

Do unto others . . .

Since those days when legendary characters flew about on fleecy clouds and rode into the camp of the enemy on hurtling bolts of lightning, there have been millions upon millions of words of advice written by countless wise men.

On clay tablets of the bearded ancients, on crinkled parchments and yellow sheepskins, and from the days of bludgeon carrying cave dwellers to the present when prophets, forecasters and soothsayers hand out advice over the bargain counter for a fee, have appeared words intended to counsel others.

But, with all these words that lighten one's cares or guide one's footsteps, either wisely or unwisely, there have been none to come within a hairbreadth of those that appeared amongst nine other sentences and which a blasphemous and selfish world has seemingly forgotten. Commanding in their directness, appealing in their forthrightness, they are, in our modern words, "Do unto others as you would have them do unto you."

No more simple appeal, no more direct command to let one's conscience guide man in his daily acts, in his attitude toward others and the things that make up this world has ever been penned on paper, scratched on clay or cut into stone.

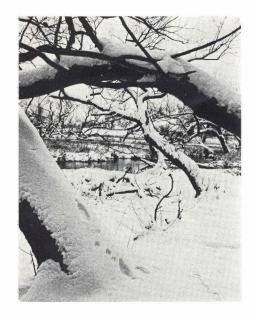
These words apply to the denizens of the wild, the trees of the forest and the waters of the stream—the things that have been placed in our care by a benevolent Master for our use, not the disgraceful abuse which has characterized our misuse of these natural resources with which our land is blessed.

These words mean to hunt your game clean, so there will be some left for your fellow hunter, for your children and your children's children; to fish in the same manner; to keep your streams clean as God intended them to be; and to handle your forest in such manner that the accusing words "handled unwisely" may never be written against your good name.

Do unto the forests, the things of the forest, and the streams, and the things of the stream, that which you want written in golden, not accusing, words on your record.

Man may appeal against the sentences of judges, but no man can appeal against the sentence of his own conscience.

(EDITOR'S NOTE: This article was written by Tom Ford many years ago, and distributed widely by members of the Outdoor Writers Association of America. Its timeless wisdom is well worth repeating as we approach the Christmas season.)



Cover Photo

Sands of time have placed many interpretations on the meaning of the Indian word "Ninnescah." Historians say it means "Good River," "Place of the Fishes," "Good Spring Water," and "Never Failing Water," and others. Regardless, the Ninnescah River, which flows by the Kansas Fish and Game Commission headquarters at Pratt, providing water for our hatchery and life to our little, beautiful valley, is "home" to many of us. Sometimes, Mother Nature sees fit to add a silent, gentle snow cover to the beauty which abounds along our quiet, winding river, giving it even a greater meaning than it normally possesses. Such was the case when Leroy Lyon of the Commission's Information-Education staff passed by with his camera, and captured the "Christmas Card" on our cover. May your Christmas be as beautiful as that along our river. . . . Thayne Smith.

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FISH & GAMI Winter, 1968 Vol. XXVI, No. 1 IN THIS ISSUE SETH WAY RETIRES By George Valyer WHAT IS A QUAIL HUNTER? By Charles Dickey WILDLIFE WONDERS By Marvin Schwilling OLD DOC SHOWS THE WAY 10 By Merle Gary Hesket POND STOCKIN' TIME 12 By Leroy Lyon By Thayne Smith NORTHERN PIKE—A Record Smasher 17 By F. Robert Henderson REEL DATES TO 13TH CENTURY 22 **THOUGHTS**

By Bob Wood

Seth Says 'So Long'

By GEORGE VALYER

Seth Way, genial superintendent of the State Fish Hatchery, is retiring. After 46 years of continuous service to the fishermen of Kansas, Seth plans to hang up his boots in the fish house for the last time on December 31, 1968, two months after he reached the age of sixty-five.

There is one thing you can count on, Seth has another pair of boots in reserve. Although he won't be working for the Fish and Game Commission, he'll still be busy doing the thing he knows best—raising fish.

He has been a silent partner in a commercial fish operation for some time and you can bet he'll find plenty to occupy him at the Hartley Fish Farm near Kingman on U. S. 54. He is also in demand as a consultant for fish farming operations over a wide area of the country, so chances are you won't find him occupying a rocking chair for any period of time.

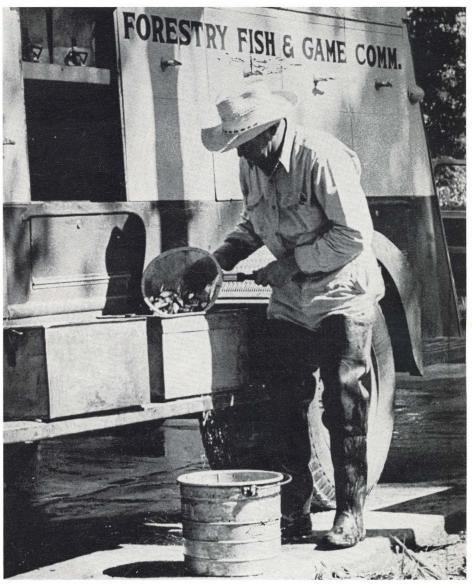
What about this man Seth Way? How did he come to occupy the revered position as an expert in the business of fish culture? Why is it that persons in high positions in the realm of fishery work have sought him out to benefit from his experience?

The answers are not simple, but must be tied in closely with the man himself, his dedication to an effort, his ability to put facts together and come up with a solution, his innate scientific ability coupled with a common sense approach. Along with these abilities and virtues, a sense of public service has kept him motivated through the years.

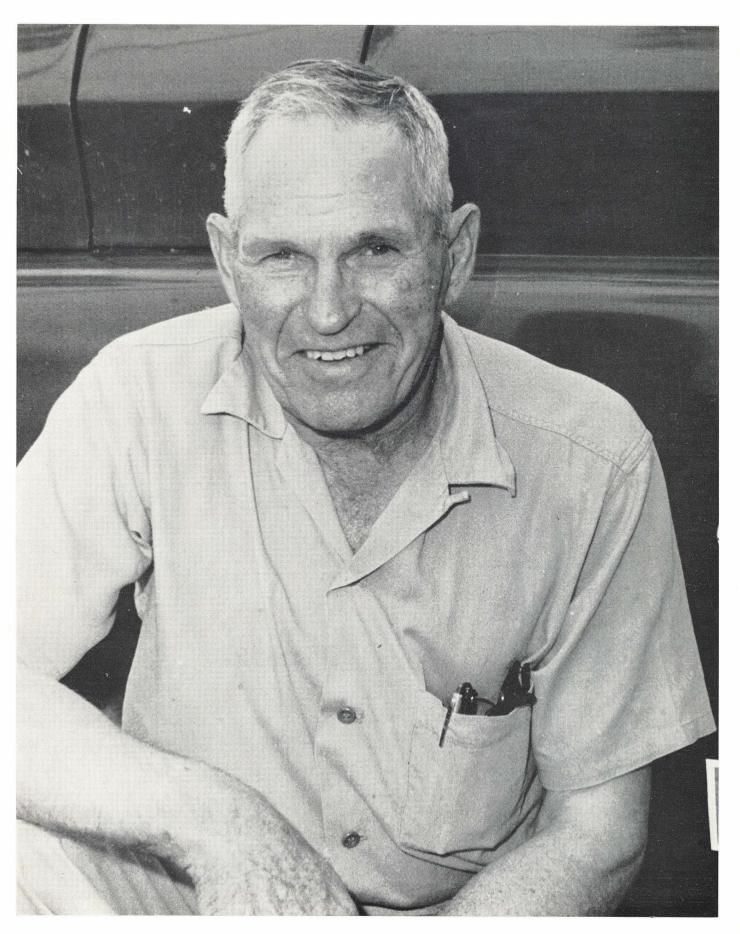
Regardless of position, a visitor to the fish hatchery always received cordial treatment and a sympathetic ear from Seth Way. He was just as concerned over a farm pond and its owner's problems as he was with a visiting foreign dignitary seeking improved methods for pond fish culture in his native land.

Although Seth never had many of the opportunities of formal education, his powers of observation and a remarkable ability for retention of facts placed him far above the ordinary man. He was hired by the Fish and Game Department as a fish culturist in 1922 and on January 1, 1926, became superintendent of the Pratt hatchery. The biennial report of the Kansas Fish and Game Department for 1926 leaves no doubt that Seth had inspired the confidence of his superiors and, upon the resignation of John Murphree as superintendent, he was immediately appointed to the position.

The most outstanding of Way's accomplishments and the one which brought him national and inter-



FAMILIAR TASK—For more than 46 years, Seth Way, retiring superintendent of hatchery at Pratt, has been counting fish in manner similar to that above photo, believed taken in 1948.



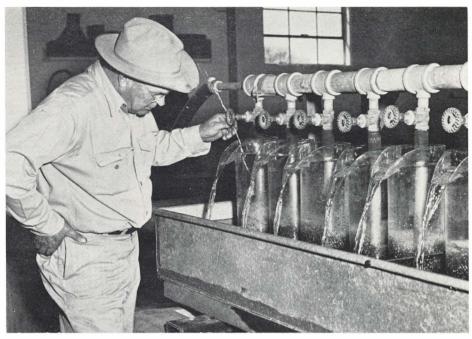
Fish and Game

national acclaim was the development of the first practical method of artificially hatching channel catfish eggs.

The importance of this development can hardly be overstated. Of course, the average angler has received a great deal of benefit through the increased availability of channels for stocking public and private waters, but the process has also been the basis of the rapidly-growing fish farming industry throughout the southern half of the United States as well as abroad.

Although carp have been grown commercially for centuries, primarily in the Orient and central Europe, the channel catfish holds the bulk of popularity in North America because of its superior flavor and texture. This popularity is spreading to many other spots around the globe, further accenting the importance of Way's discovery.

Seth's invention is principally a trough with screen baskets to hold the spawn and a system of moving



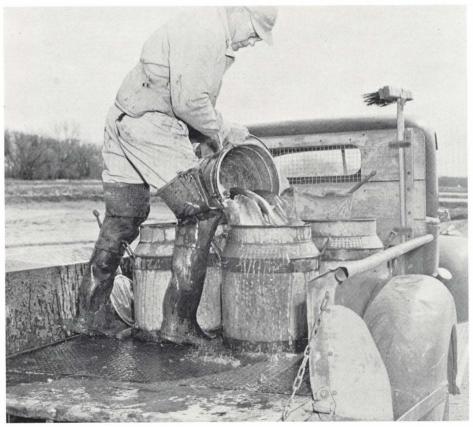
WALLEYE EXPERT, TOO—Way's fish hatching experience hasn't been confined to channel cat entirely. He's also an expert on other species, and is shown here at walleye egg hatching battery in Pratt in April, 1953, when state first started experimenting with walleye.

vanes over each basket to keep the water circulating through the egg mass. The vanes are propelled by a water wheel at one end of the trough and a constant stream of water is kept flowing from one end of the trough to the other. When Seth was first designing the system, his initial thought was to use an electric motor to power the vanes. However, the Fish and Game Department was essentially broke at the time. Funds were not available to purchase the motor. As an alternative, Seth designed and built the small waterwheel to power the mechanism and the same design is still used today.

Literally hundreds of these channel catfish "incubators" have been constructed throughout the country since 1930 and are used in many state and federal fish hatcheries as well as commercial fish farms. The result has been high hatchability of the spawns and higher survival rate of the young fry.

Seth's work with channels earned him the nickname of "Catfish" Way and thus he is known among some of the sportsmen of Kansas. Nearly every ardent fisherman and farm pond owner in Kansas is well acquainted with the name and all who know him respect his knowledge.

When talking about his retirement, Seth frankly admits he is looking forward to it with pleasant anticipation.



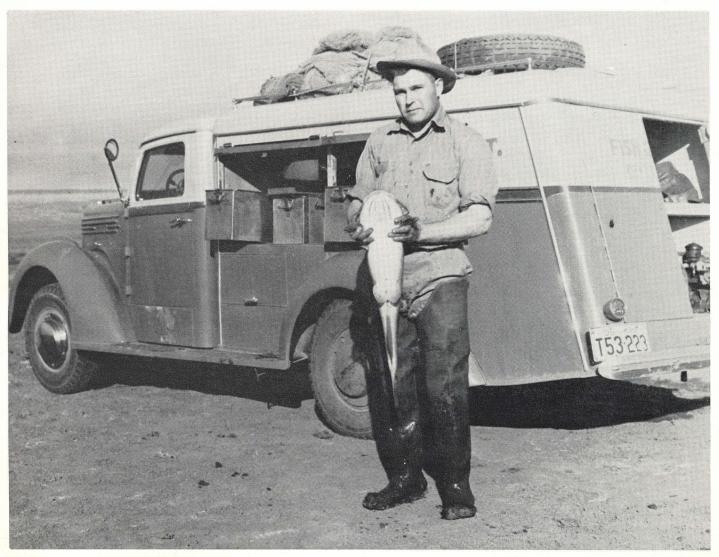
"ANOTHER LOAD OF FISH"—That statement has been repeated thousands of times in his 46 years with the Commission by Seth Way, retiring hatchery superintendent. He's shown here pouring a bucket of channel cats into large cans for stocking in a state lake. Photo is believed taken in 1950.

For years he has accepted the responsibilities of his position with a dedication seldom found among public employees. When the fishing was best, then Seth was the busiest. Now he plans to go fishing when he wants and you can be sure he knows how to harvest some of the crop he has been planting for so many years.

For his retirement years, Way and his attractive wife, Viola, have purchased a home in Kingman, not too far from Seth's fishery interests. There, he expects to live at a little more leisurely pace than has been his for the past 46 years. There's no doubt that the good wishes of all sportsmen will be with him as he closes his career of public service and opens the door on a different way of life.



IN "GOOD OLD DAYS"—Seth Way, right, and former Kansas Game Warden Don Welsh, now a resident of Aransas, Texas, stand beside Fish and Game Commission fish delivery truck in 1935, at Meade, where Welsh was stationed.



SETH AND FRIEND—"Mr. Catfish" of Kansas shows one of his prize brood cats while standing beside new Commission fish truck in 1939 photo.

What Is a Quail Hunter?

By CHARLES DICKEY

Between a boy's first shotgun and a tottering old man we find a delightfully unpredictable creature called a quail hunter. Quail hunters come in assorted sizes, but all of them have the same creed: To enjoy every second of every minute of every hour of every hunting trip—and to violently protest when the

sun sinks beneath the horizon and it

gets too dark to hunt.

Quail hunters are found nearly everywhere—on steep ridges, bragging in offices, field trials, swamps, sporting goods stores, conservation meetings, Sunday schools, back rooms, and at meetings. Mothers love them, young girls hate them, older brothers and sisters tolerate them, the boss envies them, and Heaven protects them.

A quail hunter is Truth with dirt on its face, Beauty with a briar scratch on its finger, Wisdom with Nature as its God, and the Hope of the future with good will toward man.

When you are busy, a quail hunter is thinking of pointers, setters and country roads. When you want him to make a good impression on a client, he may talk only of the triple he once bagged, the way "Ole Spot" honors a point, the spring bird hatch or the prospect of his newest pup.

A quail hunter is a composite: he is content with "rat" cheese and crackers for lunch at a country store but his ulcer has to be pampered with a special diet when he's home. He will drink from any old well without question; he has the energy of a hurricane when he starts hunting, although in the office it tires him to walk to the pay window.

He has the lungs of a dictator when he yells at the dogs, although his secretary complains that he whispers all the time. He has the imagination of a scientist as he looks for coveys along each likely edge. He shows the audacity to a steel trap as he tramps through green briars, oblivious of the pain in his thighs. He has the enthusiasm of a firecracker as he beats every brush pile, and when the dogs And the second of the second o

point, he has forgotten to load his gun.

He likes dirty hunting pants, old guns, hunting knives, leaky boots, long week-ends, all kinds of field dogs, back roads, wool shirts, abandoned farms and questionable companions who also are quail hunters.

He is not much for social gatherings between Thanksgiving and New Year's, stray cats, neckties, educational books, week-end company, barbers, people who post land, and clients who don't hunt.

Without thought of race, color, or creed, he likes people who hunt bobwhite quail two months a year and talk about it twelve months a year.

Nobody else is so early to rise, or so

late to supper—during the bird season. Nobody else gets so much fun out of chasing dogs, tramping honey-suckle, and getting mud on his feet. Nobody else suffers so silently with aching feet, twisted ankles and strained muscles.

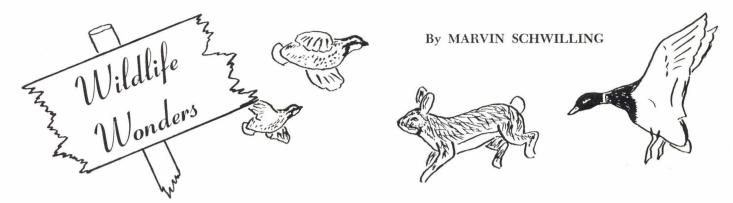
Nobody else can cram into one pocket a rusty knife, 17 No. 8 shells, an extra pack of smokes, a compass that doesn't work, six dog biscuits, change for lunch, a hunting license, waterproof matches, a crow call, a red handkerchief, last year's duck stamp, extra boot laces, a broken dog whistle and a snake-bite kit.

A quail hunter is a magical creature: you might get sore about his constant chatter about birds but you can't lock him out of your heart. You can assign him itineraries in the spring, but you know where he'll be in the fall.

His sales chart will be as good as the next one, but he'll get it there in his own sweet time. He may be the very one who sells the "rich old buzzard" who spends his winters quail hunting in Georgia.

You might as well give up—the quail hunter is a child of Nature with a hopeless one-track mind. He'll do his work with the best of them, but when autumn rolls around he's out in the field behind a young pup and an old veteran, on the prowl for Mr. Bobwhite. He's earnest in his work but he is just a little more sincere when he's slow-trailing a jumpy covey.

And though you get sore at him in the winter, you know you'll always like him. There's something about him that rings true—he's almost too honest. He's a simple and kindly man who asks no more of life than that the birds fly fast, the dogs hold tight, and everything has a sporting chance to live or die.



It's winter, when hunting reaches its annual peak.

Pleasures derived from hunting and hours spent afield are measured similarly but differently by each participant. Hunters are the select group permitted to harvest and dine on wild game, a delicacy that cannot be bought at the local supermarket at any price.

There too, are other by-products of the sport. The nerves are more relaxed and muscles a little tougher. Not all hunters fully appreciate the informal nature study which is an inescapable part of every hunt. They do not deliberately look for other wildlife or read the signs of wildlife use which are present. The "still" archery deer hunter may temporarily detest a cock pheasant which wanders close to the blind and flushes noisily. A squirrel nearby on a snag, jerking his tail and barking at the intruder, or a blue-jay, having discovered the concealed hunter, lets all the world know he was there with his loud persistent scolding.

After the hunt, however, the hunter admits such episodes add interest to eventful days afield. Many nimrods have developed a hobby of year-round nature study following some such experience.

It was just before noon when my boys, Jerry, Gary and I headed the station wagon off the gravel road and drove the hedge-lined lane to an old farm house. We had driven the 120 miles to open the quail season in Chase County near Cottonwood Falls.

We had picked up my nephew Jim and found Aunt Etta, Cuddy and Emma waiting when we arrived. This was to be a family hunt in prime quail country deep in the heart of the Flint Hills.

Aunt Etta, Cuddy and Emma had hunted the east hedge in the morning and found plenty of quail but weren't bragging about how many they had bagged.

We ate a guick lunch and decided to begin the hunt over on the "80" by the big pond. We parked near the dam and spread out, heading down the valley below the dam. As Gary passed a brush trumpet vine among the remains of an old rock house, the vines exploded. He was over-anxious and shot before the birds were far enough out for the shot to spread. A couple of birds swung by me. I followed too slow and my first try was well behind the speedster. The second put him in the grass. Jerry also got a shot but failed to connect. Gary's bird was a total loss. The compact shot pattern had left nothing edible.

As I walked out to retrieve my bird, another covey flushed from a brush hedge. They flew south down the hedge without a shot being fired. Most of the birds from the first covey went east over the hill. We knew there was a plum thicket in that direction, along the border of a small field, and set off after them. As we approached the thicket we could see the birds moving. They flushed a few at a time, giving everyone an opportunity to test their skill. Three

empty shells lay at my feet along with twelve other empties for the group—but only three birds fell.

It was a large covey. They left the brush and sat down in the tall bluestem grass in an abandoned road right of way. We followed and found the quail were considerably easier to hit when flushed from grass. The covey scattered, so we let them go and returned to the pond to take up the original hunt down the ravine. One of the earlier coveys flew into gooseberry brambles that had grown up in an old timber claim. The timber area, as well as several acres around and below the pond, had been fenced to keep cattle out and permit good quail habitat to persist. We picked up several more birds in the area and continued hunting down the south hedge.

The wind had died completely and the hot fall afternoon sun sent temperatures into the seventies, really too hot for good quail hunting. However, it was a beautiful afternoon. Butterflies — orange sulphurs, white sulphurs, variegated fritillaries, painted ladies and gossamer winged —all were abundant, and this late in November.

We returned to the house a "bushed" bunch of hunters. Final tally was 27 birds. A lawn chair and a glass of iced tea soon brought the hunt back into proper perspective.

NOTICE TO READERS

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Old Doc Shows the Way

By MERLE GARY HESKET

With the opening day of Quail season, old Doc Feathers and myself bumped along a country road, listening to the two Brittany dogs as they moved about restlessly in the back seat.

As we drove along we passed numerous "No Trespassing" signs, each of which varied in size, shape, and general wording. Sometimes I would glance quickly to Doc, anticipating some kind of remark, but Doc continued silently down the road. Finally, I made a comment, something to the effect that there would soon be no place to hunt if the present trend continued.

Doc leaned back against the seat without taking his eyes from the road and with a heavy sigh his backcountry voice broke the silence.

"Nobody likes to ask permission to hunt on another man's land," he began. "It's kinda like askin' a man if you can take his daughter to the dance-you get all the benefits and he gets nothin' but worry.

"I reckon hunting on a man's property is a kind of relationship that has to be built up. That farmer wants to know who you are, how you think, if you're honest, or if you know a cow from a nanny goat.

"He wants to know if you smoke and what you do with the matches. He wants to know if you can cross a fence with a gun, or if you tear the fence down first."

He paused for a few moments as he turned and glanced towards the dogs in the back, then continued. "The main trouble with most hunters is they don't take time to build up a relationship. They come tearin' into the yard about four o'clock in the mornin', run up and bang on the door and yell: 'Sir, can I shoot your quail?'

"Yessir, you gotta let that farmer get his eyes open first, then you gotta spend a little time and let him know you and then he will let you know him.

"You whittle together, and draw purty pictures in the dirt together, swap tobacco and let each other know that you respect each other's wishes.

"Most farmers realize that they hold the biggest share of hunting lands, but that ain't no reason to let every Tom, Dick, and Harry run all over it. All most signs is sayin' is 'Let me know you!'

"I know a lot of farmers that have posted land but they will let you hunt if you talk with 'em. I know others that won't but that ain't no reason to call them a dirty word or shoot their signs down. They might have sons who like to hunt, or cattle in the field, or maybe they jest don't want their birds shot and I reckon that's their privilege."

"Wildlife belongs to the public," I argued. "They can't say the birds are theirs."

"Yessir," Doc continued, "they belong to the public alright, but the land's still his and about the only thing we can do is hope he will share his land with us for a little while. But it's just a privilege, and it ain't a

"What if it isn't posted?" I gueried as we passed an unmarked field of tall switchgrass.

"Don't make no difference," he said, "if you find a boat settin' along the river you don't jest take it fishin' because nobody's settin' in it. No sir, you gotta respect private property. Jest like that beer can there"—he pointed in the grader ditch—"how would you like it if somebody threw cans all over your yard?

"This field means the same to that farmer as your yard, and he don't like it much either. He don't like it when he has to call the telephone company to get his telephone insulators replaced, either. I was talking to one of those State Highway men here the other day and he told me the State of Kansas spends somewhere in the neighborhood of \$85,000 a year for sign replacement, mainly because of trigger-happy fools driving around the country side."

"Well Doc, most of that is done by kids," I said, as I reached for a cigarette.



SIGN OF THE TIMES—Abuse of property by a few hunters has lead to signs like this one.



MORE AND MORE land in Kansas is being placed under private lease, leading to signs such as that above.

Doc suddenly became rigid as he firmed his grip on the wheel.

"Dammit boy!" he raised his voice and continued, "that's the trouble with the United States today. We keep blaming everything on the kids, say they don't know what they're doing. A kid is jest like a bird dog—he might be bred right, and fed right, but if you don't teach him anything he won't know a quail from a butterfly. I know lots of parents who give their kids a gun when they reach a certain age, and age ain't got nothin' to do with it. That kid's got to have some responsibility and some respect for other people and other people's property and this begins at home. Somebody said once that you gotta be smarter than a bird dog to train one and this goes for parents and kids, too. Chances are if a kid shoots holes in signs and game out the car window he has probably seen his old man do the same thing." Suddenly Doc slowed down and turned into a farmyard, greeted by the barking of a mongrel farm dog. The kitchen door opened as a middle-



"Keep Going, Fred-I Don't Trust Hitch-Hikers!"

aged farmer shouted a warm hello and gestured for Doc to come in.

An invitation for a cup of coffee was accepted as we sat around the table and discussed everything from the price of wheat to government farm programs.

Finally the farmer walked over behind the door and reached for a rusty old 12-gauge.

"Well, we're not going to shoot any quail setting here," he said, "let's get going."

Old Doc certainly had a good relationship, and I was proud that I was a part of it.

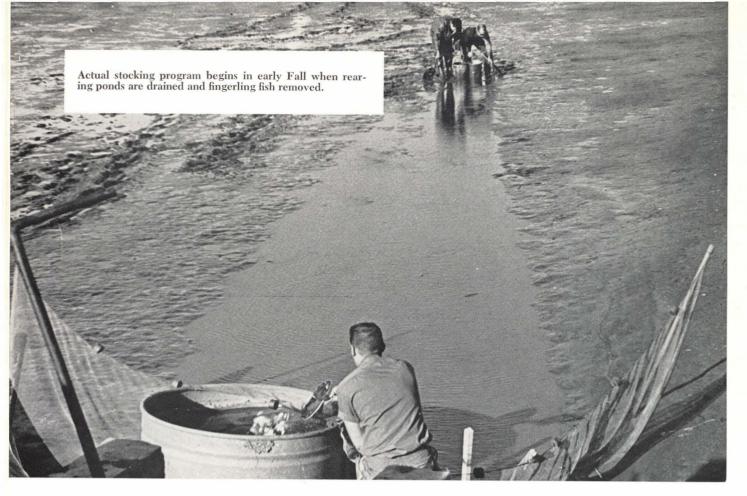
The leopard, once supposed to be a cross between the lion and panther, takes its name from two words—leo, meaning lion, and pardus, meaning panther.

The rock hyrax of Central Africa has the front teeth of a rodent and back teeth resembling those of a rhinoceros.

Prairie dogs do without water between the showers that provide puddles, their only source of supply in arid places.



WATER Pollution Control



After weight to insure surv

Pond Stockin' Time

A few fingerlings are retained at Pratt hatchery for additional feeding and growth then stocked later in state lakes, federal reservoirs and other public waters.



Once a year, generally from September through November, about two million fish which have been hatched and reared at the state hatchery are distributed across the state. Delivery trips are scheduled in each county for which approved applications have been received.

Those whose ponds have been approved receive notification several days in advance of the distribution trip. They are informed of the date, time of day and place to meet the delivery truck. They are also advised of the number and kind of containers they should bring for transporting fish to their ponds and lakes.

After the fish have been delivered to the pondowner, it is his responsibility to stock the fish in his own pond. While it is the pondowner or tenant's right to determine who shall have access privileges to the pond, many will grant permission for fishing by persons other than their own families and relatives, if they are asked.

After a growth period of about two years, the fish each catchable size and are ready to be harvested. One of the state's greatest sources of fun and recreation is its more than 80,000 farm ponds.

For a princely reward in close-to-home angling, look over the fishing possibilities in nearby ponds—a traditional Kansas pastime.

Through joint cooperation between pondowners and the Kansas Fish and Game Commission, farm pond fishing has become a tradition throughout Kansas.

For many years the Commission has conducted a fish-stocking program providing fingerling-sized (from 3 to 4 inches in length) channel catfish, bluegill and largemouth bass free of charge to pondowners whose ponds meet minimum requirements established by the Commission's fisheries division. To obtain fish, it is necessary for the owner to fill out a formal application card.



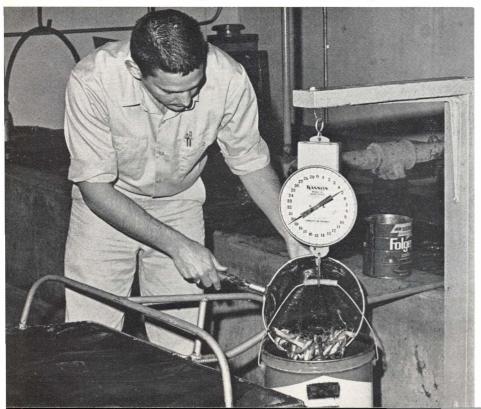
5, fish are loaded in tanks with special aeration equipment val of fish while being transported.



Pondowners, whose applications have been approved, meet fish truck at a central location in each county of the state to pick up their allotment.

Photos and Article By LEROY LYON

Fish are weighed to determine approximate number which are being distributed.





After picking up his fish, the pondowner hauls them to his pond where it is his responsibility to stock them.

POMONA...

Garden Spot for Sportsmen

by Thayne Smith

Jolly Frank Custenborder eased the big, flat-bottomed boat up to a large log protruding from the smooth surface of 110-Mile Creek on the north side of Pomona Reservoir, with hardly a ripple showing when he cut the motor with an expert's hand.

"Yesterday," he said, "they were right below here, and if we're quiet we might catch a few."

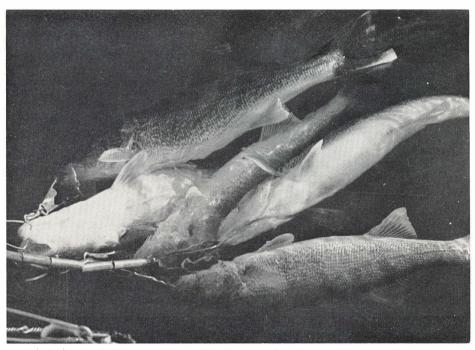
"They" were crappie, and Pomona has some dandies, which we discovered a few moments later when Frank cast a small jig behind the boat, let it sink about 15 feet, and set the hook as something lightly touched his offering.

"It's a dandy — just like yesterday," he said, reeling in a crappie of about two pounds.

"Boy, that really burns you up, doesn't it?" he chided, turning to me, as I tried vainly from the other side of the boat to repeat his performance. Then he let out with that famous laugh of his, familiar to fishermen throughout the state as belonging to the one and only Frank Custenborder. It's a sort of Santa Claus "Ho, ho, ho," with a special flower-grower twist. Frank is a florist, a good one, at Topeka. There's only one problem with such a profession, he says, and that's the fact that work sometimes interferes with his fishing.

We left the area a couple of hours later with an excellent string of fish.

That's what Pomona will do for you, too—make you wish that you could fish all the time. It's that kind of lake—and it has probably produced more good, big fish in its short life than any other similar body of water in Kansas.



REFLECTED GLORY—Nice string of walleye in clean Pomona waters make an unusual picture.

Nestled in a quiet little valley formed by three swift-running creeks about 30 miles south of Topeka, Pomona is a garden spot for sportsmen. It offers 52 miles of shoreline and 4,000 surface-acres of water, set among quiet coves and tree-filled hills. Its location in rolling eastern Kansas puts it in the center of the state's finest scenery, and Pomona boosters often claim that it is the "prettiest large lake in the state."

A certain amount of the popularity of Pomona can be attributed to its location. Only 71 miles from Kansas City with new Interstate 35 highway to carry traffic within a few miles of the dam site, Pomona has more than two million persons within 80 miles of its shores.

The lake's dam is near the Marais des Cygnes River, and the lake itself is fed by Dragoon, 110-Mile and Wolf creeks.

Constructed by the U. S. Army Corps of Engineers, Pomona was started in 1958 and filled for the first time in 1964. It cost more than \$65 million.

The day it filled, Pomona offered something for everyone—every sportsman can find a home on its water or its shores.

Two State Parks, developed by the Kansas Park and Resources Authority, are among the finest in the state. One — Vassar — on the south side of the lake, sports among many facilities the finest marina in Kansas, developed by the late L. D. Flint of Lyndon. Another fine marina is located just north of the damsite.

At the west end of the lake, where modern US-75 highway crosses Dragoon Creek, there is another fine state park—Carbolyn. Both the Vassar and Carbolyn parks boast hot and cold showers, modern toilet buildings, dozens of modern campsites with picnic tables, fireplaces, barrels and other facilities. Vassar has a large and excellent swimming beach.

In addition to the State Parks, the Corps of Engineers has developed several good parks around the lake—Dragoon, Michigan Valley, 110-Mile and Wolf Creek, all on the north side of the lake.

A \$5 State Park annual vehicle permit, or \$1 per day permit, is required of Kansas residents at Carbolyn and Vassar Parks, while the Corps of Engineers facilities are free.

Camping is a big item at Pomona, and combined with its excellent fishing and boating, accounts for more than two million visitors at the lake each year. Woods around the river and on the upstream side of the dam provide a relatively peaceful atmosphere for campers. The area is filled with clear, running streams, meandering their way through thick, grassy meadows and deep draws filled with abundant walnut and cottonwood trees

The real beauty of Pomona is seen from the water, sliding over the surface with a fish-eye view of the hills and wood areas so popular with campers. Also, from the water, new lake-side cottages and stately homes with neat boat docks and waterside patios, are visible from many angles.

Water of the main pool of the lake is generally calm due to the high hills and woods on the bank, and the fact that the general direction of the three-fingered lake is from east to west.

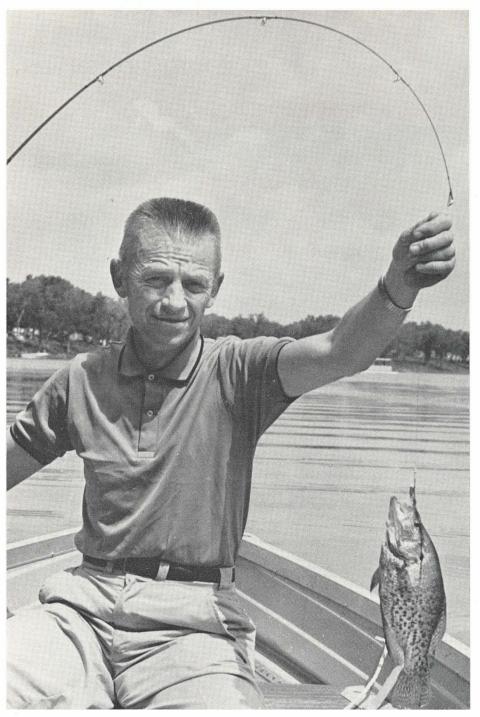
It's on the water too, that fishermen have found Pomona a haven.

When it filled in 1964, the Kansas Forestry, Fish and Game Commission

Third in a Series On Kansas Reservoirs



PRIZED CATCH—Carl Pape, Topeka angler, displays three fine walleye and 2-pound crappie pulled from Pomona. (Photos by Thayne Smith.)



BIG CRAPPIE is displayed by Dev Nelson, Manhattan, after being taken on jig from Pomona cove.

promptly stocked it with walleye, bass, bluegill, channel cat and perch.

Since that time, it has gained national renown as a good fishing lake—especially for walleye, black bass and catfish.

Biologists of the Commission, in fact, are continually amazed with the fine growth of the walleye in Pomona waters. Several were caught this year in the six and seven pound class—excellent for four years of growth. In its second year, Pomona produced many three and four pound fish. Many black bass up to five pounds are caught from the lake each year.

There are excellent spots for the hunter at Pomona, too. Quail, squirrel and rabbit hunting are excellent on more than 3,600 acres of public land at the upper end of the lake, and the shallow, marshy coves on the Dragoon arm often offer excellent duck and goose shooting. Blinds are allowed through drawings on a firstcome-first-served basis, conducted by the Corps of Engineers (office at the damsite) each fall.

For the boater, Pomona's smooth and generally clear waters are something to brag about, and this, too, contributes greatly to the lake's extreme popularity. On a warm summer weekend, lake is often crowded with boaters and water skiers.

Although constructed principally for flood control, the recreational aspects of Pomona have been chiefly responsible for the good name, and the high berth, it has won among Kansas' popular and scenic lakes.

Even while other big reservoirs are constructed around it, and nearer to the population centers it serves, Pomona's popularity continues to climb. Perhaps all this comes about because it generally has smooth waters for boaters and skiers, even on windy days; good hunting for the nimrod, regardless of whether he's seeking waterfowl or upland game; excellent campgrounds in any weather, and good fishing for the angler.

Perhaps that's why you'll find folks like Frank Custenborder spending a lot of time at Pomona, too, while others of the family tend his flower business. He's not only a good fisherman, but likes to hunt, water ski and go boating as well.

He doesn't give a hoot for camping, but probably only because he doesn't have the time.

Ants are capable of lifting 52 times their own weight, which is equal to a man lifting 8000 pounds.

The purple finch is not at all purple. The male is an old rose color and the female has the general sparrow-like appearance.

A bird's two eyes often weigh more than its brain. The ostrich's eyes often weigh more than twice the weight of its brain.

Northern Pike . . . A Record Smasher

During a span of six days in early June this year, the Kansas Northern Pike record was broken three times—two of them coming within a 1½-hour period.

This in itself was a record. Never has a single species of fish attracted so much attention in such a short

period of Kansas history.

It was 1962 when the Northern Pike was first stocked in Kansas waters, with several million fry placed in Tuttle Creek Reservoir after being obtained from the state of Nebraska.

In practically no time, they started showing up on angler's stringers. Many veteran Kansas fishermen didn't even know what they were catching, but they knew good and well, you can bet, that they'd caught something.

Even when small, Northerns are

great battlers.

They don't stay small long in Kansas waters, however. Their growth has been short of phenomenal.

At the end of the year, three pounders were common. In their second year, some weighed eight pounds, then in three years—the first record was recognized at about 11 pounds.

In the meantime, three years ago, Northerns were stocked also in Norton and Council Grove reservoirs. Norton was closed to fishing for two years, and on the opening day, a number of 8-pounders were taken by lucky Sunflower State anglers. The same was true at Council Grove. Many 8-pound, two-year-olds were caught.

Then, this year, the "battle of the records" started. Kenneth Brown, Manhattan, who estimates he has caught at least 100 Northerns from Kansas waters this year, hauled a 15-pound, one-quarter ounce Northern from Council Grove, for a new record. On June 18, he became the first man to break his own record with a 15-pound, 8-ounce specimen from



Northern Pike (Esox Lucius)—Prized Kansas Import.

Council Grove. The record didn't last long, however.

On June 23, Fred Bammes, also of Manhattan, hauled a beautiful 15-pound, nine-ounce job from the same spot. His record was confirmed by Lyle Jones, operator of the Council Grove Marina, but he hardly had time to ask the State Fish and Game Commission for a record application. Just one-and-one-half hours later, Wayne McCabe, also of Manhattan, brought in a bigger one for Jones to weigh. It tipped the scales at 16-pounds, 9½-ounces, a pound larger than that of Bammes.

Everyone thought McCabe would be able to hold the record for a while, considering the size of his fish, and knowing that they could not be more than three years old.

While anglers statewide shook their heads at the news and asked "how fast will those things grow in Kansas water, and how big are they eventually going to get?" an angler from Oberlin grabbed the spotlight.

On July 2, fishing at Norton, Clyde A. Vernon landed a 16-pound, 10-ounce Northern. Game Protector Clyde Ukele weighed, measured and confirmed the record.

Vernon's record has held to this time, but could be broken any moment. No doubt, there are bigger Northern in Kansas waters.

How big do they get? Well, the world record is a 46-pound, two-ounce monster taken in 1940 from Sacandaga Reservoir, N. Y.

The Northern ranges from Alaska eastward through Canada, down through the Great Lakes and to the Southern U. S.

It thrives on other fish, and is said to sometimes eat its own weight in other fish every day, hence the fast growth.

Northern are found around weed beds, brush, lily pads and in bays where streams flow into lakes. It likes shallow water in Springtime.

The best lures in Kansas are diving spoon-billed plugs, such as Hellbenders, Bombers and the Heddon Deep 6. Large suckers and big minnows are also good bait, as well as spoons and spinners.

Standard tackle outfits are suitable for taking Northern, but it's wise to keep them on the "hefty" side. And one word of caution—always use a steel leader when fishing for them.

Northern have so many sharp teeth in their large mouths that they're like a dentist's nightmare. They back it up with one of the most powerful bodies in fresh water.

It's quite evident that if and when you get one on your line, whether you land it or not, you'll know it. When you do, brace your feet—you're in for a few supercharged moments.

With more and more Kansas lakes being stocked with this plucky game fish, the record undoubtedly will climb with the years. Fish and Game Commission biologists predict a state record of 25 pounds within two or three years.

Ferret Search on in Kansas

The black-footed ferret was first described as a separate species in 1851. Because of its secretive habits, the ferret has never been thought abundant, and throughout history, only a few specimens have been collected for scientific study.

In 1964 the U. S. Bureau of Sports Fisheries and Wildlife compiled its first published list of rare and endangered wildlife, including the blackfooted ferret.

The most obvious distinguishing feature of the species is the striking black to blackish-brown mask across the face. The feet, legs to shoulders and terminal fourth of the tail are black, also. The remaining pelage is a pale yellowish-buff becoming lighter on the lower parts of the body and nearly white on the forehead, muzzle and throat. The top of the head and middle of the back are brown. The fur is short—about two-fifths inches long on the back.

The ferret does not molt to a white coat in the winter as do some other members of the weasel family.

Adult male ferrets are 21 to 24 inches in length, of which the tail makes up about a fourth. Females average about 10 percent less in linear measurements. Ferrets weigh between 1½ and 3½ pounds.

The ferret is short-legged, has long well-developed claws on the front paws, large ears and larger eyes than the mink, which is about the same size, and also belongs to the weasel family. After dark, the ferret's eyes show a greenish reflection from artificial light. The ferret is a nocturnal animal.

The native black-footed ferret should not be identified or confused with the domestic European fitch ferret. The domestic ferret differs from the black-footed ferret in having darker pelage which is almost an inch long on the back, yellowish underfur and an entirely black tail. The domestic ferret rarely, if ever, becomes established in the wild in this country.

The black-footed ferret is characteristic of the short grass prairie, or Great Plains, and originally occurred from the southern parts of Alberta and Saskatchewan south to Arizona and Texas.

(EDITOR'S NOTE: F. Robert Henderson, author of this article, is a wild-life management extension specialist with the Kansas State Cooperative Extension Service, Kansas State University, Manhattan. He recently joined the KSU extension staff after working several years for the South Dakota Parks, Game and Fish Department.)

Although a mystery to the white man, the black-footed ferret at one time, at least, was known and held in special regard by the American Indian.

Four black-footed ferret skins are preserved in a collection of Indian relics at Pyron, Montana. The skins, which had been collected and stuffed by Crow Indians many years ago, had been used in ceremonies.

The ferret was also familiar to the Sioux Indian as "pis pis za i top so pa"—meaning "black-faced prairie dog." The Sioux also referred to the ferret as "King of the prairie dog." An Indian symbol for the ferret was Z. It was represented by an arm held up with elbow and wrist crooked. The person making the motion then pointed at something black and passed his hand across his face.

Not until recently has there been much known about the life history of the black-footed ferret. In 1964 a family of ferrets were found living in a prairie dog town in western South Dakota. The following information on the life of black-footed ferrets has been gleaned from what little has been written previously and the results of a four-year study of several different groups of ferrets in South Dakota.

Four young are the rule, although litters of three, five or more may occur. The mother ferret alone care for the young and direct their activities until the family dispersal.

Each day during the young-rearing period after the sun had set allowing darkness to shield the family's movements, the following drama would usually unfold: Upon digging her way out of her burrow if it had been covered by industrious prairie dogs during the day, the mother ferret would look around with only her head showing. At times she appeared to be sniffing the air. After several minutes she would emerge and cautiously canvass the burrows in the immediate area. If she became alarmed, she would run with a rapid bounding gait to the nearest burrow, often with her head reappearing so quickly that it seemed a second animal was present. At times she would stand up on her hind legs, presumably to get a better view or scent. After her safety standard was satisfied, she would proceed to go to and dig open, if necessary, the burrow containing the young. Immediately thereafter she would enter it, almost always remaining for 5 to 15 minutes before reappearing at the burrow opening to look about in all directions.

Gradually then she would climb out of the burrow, run quickly from burrow to burrow, sometimes thrusting her head part way into a burrow opening. At other times she entered a prairie dog burrow and quickly reappeared at the entrance and then darted to another burrow. Eventually she would return to the burrow containing the young. After entering she would remain for a short time before slowly emerging.

Finally the young would appear at the opening, first showing only their heads and gradually the foreparts of their bodies. Slowly, one by one, they would move out from the burrow. If they were reluctant to leave, as they sometimes were, the mother would seize the young individually by the nape of the neck and pull each one out.

Even after all the young had emerged from the burrow, they still hesitated to leave the immediate area. Sometimes they would venture a few feet away, then quickly dart back. Following the lead of the adult, however, they would eventually move to

By F. Robert Henderson



FOE OF THE PRAIRIE DOG—Ferrets are found in prairie dog towns, and prey on them for their food supply.

another burrow in single file with graceful agile hops, creating the impression of a miniature train. Arriving at the burrow of the mother's choice, the young would enter after she had checked its safety.

After relocating her family, the mother reverted to her practice of surveying burrows, entering some, staying out of sight for a few minutes, reappearing and then finally going down another burrow to stay. From June to the middle of July, the ferret family stayed in the same general part of the prairie dog town. Around the middle of July, after the young were observed above ground at night, the family extended its area of activity and increased its frequency of relocations. This modification in movement is believed to be a response to both greater activity and food demands of the growing ferrets and local decrease in prairie dogs through ferret predation.

By early August the mother ferret was separating the young, putting some in one burrow and others in another. It was at this time that some of the young were first observed hunting at night by themselves. By mid-August they could be seen during daylight hours, peering out of burrows playing near the entrance and sometimes following their mother.

By late August or early September, when the young were nearly as large as the adult, the ferret family started to disperse and were no longer seen as a closely knit group.

In spite of their dispersal a few ferrets have continued to inhabit the prairie dog towns under study as long as a population of prairie dogs remained. One prairie dog town was inhabited by ferrets for at least 5 years and was still harboring ferrets in 1968. The longest recorded life span of a black-footed ferret is 5 years for an individual held in captivity.

Observations of ferrets and their tracks showed that the animals were usually found singly during the late fall, winter and early spring and had achieved a definite independence.

As during the summer, activity was largely nocturnal, although more diurnal activity was noted in late summer than at other times of the year.

Tracking in the snow showed that

ferrets remained active through the winter.

The exact time of mating of blackfooted ferrets is not known but is believed to be in April or May. Birth would be in May or June.

Hearing seems to be well developed in the ferret. Smell also appears to be an important sense. Sight is relied upon at close range but does not seem to be as important at distances over 300 feet.

Only a few scats (fecal pellets) thought to have been deposited by ferrets were found. It is suspected that ferrets deposit scats under ground in a manner characteristic of weasels.

The hardness of the soil of prairie dog towns makes it difficult to find tracks left by ferrets hopping or walking. Most of the ferret tracks were found when snow covered the ground. The average distance between tracks in the normal hopping gait was 12 to 16 inches.

When digging in a burrow, the ferret holds loose earth against its chest with its front paws and climbs out backward. In each subsequent trip it drags each load of dirt a little further from the entrance. After repeated trips a trench from 3 to 5 inches wide and up to 11 feet long is formed.

Trenching is considered to be diagnostic of ferrets since no other animal in a prairie dog town has been observed to leave a structure of this shape and size. The black-tailed prairie dog will excavate earth but generally this is deposited all around the burrow entrance to form a doughnut-shaped mound. Later it will build the mound higher by going away from the burrow and moving dirt toward the entrance.

Ferrets which were observed over a period of months were found to be residing in prairie dog towns where they occupied prairie dog burrows. The prairie dog is the ferret's main source of food.

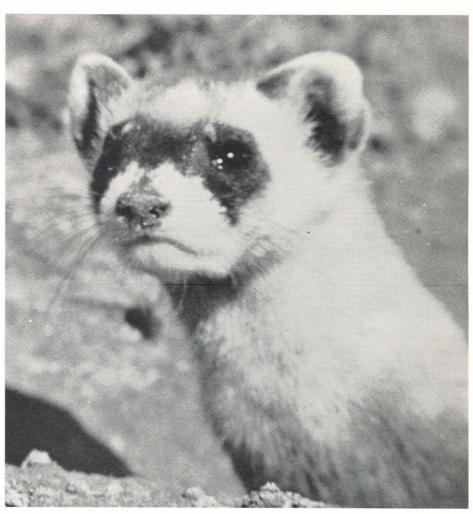
The fact that black-footed ferrets have been found living in haystacks and alfalfa fields, around buildings and in proximity to certain rodents and other animals indicates that they can subsist for a while, at least, without prairie dogs. It is not known, however, if they can maintain such a livelihood indefinitely.

In addition to prairie dogs, blackfooted ferrets will eat ground squirrels, mice, rats, birds, rabbits, snakes and insects. Ferrets will eat prairie dogs that they have not killed themselves.

In some cases ferrets are able to depopulate some prairie dog towns. A number of reports exist in which ferrets greatly diminished or exterminated prairie dogs.

Investigators working with captive black-footed ferrets have observed that they kill prairie dogs by attacking at either the throat or back of the neck. The ferret has also been described as a wanton killer, but if this were always true, it would be hard to account for the partly emaciated females observed before the young can care for themselves. Although no evidence of wanton killing was discovered, it seems entirely possible that it does engage in this habit at times. To imply, however, that this is the constant nature of the ferret seems inaccurate.

The prairie dog apparently does not succumb to attack by the blackfooted ferret easily and uses several means of defense and offense. One



HAVE YOU SEEN HIM?—A close up view of the ferret shows black patch above white nose, short ears, which allows unmistaken identity.

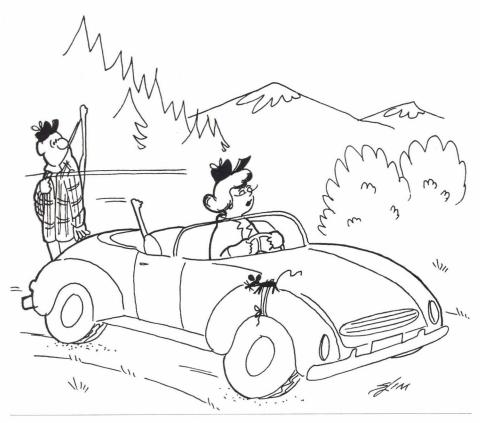


CALLING CARD—Long, slender burrow is evidence that black-footed ferret has been working near prairie dog mound.

common activity is to plug up burrows in which ferrets are present. This they do by digging dirt rapidly with their front paws, then kicking it into the burrow with their back feet. In the process they usually erase trenching or other signs of ferret activity.

During the day prairie dogs were repeatedly seen covering up entrances of burrows. It is possible that some of these burrows were covered for reasons unconnected with ferret activity. Prairie dogs will plug burrows occupied by prairie rattlesnakes, bull snakes and striped skunks. Researchers have observed many covered burrows had been used recently by ferrets, suggesting that these burrows were closed because prairie dogs detected ferrets or ferret scent.

At best, this "burrow plugging" activity seems to be only a stop-gap



measure, for it presents only a minor problem to ferrets should one be in a burrow that is covered up. Repeated observations showed that they could easily dig themselves out.

Black-footed ferrets were once common in western Kansas. Of eighty-two black-footed ferrets represented in the native mammal collections of the National Museum, forty-two were collected in western Kansas. Nearly all of them were collected in the late 1800's in prairie dog towns. The most recent documented record of a black-footed ferret in Kansas came when one was captured on December 31, 1957, near Studley in Sheridan County.

A search for additional information on black-footed ferrets in Kansas has been started. Success will depend upon interested persons reporting observations of ferrets or ferret signs. If you have seen a ferret or know of one being seen in the last 20 years, please write to Wildlife Extension Specialist, Fairchild Hall, Kansas State University, Manhattan, Kansas 66502.

Winter seems to be the best time for sighting signs of ferret activity. Fresh snow covers are best for recording tracks and digging. Furthermore, prairie dogs are less active in the winter and not as apt to erase signs of digging.

If a search is being conducted in winter, burrow openings should be scanned for signs of recent diggings and trench formations.

Investigators should also look for freshly covered burrow entrances. Prairie dogs, while usually less active during the winter, will spend many hours on warm days plugging burrows in areas where ferrets have been active. During the late spring and early summer the investigator should notice if the prairie dog population includes as many young prairie dogs as would be expected in a ferret-free town. Prairie dog towns occupied by ferrets often contain fewer young prairie dogs than normal.

There is no way to be absolutely certain that a ferret is residing or not residing in a prairie dog town at a particular time.

Although ferrets are mainly nocturnal, they are often found outside their burrows in daylight at any time of the year, but especially in the late summer in the early morning.



Reel Dates to 13th Century

Antiquarians attribute the development of gunpowder, writing paper, and carp fishing to the Chinese. And it may well be that a Celestial silkworm soaker invented the fishing reel, the Fisherman's Information Bureau reports. While English sport fishing historians agree that the first mention of the reel,

or "wind," was published in the middle of the 17th century, a Princeton University professor offers pictorial evidence that a reel was used on a rod as early as the first half of the 13th century.

Dr. John T. Bonner, Chairman of Princeton's Department of Biology, refers skeptics to a painting by the celebrated Chinese artist Ma Yuan, who is known to have been active in the period 1190 to 1230 A.D. The painting, which hangs in the National Museum of Tokyo, has been reproduced many times in art publications, but never in fishing literature prior to Dr. Bonner's exposition in *The Atlantic Salmon Journal*.

First mention of a fishing reel appears in *The Art of Angling*, written by Thomas Barker and published in England in 1651—two years before the appearance of the first edition of Izaak Walton's *The Compleat Angler*.

Barker, who "served at the Lord Protector's charge in the kitchen of foreign ambassadors," according to author Eric Taverner, refers to the reel as follows: "Within two foot of the bottom of the rod there was a hole made for to put in a wind to turn with a barrel to gather up his line, and loose at his pleasure."

Barker used a "wind" in salmon fishing, according to Dr. Bonner, "and even tells us that he put 26 yards of line on the reel, and mentions a wire guide at the tip of the rod. Despite the fact that he carried a gaff he still must have been a busy man with a good fish on. Since a standard (fly) line today is 30 yards this is roughly the equivalent of going after salmon without any backing at all."

Walton also mentions the reel in connection with salmon fishing, in his second edition of *The Compleat Angler*, published in 1655.

The following reference appears in the fourth edition (1668): "Note also, that many use to Fish for a Salmon with a ring of wyre on the top of their Rod, through which the Line may run to as great a length as it is needful when he is hook'd. And to that end, some use a wheel about the middle of their Rod, or nearer their hand, which are to be observed either by seeing one of them, or a large demonstration of words."

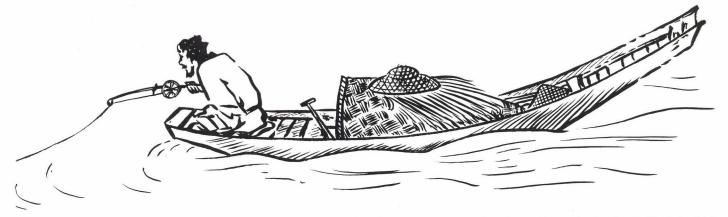
Dr. Bonner found additional evidence of the reel's early use in an

encyclopedic series, "Science and Civilization in China," by Dr. Joseph Needham. In a volume on "Mechanical Engineering," he reports, "there is a most extraordinary passage which clearly shows that the first fishing reel was well known at least by mid-13th century A. D. and possibly as early as the 3rd and 4th century A. D." Dr. Needham suggests that the Chinese reel was patterned after the early use of the bobbin in the silk industry.

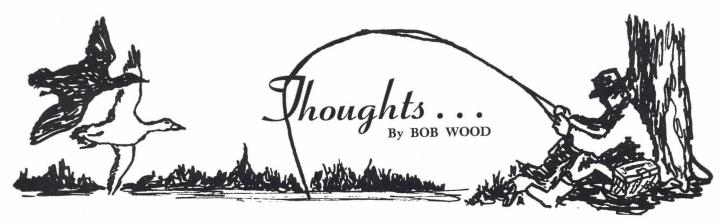
Although Dr. Needham gives the exact date of the Ma Yuan painting as 1195 A.D., there is apparently some uncertainty, according to Dr. Bonner. In the lower right-hand corner of the painting there is a collector's seal bearing a cyclical date corresponding to either 1195 or 1255 A.D., "the latter being more likely." His authority is Dr. Roderick Whitfield of Princeton's Department of Art and Archeology.

Thus art and science historians, who have long been aware of the picture, have been ignorant of its significance to fishing fanatics. Meanwhile, piscatorial pedagogues, to whom the significance would have been obvious, have seemingly been ignorant of the evidence. In Dr. Bonner's view:

"Apparently fishermen do not read much history of science or gaze at Chinese art."



FIRST REEL?—Earliest illustration of a fishing rod with a reel, taken from a painting attributed to MaYuan in the first half of the 13th century.



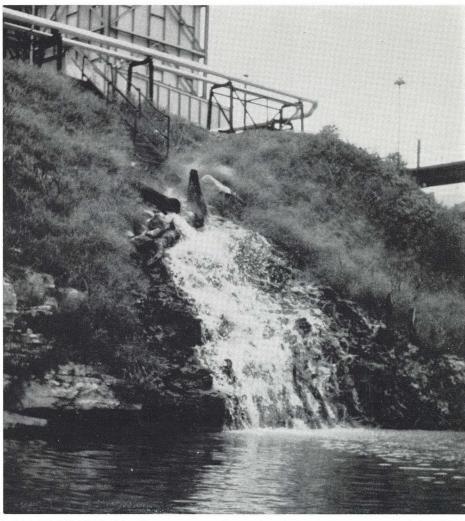
"Where population is dense people are actually wallowing in their own filth. Carelessly or thoughtlessly, they have poisoned the ground until mother earth has been transformed into a hydra-headed deadly viper. Although Americans are as clean a race as any on earth, and Kansans cleaner than most New-world folk, the smells that tell when one nears a settlement are an indictment of our hygiene.

"We spend millions on sanitation, but mainly sanitation that is every day visible in conveniences about us. Then we forget or turn our backs on the filth we pass on or that we do not see. We throw our garbage into low spots to be water soaked, little appreciating that a cesspool may result. We dump our sewage into our streams. The folks below who drink the water will have to do the worrying. We pour waste oil from motor cars, industries and what not into water somebody below must try to use. Filth of months' accumulation is swept down ravines, creeks, rivers and lodged somewhere.

"But the cry against pollution is not new. It has not awakened the public largely because all of us are about equally guilty. But we are poisoning mother earth. The accumulation of filth of a few hundred years may some day breed a pestilence that will all but wipe us off the face of the earth.

"Stream pollution is not a problem within itself. It is a part of the state's duty to keep clean. It is a question of sanitation just as is the problem of poisoning mother earth by carelessly planting our refuse in the bosom of nature and thinking the while that we are getting rid of it.

"How to approach the problem of



POLLUTION SOURCE—There are many forms of pollution in Kansas. One of the oldest, and most prominent, comes from industrial plants. History has proven pollution control a "knotty problem." (Photo by Roy Schoonover.)

better sanitation, better methods of disposing of our waste, is indeed a knotty problem. Present remedies suggested would bankrupt or wipe out needed industries. But there is a way out. Kansas has many bright minds, and were a few of these put to work the way would dawn upon us."

Above is a quote from the Sixth

Biennial Report of the Kansas Fish and Game Department dated June 30, 1926, prepared by State Fish and Game Warden J. B. Doze.

Modern methods and technology have changed pollutant sources, but a message voiced two score and more years ago echoes still, were we not so deaf but to hear it.



SCENIC SETTING—Topekan B. D. Ehler fishes for crappie from tree-lined shore as pleasure boater skims across clear surface of Pomona Lake in background. Lake is one of prettiest in state. See story on page 14. (Photo by Thayne Smith.)

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