

KANSAS FISH & GAME



July-August 1976

33
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Featuring . . .

Channel Catfishing

The Roadrunner

Kansas Snakes

Carp Fishing

The Walleye

KANSAS

Forestry, Fish & Game Commission

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KANSAS

FISH AND GAME

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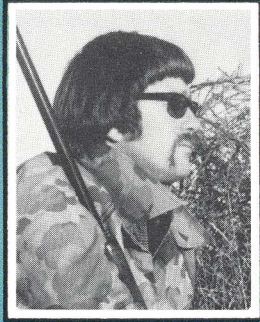
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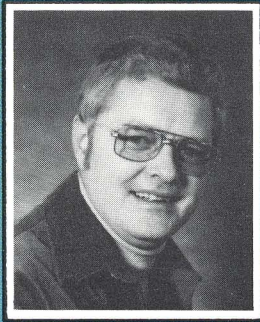
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American bald eagle and sunflowers by Ken Stiebben.

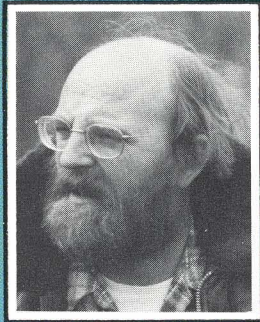
Editorial PREVIEW



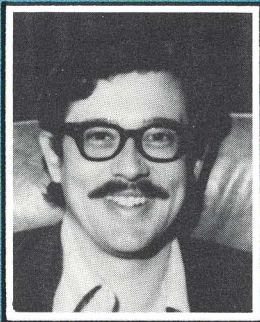
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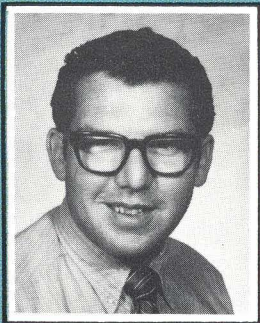
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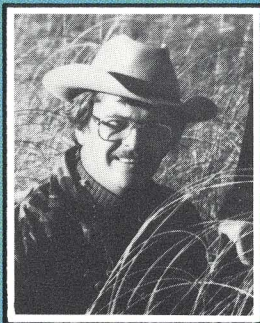
Collins



Scott



Brewer



Stiebbsen

Well, here it is—the July-August issue of KANSAS FISH & GAME. It's our first issue published on a paid subscription basis and we think it has a lot to offer.

First, off, we've put together a piece on channel catfishing. Hopefully it will appeal to catfishermen young and old. There's some basic items in it for the beginning catfisherman but there's also some pretty heavy stuff in there from some of the state's saltiest catfishermen.

George Anderson, staff writer, follows with an interesting wild-life profile on an unusual resident of southwestern Kansas—the roadrunner. Anderson provides us with some little-known facts on the bird plus some interesting observations of those who've run across the little speedster in the field. In addition, Anderson has researched and documented some unusual encounters between the roadrunner and various other critters. Anderson has also come up with a short piece on our Nation's Symbol—The Bald Eagle. In this, our bi-centennial year, we felt something on this magnificent raptor would be appropriate.

Then Joseph T. Collins, vertebrate zoologist for the Museum of Natural History at the University of Kansas gives us an interesting and informative piece entitled "Kansas Snakes: An Educational Experience." In addition to publishing more than 50 scientific and semi-popular articles on amphibians and reptiles, Collins is the author of *Amphibians and Reptiles in Kansas* and co-author of *Fishes in Kansas*. He currently serves on state and national committees concerned with amphibians and reptiles and was formerly editor of *Herpetological Review*, a member of the editorial board of the *Journal of Herpetology* and an elected officer of the Society for the Study of Amphibians and Reptiles. Collins is an accomplished photographer and illustrates this article with his own photos. He has traveled throughout the world to study, photograph and speak about amphibians and reptiles.

Want to learn how to catch carp? If you do, Bill Scott, staff writer, provides you with more than enough information to get you started. And he's rounded up some recipes that'll have you going to the refrigerator before you're through with the article. In fact, if Ed Augustine's recipe is as good as it sounds, the carp could become the most prized fish in our waters.

Staff Writer Farrell Brewer has a couple of offerings in this issue. His profile on walleyes should be of interest to anyone who fishes for this highly-prized species. If you've ever smashed a good rod by slamming the car door on it or stepping on it in the bottom of a boat, Brewer has an article on building a rod case that could prevent this kind of mishap.

As usual, our staff photographer, Ken Stiebbsen has provided some outstanding photographs for this issue. For years Ken has been shooting some super color stuff that has appeared only on the covers. Now that we're utilizing color inside you'll have a greater opportunity to view his work.

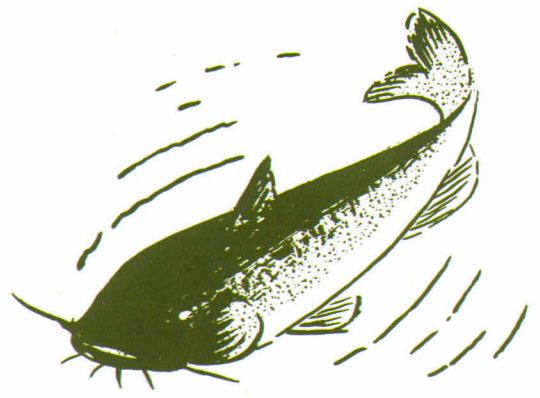
Inside the backcover you'll find a new feature called *Ramblin' Afield*. This column will contain helpful and useful items of information for all outdoorsmen.

As in the past, we'll continue with our news insert, bringing you various news stories and photos which have been selected from the Commission's press releases. We feel this section provides readers with Commission news that might not have been carried by the media in their areas.

KANSAS FISH & GAME has undergone some changes. There will be more. Let us know what you think.

Vic McLeran
Along the Ninnescah

Channel Cat PRIMER



Vic McLeran

By Vic McLeran, Editor

It WAS A damned nice channel cat; one that would probably go six pounds. It was the second big channel I'd seen that evening and I was bugged because I hadn't caught either one.

Sliding the big catfish into a wet burlap sack, my fishin' buddy Ken Stiebben snickered.

"That beef melt sure is good bait," he said. "Bet you wished you had some," he giggled, pointing to the fact that I was fishless so far that evening using some prepared stink bait.

"That's right," I replied. "And I'll bet you're gonna wish you'd shared it with me when you're doin' that 17-mile walk back to town," I said jingling my car keys. "Be painful too, tryin' to walk on that broken leg you're about to get."

"How much of this beef melt do you need?" Ken asked, quickly handing me the jar. "All of it," I growled. Pushing the jar of stink bait aside, I baited up with the beef melt and cast out.

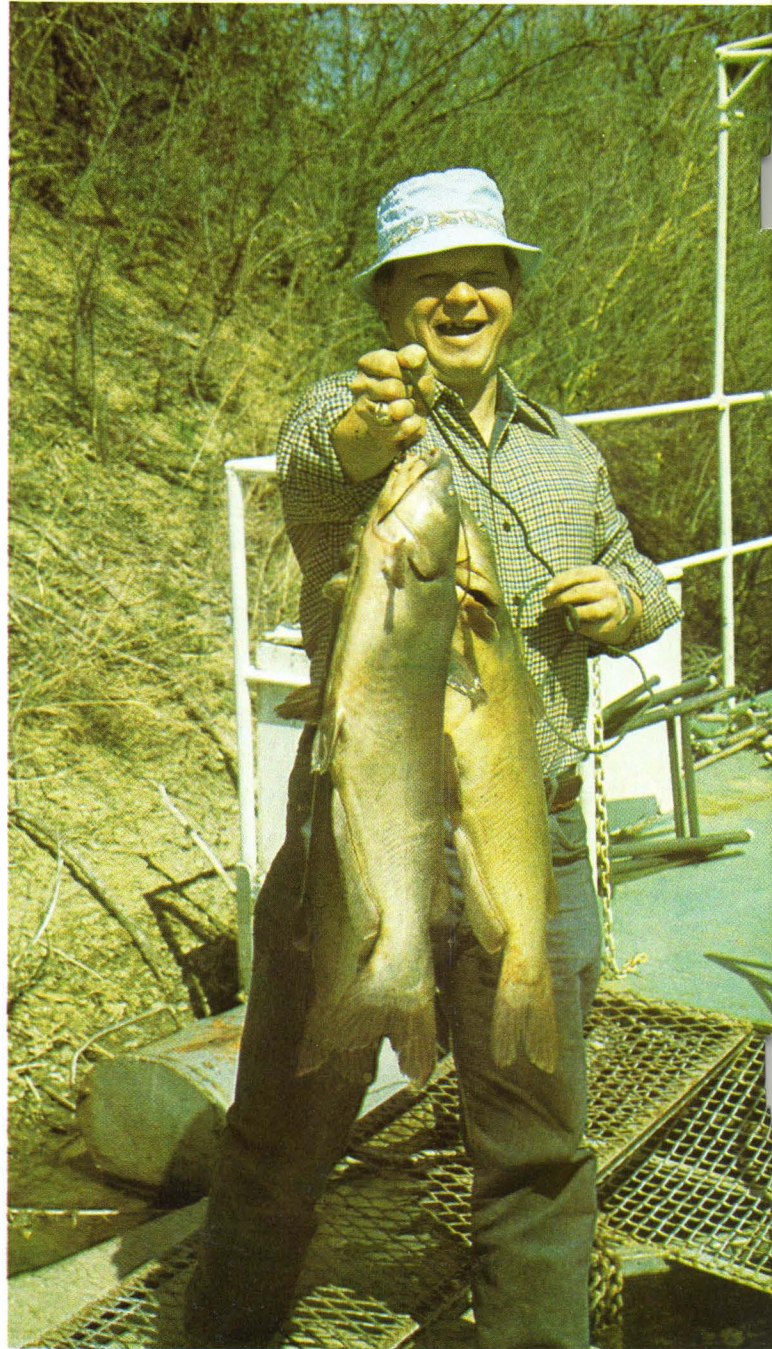
It was March and reports had started filtering in about channel catfish being taken from farm ponds. Ken, the Commission's photographer, and I are both fond of fresh channel catfish so we'd decided to give it a try. The pond we were fishing wasn't large—less than an acre—but it was a fertile impoundment and we'd caught nice channel here before.

Thinking back, I recalled a night in May the year before when we'd taken nine channels from the pond which had averaged four pounds apiece. Lost in thought, I wasn't concentrating on my rod tip and missed a good strike. But the fish were evidently hungry and moments later I had another good hit. Leaning back, I struck hard and the fish was on. It was the solid, husky pull of a good-sized channel cat. I pumped the rod, lowered it and reeled in rapidly. Raising the rod again, I winced as the Ambassador's drag screamed. The big channel was taking several feet of the 17-pound Stren.

"Feels like a 10 or 12 pounder," I muttered, trying to regain the lost line. "We'll be able to put both those little baitfish of yours inside this one," I told Ken.

Ken said something very ugly about me and the big channel cat.

Moments later, in the dull glow of a Coleman, I slipped a couple fingers into the cat's gills and hauled him out of the water. Two hours later he'd nudge nine pounds on a grocery store scale.



Bill Hedden, Chanute catfisherman, struggles with a string of hefty channels taken from an old cemetery pond.

In the next 30 minutes Ken and I landed another channel apiece, both on beef melt. The action quit abruptly and we headed for town. The five channel catfish weighed 35 pounds before we fileted them out.

Channel catfish are probably the most sought after game fish in the state. To a lot of anglers the only kind of fishin' is catfishin'. In fact, a telephone survey taken last year for the commission, of about 5,000 licensed Kansas fishermen revealed that catfish were the favorite fish of 42 percent of those anglers surveyed. Largemouth bass were the next most-favored species, being sought primarily by 17 percent of those surveyed. With the channel cat in such demand by anglers the Fish and Game Commission stocks this fish heavily in both public and private impoundments. In 1975 for instance, the Commission released more than 300,000 channel catfish in waters across the state.

In this, our bi-centennial year, we thought it might be appropriate to give some space to one of our most popular native game fish. So I leafed back through all the Master Angler Awards the Commission has given to fishermen who've caught channel catfish on rod and reel weighing 15 pounds or more in the past 12 years. Then I went out and interviewed some of the state's top notch channel catfishermen for their thoughts and ideas on catching forktails. I think you'll be interested in what I found.

The Master Angler Awards showed that 106 fishermen had caught channel catfish which weighed 15 pounds or more. Of this number, 42 of the big fish were taken from state or city lakes; 31 came from farm ponds; 22 were taken from reservoirs, while 6 were caught from shale, sand or strip pits. The remaining five came from the state's various rivers.

Minnows, including small bluegill, shiners, perch, sunfish and chubs, were the biggest producer of lunker-sized channel cats. Turkey and chicken livers were the next most popular bait followed by crawfish, shad baits, frogs-toads, worms, prepared stink baits and the various blood baits.

The records indicate that most of the big channels were taken during July followed closely by May and June. April and September were other months which produced big channel cats.

One of Kansas' best known catfishermen is Jim Zeiner, Wichita bait manufacturer and dealer. I talked with Jim about channel catfishing in farm ponds.

"Outside of *Magic Cheeze*, what's your favorite bait for channel cats in farm ponds?" I asked.

"I like the little grass or striped frogs," he said. "I think they're one of the best live baits for channels you can find. Especially during the late spring and summer after the water's warmed up. "Course the shad baits—sides and gizzards—are hard to beat when the water's still cold like in February and March."

"How do you fish the frogs?" "Generally I fish them on the bottom with a slip sinker and I free-spool the reel. This lets the fish pick up the frog and move off

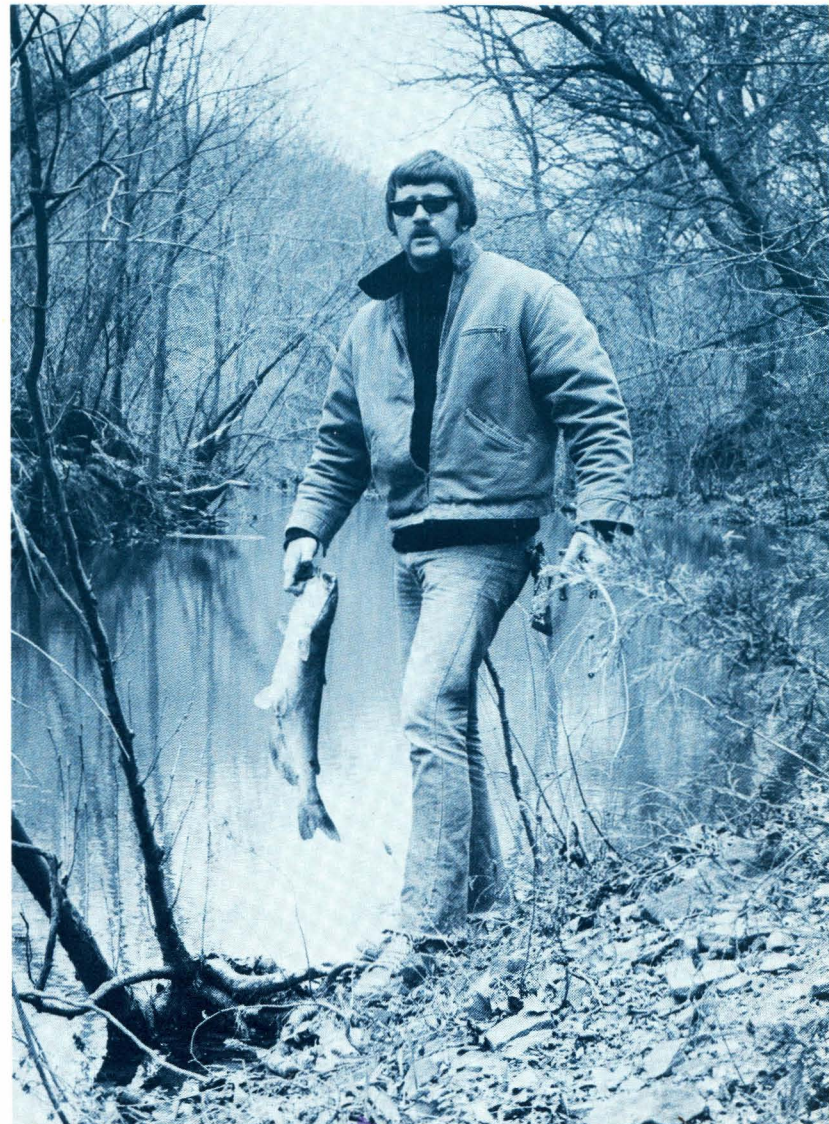
with it. When the line starts moving off the second time, I stick him."

"What about hook size?"

"I try to stay with a 1/0 or a 1, depending on the size of the frog. There are times though when fishing a large frog you'll have to go with a larger hook."

I knew what Jim was talking about. This past spring I was fishing a farm pond in Chautauqua County using frogs for bait. I'd threaded the hook through both of the dead frog's lips and into the thigh of one hind leg. It wasn't long before a channel cat picked up the frog and moved off, stripping line from the reel. As soon as he stopped, I took up the slack line. When he started off again, I hit him. From the struggle he put up, I could tell it was a large channel. When I had the fish within several feet of the bank, the line went slack and he was gone. Reeling in, I examined what was left of the frog and saw what had happened. The hook, a No. 1, was simply too small to penetrate the frog's leg and then hook the fish. After swallowing the frog, the big channel had simply regurgitated it, hook and all when I had him close to the bank. Changing to a long-shanked 3/0 hook, I cast the frog out again to the same spot. About 20 minutes later I had another pickup. Again I fed the

The author hauls a nice channel cat from one of the state's many creeks—areas often overlooked by catfishermen.



fish line. When he stopped and started off again, I stuck him. The large hook penetrated and held. Moments later I beached the big channel—an eight pounder.

While we're talking about frogs as channel catfish bait I probably should tell you about a method for hooking them that was passed on to me by Don Clarke, Woodson County game protector. His method sounds good to me and it's one I'll be trying this summer.

"Since a channel cat normally swallows its food items head-first, it's a good idea to have the hook positioned so that the line of pull is directly back to the angler," Don told me. "In other words, the hook should be pointing to the rear of the frog after the channel cat swallows him head-first."

To achieve this, Clarke weaves the hook through both hind legs of the dead frog, up through and underneath a foreleg, then through the body and out the frog's mouth. After you pull the line taut, the point of the hook is then lying alongside the frog's head and pointing to the rear where you can get a direct pull back toward you without binding the hook.

"Jim, we see a lotta folks fishin' with a tight line but I noticed you don't fish that way. How come?" I asked.

"The trouble with tight lining is that oftentimes the fish feels resistance from the tight line and drops the bait. Sometimes after feeling this resistance, they simply leave the bait alone and won't come back. Of course there are times when they're extremely hungry, that they'll go ahead and take bait on a tight line. But for the most part I like to either free-spool the reel so a fish can take out line without resistance, or else I leave several feet of slack in the line. Then when the fish picks up the bait and takes out the slack, I set the hook. I just think that the resistance of a tight line is unnatural and often tends to alarm the fish. Of course we're talking here about fishing in still water like ponds or lakes. In creeks or rivers which have a current, you'll have to go to a tight line."

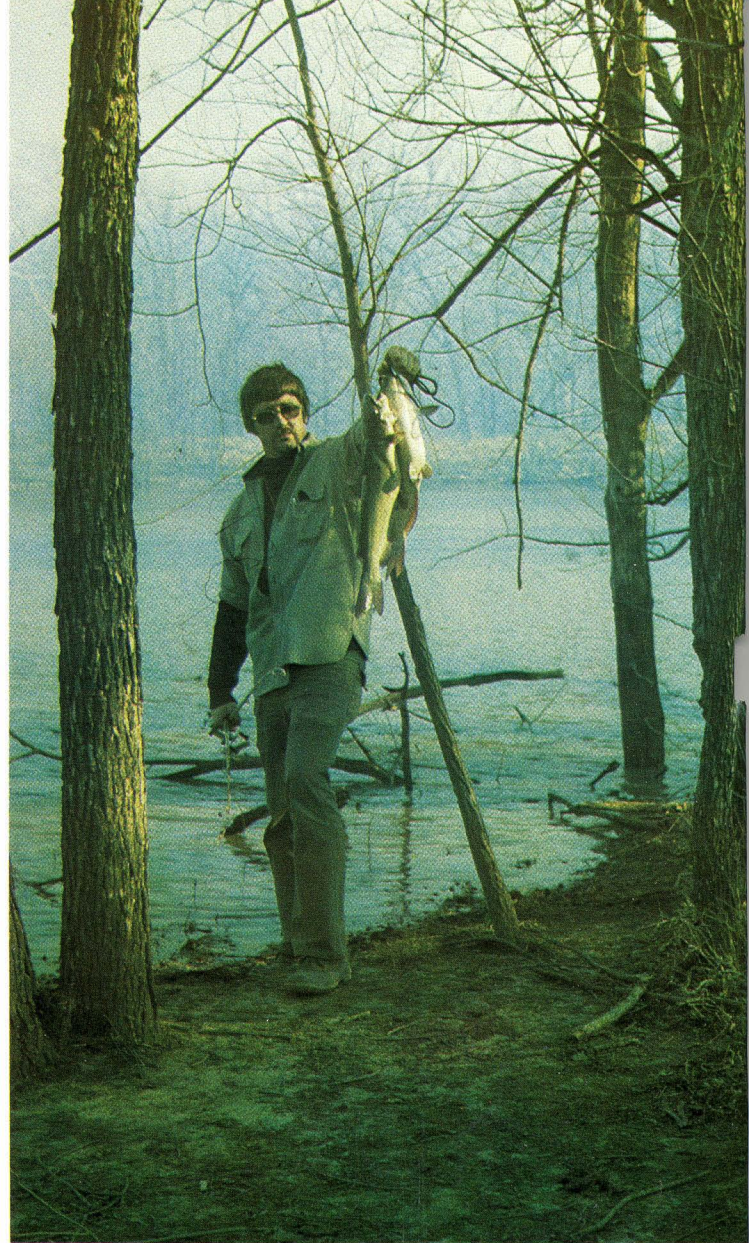
"Jim, how much line do you let a channel cat take before you set the hook?"

"It varies, depending on how the fish are taking the bait. If they take the bait vigorously I hit 'em as soon as they stop stripping off line and start off again. If they're timid about taking the bait, I give them quite a bit of line. You just have to experiment to find the best way for that particular day."

I asked Zeiner what specific areas of a pond he fished.

"I look first of all, for brush piles or submerged trees, logs or big rocks—anything that provides cover," he replied. "Channel cats are like bass in that they'll seek the protection of underwater structure. And once you catch a big channel out of a specific spot, it's a good bet that sooner or later another channel will move in to take it's place."

While we're on the subject of catfish cover, we might mention the structure maps which fisheries biologist Phil Jeffries has prepared for several state fishing lakes in southeastern Kansas. Those maps show you the vari-



Farm ponds are home to a large number of channel cats like this brace of four-pounders.

ous depths, dropoffs, piers, and brush piles—all areas which provide structure or cover for fish. Jeffries has completed these maps for Bourbon, Montgomery, Neosho, Wilson and Woodson State Fishing Lakes. They're available free of charge from the regional fish and game office in Chanute.

Continuing, Zeiner said, "In extremely clear ponds, I look for the deeper water which will be darker. Because it's darker, the channel cat feels protected. In the evenings and at night under the cover of darkness, they'll come into the shallows to feed. And even though catfish feed mainly at night, you can still coax them into feeding during the day if you get your bait down in the deeper water or the underwater cover."

Jim had another good tip for those of you who fish for catfish in farm ponds. "A lot of our farm ponds have a layer of silt or moss on the bottom. When you cast out, your bait sinks down into this stuff and it's next to im-



Kansas Fish & Game NEWS

BULLFROG SEASON OPENS JULY 1

PRATT — If you don't mind getting your feet wet and hassling the mosquitoes or an occasional water snake, you'll want to take advantage of the Kansas bullfrog season that opens July 1.

The bullfrog season, as established by the Kansas Fish & Game Commission, opens July 1 and runs through September 30. The daily creel limit is eight bullfrogs. A valid fishing license is required for any person to take, catch or kill bullfrogs, except those persons exempt by law from having such a license.

In Kansas, the only legal methods for taking frogs are by hand, dip net or by

hook and line. Bow and arrows, gigs, spears, firearms and all other methods are prohibited.

Fly rods and ultra-light spinning tackle are popular in some areas for taking the "bulls" during daylight hours. Another time-tested method involves a small piece of red cloth placed on a hook. The rig is dangled and jigged in front of the frog which is supposed to mistake the object for an insect and eventually strike.

The old frog hunter knows that hunting conditions are sometimes less than ideal, but a mess of frog legs, frying crisp and golden, makes all the effort worthwhile.



The fox and gray squirrels are an important part of the Kansas wildlife scene and a favorite of all who hunt them.

SQUIRREL SEASON IN PROGRESS

PRATT — With the fall hunting seasons several months away a select group of sportsmen have been enjoying their sport since June 1. The Kansas Fish & Game Commission reminds hunters that the squirrel season opened June 1 and will remain open through December 31, 1976.

Both fox and gray squirrels are legal game during the hunting season established by the commission. The daily bag limit is five with a possession limit of ten. Shooting hours are from one-half hour before sunrise until sunset.

During a year when food supplies are sufficient and the production of young is normal, the total fall population is nearly two and one-half times larger than in the spring. Even if squirrels weren't hunted, a large majority would fail to survive through winter since many will die from natural causes. Thus, the annual surplus squirrel crop can be safely utilized without harming the squirrel resource.

FIREARMS DEER PERMITS AVAILABLE JULY 1

PRATT — Kansans planning on hunting deer with firearms this year are reminded that the dates for applying for the permits are drawing near.

Firearms deer permit applications will be accepted from July 1 until July 15 at 5 p.m. Application forms will be available for firearms permits from county clerks, license vendors and from commission offices. Only persons attaining the age of sixteen on or before the opening day of the firearms deer season are eligible to apply for permits.

Commissioners approved the issuance of 11,125 firearms deer permits for the December 4 through December 12 season. A drawing will be held in Pratt on August 4 to determine the permittees for the 1976 firearms deer season.



ILLEGAL FISH NETTING
DRAWS HEAVY FINE

(released May 17, 1976)

MANHATTAN--A recent investigation and stake-out by Kansas game protectors in northeast and northcentral Kansas has led to the arrest and conviction of two men for taking fish by illegal methods. For one of the men, it was his second trip in less than a year to a Kansas court for the same type of violation.

Emmett L. Munden, 39, Missouri City, Missouri, was charged in Pottawatomie County Court with taking fish by an illegal method, possession of illegal fishing equipment, no fishing license, no boat registration and no life jackets.

Munden appeared before Judge James Zeller, entered a plea of guilty and was assessed fines and court costs totaling \$711. In addition to the fine, Munden's boat, motor, trailer and 900 yards of gill and trammel nets were seized by the court. The equipment had an estimated value of \$1500.

William Pierce, Kansas City, Kansas, was also charged in the investigation with taking fish by illegal methods and no fishing license. Pierce appeared before Judge Zeller, entered a plea of guilty, and was assessed fines and court costs totaling \$136.

According to Paul Miller, Manhattan, state game protector, the illegal netting operation was conducted in the upper end of Tuttle Creek Reservoir, north of highway 16.

"A total of 490 fish were seized, mainly buffalo and a few catfish and drum," Miller said. "I understand the fish have a value of thirty-cents a pound before processing, with a street value of eighty-nine cents a pound. The fish were given to the public."

Munden was arrested and convicted at Lovewell Reservoir in Jewell County in September of 1975 on a similar charge of taking fish by illegal methods and was fined \$500 and loss of equipment.

-GA-

BIG GAME VIOLATION
DRAWS \$900 FINE

(released May 17, 1976)

GARDEN CITY--An intensive investigation by state game protectors and Finney county authorities into big game violations has resulted in the arrest and conviction of a Garden City resident.

Max Crist, Garden City, was charged in Finney county court with illegal possession of deer or parts of a deer without a locking tag for the 1975 season; illegal possession of deer or parts of a deer without a valid Kansas deer permit and possession of deer or parts of a deer in a manner or time not permitted by law.

Crist appeared before Judge Harrison Smith on April 27 and entered pleas of guilty to all charges. Crist was assessed fines and court costs totaling \$911. In addition, Crist was given a 30 day suspended sentence and one-year of probation with all hunting activities revoked for that year.

State game protectors Richard Harrold, Garden City and Jim Kellenberger, Jetmore, conducted the investigation and made the arrest. During the investigation they were assisted by assistant Finney county attorney Mike Quint and the Finney County sheriff's office.

-GA-



Kansas Fish & Game NEWS

RABIES CONTRACTED FROM HANDLING FOXES

NEWTON — Several cases of rabid red foxes in the Newton area and the illegal keeping of some of the animals have caused ten people who have handled the animals to undergo the series of 21 rabies injections.

"We don't know if it's a bad problem or not yet," said John Lingg, Harvey County game protector. "I picked up the first fox in north Newton around the twelfth of April and turned it over to the Harvey County Park Department. It died on the fifteenth of May and the diagnostic lab at K-State (Kansas State University) reported the animal was rabid." The rabies virus has been known to have been carried up to one year before the effect of the disease has been shown.

Lingg said this first animal was wild, but that has been the last wild rabid animal found. All others have been wild red foxes kept illegally as pets.

"The problem is the people, not the foxes," Lingg said. "I don't want to start a movement to irradiate the red fox because of a rabies scare. If people will just leave them alone they won't have to undergo these rabies shots," he said.

Lingg himself is undergoing the series of injections because of a slight cut to his hand

received while handling one of the three illegally kept foxes that five days later died of rabies.

Only two of the eight people receiving rabies shots have been bitten by the animals. The shots are being given as a precautionary measure against the fatal disease.

Keeping wild animals confined in Kansas is against state statutes. Lingg explained one of the reasons for the law.

"Wild animals raised in captivity can't take care of themselves in the wild. And that is usually exactly where the owners of these wild pets wish they had left them when the animal becomes older. They sometimes become mean, or they are just not cute, like they were when the owner found them."

These pets returned to the wild are usually easy prey for larger predators, or they starve without someone to feed them.

Lingg said four more foxes being kept as illegal pets are being observed for signs of rabies and two others, one of them an illegal pet, have been found and checked for rabies at KSU.

"We found one red fox south of Newton dead in the wild. Another was found in Moundridge that was an illegal pet. Both were checked at KSU and were not rabid," Lingg said.



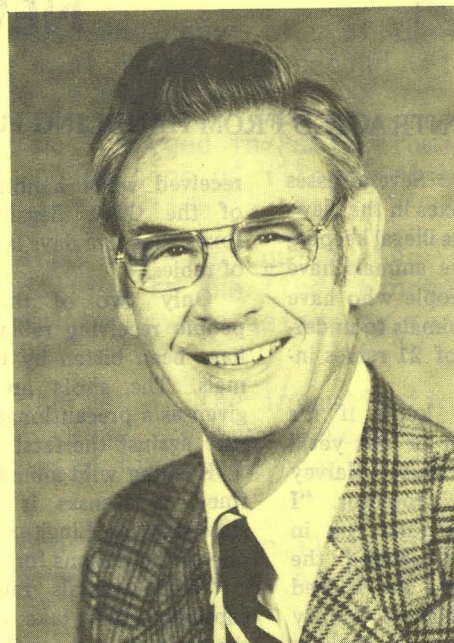
GOVERNOR APPOINTS TWO
TO COMMISSION

Governor Robert F. Bennett has appointed two men to fill vacancies on the five-man Kansas Forestry, Fish and Game Commission.

Dick Langenwalter, Hutchinson, succeeds R.W. "Bill" Fowler of Weir, whose term expired May 1. Langenwalter represents the Fourth Commission District which includes most of Southeast Kansas.

The new fourth district commissioner is president of Reno's Ace Hardware, Inc. and Hutchinson Floral Company. Commissioner Langenwalter is also active in civic organizations such as Rotary and is a past president of Hutchinson Chamber of Commerce.

An ardent hunter and fisherman who hits the ski slopes of Colorado each year, Langenwalter is also an active supporter of Ducks Unlimited.



Dick Langenwalter



William "Bill" Hawes

Governor Bennett also appointed William "Bill" Hawes of Smith Center to fill the commission post vacated by the late Fred Sears of Colby.

Hawes, a Smith Center pharmacist, will represent the second district, an area of 22 counties in the northwest quarter of the state.

An avid big game hunter, Commissioner Hawes has achieved the coveted "Grand Slam" on North American sheep, bagging a Dall, Stone, Rocky Mountain Bighorn and the much sought after Desert Bighorn.

Commissioner Hawes is a lifetime member of N.R.A. and actively supports Ducks Unlimited, Safari International, Wild Turkey Federation, National Wildlife Federation and Honkers Inc., a goose hunting club located near Kirwin.

possible for the catfish to find it. You can correct this by using a cork or float to suspend your bait off the bottom. This works well with the prepared stink baits too. Especially on a windy day when the wave action constantly moves the float up and down. This jerks the bait up and down and lets particles flake off in the water. This of course, makes it easier for the channel to locate the bait. Blood baits are good when fished in this manner too."

Jim added that in the spring, he usually fishes the shallower waters since they're the first to warm up.

"How long do you fish a spot before moving onto another?" I asked.

"Not very long. Ten or fifteen minutes usually gets it then I try another spot. Catfish don't move around much, especially during the day. So you're gonna' have to take

the bait to the fish. I've found that it's often effective to reel my bait in a foot or so every few minutes. This lets the juices off into the water and you're covering more territory at the same time."

An awful lot of channel catfishing here in Kansas is done in creeks and rivers. And one of the most fertile catfish streams in the state is the Neosho River.

During the warm summer months, congealed chicken blood and hellgrammites seem to be a couple of the most preferred baits along the Neosho. And one of the favorite methods for fishing these baits is wading the river and fishing the bush piles or submerged logs and trees.

I talked with Joe Goodeyon, Chanute, about this type of fishing.

"I like to use a flyrod with a four foot leader," Goodeyon told me. "At the end of the leader I tie on a small



Ken Stiebben

snap swivel. For bait, I take a chunk of chicken blood about the size of a 50 cent piece and run the shank of a No. 10 treble hook up through the blood. Then I snap the hook to the snap swivel. I've found that the blood stays on the hook better if baited this way."

"Why such a small hook?" I asked.

"With the small hook it's just that much easier for the fish to get the bait in his mouth. Also, he's less likely to feel the small hook and drop the bait."

Goodeyon clamps a split shot to the leader about 14 inches above the hook and he's ready to fish. "The light split shot enables the bait to drift naturally with the current," Joe explained. "A heavier sinker would drag the bait down."

"I stay on the bank whenever possible," he told me, "slipping along quietly, just dropping the baited hook into the water a foot or so upstream from brushpiles, submerged logs or trees, root snags—just any place that looks like it provides good cover for catfish. Now you'll find a lotta' brushpiles that don't contain fish. But if there's a channel cat in that brush, the chicken blood will bring him out. And he'll usually take it quickly. I normally fish each likely-looking spot for about ten minutes then move on.

"If the bank is overgrown with brush, I'll slip on a pair of sneakers and wade the river. But regardless of whether you wade or walk the bank, it's imperative that you move quietly—not kicking rocks and sticks into the water. I think that's why a lot of people don't catch fish—they spook them with excessive noise and commotion." In western Kansas streams, similar tactics are used but the baits there are grasshoppers and the little sand toads.

Jimmy Joe Laymon, another Chanute catfisherman, also fishes the Neosho but his choice of bait is the hellgrammite.

Laymon gathers the hellgrammites by lifting and turning over rocks along the riffles. "We put a screen or a minnow seine a couple feet downstream from the rocks. As the rocks are lifted and the hellgrammites dislodged, the current carries them into the seine or screen."

Aside from being a favorite with channel cats, another good point about hellgrammites as bait is their durability. "Sometimes you'll catch two or three catfish on the same hellgrammite before you need a new bait," Laymon said. "Then too, hellgrammites keep well. They'll stay alive for several weeks if you keep them in some moist moss or leaves in a cool, shady spot."

Using spinning tackle, a split shot and a small hook, Laymon fishes two hellgrammites to a hook. "I thread the hook through the collar on the hellgrammite's neck," he said.

Laymon gets out in the river and makes his casts, letting the current carry the hellgrammites directly into the riffles or into the little backwater eddies around the riffles.

John Farran, Parsons sporting goods dealer, fishes the Neosho River and lakes like Parsons City Lake and

Neosho State Fishing Lake. John uses an open-face spinning reel with a long rod and 10 or 12 pound test line. His favorite bait during the early spring months when the water is still cold is cut shad sides. Later, as the water warms up, he goes to shad entrails.

"It's the best all around summer bait I've found," he says.

John also uses chicken livers a great deal during the summer. If you've ever had trouble with chicken or turkey livers staying on the hook, he has a tip that should help.

"I spread the chicken livers out on a board in the sun," he told me. "Then I salt them down. This combination of salt and sun toughens the liver to where it stays on the hook much better."

Incidentally, the mere mention of shad baits will turn up the noses of a lot of anglers. In fact, the strong offensive odor of shad sides keeps a lot of anglers from fishing with them, even though it's this same strong odor that attracts catfish. Jim Bryan, law enforcement supervisor for southeastern Kansas, gave me a tip about getting the shad smell off your hands. It's the best one I've ever tried and I'll pass it on to you.

Take an empty olive bottle and fill it about one-third full with mustard. Then fill it the rest of the way with vinegar. Put the lid on and shake well. After baiting up with the shad, pour some of the mustard-vinegar solution into your hands and rub it in like you would soap. After a couple minutes of scrubbing, rinse the solution off. It'll cut 95 percent of the shad odor from your hands. It doesn't require refrigeration so you can carry the bottle in your tackle box.

The big federal reservoirs that dot our state are home to a lot of catfish—and a lot of catfishermen. Mick Crawford, Wakefield bait dealer, is a catfisherman deluxe. He accounts for more catfish out of Milford Lake than anyone I know. Though a large number of Mick's catfish are taken on limblines and trotlines, he's also an excellent rod and reel catfisherman.

Talking about baits, Mick listed his preference for channel catfish. "I think fresh shad gizzards are probably the best year 'round channel cat bait you can find," he said. "In the live bait category, at least for lake fishing, I like crawfish, shiners and gold fish in the three inch class."

Crawford's choice of channel catfish tackle includes a 6½ foot Fenwick casting rod, an Ambassadeur 5000 loaded with 17 pound Stren and armed with a long-shanked Eagle Claw 3/0 hook.

"Where do you look for channel catfish in a large lake like Milford?" I asked Mick.

"Rock jetties, old river or creek beds, feeder streams, submerged brush or logs and the mud flats are all favorites of mine," he replied. "I'll take a boat and drift across the mud flats with my bait trailing. As soon as a catfish takes it, I stop, anchor and fish the area out."

I asked Mick for his thoughts on the tight line versus freespool or loose line question.

"When I'm fishing still water, I always either freespool or leave several feet of slack in the line," he replied. "I firmly believe that the resistance of a tight line will often scare the fish, causing them to leave your bait."

If your fishing fever's not up yet and you need a little incentive just take a look at our current state record on channel catfish. Set back on August 14, 1962, it's one of the oldest fish records in the state. Edward S. Dailey of Gardner had a throwline baited with a small sunfish in the Gardner City Lake. When he pulled the line in, he

found a 32 pound channel catfish measuring 40½ inches attached to the other end.

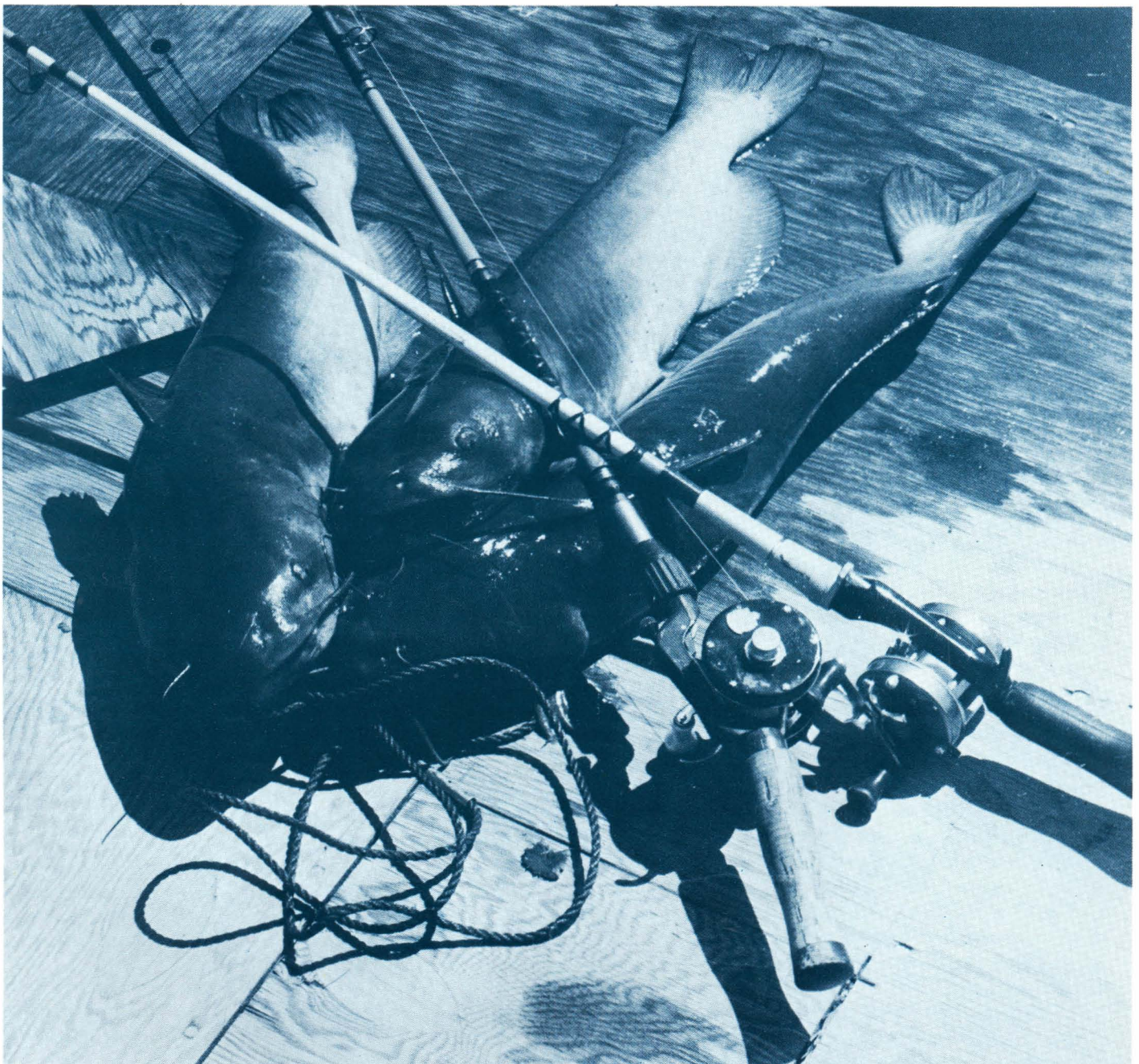
If the state record's not enough incentive for you, look at the current world record on channel catfish. Taken July 7, 1964 from South Carolina's Santee-Cooper Reservoir, the king channel topped the scales at an even 58 pounds—a big channel.

This article isn't guaranteed to make you the next state or world record holder. But hopefully it's given you a broader outlook on channel catfishing in Kansas and maybe a few new ideas to try out this summer.

Good fishin!

According to angler surveys the channel cat is the most sought after fish in the state.

Vic McLeran



The ROADRUNNER



By George Anderson
Staff Writer

ROADRUNNER? Yes roadrunner, but which one? For sake of argument we'll class them in three groups. The first and most popular, is the quizzical-looking cartoon character that races down the highway with blinding speed, emitting his well-known call—"Beep-Beep."

Forever pursued by the crafty coyote who has devoted his life's work to making a meal of 'Beep,' this pair of whimsical characters has delighted movie fans for many years.

Our second roadrunner is a style of automobile. Manufactured by one of the large U. S. car companies, it comes equipped with, among other things, a decal of the famous cartoon character and a horn that goes "Beep-Beep."

The third, and least recognized roadrunner, is the "real one." That right! A bird that's as odd looking and strange acting as his movie star counterpart.

Once you've seen the bird or had the good fortune to observe it in its natural environment you'll see what an odd, funny creature the bird is. It's natural to caricature the roadrunner in describing it.

In *Life Histories of North American Cuckoos*, J. L. Sloanaker describes the roadrunner this way: "He is about two feet in length, with a tail as long as his body, color above is brown streaked with black, bare spaces around the eyes are blue and orange, feathers of head and neck are bristle-tipped and eyelids are lashed . . . his whole plumage is coarse and harsh. Could you imagine such a looking creature? Try and think of a long striped snake on two legs, a feather duster on his head and another trailing behind; or a tall, slim tramp in a swallow-tailed coat, a black and blue eye, and a head of hair standing straight on end!—There you are!" The roadrunner.

Roadrunners are members of the Cuckoo family of birds. They're mostly arboreal which means inhabiting or frequenting trees, but sometimes terrestrial and

ground-scratching. Their toes are arranged in pairs, two pointing forward and two backward. The bill is extremely variable as to size and shape, but is always compressed and more or less decurved at the tip.

The roadrunner is a native of the southwestern region of the United States and ranges south to central Mexico. In Mexico the bird is called *paisano* or the *correo del camino*. The first of these names means fellow countryman and is freely translated as "little friend." The latter is almost the equivalent of our name roadrunner.

Other colloquialisms the desert speedster goes by are: Ground Cuckoo, Chaparral Cock, Snake Killer, Lizard Bird and Cock of the Desert.

In Kansas, the southwest corner of the state is the main stronghold for the roadrunner. Reported sightings of this unique bird have come from almost all the southern counties in Kansas including Cherokee county in the far southeast corner.

Roadrunner populations in the neighboring state of Oklahoma are apparently more widespread. Larry Hicks writing a wildlife portrait on roadrunners in *Oklahoma Outdoors* magazine says, "Roadrunners can be found in most counties in Oklahoma, but are more prevalent in the western half of the state."

Most sightings of roadrunners come from commission personnel who travel in southern and southwest Kansas.

Gene Hitt, state game protector for the commission stationed at Pratt has seen roadrunners several times in Barber county. "I've seen them run across the road on several occasions," Hitt told me. "One day while driving the back roads of Barber county, I turned a corner and there sat a roadrunner on a corner post of a fence. I watched him for a short time and he jumped down and ran off into the brush."

Lee Queal, chief of game for the commission had told me of seeing several roadrunners within the city limits of Pratt in the past several years. The most recent being in October of last year.

Artwork Courtesy of New Mexico Game and Fish Department.





Leonard Lee Rue

Roadrunners are most common in the southwestern part of the state.

The last encounter this writer had with a roadrunner occurred on opening day of pheasant season last year in northwest Pratt county. Ken Stiebben the photographer for the Fish and Game Commission, and I were driving south of the Sandhills Public Hunting area checking hunting activity and attempting to get some hunting photos for Ken's files when up ahead of us a roadrunner popped out of the ditch. The bird took one hurried look at the approaching vehicle, cocked his tail, shifted gears and was down the road and over a hill less time than it takes to tell about it.

"Fast ain't they," Ken laughed, still holding the camera which he failed to use. I agreed, they're quick.

In *Life Histories of North American Cuckoos*, H. H. Sheldon writes of the speed of a roadrunner he clocked with an automobile. "The car gained on the bird until about five yards separated us, and I saw it was running at its utmost speed. I instructed my friend, who was driving, not to press him further, and for fully three hundred yards the bird ran from the big monster in pursuit, while the speedometer registered exactly fifteen miles per hour."

"There is no doubt in my own mind," Sheldon continued, "that a fully adult roadrunner can, for short distances, run faster than 15 miles per hour. Athletic directors tell us that an average man (not an athlete) can run 9 yards a second, or about 18 miles and hour.

I know I can run as fast as the average man, and I know I have failed many a time to gain on a roadrunner that happened to appear on the road a short distance ahead of me."

Unlike many birds that feed on seeds, grain, green browse and insect life, the roadrunner diet is comprised of over 90 percent animal material.

With a diet that consists of lizards, small snakes, scorpions, spiders, including the large tarantulas, centipedes, mice, rats, small birds and even pricklypears, the digestive powers of the roadrunner are remarkable.

Contributing information to Bent's book on *Histories of North American Cuckoos*, Dr. Harold C. Bryant says ". . . that the digestive apparatus is powerful is evidenced by the fact that bone, hair, and feathers pass through the digestive tract and are not thrown back out the mouth in the form of pellets, as is the case with some hawks and most owls."

With snakes being one of the items on the roadrunners diet a certain amount of folklore is credited to the bird. One tongue-in-check tale tells how the 'snake killer' dispatches a rattlesnake—after locating a sleeping rattler the roadrunner proceeds to build a fence of cactus spines around the snake. The snake awakes and in desperation impales itself on the spines or bites itself to death!

That story, as silly as it seems, has been around for years. N. S. Goss in his book *Birds of Kansas* written in 1891, speaks on some of the tales told of the roadrunner,

“ . . . I put no faith in the general belief and many stories told about their manner of killing the large rattlesnake,” Goss said. “For if they had the courage, they have not the strength of wing, bill or claws with which to successfully attack them.”

Snake killer or not, the roadrunner has a voracious appetite and any animal from rodents to small insects are fair game. Even the well-armored horned lizard is not safe from this predator bird. An account of a pet roadrunner's encounter with the horned lizard is told in *Life Histories of North American Cuckoos*, “The lizard confronted by the roadrunner, would flatten out, rise high on its legs, and sway back and forth as if about to leap or inflict a dangerous bite. But the roadrunner is not to be bluffed. Grasping his tough victim by the head or back he beat it against a convenient stone. Thirty or forty blows were needed to render it sufficiently quiescent for ingestion. If swallowed while yet alive it had to be coughed up for further battering.”

The voice of the roadrunner can generally be heard during early morning as the sun is rising. The sound is more of a dove-like cooing and may continue for as long as an hour after sunrise. At other times the voice is more of a purring sound. Some ornithologists think this sound is produced by rolling the mandibles together rapidly and sharply.

Courtship and nest building may begin as early as March and continue through June or July.

The nest is usually constructed at a distance of 3 to 15 feet off the ground in trees, thickets, cactus and even a packrat's nest has been used as a foundation for the roadrunner's nest. Rarely is the nest found on the ground.

Nest construction is of coarse material such as sticks, grass, feathers and even discarded snake skins. The nest may be well hidden or right out in the open.

The female deposits as a rule three to six chalky-white eggs. The eggs may be laid at considerable intervals, however incubation begins after the first of the eggs are laid and is believed to last 18 days for each egg. Perfectly fresh eggs along with newly-hatched birds are sometimes found together.

The young chicks are indeed a motley looking bunch. The only plumage is coarse, long, white hairs which do not cover the dark-skinned body. They have a greasy-black appearance as if dipped in crude oil.

As stated before the voracity of the adult roadrunner keeps it on constant alert for food. With a nest full of young chicks to feed the adult must run themselves ragged in search of food for the growing birds.

The young birds develop fast and after approximately three weeks are able to catch some food for themselves. Mostly small insects at first, but before long they're tackling the large prey.

Even as young birds, roadrunners cannot be classed as timid and shy when in search of a meal. An almost gruesome account in Bent's book on *North American Cuckoos*, recounts the conquest of a large, furred tarantula spider

by two young roadrunners. “. . . With a dash one bird was upon the spider before it could leap a second time. A toss of the bird's head and one of the eight legs was gone. Free again, the spider leaped upon her captor. The other bird now entered the combat, snatched up the spider, and flicked off another leg. One by one the legs went down, and finally both birds pulled apart and gulped the sable torso.”

Unlike his cartoon counterpart who is the happy-go-lucky type, jetting around the desert, perfectly content in outwitting the coyote, the real roadrunner is pugnacious. This means they have a combative, belligerent nature. They will attack dangerous and timid prey alike, but, like all wild creatures, their killing is for the purpose of securing food.

Roadrunners have few natural enemies. Certain birds of prey might on occasion take a roadrunner but the adult birds are usually wary enough and fleet of foot to evade the coyote and hawks. Crows, ravens and some snakes probably take a small amount of roadrunner eggs so the greatest enemy the bird must face is man. Unfortunately when man appears, the roadrunner all too frequently disappears.

The man versus roadrunner dispute is based mainly on the notion that the roadrunner is a quail killer.


There is no doubt that an occasional quail does fall prey to the roadrunner and this puts it in direct competition with man's values. Man does not like any threat to his sport so the roadrunner receives the 'black ball' and is unjustly persecuted.

In *Little Essay on Vermin*, W. L. McAtee comments on the roadrunner versus mankind by saying, “. . . the roadrunner never has been shown to be a special enemy of quail, and it cannot eat their eggs except during a brief season. It eats more scorpions, centipedes, and tarantulas than it does quail eggs, and it is a voracious consumer of grasshoppers. It is a unique bird, not only in our fauna but in that of the world, has extremely interesting habits, and in its choice of food in the long run undoubtedly does more good than harm. Its persecution is all but baseless and is thoroughly unjustified.”

In Kansas and by virtue of the region that the roadrunner inhabits, they are not commonly seen by Kansans. The “snake killer” is afforded full protection by Kansas law and is listed as one of many birds protected by federal law.

If you're traveling the back roads of southern Kansas and come across a rather quizzical, strange-acting bird that prefers to run beside your vehicle rather than fly away, take a second look. Check the way he works that long tail as a rudder as he zigs and zags across the country. After he has vanished from sight, stop and look at the track he left behind. A perfect X. If you hadn't seen him run, you wouldn't know which way he was going when he left the track. You've probably just seen the roadrunner. A delightful bird. Even if he doesn't go “BEEP-BEEP.”

HOW TO BUILD A ROD CASE



By Farrell Brewer
Staff Writer

HAVE YOU ever been getting ready for a fishing trip and stashed an outboard motor in your wagon, only to have it tip over and crush your fishing rod and cardboard storage tube? An incident such as this can be very disturbing, particularly when you're away on vacation, ready to sample extraordinary fishing. You could end up angling with a hand line, if at all.

After such a rod breaking incident, we took measures to guard against future breakage—sort of locking the barn after the horse was stolen. We built a rod box. This gave protection from heavy outboard kickers. It also permitted packing an assortment of rods—fly, spinning and spin-casting—into one package. This is a decided advantage over carrying rods in individual metal tubes. When an occasion to go fishing presents itself, we need only to grab one rod box and we're set for any and all types of fishing.

Our handy carry-all rod box is shown on these pages. If a similar case holds advantage for you, set to work building one now, its fun and relatively inexpensive. Here's how.

Decide first on the dimensions of

the box. Exact dimensions will vary depending on what type rods and the number you ordinarily take along on a trip. We made ours 69 inches long, four and three-quarters inches deep by three and three-quarters inches wide. Depending on how the interior is finished, this small space can carry up to a half dozen rods.

After you decide upon your dimensions, material selection is next in line. We used hardboard siding and three-quarter-inch white pine for this box. If we build another one we will select different materials. You might consider red cedar or white pine planed to one-half inch.

The red cedar is sold for lining clothes closets against damaging moths and is available at many lumber outlets. White pine in half-inch thickness is sold as bats for combine reels. The half-inch lumber will make a lighter box and it will be sturdy enough to protect your rods.

Building a rod case will prove simple matter for anyone with a little ability. I solicited the help of a friend Max Ewert to build my box. Not that I couldn't master a simple task

such as this, but an extra set of hands will come in handy.

The secret in building this rod box or any box, is to glue and nail all four sides and ends into a solid unit. Don't attempt to assemble box and lid separately. One rarely fits the other.

We started by cutting the pieces to length and then ripping the sides to width as well as the top and bottom. This is a simple task if you have a table saw available. If you don't you will need to set up a rip fence for your jig or Skilsaw to do the job. With this accomplished we assembled the two sides to the bottom using glue and nails. Determine where you are going to make your cut for the top and avoid placing nails in this area. We selected contact glue as it was the only waterproof available at our hardware store.

When you have attached the sides to the bottom insert the ends, then attach the top. When the glue cures, saw the lid off the box allowing a narrow strip of side boards and ends to remain as a framework around the lid. This will prevent warpage. To accomplish this task we set up the rip

fence again and cut each side, then cut through the ends with a hand saw.

Before you cut the case you may want to paint it to make it more resistant to moisture. It is easier to paint before you cut it apart and install the hardware.

After painting and cutting, add hinges, clasps and a handle (preferably a folding type) to complete the case.

We selected a thirty inch piano hinge which we cut in half and bradded the ends. Two 15" hinges will give a lid this size ample support. Clasps similar to those used on many tackle boxes were used. Being unable to find a suitable handle we fashioned one ourselves. Using a three-sixteenth steel rod and two eye

bolts. We bent the rod into a handle shape, attached it with the eye bolts and were in business.

If you use red cedar or pine we recommend using a clear finish to bring out the natural beauty in the wood.

You can store rods in this carry-all box in one of two ways. (1) Glue pieces of household sponges into the box. Fit turn buttons above them to hold rods rigidly into place. (2) Let the interior remain free of fixtures. Store rods, in their individual cloth bags, inside the box.

You can either purchase cloth bags to fit the rods or use cloth remnants and have your wife or girlfriend as the case may be, sew a case for them.

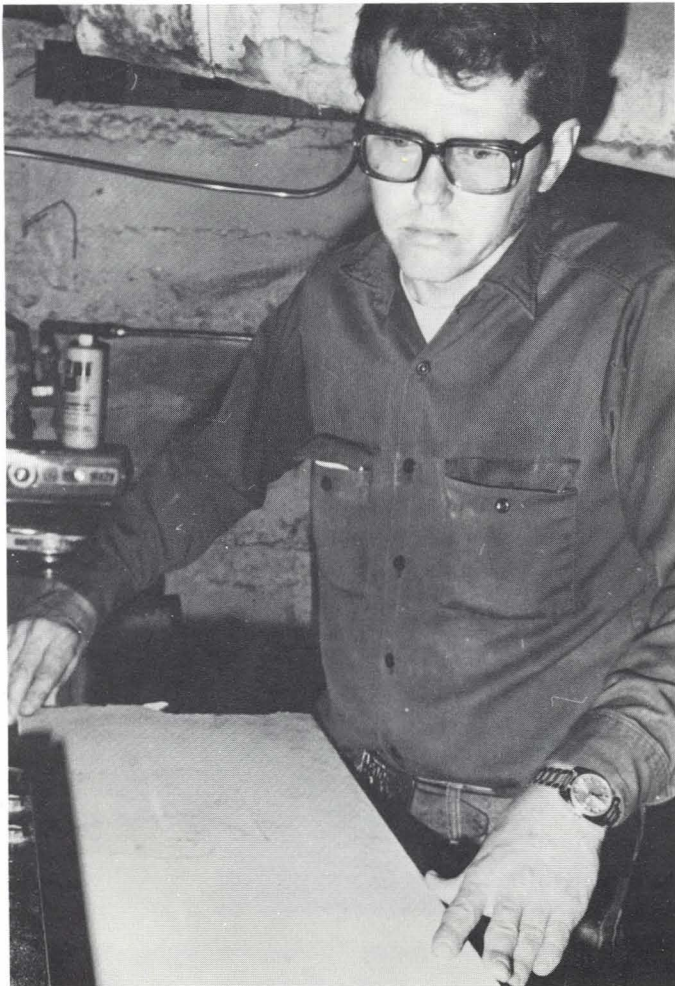
We used method number two for

our case as it permits carrying more rods afield. We also found extra spaces for a spare reel and a box of flies. Keep in mind this case is not designed to replace the old tackle box. It does, however, give space for for storing a few extra accessories.

I recommend building a smaller case for reels. I prefer to remove my reel from the rod and store it in a plastic bag to keep it dust free. I used the same method for my reel box just different dimensions.

You might consider this case a one-evening project. You can build one, even two, in that short time. And if unpainted cedar boards appeal to you, the box can be outfitted with rods and accessories right after the last screw is put into place.

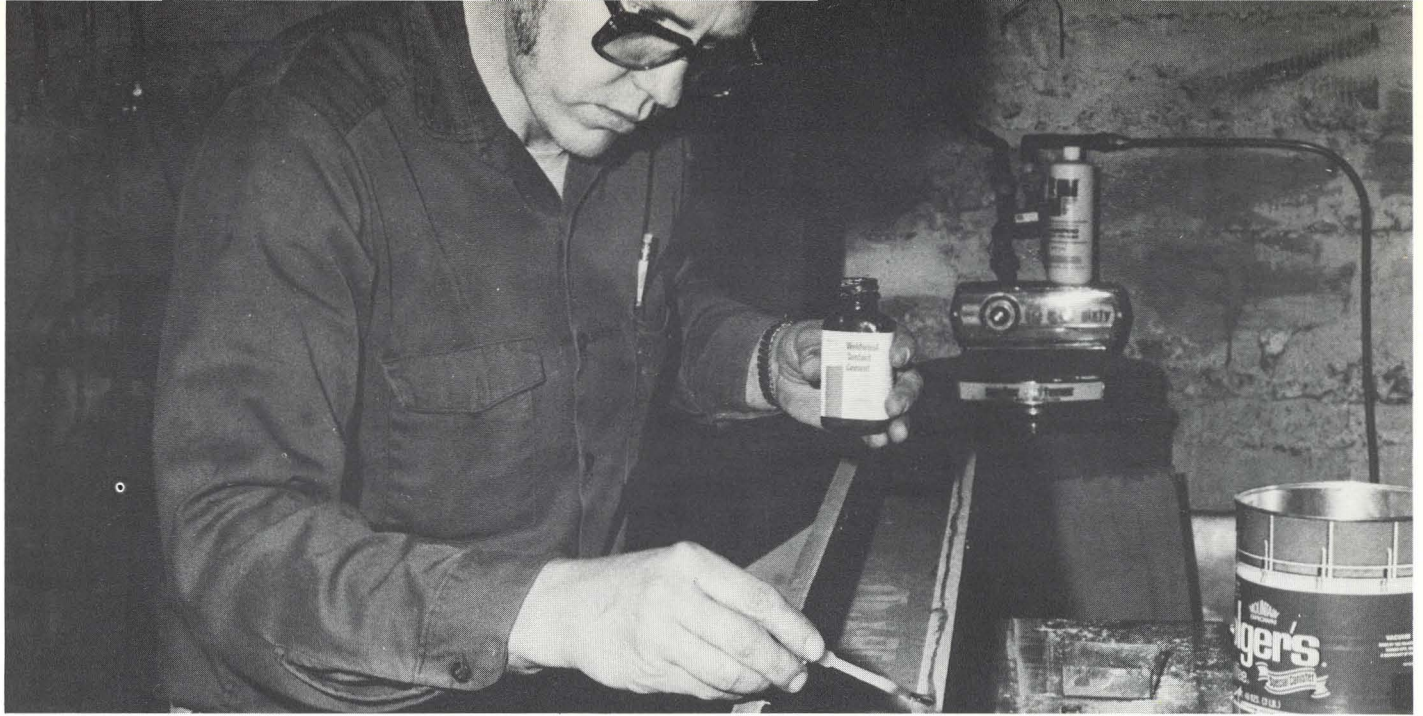
Max Ewert, Newton, cuts a piece of hardboard siding to dimension.



It is necessary to predrill nail holes in the hardboard for assembly.



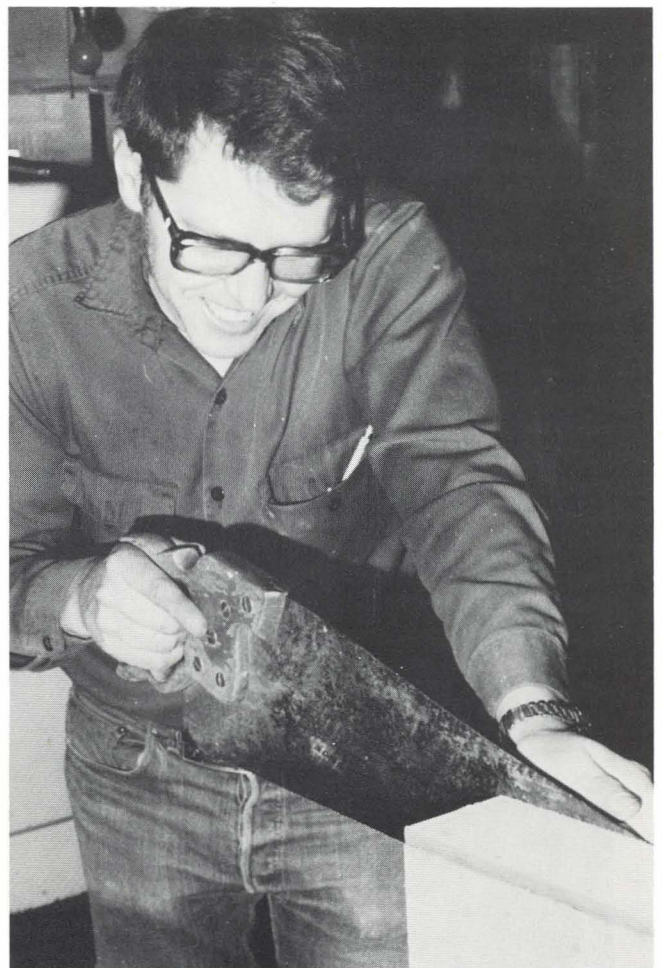
Photos by the Author



Contact cement was used in the joints for strength.



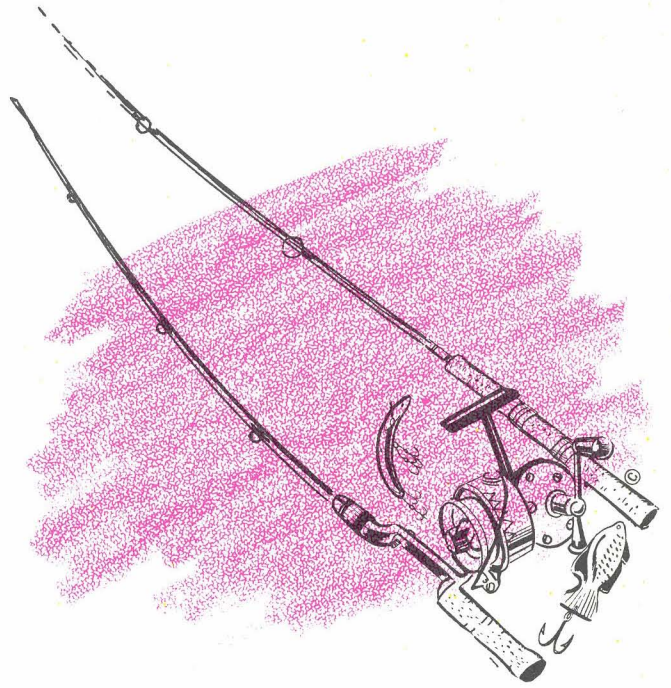
After sides, top and bottom and ends are assembled Ewert assisted by Lee and Carl Vinson prepares to cut the top from the rest of the box.



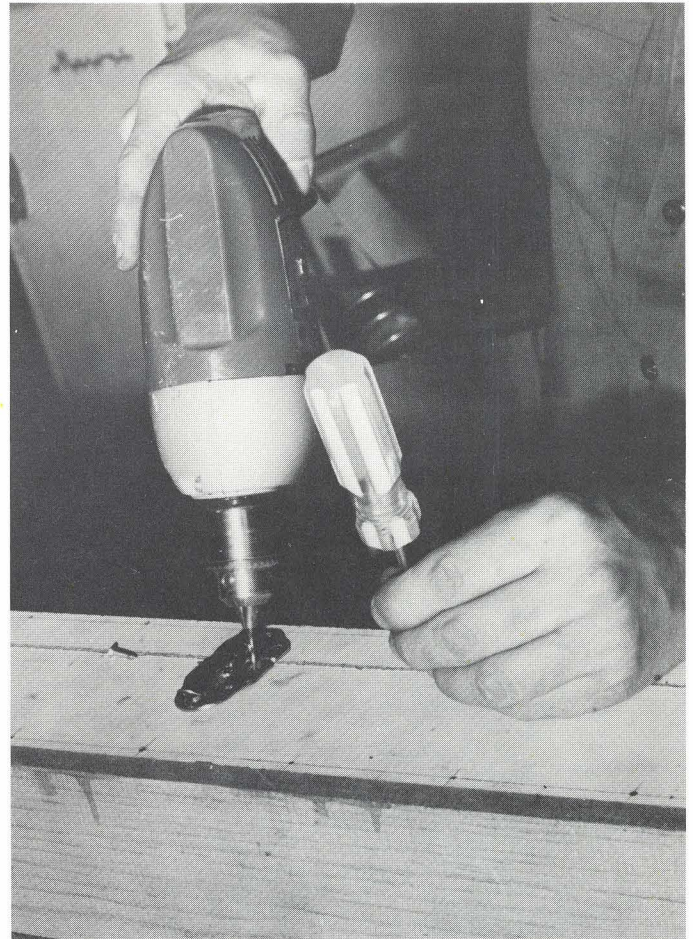
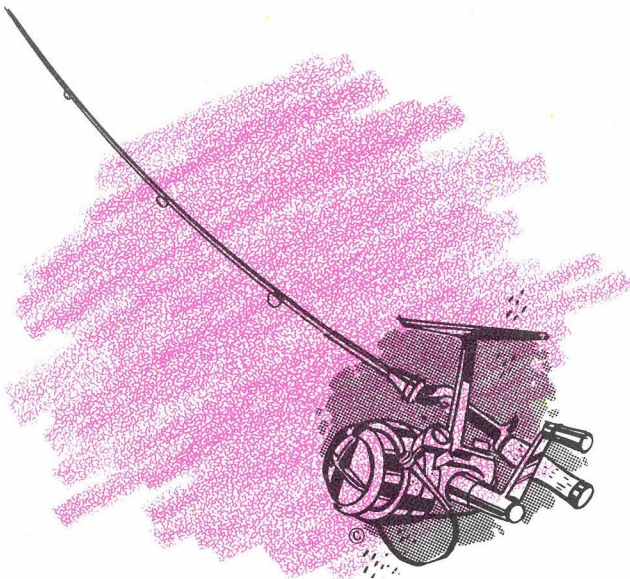
A hand saw was required to complete cutting the top off.



The completed box will hold five or six rods with ease.



Predrilling pilot holes for the hardware makes assembly easier.



KANSAS

Snakes

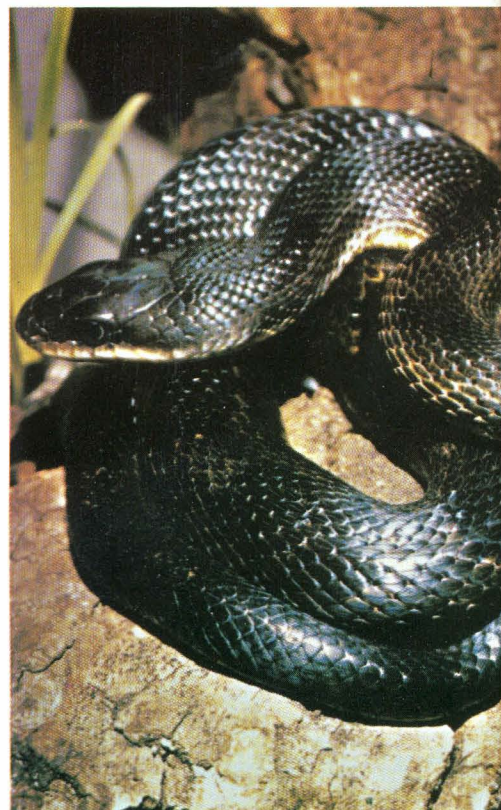
..an educational experience

By Joseph T. Collins
Vertebrate Zoologist

The brightly colored speckled kingsnake is a cannibal and should not be kept with other snakes.



An adult black rat snake may bite when first common in eastern Kansas.



SNAKES are fascinating creatures, and some kinds are easily maintained in captivity where their interesting habits and behavior can be easily observed. However, many kinds of snakes do not adapt well to captivity, and in this article I stress maintaining only those kinds which have proven, by my own experience and that of many other herpetologists, to be good captives. In addition, I strongly recommend that students wishing to cage and maintain snakes do so only under supervision of their biology or science teachers.

Individuals should not maintain snakes in their homes, for many reasons. First, to collect snakes in Kansas is to remove them from their natural environment, and may result in disruption of their natural populations and those of the surrounding wildlife. Most biology teachers have, or can obtain, a scientific collecting permit from the Kansas Forestry, Fish and Game Commission. This permit is issued to qualified individuals for legitimate educational purposes.

Second, some cities and towns in Kansas have ordinances against the keeping of "noxious" animals in homes or dwellings. Although these ordinances have been enacted primarily to discourage keeping venomous snakes and other potentially dangerous animals, they may extend to *any* harmless snakes provided a complaint

is registered. Third, keeping a private, live collection of snakes may be an educational experience for some persons, but for most it becomes merely a "postage stamp" type of situation in which the collector simply captures snakes so he can boast of having many different species in his collection. These collections have little educational value.

For those who wish to collect snakes and maintain them for observation, the first problem is: what kinds should be collected? Many species of snakes are nervous, temperamental animals with secretive habits and highly specific diets. They do not make good captives. Examples are western worm snakes and prairie ringneck snakes which feed on earthworms and must have a substrate retreat in which they can constantly burrow. They are difficult to observe in captivity, and thus do not lend themselves to an interesting educational experience. The snakes, like all the small, secretive species found in Kansas, may be maintained in captivity for a few days for observation and handling, but should soon be released **exactly** where they were captured. The delicate, graceful rough green snake is a nervous creature and feeds only on insects, making it very difficult to maintain during winter months.

Some larger snakes such as yellow-bellied racers and

aptured, but soon becomes gentle. It is

An adult red-sided garter snake makes an excellent captive. It is common throughout eastern Kansas.



Photos by the Author

coachwhips are extremely nervous and aggressive, and can inflict a painful bite. They rarely adjust to captivity, and must be maintained in separate cages since they will eat other snakes. Water snakes are also large, aggressive snakes which can inflict a nasty bite. They can rarely be trusted, and thus do not make good captives. Venomous snakes are dangerous and, if kept, must have secure locks on their cages to prevent accidents. Most venomous Kansas snakes are temperamental and frequently refuse to feed. I do not recommend maintaining any venomous snakes in captivity.

Fortunately, several species of harmless snakes found in Kansas frequently do very well in captivity. Among the easiest to maintain are the red-sided garter snake and the Plains garter snake. Both of these attractively colored snakes may be aggressive when first caught, but they quickly become docile after regular handling. In addition, both species eat a wide variety of foods that are readily obtainable during the entire year. Examples of prey items that both kinds of garter snakes relish are earthworms, minnows, toads and frogs. The first two prey items can be obtained at bait stores during winter months. Another educational aspect of maintaining garter snakes is the possibility of observing the birth of young. Both species are live-bearers, giving birth to large broods. Females caught during June may be pregnant and, if so, will give birth in late July, August or early September.

For individuals and schools that can regularly trap small rodents, or who have a ready source of laboratory mice, there are several additional kinds of snakes that can easily be kept in captivity. The western hognose snake is an interesting, gentle animal. Although

it hisses, spreads a hood, and acts aggressive when first encountered, it never bites, and soon becomes an excellent captive. The western hognose snake frequently prefers to eat toads, a prey item not normally available in winter. However, most examples of this snake will also consume small rodents, so initiate feeding of captive specimens with mice instead of toads.

Rat snakes make good captive animals. Although large examples will inflict a nasty bite when first caught, they can soon be tamed by gentle handling. The black rat snake and Great Plains rat snake or both found in Kansas, and they capture and kill their prey food by constriction, behavior easily observed in captive specimens. Both species eat rodents.

One of the most beautiful mouse-eating reptiles is the speckled kingsnake. This Kansas snake is gentle and mild-mannered, and generally does very well in captivity. During the first few weeks of captivity it should be watched carefully when handled—some individuals will slowly and deliberately bite and hang on, an unpleasant experience. Also, speckled kingsnakes should **never** be kept with any other snakes—they are cannibals and will eat other snakes, as well as lizards and rodents.

Perhaps the most popular captive snake in the classroom is the bullsnake, a large constrictor that occurs throughout Kansas. Bullsnares hiss and bite when first captured, but most individuals make good, hardy captives that can be regularly handled. They are strictly rodent-eaters, and large individuals can consume many mice. If you keep this species, have a good mouse supply!

The seven snakes mentioned above are the best Kansas species to maintain for educational purposes in the classroom. A word of caution—keep only one or two

An adult western hognose snake. This alert, chubby creature never bites and is easily handled.





A bullsnake grows very large and can consume many mice. It is common throughout Kansas.

snakes. Do not try to keep large numbers of snakes. This increases the chance of disease and will require a large amount of work to maintain healthy animals.

How do you find, capture and transport a snake? Assuming you want only a harmless species such as one of the kinds recommended above, it is fairly easy to obtain a snake in the wild. With the advent of spring, snakes emerge from their winter dens. They can generally be found basking in the warm, spring sun in larger than normal numbers around these den sites. Excellent places to search for snakes are crumbling rocky, outcrops along south-facing hillsides or slopes. Rock walls or rock fences are also ideal collecting spots. Be sure to lift all large rocks and replace the rocks exactly as you found them. This ensures that habitat will not be destroyed. In addition, always ask for permission to hunt snakes on private and public property.

When you discover a harmless snake, grab it (gently, and wearing gloves), pick it up, and put it in a container or, preferably, a sack (a pillow case is an excellent snake sack—be sure to check for holes). Using a sack allows ease in carrying, prevents heat stress, and is inexpensive. Be sure to keep the sack and its reptilian contents away from lengthy exposure to direct sunlight. You are now ready to transport the snake home to its cage.

Please do not purchase snakes from pet shops or animal dealers. Some of the many reasons to avoid this practice are (1) that purchased animals are frequently diseased and poorly maintained prior to retailing, (2) that non-native species may escape and be established in Kansas to compete against our native fauna, (3) that commercial sale and purchase of many reptiles (particularly endangered species) require permits, and (4) that you cannot morally release the snake because you don't know where it was collected. It should not

be released because it may pollute the gene pool of a native population.

For educational purposes, the seven Kansas snakes I have recommended as good captives can easily be maintained singly in a 15 or 20 gallon aquarium with a snug wood-frame mesh or screen lid. Each aquarium should have an appropriate retreat box, and a heavy *straight-sided water* bowl (such as a fingerbowl or heavy pet dog water bowl). Do not use saucers for water bowls—they are too light and can be tipped over easily by a snake. Do not put gravel or wood chips or other substrate in the aquarium. This creates hiding places for mites and other pests—in addition, it makes the aquarium more difficult to clean. Instead, use newspaper laid flat on the floor of the aquarium. Although not as pleasing to look at, it is functional and quite comfortable for the snake. Clean the aquarium each time the snake defecates to reduce odor.

To maintain healthy snakes, follow certain sensible rules: (1) keep the cage dry (except for the waterbowl—a damp cage can cause ugly skin blisters), (2) maintain the air temperature between 70°-85° F.—do not expose to constant direct sunlight, (3) keep only one snake per cage—this prevents transfer of diseases, and (4) remove any live mice not eaten—they may injure your captive snake.

To enhance your educational experience, regularly record dated information about your captive snake such as (1) food eaten and how much, (2) defecation, (3) shedding, (4) courtship and mating behavior, (5) births, (6) weight, and (7) length. Watch your snake as it goes about doing the things a snake likes to do—you will discover a deep appreciation of the fascinating adaptations that permit these strange reptiles to exist and thrive throughout the prairies and forests of Kansas.

The C A R P



.....KING OF FISHES ??

By Bill Scott
Staff Writer

So THERE WE were, lookin' kinda sheepishly at each other. The Great Carp Expedition (GCE) had been organized. It'd been planned with the skill and precision of a jail break. I'd quietly picked up Jerry Dishman, master hunter safety instructor in Riley county, Jerry's boy Jerry Joe and his pal Andy. Then we'd met Boyd Hampton from Junction City inconspicuously as possible in a pizza hangout's parking lot. We'd slipped down back streets in Manhattan covertly as thieves in the night, glancing sideways fearfully, wondering if anyone had guessed what we were up to. Now here we were, down at the Kaw. Boyd's a crappie fisherman deluxe at Geary State Fishing Lake and Milford Reservoir. Jerry's a bass and channel cat artist. I'd called these

two fine fish teasers and said "Let's go fishin', fellas." "Great! What's we goin' after?" With all the dash and bravado of an arthritic bullfighter, I'd muttered it, barely above a whisper. "Uhh—carp." "Oh."

But these are nice guys, gentlemen trained in the Old School which says "Let the other guy be crazy if he wants to." Somehow, their code even extended to humoring the poor soul.

The outfits, landing net, walkie-talkies, yellow corn that had been opened and allowed to ferment overnight and the Wheaties were spread on the Kaw's steep bank.

Boyd stationed himself on a rock jetty and went to work. Jerry Joe and Andy headed west and found themselves an overhang that provided

a smidgeon of protection from the gusty, warm March wind.

Jerry and I began to work a slowly rolling eddy. He ripped open the box of the Breakfast of Champions and brought out a handful. "I'm gonna show you how to make a Wheaties doughball," he said.

He knelt at the water's edge and dipped it only a little longer than you'd leave your hand in a glass of boiling water. With the hands of a master, he began to work it. Slowly, it took the shape of a small orange. Jerry offered me some. "Put 'er on your hook—that stuff's sweet and seems to really get 'em." Amazingly to me, those Wheaties had taken on the texture of roughly a deflated football. The Breakfast of Champions

was flung into the Kaw, intent on building athletic fish.

The spinning rods were still nodding listlessly an hour later.

Boyd looked forsaken on that rock jetty.

Andy and Jerry Joe looked like woe-begone orphans.

Jerry's frown got darker.

"Well, I can't figure this out!—"

The Great Carp Expedition was in trouble. What's that old saying—"When the carp won't bite, you can always fish for bass"? Or something like that—

The mood started getting a little ugly. Disconsolate carp fishermen are a mean bunch.

Jerry spoke. "What not try it over at Crystal Lake? There's jillions o' carp in there—we oughtta get over on those mudflats where the water's warmer."

Hope blooms eternal in the human breast.

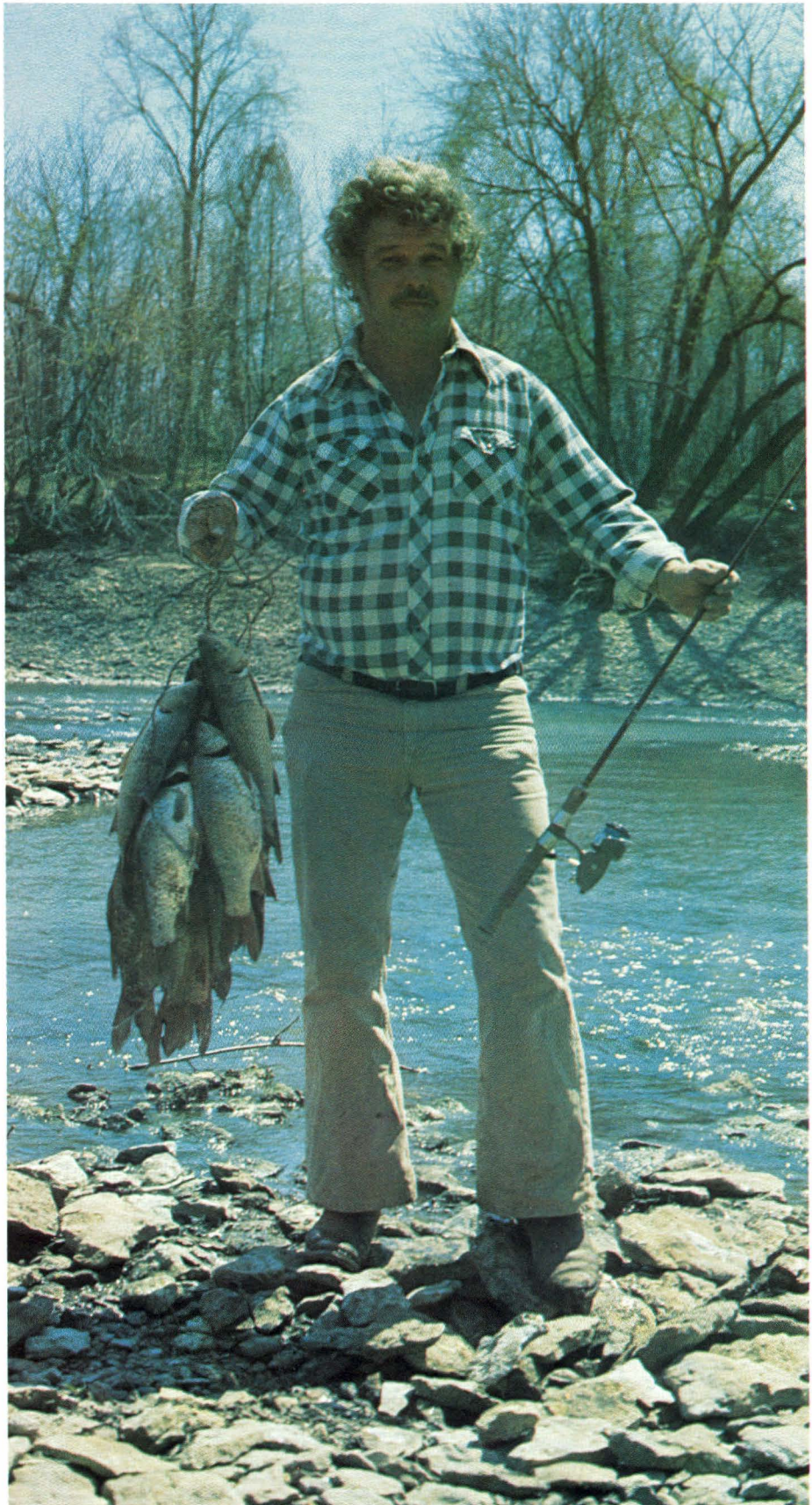
As we toted gear down to Crystal, we noticed a Ft. Riley soldier was intently watching his poles. He was fishing deeper water, near a protruding log.

Crystal Lake is a favorite fishin' hole southwest of Manhattan. It was the river channel prior to the 1951 flood. Now, it's a naturally impounded lake gracing the edge of a golf course.

Worms, Wheaties, and yellow corn went flying out. Mentally, I began to make excuses for the endangered expedition. "Those Nebraska carp fishermen haven't come to Tuttle or Milford yet—so guess I'll write about what should happen." Jerry read my mind. "What're you goin' to write about if we don't catch anythin'?" "Well, I'll just talk about places to fish for 'em, how to go about it—y'know, some o' that stuff."

Behind us, a golfer sliced his ball and it fell—kersplat—into Crystal next to our lines. "Scare away the carp, willya? Maybe we oughtta be usin' golf balls for bait."

Wait! For the love of carp! Boyd's line tightened to a bowstring, then slacked rapidly. He leaped to his feet and I grabbed the camera. Furiously, he cranked in slack, then whacked his spinning rod backwards with a vengeance.



Dean Hedden, Chanute, displays a string of Neosho River carp.

Everything went kaput. Line instantly went limp, started blowin' in the wind.

Boyd turned. "He broke my line!" "What pound test were you usin', Boyd?" "Ten pound."

Now that was a carp.

"Where there's one carp, there oughtta be more!"

He went after it with renewed zest. It didn't take Boyd long to get one workin' again. He set the hook vigorously on one of those taps and cranked it in.

A husky, one-half pound carp hung on that hook, looking a little bewildered with that tattered worm dangling from its mouth. Boyd didn't look awestruck either. Oh well, I got my picture.

But Boyd was not to be the only hero. Jerry sang out. "He's got one!" Jerry Joe's rod was bent in that blessed upside down "U." I stumbled over rocks to snap a picture of another desperate battle. Jerry Joe landed a carp the size of a Big Mac. "You got one, Jerry Joe!" "Yeah." The tone was the same as his dad's when he announces he's out of a poker hand.

While the carp languished in splendor in the grass, I snapped some more pix.

A golfing party moved by. "Fish bitin'?" "Yeah." "Really? What kind?" "Carp." "Humph." I growled mentally, "Keep movin', men. Mind your own business. You know as much about fishin' as we do about golfin'. Don't ya recognize carp specialists when you see 'em?"

We'd had enough success for one day. Gets heady after awhile.

As we were trudging out, the Ft. Riley soldier showed us what it was all about. His rod bent in that way that means business. A burly carp rolled to the surface, muscular yellow tail flailing. It burrowed deeply, fighting like a mad bull. The fish finally tired, slowed its twisting motions, and rolled onto its side, exhausted.

It wasn't until after picture-takin' time I noticed that carp had been subdued with a spincasting rod with its tip broken off. I figured that just about topped the day. I was wrong. "What'd you catch him on?"

"Chicken liver."

Yep, carp will hit just about anything. Doughballs, worms, yellow corn, minnows, imitation maple flavor daubed on another bait, bread, a hunk of your bologna sandwich, and others all work. Spittin' on your bait can really help. Tests show saliva's a natural attractant. Chew tobacco? Tobacco juice gets 'em too.

Using a slab of boiled potato is a new one. English author-conservationist Fred Taylor, writing in *Why Fish Carp?*, says it's the best way to go for three reasons:

1. The little ones can't handle it and therefore won't nibble it to death.
2. It won't settle into the mud.
3. There's enough casting weight in a spud you don't need a sinker.

Taylor maintains that many times if a carp feels a sinker's weight he'll drop the bait and run, much as a wily channel.

Taylor gets carp fishin' down to an exact science. As he knows and you know, you can never tell about the mood of a carp. Sometimes they'll tap, tap, tap you right out of bait. Other times a carp will grab it and steam for the bottom like them poor chickens at Wolf Creek Pass. Taylor says the best way to avoid that bait-stealing is to fish with a slack line, preferably without a sinker. Just let the slice of bread, slab of potato, or hunk of yellow corn supply the weight.

And Taylor makes a lot of sense when he says that sitting there with the line pinched between your index finger and thumb detecting every nip and pluck gets old when the action's slow. It's a ball when the carp are movin', but when they're sluggish you can feel your whiskers grow before they'll bite.

Why not try his trick: With Taylor's method, the rod is left in two rests, the one closest to the water being shorter so the rod angles downward. Pinch a bobbin—a piece of mud or tin foil—onto the line between the first two butt rings. When a carp is mouthing that spud, the bobbin rises.

The carp is here. Brother, is he here. The fish English and Asians call "King of Fishes" came to America—just barely—in 1872. J. A. Poppe

of Sanoma, California shipped 83 of 'em by steamer from Holstein, Germany but only five scrawny, sickly *cyprinus carpius* survived. (Stop muttering to yourself "He shoulda let 'em die.")

Poppe brought them back to robust health. Did he ever. By 1876, he was peddling carp to state Fish and Game departments across the country, Central America and the Hawaiian islands. Others joined Poppe the peddler, until a peak of 260,000 was reached about 1883. Two hundred ninety-eight of the 301 Congressional districts got carp that year.

That's when the King began to turn into a crumb. That same year, the increase in carp at Lake Erie paralleled an enormous decrease in wild celery and rice beds. Lake Erie was hit especially hard because it's shallower and warmer than other Great Lakes. By the turn of the century, carp were going like crazy through the country's lakes and rivers.

About 15 years after carp had been stocked in central Canada, Edward Prince warned his fellow Canadians: "German carp are nomadic in their habits and wander apparently aimlessly into all accessible waters, hence if introduced into any streams, will spread rapidly over the whole system—"

I've gotta confess I'm nuts about duck hunting. Carp didn't earn my affection either when I learned some of the finest canvasback lakes in the country were ruined by carp, lakes like Koshkonong in Wisconsin and Pomme de Terre in Minnesota. The "King of Fishes" devastated wild celery beds and pondweeds there that once attracted clouds of canvasbacks.

Carp not only uproot aquatic vegetation but muddy the water as well, cutting down light penetration necessary for growth of submerged plants. Some researchers fenced the bottom rooters to show what happens when carp move in. Inside the fence, the water is clear and vegetation is luxuriant; outside the fence, muddy water and destroyed plant life is all to be seen.

But we've got the carp to live with. As Leon J. Cole reported the U. S. Fish and Game Commission in



1905,—“the only practical remedy is removal of the fish.”

And how, pray tell, can you kill out the carp without killing all the desirable fish as well in a given impoundment?

You can't.

Not at the present time, at least.

Since this is true, why don't we make the best of him? Maybe we won't ever crown the carp King as they have in Europe and Asia, but maybe we're kinda missin' the boat by lookin' at 'em as trash. Carp do have some redeeming features, after all. They'll bite when nothing else is stirrin', they'll fight like bulls and they're just about everywhere.

That still leaves a problem, doesn't it?

Eatin' 'em.

You look at the kind of water they often come out of and you look at that vacuum-cleaner mouth and a body shaped like a shoat and you think “Carp! Throw 'im back on the bank!” Or, if you're feeling particularly energetic, you take your carp home and let 'em fertilize your garden. And yeah, you can file a carp and prepare it on a board; eat the board and throw away the carp.

But it doesn't have to be that way. I'm sittin' here right now with my mouth drooling, looking at the recipe Ed Augustine of Junction City sent me. Ed, a veteran outdoorsman with the Geary County Fish and Game Association, wrote me a heckuva letter I'd quote verbatim if I had copy space.

Before I give you the high points of Ed's recipe, let me say right now that the common feature all the recipes you're about to read is—get that dark line out on either side of the spine! Whether it's called a “blood line” or “mud line,” it'll ruin the whole shebang. Pressure cooking is common too, and will soften those bones, but Ed's got a neat way to handle em, as you'll see.

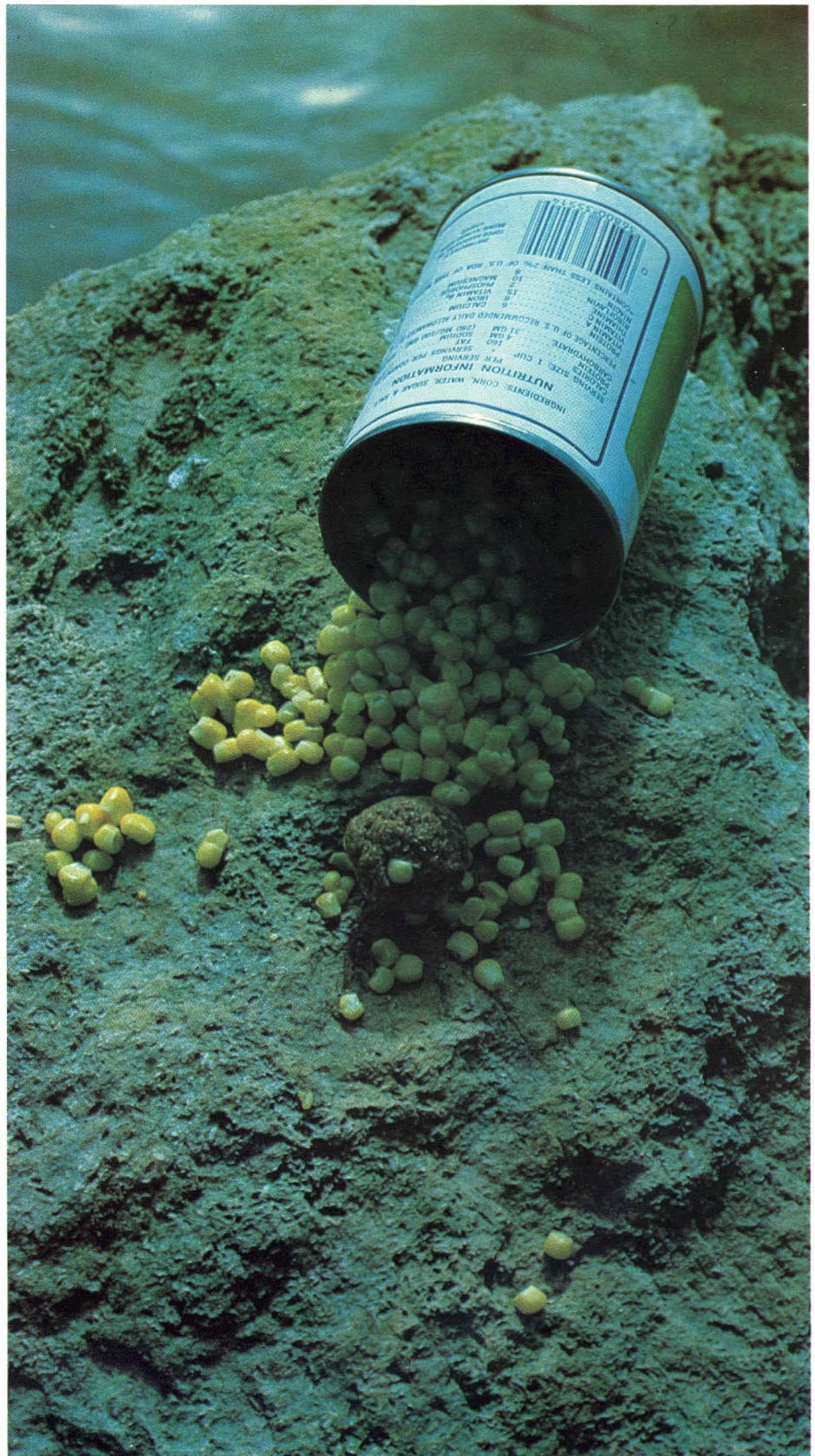
Ed Augustine's Carp Recipe

Filet the fish; easiest way is to use an electric knife.

Cut out the larger bones

Freeze the filets

Take 'em out of the freezer two



Canned corn and doughballs made from cereal and various other ingredients are both effective baits for carp.

days before the fish fry. Put the carp in coolers, without lids. Don't expose the filets to high heat, but they should thaw slightly.

The next day, grind the onions—one-half yellow, one-half Bermuda. Grind the onions in a fine food grinder. Place in separate close containers and refrigerate. Then, with the fish still slightly frozen, place them in the grinder. This will chop what few bones remain. Put the carp in separate closed containers and refrigerate.

Break up Saltine crackers. Mix them together dry with salt and spices including salt, pepper, sage, garlic salt and celery salt. Also, lots and lots of lemon juice.

On the day of the fry, mix carp and ground onions thoroughly, adding lemon juice.

To cook, use either bacon drippings or cooking oil. With a patty maker, make six patties to the pound. Cook until slightly brown on each side.

Serve with tartar sauce on buns. It'll be reminiscent of salmon patties!

I realize I didn't give the amount of spices. When Ed prepares his carp for the Geary County Fish and Game Association, he works with 10 pounds of carp or buffalo. When working with that much, Ed uses two white and two Bermuda onions, six tablespoons of salt, one teaspoon pepper, six tablespoons sage, two teaspoons each of garlic and celery salt, at least 10 tablespoons lemon juice (better too much than too little), and 150 to 200 crackers. That might give you some idea of how to pare down the ingredients if you're working with a smaller amount of fish.

Here's another good-sounding one.

Pan-Fried Carp

2 lbs. carp ½ cup all-purpose flour
2 tsp. salt ½ cup corn meal
½ cup milk 3 tblsp. fat or drippings

Cut fish into portions for serving. Salt on both sides and let stand for about 10 minutes. Dip the pieces in milk, drain and roll in the flour and corn meal mixture. Melt fat in skillet. When fat is hot but not smoking, fry fish for about 10 minutes on each side. Or how about this one?

Steamed Carp with Tomato Sauce

3 lbs. carp, dressed ¼ tsp. pepper
for baking
2 tsp. salt 1 cup water

Cut dressed fish into portions for serving. Season with salt and pepper and place on a rack over water in a pan with a tight-fitting cover. Steam for 10 minutes. Serve hot with tomato sauce.

How about that? Doesn't sound half bad, does it? You can get many more carp recipes from Don Gapen's booklet "Why Fish Carp?" It's available by writing: Don Gapen, Big Lake, Minnesota 55309.

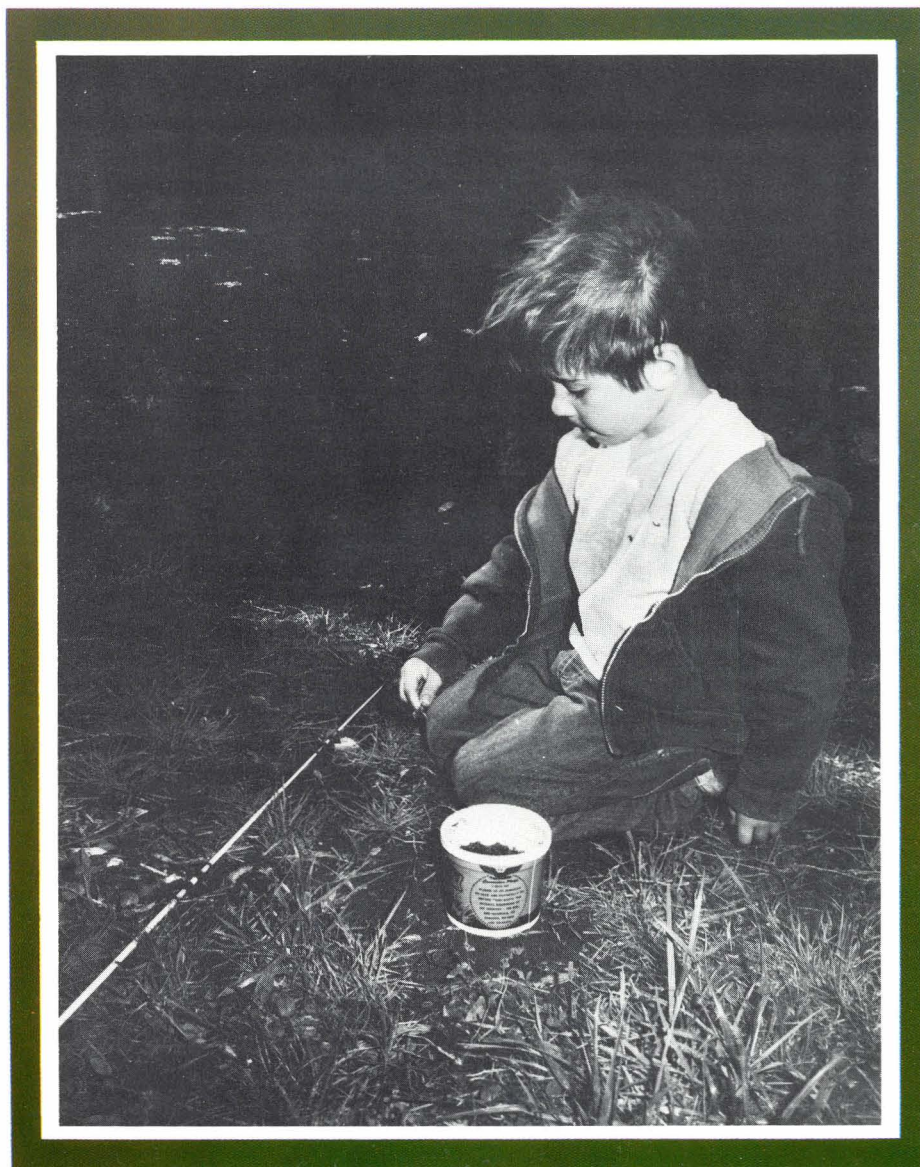
Yep, that was quite a trip. I was sorry Lou "Carpman" Constantino, of WREN-Radio Outdoor Sportsman fame, wasn't along. Lou has a pet carp he's trained to lay down, roll over, and stand up and beg. As most eastern Kansas sportsmen know, Lou's on Monday through Friday 5:45 p.m. and 8:45 Saturdays.

We needed Carpman along to show us how to do it.

'Scuse me, please!

Gotta get Carpman and go catch a carp.

For the youngster with a can of worms, carp are the perfect fish to start on.



Ken Stiebben

The American Bald Eagle

OUR NATION'S SYMBOL

By **George Anderson**
Staff Writer

JULY 4, 1776 was a busy day for the delegates of the Second Continental Congress. Aside from the afternoon signing of the Declaration of Independence, many matters of less significance had to be done. One of the lesser items on the agenda, but one the Continental Congress felt was urgent, was the need for an official seal.

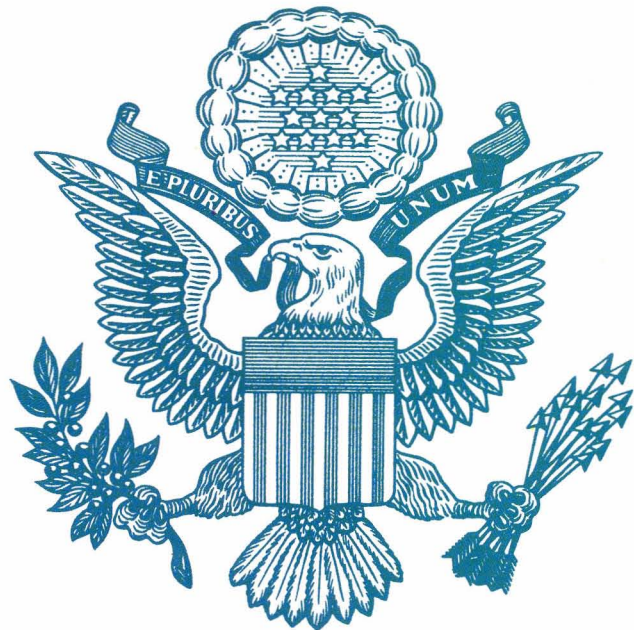
True to the "American Way" they appointed a committee to study the problem and bring in a design for a national seal.

The importance of the seal was reflected in the membership that was selected to serve on that committee. Excluding Robert Livingston and Roger Sherman, it was the same group that had drawn up the Declaration of Independence. The three-member committee was comprised of Benjamin Franklin, John Adams, and Thomas Jefferson.

The design that was finally presented by this committee failed to impress the congress and urgent or not, the selection of a seal was tabled for almost four years.

It was not until **June 20, 1782**, and several committees later, that the Continental Congress adopted a design and it was by this action that the American eagle became the national symbol.

The choice of the eagle as the nation's symbol was apparently a popular one. George Washington was the first to use the eagle seal on an order arranging the exchange of war prisoners with Great Britain. Since that time the eagle has appeared on about anything you can think of. You're probably carrying a likeness of the eagle in your pocket now. Look at your money—there is a good chance there is an eagle on some of the coins or paper



money you have. Every courthouse and federal building generally has an eagle statute and an eagle stands atop most flag poles.

The bald eagle is native only to North America, except for a few that are found in eastern Siberia. The scientific name of our national symbol is *Haliaeetus leucocephalus*, which literally translated means white-headed sea eagle.

The head of the bald eagle is covered with white feathers. It is not actually bare as the name would imply. The original Greek meaning of the word bald is white, not bare. It is not until the young bald eagle is four or five years old that it develops its white head and tail. Until this time the bird is often mistaken for a golden eagle, which is uniformly brown in color.

The U. S. Department of the Interior in their publication "Bald Eagles in Alaska," describe two races of bald eagles, the northern and southern race. Much has been heard about the plight of the southern bald eagle whose breeding range is basically along the southeast coast of the United States. Its numbers have been decimated by destruction of habitat, ingestion of pesticides and indiscriminate shooting. It has become an endangered species.

The northern race ranges along the northwest coast from Washington to

the Aleutian Islands. In some parts of its natural range, the northern bald eagle has been a victim of the same problems that have affected the southern race.

It's an unfortunate fact that most Americans have never seen an eagle in the wild. Sure, you'll see an occasional specimen of our nation's symbol in one of the many zoos across the country and there is generally a good reason why the bird is there. He might have hit a high line and broken a wing or fell victim to the indiscriminate shooter. Notice I said "shooter," not hunter or sportsmen. There is a big difference.

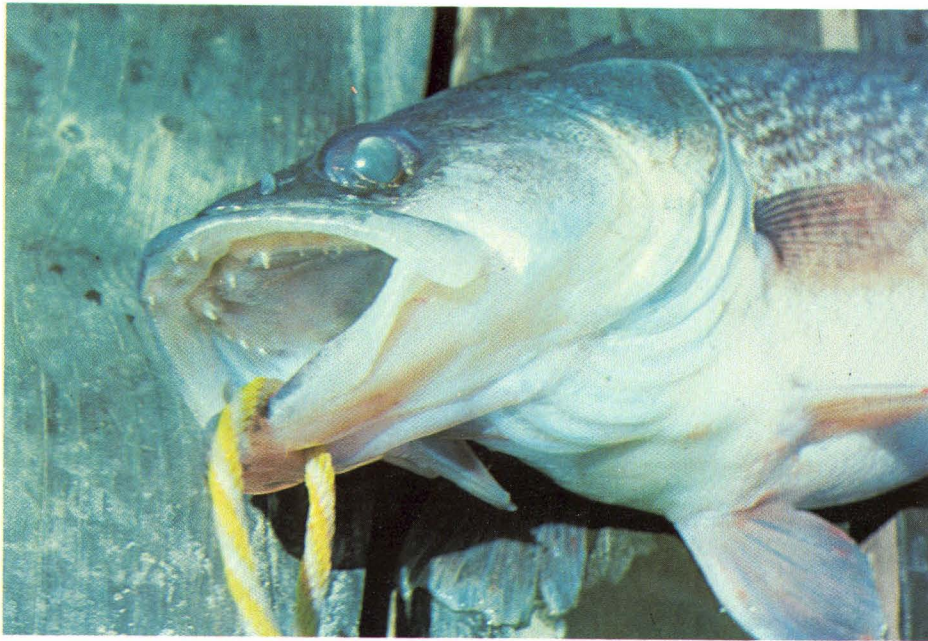
During late winter in Kansas the bald eagles can be found around many of our lakes and reservoirs. When the lakes are frozen the eagles can be seen setting on the ice watching for crippled and sick waterfowl that share the lake with them. Fish is a favorite of the bald eagle and much time is spent digging winter-killed fish from the ice.

The eagle's future, as they fight to exist with man in his modern environment, still awaits the final chapter. The decision will be ours to make. Let's hope we make the right one for it will be a sad day when the great bird, white head reflecting the cold winter sun, ceases to cast his graceful shadow across the country that made it a nation's symbol.



Albert Carl Gilbert
© 1973

Art courtesy National Wildlife Art Exchange, Copyright 1973



**By Farrell Brewer
Staff Writer**

THE WALLEYE has become an important game fish in Kansas. It takes artificial lures readily and is among the finest of fresh-water fishes in flavor. It has been welcomed by sportsmen wherever it has been introduced.

Names such as yellow pike-perch, walleyed pike, pike, spring jack and jack-salmon have been pinned on the walleye. The scientists call this fish *Stizostedion vitreum vitreum* (Mitchill) to prevent confusion created by the common names. The common names, referring to "pike" and "jack" would indicate that this fish is related to the pike family. These common names possibly developed from the fact that the fish is relatively long and round like members of the pike family. Actually, the walleye has no relation to pikes at all, but is a member of the perch group.

Although anglers nationwide do not agree on a common name for the walleye they do agree this fish is one of the best in the old frying pan.

Many Kansas anglers have been told the walleye is a new fish and was recently introduced in the state. This is not totally true. Dr. Frank Cross and Joseph Collins associated with the University of Kansas Museum of Natural History in their book *Fishes*

in Kansas say the walleye was recorded in Kansas as early as 1865; thus, it may have occurred naturally in rivers of eastern Kansas at the time of settlement.

The large impoundments which have been constructed in the state in recent years has made possible reintroduction of this species to Kansas waters.

The walleye occurs mainly in large reservoirs, but is also found in streams and rivers below the reservoirs. The largest walleye taken by hook and line in Kansas was 13 pounds, one ounce caught by David Watson of Manhattan on a jig in the Rocky Ford fishing area near Manhattan in March of 1972.

This fish is a native of the cool, clear waters of the upper Mississippi valley and southcentral Canada. Because of its desirability as a game fish, it has been introduced in many waters beyond its original range.

The walleye is a brassy olive-buff, sometimes shading to yellowish sides and white beneath. There are no distinct dark bars or mottlings on the sides, but rather an over-all mottling of black or brown. Spots on the first dorsal fin are lacking, but there is a dark blotch at the back of the snout

The W A L L E Y E



BIG CATFISH CATCH--Junior Smith (center) and Leonard Eytcheson (right) both of Route 2, Independence display their catfish haul. The fish were taken on a trotline in Elk River. Perch was used as bait. The biggest weighed 32 pounds with three ranging in weight from 24½ to 28 pounds. Helping the men display their catch is Christopher Hastings of Independence. (Photo courtesy of Independence Reporter)

OUTDOOR PUBLICATIONS NOW AVAILABLE

PRATT--Ah summertime. A time for fishing, boating, poison ivy, chiggers and ticks--good times and bad.

But now there are several publications available which can help increase your good times and decrease the bad.

From the State Biological Survey of Kansas come several extremely informative booklets on three of the most common summertime banes--poison ivy, chiggers and ticks. The authors tell you how to identify, avoid and treat these bad guys. They're free by simply writing; State Biological Survey of Kansas, 2045 Avenue A, Campus West, Lawrence, 66045.

If canoeing is your thing, the Kansas Department of Economic Development and the Kansas Canoe Association has assembled a folder containing maps and facts about canoeing in Kansas. They've also included a list of canoe outfitters, float guides and places where you can rent canoes in the Sunflower State. The material is available free of charge by writing KDED, 503 Kansas Avenue 6th Floor, Topeka, 66603.

The Missouri Department of Conservation has just published a 343 page book entitled **THE FISHES OF MISSOURI**. Written by William L. Pflieger, a research biologist for the Department, the book covers all the fish species in our neighboring state. Since many of these species occur within the borders of Kansas, the book should prove interesting and helpful to those interested in learning about our fishery resource--whether interested amateurs, anglers or professional biologists.

A total of 198 species, divided into 25 families, are described in detail. Information on each species includes common and scientific names, characters, life colors, size, the meaning of the scientific name, and sections on distribution and habitat and habits and life history. For selected species there is information on the fish's importance to man and on angling techniques.

THE FISHES OF MISSOURI is available from the Missouri Department of Conservation, Jefferson City, MO., and sells for \$10 case bound or \$7.50 soft cover.

Finally, for cooking your catch, there's a booklet entitled **HOW TO COOK FRESH WATER FISH**. It's written by Joan Cone, author of **EASY GAME COOKING AND CROCKERY GAME COOKING**.

Acting upon requests from anglers in Wisconsin, Kansas, Alabama and other states, Joan Cone has tested and assembled a collection of easy-cooking, good-eating recipes that work with all species of fresh water fish. For your copy of **HOW TO COOK FRESH WATER FISH**, send one dollar to Mrs. Joan Cone, Box 242, Williamsburg, Va., 23185.



CHANGE OF ADDRESS NOTICE

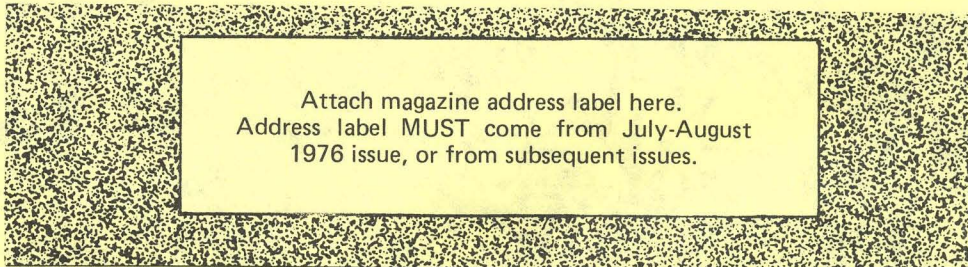
KANSAS FISH & GAME has a new computerized magazine subscription process which starts with the July-August 1976 issue.

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 too:

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Kansas Fish & Game NEWS

CHANNEL CATS STOCKED IN COW CREEK

HUTCHINSON — The second installment of a three year supplemental stocking of channel catfish in Cow Creek has been completed, according to Richard Langenwaller, fourth district commissioner of the Kansas Fish & Game Commission.

"Approximately 1600 channel catfish with an average weight of one pound are being stocked in Cow Creek northwest of Hutchinson," said Joe Lillie, Pratt, aquatic ecologist for the Commission. "The funds for the purchase of the fish were provided by Mid-America pipeline system of McPherson. In August of 1974

a line owned by the company ruptured allowing anhydrous ammonia to flow into Cow Creek killing thousands of fish and minnows."

The first re-stocking effort was conducted during May of 1975 when approximately 2,500 channel catfish ranging from 10-14 inches were stocked in Cow Creek.

"The fish are of harvestable size," Lillie noted. "These fish should provide supplemental catches for area anglers. The purpose of the stocking is to make up for the fishing lost as a result of the kill that occurred."

APPLY FOR ARCHERY PERMITS SOON

PRATT — Kansas bow-hunters are reminded that the application dates are drawing near for applying for archery permits for the 1976 archery deer season.

Archery deer permit applications will be accepted from June 1 until June 21 at 5 p.m. Application forms will be available at county clerks offices, license vendors and from Kansas Fish & Game offices by June 1.

No limit is placed on archery deer permit numbers. Persons applying for archery deer permits must have attained the age of fourteen on or before the opening date of archery season.

The archery season opens October 1 and runs through November 30, then reopens December 18 and continues through December 31.

PLANS UNDERWAY FOR SECOND HUNTER SAFETY WORKSHOP

PRATT — The Athletic Arena at Hutchinson, Kansas, has been chosen for the site of the 2nd Kansas Hunter Safety Workshop, April 23, 1977, after confirmation with Athletic Arena officials and Royal Elder, hunter safety coordinator for Kansas Fish & Game.

Elder said he is expecting about 2,000 instructors and spouses to attend the workshop which is being hosted by the Reno County Association of Kansas Hunter Safety Instructors.

Robert Freeman, president of the Reno County Association, has met twice with Elder and his group in beginning plans for the workshop.

Elder said the workshop will be "a chance for Kansas Hunter Safety instructors to refresh and exchange teaching techniques and ideas." Several training sessions will be held through the day and plans are being made for a program and banquet that night.



Fish & Game Photo

Commissioner Richard Langenwaller and two youngsters watch fisheries culturist Terry Funk stock one-pound channels in Cow Creek.

dorsal fin, usually coloring the lower portion of the lateral line of the body and the cheeks, as a rule, are sparsely scaled.

Young walleyes feed extensively on microscopic animal life and insects. After they reach approximately two inches they begin to add small fishes to their diet. Fishes most often found in the stomach of young walleyes include the young of minnows, suckers and bluegills. Adult walleyes consume large quantities of fish, sometimes feeding upon them wholly. Midgefly larvae are eaten in large quantities by both young and adult and when hatches of Mayflies are available they feed upon them to the exclusion of all other foods. Other

items in their diet include crayfish, frogs and snails, but of lesser importance than fish and insects.

Walleye reproduce in both streams and lakes in Kansas. When the water temperature reaches 45° to 55° walleyes move into shallow waters to spawn. This temperature range usually occurs from late March to early April in Kansas reservoirs.

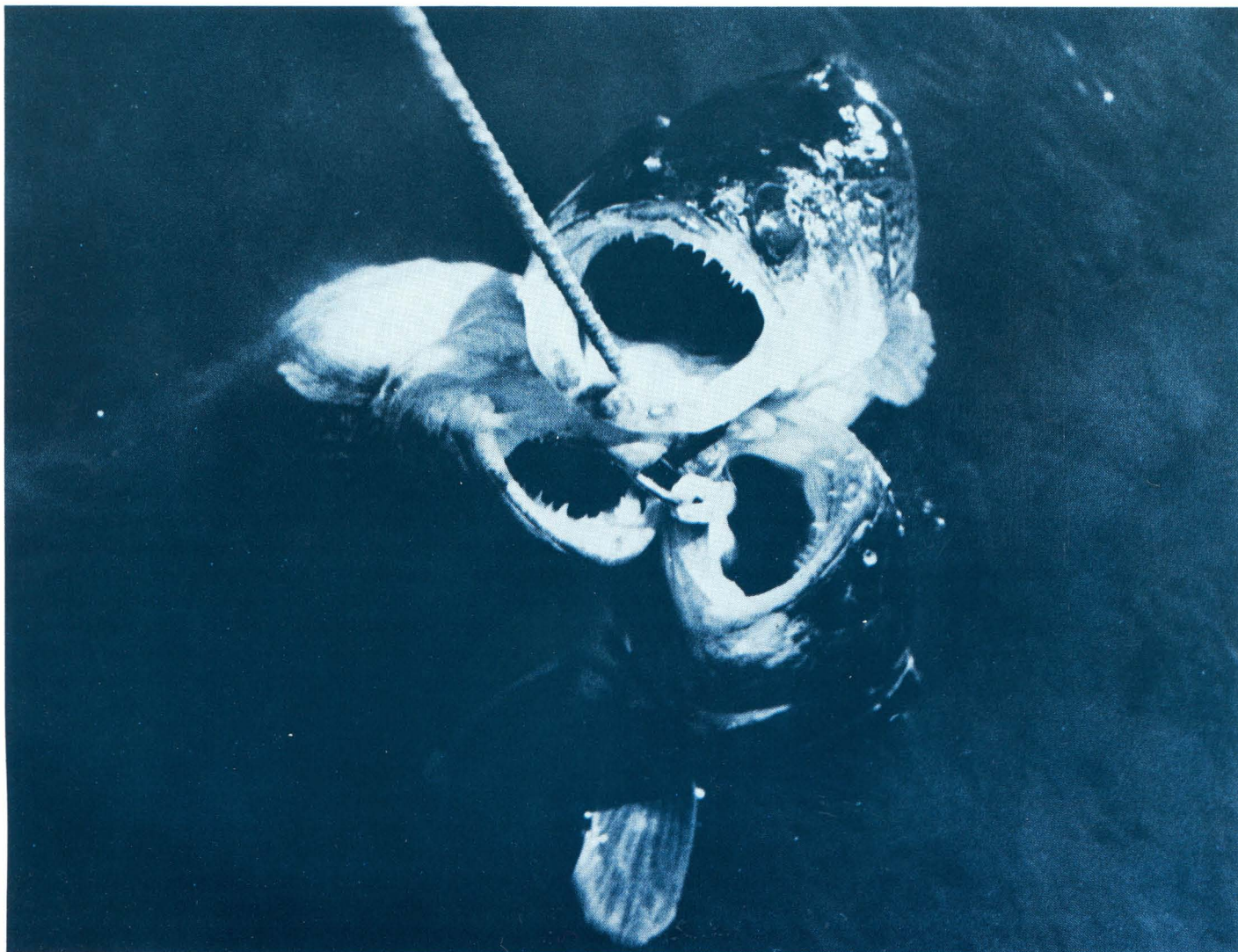
A wide variety of spawning grounds are used by the walleye, depending to some extent upon what is available in any given body of water. This species does not build a nest. The eggs are laid free among rocks and settle to the bottom. There, they are fertilized by the males. They seem to prefer a clean gravel or rocky

bottom on which to lay their eggs, but some research has shown they will distribute their eggs in flooded vegetation. Many Kansas reservoirs have rip-rapped dam faces which seems to attract the walleye spawners. This location also provides the wave action necessary to hatch the eggs. In the rivers the preferred spawning sites are riffles.

Locating spawning areas are very important to the sunflower angler as the walleye provides a prime target during the spawning season. Word of a spawning run at any given reservoir spreads like a prairie fire.

Angling techniques for the walleye are another item on which anglers often disagree. Some contend the only

Sharp teeth make the walleye one of the most efficient predatory fish in our lakes.





Bruce Taggart, commission fisheries biologist, hauls out a nice string of walleyes.

time to fish is during the daylight hours while others feel the hours of darkness provide the best opportunity.

To many fishermen the walleye is one of the most bewildering and infuriating fish that inhabit the waters of Kansas. Although they are sometimes caught by bass and pike fishermen, most techniques used on those species will not produce walleye regularly. To catch walleye successfully you must go after them specifically, even then the results will vary from angler to angler.

They can be caught under a variety of conditions in rivers and in lakes any time of the day or night and at any time of the year. No specific method is going to catch these fish at different locations and under different conditions.

I will present some methods which have proven successful for me. During the spawning season I prefer to fish from the face of the dam using light tackle and a variety of lures. The ditch digger is one of my favorites. I cast out into the reservoir and use a very slow retrieve.

Trolling off the face of the dam in late March is also a good technique. A silver thin fin has been the best lure for me but others who fish with me use other colors of the thin fin and other lures and catch fish. One item on which we all agree is the slower we troll the better.

My advice is to troll as slow as you think you should and then cut that in half. We often use reverse gear to attain a slower trolling speed. When wind conditions permit, drifting is an effective method to cover the area slow.

When the spawn is over the walleye moves to the deeper waters and to be successful you must get your bait to them. I haven't been too successful at this, but those who are say they put a weight on their line seven or eight inches above their bait. Many use a spinner and a plastic worm to attract the fish down deep.

In the spring at many reservoirs water is being released. The stilling

basin is a good location to catch walleye. Jigs are good lures to use here for two reasons. One, the fish will hit them and two, when you snag up and are forced to break off you won't cry a lot at a ten to twenty-five cent jig loss.

Jigs can also be effective while trolling or fishing sand bars and other areas. The jig often resembles an in-

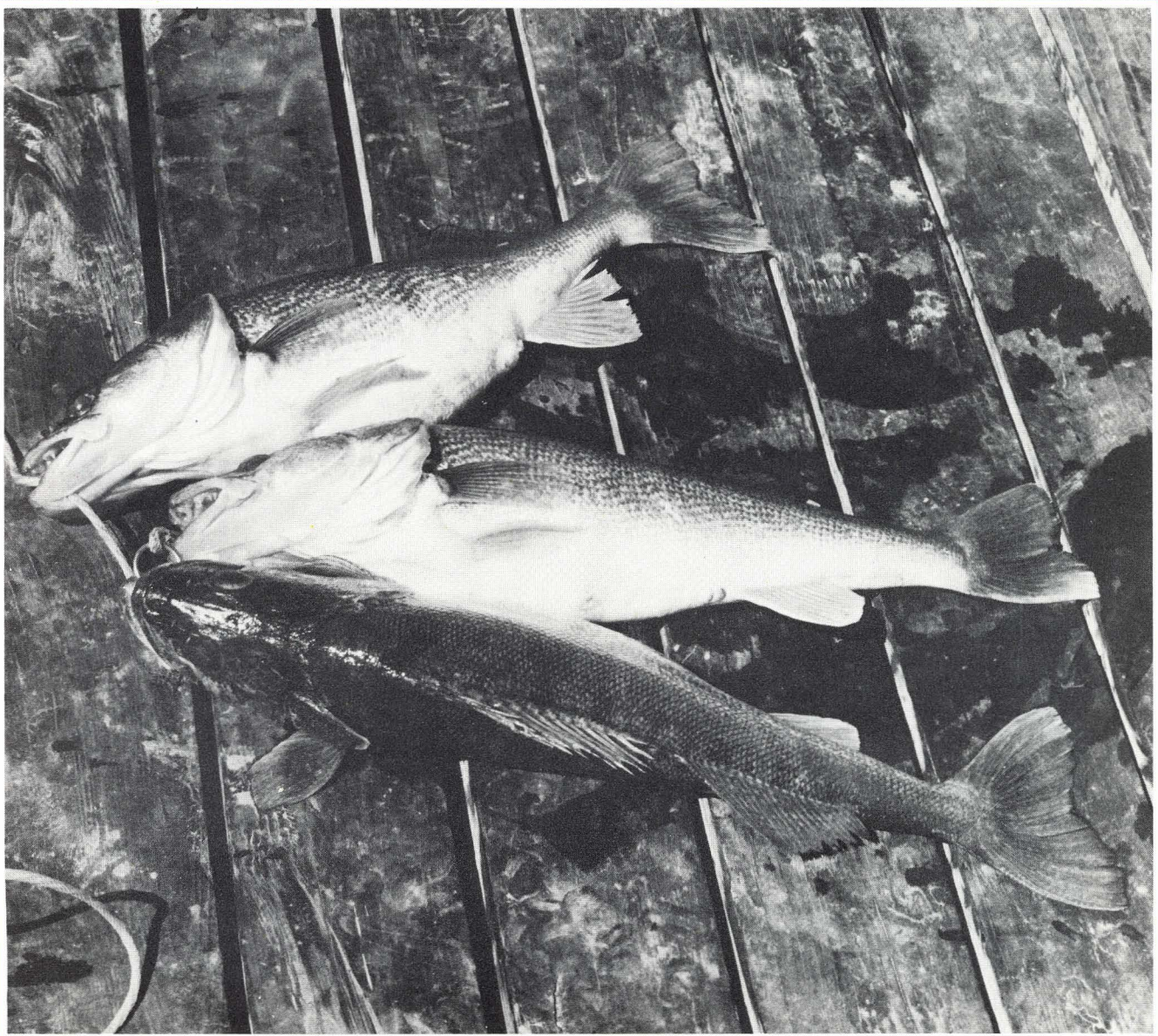
sect to the fish and as we stated earlier in this article the walleye dearly loves the Mayfly.

To be a successful walleye angler, you must learn the habits of the fish, be able to identify areas in a given body of water they like to use. The more knowledgeable you become the better equipped you are. I often clean the first fish I catch to determine

what they are feeding on and then try to simulate whatever it happens to be with a lure from my box. For example, if they are feeding on shad I try my thin fins, if they are eating insects I use jigs.

And when nothing seems to work I just keep trying because I know they're the best eating fish around and I intend to get my share.

Walleye considered the most delicious fish on the continent by many, are highly prized species.

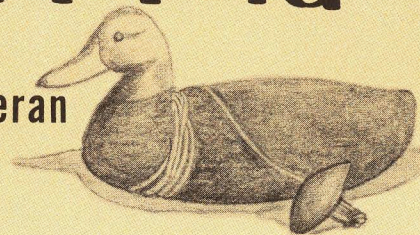






Ramblin' Afield

with Vic McLeran



Back in the thirties a songwriter by the name of Tom Paxton put together a tune called *My Ramblin' Boy*. The song later was subsequently recorded by Pete Seeger and later by the Kingston Trio. Some folks say Seeger had Cisco Houston, the late folksinger in mind when he sang *My Ramblin' Boy*. At any rate, the ballad tells about a couple of hobos who rambled 'round the country from one jungle camp to another, sharing it all—the good and the bad.

Like Paxton's hobos we're gonna' ramble across the outdoor scene in this column sharing it all with you—the good and the bad. It's the kind of page where you'll find information from a number of different areas afield; primarily in Kansas but in other states as well. There'll be some thoughts, ideas and observations of mine as well as information on the latest developments in the outdoor field. On this page you'll find reports of hot fishing spots across the state, new fish records, good areas to hunt, observation on wildlife hunting, fishing, camping and trapping. We'll also report on good recipes and methods of cooking or preparing fish and game. There'll be reports on the latest outdoor sports equipment and we'll talk about recent developments in the conservation field. And we'll keep you posted on the latest regulations and forecasts by the Fish and Game Commission. We'll also report on any legislative action of interest to outdoorsmen.

It will be a rather informal column so if any of you have items of interest which you think other folks would be interested in, let us hear from you.

NEW SMOKER FOR OUTDOOR COOKS

For years, the art of smoke-cooking meat stayed alive in the hands of only a few people, mainly outdoorsmen who specialized in fish and game. These folks usually had a backyard smoker built of brick or stone, or utilized an old refrigerator with a hot plate in the bottom for a heat source. Then you began to see some commercially-made smokers designed for home use. These smokers usually contained a small heating unit beneath several racks. A pan of hickory chips or sawdust was placed on the heating coils and allowed to smolder, providing both heat and smoke. But these units, like their predecessors, weren't without problems. For one thing, you had to switch the meat from the lower racks to the upper racks to get an even, uniform job of cooking. Then too, meat—especially chicken and wild game—processed on these cookers tended to dry out in the cooking process, leaving the meat dry and tough.

But now there's a product on the market which utilizes a revolutionary new cooking process. It's called the SMOKE 'N PIT and sportsmen I know who've used these units are wild about them. The heat source is a pan of charcoal briquets which sits in the bottom of the unit. Several inches above the charcoal is a water pan. Directly above the water pan is a grill for the meat. You light the charcoal, toss on several chunks of hickory, position the water pan, place the meat on the grill and put the cover on

the unit. The smoldering charcoal and hickory provide the heat-smoke while the water provides a steaming effect. The juices from the meat drip into the water and steam back up, in effect, steam basting the meat in its own juices.

I have two of these units and I've smoked bass, catfish, chicken, turkey, ham, pheasants, quail, rabbit, squirrel, ribs and Cornish game hens—all with excellent results. Even meats like turkey, pheasant and quail—which are traditionally dry—stay moist to the bone when cooked in these smokers. The really nice thing about the SMOKE 'N PIT is the fact that they're trouble free. You just fire the unit up, put on the hickory, water and meat and let it cook the allotted time. It's almost impossible to overcook the meat and you're provided with a chart which tells you how much charcoal, hickory and water to use. This chart also tells how long various pieces of meat should be smoked. In addition, you can remove the water pan re-position the charcoal pan and the unit serves as a straight charcoal grill.

If you like the flavor of smoked meat, especially game or fish, I think you'll be as enthusiastic about the SMOKE 'N PIT as I am. The units retail for about \$55 in sporting goods or hardware stores.

ITEM FOR WATERFOWLERS

Although it's a little early for duck shooting, it's not too early to start thinking about getting your waterfowl gear in shape. This brings to mind the hassle of carrying a bag of decoys, shotgun and ammunition from the car to the blind and back. You never seem to have enough hands—and the problem is compounded if you've bagged a limit of ducks. Last season I ran across an item which makes carrying dekes a cinch. Eddie Bauer of Seattle markets the product and it's called the CAMO DEKE TOTER. It's a poncholike affair which carries a dozen duck decoys, each in its own pouch compartment. Just slip it over your head, secure the side snaps and you can head through the marsh with both hands free to carry the rest of your gear. The design spreads the load full-circle for balance when you're walking and the separate compartments cut down on chipped paint, broken heads and tangled anchor lines. The toter also serves as a safe compact storage unit for your dekes during the off season. It retails for \$20 through the Eddie Bauer catalog.

FISHING MAPS AVAILABLE

If you fish the state lakes of southeastern Kansas, you'll be interested in some new structure maps which are now available. Prepared by Phil Jeffries, fisheries biologist, these maps give you the various depths, dropoffs, piers and brushpiles—areas which are attractive to bass, crappie and catfish. In addition, the maps show camping areas and boat ramps. Jeffries has completed these maps for Bourbon, Montgomery, Neosho, Wilson and Woodson State Fishing Lakes. They're available free of charge from the regional Fish and Game office in Chanute.

Vic McLeran

