for canoeing during the spring and early summer months. However, stream flows are normally low at other times of the year, so check locally before starting your float, especially if the weather has been dry.

Trail guides for both areas are available free of charge by writing the Kansas Canoe Association, Box

2885, Wichita, Kansas.

The most popular canoeing waters in this area are located in Missouri and northeast Oklahoma. Kansas canoeists frequently journey to such rivers as the North Fork, Niangua, Current, Eleven Point, Elk, Gasconade, and Jack's Fork rivers in Missouri and the Illinois River in northeast Oklahoma near Tahlequah. These



Floating isn't a high-pressure pastime. There's no schedule to keep. Most floaters just sit back and let the river do the work.

beautiful Ozark rivers are simply delightful for family canoeing on clear water in Ozark mountain scenery. Abundant access points exist on Missouri and northeast Oklahoma streams along with numerous clean gravel bars for camping. Springs, bluffs, rock outcrops, caves, waterfalls and other natural features of scenic beauty abound. The Niobrara River along the northern Nebraska border also offers excellent canoeing and some outstanding scenery.

Missouri and Nebraska streams are public as are the Illinois and Spring Rivers in Oklahoma. You will not need permission to canoe them, but if you use private access points or campsites, be sure to secure landowner permission first. In Kansas, canoeing on small streams will often require landowner permission. Other streams such as the Kansas and the Arkansas Rivers are considered navigable and public when it comes to floating a boat on then. The rivers and streams on the upper ends of our Corps of Engineer and Bureau of Reclamation lakes contain publicly owned water below the flood pool elevation. This means that many of the streams feeding these reservoirs offer from one to two days of good canoeing on moving water before lake water is encountered, at normal conservation pool elevations.

Canoes have several advantages over other types of water craft. A canoe is light and small enough it can easily be cartopped or carried by one or two people. A canoe's design permits it to move almost effortlessly with the slightest push from a paddle (although after a 20 mile day-long trip, it may seem like it moves like a log). And, in spite of its reputation, a canoe is actually very stable once you get used to it.

The best way to get started in canoeing is to go with someone who is experienced. This will result in a safer

and more enjoyable first time experience.

You will need a few pointers on how to handle your craft properly and a lesson or two in the basic paddle strokes will prove quite valuable. Also, you will need some assistance in packing your canoe with the proper kinds of camping and personal gear. If you're like most people, you will become an avid canoeist after just one or two trips.

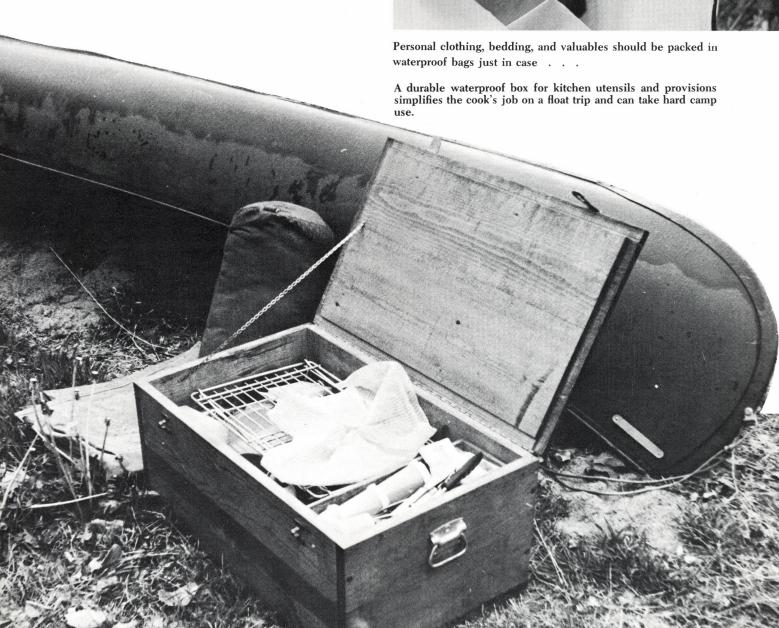
You'll probably want to borrow or rent equipment the first few times out as there are considerable differences in canoe design, materials, and equipment. By borrowing or renting equipment and discussing the different options with people who have been in the sport for some time, you will be able to make wise decisions in your purchase of equipment later on.

The most common canoe used in the mid-west is a double-end model 17 or 18 feet in length and made of fiberglass or aluminum. Such a canoe when well designed can safely hold from 800 to 1,000 pounds and requires only 6 or 8 inches of water in which to float. Another interesting fact is that a canoe heavily loaded

will move through the water about as easily as one lightly loaded. This is due to a basic design that has been changed very little since the first canoes were designed and used by primitive people.

The use that you will make of your canoe should be the deciding factor in determining whether you will prefer a fiberglass or aluminum canoe. Both materials weigh about the same and the costs are often quite similar. If you will be fishing from your canoe a good deal of the time, fiberglass will be your best choice since the boat will be much quieter than one made of aluminum. On the other hand, if your canoe will be stored outside, fiberglass will deteriorate more than aluminum when exposed to the weather. Fiberglass is











easy to repair if scratched or cracked while running fast, shallow, rocky water and it slides over rocks much easier than aluminum. It is especially important to buy a fiberglass canoe from a reputable manufacturer with a good mold design and layup technique. Several poorly designed or poorly built fiberglass models are on the market. Such a canoe will often be unstable and won't withstand the rigors of stream canoeing. Furthermore, it will probably cost as much as a good model. On the other hand, aluminum canoes are preferred by most stream canoeists in Kansas, mainly because of their toughness and low maintenance requirements. They will hold up well year after year whether canoeing on shallow rockfilled streams or lakes often requiring no maintenance at all. Dents can be removed with a rubber mallet and wood blocks if you want to maintain a smooth surface. Nearly all aluminum canoes manufactured today are well designed and well built. They will give you a lifetime of service if they are not badly abused. Aluminum is noisy and reflects glare but, in spite of these disadvantages, it is often preferred.

Plastic canoes are also coming on the scene. However, most of them should be avoided. This material is flexible allowing the canoe to travel over rocks without damage. However, several models lose their shape when in the water resulting in a craft that moves like a water-soaked log on flat water and in turns.

Most canoes sell in the price range of \$300-400. The rest of your equipment will cost \$100 or less. Canoeing is not only economical to get into, but your canoe will be a good investment. A used canoe in good condition will depreciate very little and will sell at any time for nearly the price of a new one.

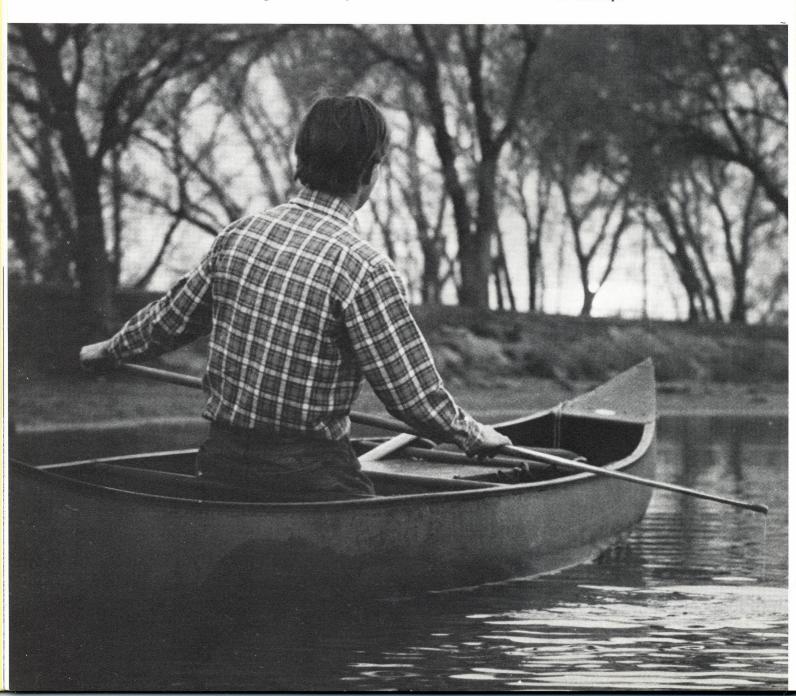
A float trip camp. Notice the extra paddle in case one of the others is lost or broken, the waterproof bag, and the large sponge for bailing.

Other basic equipment needed will include paddles of the proper length and design, personal floatation devices (U.S. Coast Guard approved), and a good car top carrier. Any avid canoeist can advise you in the selection of this equipment.

Whether you are just getting started or are already an active canoeist, you will want to know about the Kansas Canoe Association. The KCA is a group of canoeists who are dedicated to the protection, conservation and wise recreational use of Kansas waterways. Its membership, approaching 200 family, individual and business affiliate members scattered throughout the state, professes to a code of outdoor ethics designed to pro-

tect private property rights and conservation of the stream resources in Kansas. The group has a number of active committees working on such things as canoe trails in Kansas, legislation to protect stream resources and provide canoeing opportunities, development of canoeing guides for Kansas waterways, organization of regular canoe trips in and out of state, promotion of good canoeist-land-owner relations and canoeing safety. The organization sends out a periodic newsletter and meets on a regular basis. If you are interested in learning more about the KCA or in joining the group on an organized canoe trip, write to the Kansas Canoe Association, Box 2885, Wichita, Kansas 67200.

Floating is an ideal way to rediscover the wild corners of a tamed landscape.



Canoe Access

WHEN A Midwestern canoeist starts looking for a river to float, Kansas waters aren't generally the first that come to mind. He has visions of the wild, clear-water streams of southern Missouri, northern Wisconsin, Michigan, and Minnesota and rightly so. The beauty of these rivers and the country they flow through has brought them national recognition, but they aren't always the best solution to the problem of where to canoe. Many are crowded during the summer and too far away for a weekend trip. As a result, many floaters have looked for streams closer to home and they're often, pleasantly surprised. Corn and wheat belt states like Kansas have attractive, if not wild, canoeing streams. The problem for most Kansas canoeists isn't finding the right stream; it's getting permission to float.

There are two issues involved. The first is whether or not a stream is navigable. The second is whether a non-navigable stream can be closed to the public by a private landowner. A navigable stream is public highway, and like any other highway, it can't be blocked, fenced or posted without state approval. Landowners on non-navigable streams can legally dam or fence the channel, but can they post the water against

trespass?

Wisconsin decides the whole canoe access problem simply. If the stream will carry a canoe or kayak at some time of the year, it's navigable. A canoeist can legally float it, and it can't be dammed or fenced over without a state permit. Wisconsin courts also seem to sympathize with the view that "the enjoyment of scenic beauty along a stream is a

public right" no matter how much water it carries.

Missouri's laws concerning canoe access aren't as well defined or as sweeping as Wisconsin's, but they do allow the canoeist to use most streams for floating. The Missouri canoeist can legally portage his craft over private property if he's forced out of the water by a fence or other obstruction. Nebraska's stream use laws are similar. The stream bed itself is private property, but the water is public. Again, a canoeist can portage over private property if he has to.

Kansas has three navigable streams—the Arkansas, the Kansas and the Missouri. All the others are privately owned. According to Kansas law, they're off-limits to canoeists

who don't have permission from the stream owners to float.

If most Kansas streams aren't considered very scenic, its's because few people have taken the time to get acquainted with them. Few people have the time to check with all the streams owners to find out if floating is alright. None of these streams flow through any real wilderness; few of them run in the shade of Ozark bluffs or take their water from limestone-bottomed springs. They're different than the more popular Midwest float streams. They're prairie rivers, clean and tanned, spread out on broad sand bottoms between low banks, unique, and in their way as pretty as any stream in the Ozarks or north woods. It's a shame that they're also the only streams in the Midwest that are posted against trespassing.—Chris Madson.

