

KANSAS FISH & GAME



Summer 1970

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Kanopolis Reservoir

The Bambi Myth

Blessed Beetle

Environmental Cleanup Begins

Make no mistake. The 1970's will be the decade of environmental concern and action—a time when Americans will begin to bridge the gap between human and natural resources.

President Nixon opened the new year and decade on New Year's Day by launching a "now or never" crusade against pollution of air, water and the total environment. The first official act of 1970 was the creation of a Council on Environmental Quality within the presidential executive office.

"The 1970's absolutely must be the years when America pays its debt to the past by reclaiming the purity of its air, its waters and our living environment. It is literally now or never," the President declared.

Although the nationwide environmental pollution battle has only begun, some landmark anti-pollution legislation was passed by the 1970 Kansas Legislature and signed into law by Governor Robert Docking. Armed with these new laws, Kansans have now addressed themselves to the monumental task of keeping their air, water and land from becoming dumping grounds for an assortment of human filth.

While several bills relative to environmental cleanup were enacted, some of the more important measures were:

COUNCIL ON ECOLOGY (House Bill No. 2013)—Establishes an 18-member advisory group to anticipate environmental problems and propose measures to prevent or remedy them. Made up of state officials dealing with environmental problems, along with representatives of the legislature and the public, the council will also examine environmental programs of state agencies and recommend changes. This legislation was recommended by the governor.

SOLID WASTE DISPOSAL (House Bill No. 1141)—Gives the State Department of Health power to regulate collection, transportation, disposal and storage of trash, junk and other solid wastes. It also requires counties, and some cities, to develop plans for solid waste management systems. While actual regulation will not begin until 1976, each county is required to organize a solid waste management committee by January 1, 1971, and submit workable plans according to specified deadlines. After June 30, 1976, it will be illegal to operate a solid waste disposal area without a permit from the health department.

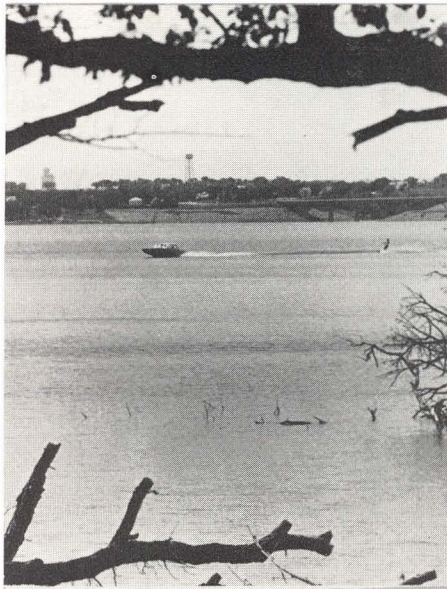
The new law also creates a 15-member advisory council which is to submit a recommended set of rules, regulations, standards and procedures to the Board of Health for implementation.

Until this act was passed, state law permitted cities, counties and the state to establish agencies for collection and disposal of rubbish, but none were required to do so.

PESTICIDE CONTROL (Substitute for Senate Bill No. 472)—To be administered by the secretary of the State Board of Agriculture, this act creates an 11-member pesticide advisory board to advise the secretary on problems relating to the use, manufacture, transportation, application and restriction of pesticides in the state. Working with the advisory board, the secretary is to regulate pesticide use in the state of Kansas. The act also provides that the board of county commissioners of any county may, by resolution, restrict the use of pesticides in the county following public hearings.

AIR QUALITY CONTROL (Substitute for Senate Bill No. 338)—Amends the Kansas Air Quality Control Act of 1969 and places responsibility for air quality conservation and control of air pollution under the State Board of Health. An Air Quality Conservation Commission, set up previously and consisting of eight members, is made advisory to the health department.

While much work lies ahead to repair the damage inflicted by a century of negligence and abuse, the Kansas Legislature and Governor Docking are to be commended for their efforts to make reparations for past damage to our air, land, water, and wildlife resources and for their attempts to prevent more of the same from happening in the future.—LEROY E. LYON.



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Cover Photo

Boaters have a veritable playground in Kansas with convenient lakes and reservoirs in all sections offering water skiing, fishing, sailing, pleasure cruising and other water-related sports.

The transformation of Kansas from a dry, arid state to a land of large lakes began in 1948 when Kanopolis Reservoir was spawned by ambitious men and mighty machines. Now, 19 reservoirs later, the Sunflower State has been changed to a virtual land of boats.

It seems only fitting, then, that this edition of Kansas Fish and Game features both the new and old—an article about Kansas' first reservoir and a cover photo depicting boating activity on Milford Reservoir near Wakefield. Milford is the largest lake in the state with 16,180 acres and one of the newest.

This summer, more than 60,000 boats of all sizes and of every description will ply the waters of the state as new boating enthusiasts join the growing Kansas Navy, discovering the new Kansas—"Midwater USA." (Photo by Leroy E. Lyon.)

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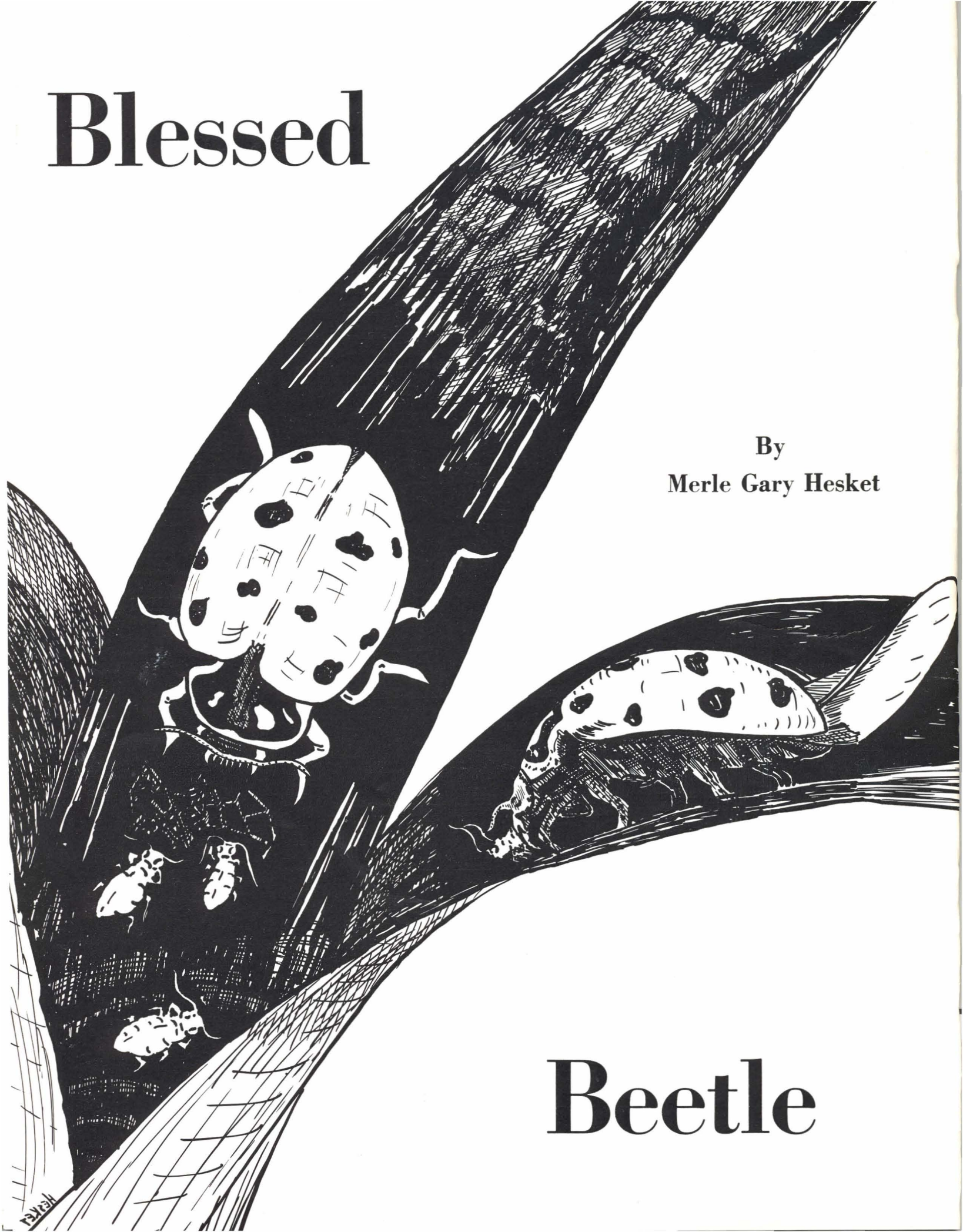
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Blessed

By
Merle Gary Hesket

Beetle



1978

Two shadows towered over a tender milo plant in a north-central Kansas field, shading it from the mid-day sun.

Smiles lined the deep-tanned faces of Bob Goodheart, Bunker Hill, and Don Dick, Jamestown, as they observed a small, orange-and-black ladybird beetle devour a greenbug aphid.

Taking a closer look, the men observed a discolored brown area on a leaf's surface where small, soft-bodied greenbugs were slowly extracting juices from the plant. As the aphids fed, a sticky waste, "honey-dew," was deposited on the leaf, destroying the plant's ability to manufacture chlorophyll. With the photosynthetic process halted, cells would soon degenerate, resulting in a weak or dying plant.

As the men watched, they saw the beetle move up the leaf to the affected area. Pausing at the brown spot for an instant, the ladybug's forelegs gently pawed at the sides of its gaping mouth while antennas on its forehead swayed from side to side. Powerful jaws resembling miniature hay tongs quickly appeared enveloping the soft-bodied aphids.

Still looking for more greenbugs to devour, the small beetle, aided by six tiny legs, continued up the milo leaf as if motivated by an invisible stimuli.

Ladybugs, named "The Beetle of Our Lady" by Italian farmers in the middle ages who dedicated the little insect to the Virgin Mary, have always been man's friend because they eat insects which are harmful to gardens, crops, orchards and forests.

Beetles belong to the technical order *Coleoptera*, which means, "Sheath-Winged." There are an estimated 250,000 species of beetles—considered by many as the most successful insects on earth. In our country alone there are 350 varieties of ladybugs. All have a hard, shield-like covering on the front wings, powerful jaws and a voracious appetite for aphids.

Aphids are also numerous—numbering 32,000 species.

The beetle observed by the men was not native to Kansas. It was hatched in California then, as an adult, shipped with many more to the Sunflower State where an experimental project was being conducted in an attempt to rid milo



Most ladybugs propagated by the Bio-Control Company are sold in one-half pint cartons containing about 5,000 each. This is the usual amount for small garden needs.

fields of greenbug aphids with natural controls rather than with controversial insecticides and pesticides.

The experiment started in early June, 1969, when Dick, game biologist and regional game manager for the Kansas Forestry, Fish and Game Commission's north-central district, was checking crops with Goodheart, who farms about 350 acres of land under the management of the Commission on the Wilson Reservoir Game Management Area.

At the time, a milo crop on the land was becoming highly infested with greenbugs which can ruin a young crop in a hurry. Due to a Commission policy of discouraging use of insecticides and pesticides on state-managed lands, Dick suggested the use of ladybugs, a natural predator of greenbugs, as an alternative to use of sprays which may harm fish and wildlife.

After searching for a source of supply, Goodheart located a firm in California which deals in ladybugs and other insects—the Bio-Control Company, Box 2397, Auburn, California.

Climatic conditions and the topography of California lends itself to natural propagation of ladybugs, *Hippodamia convergens*, on a scale large

enough for commercial usage. The convergent ladybugs hibernate in large concentrations known as beds which may contain from one to several hundred gallons of beetles. These beds are found in the Sierra mountain range near rivers and streams where it is cool and damp. Since hibernation lasts about nine months, beetles are usually available from June to March of the following year.

The ladybird beetle lays her eggs in yellow clusters under leaves or on stems of plants—there are usually from five to 35 oval eggs in each cluster. In a week or two, depending on weather conditions, the eggs hatch into larvae.

Upon hatching, the black, orange-blotched larvae are fully adapted to feed upon aphids. For about 21 days they feed on insects—just as adults do.

When fully grown, each larva forms a case around itself. This is the pupa stage.

In another week, the pupa splits open and an adult ladybug emerges. Depending upon weather and temperatures, the complete three-phase reproduction cycle lasts from four to six weeks. Throughout the summer, the adult ladybug feeds and lays eggs.

Most beetles used in Kansas are carefully collected by Harry Mantyla, proprietor of the Bio-Control Company. After collection, they are placed in cold storage (25 to 36 degrees) to "de-fat" and condition the tiny beetles for shipment.

Just before they are shipped, the insects are "crawl-cleaned"—a process by which healthy ladybugs are gently packed in a white cotton bag filled with excelsior and framed in a wooden container to allow air circulation during shipment.

Once packaged, the shiny, orange-and-black beetles are shipped by airline to Kansas.

After Goodheart received his first shipment of 75,000 ladybugs at Hays in June of 1969, they were gently transferred to Goodheart's vehicle to begin the last segment of the trip.

Since ladybugs orient their movements by the sun, the transplanted beetles were released during the night to prevent rapid dispersal from the chosen release site on Goodheart's

leased land. The beetles were scattered among heavy vegetation surrounding the infested milo fields—proving once again the usefulness of undisturbed vegetation around a field, not only for useful insects but for beneficial birds and animals as well.

Early the next morning, the two men returned to the field to watch the ladybugs in action. The morning sun slowly began to warm the ladybugs' bodies as they clung in semi-dormant condition on heavy vegetation surrounding the field. Wings began to open as if exercising for take-off—vegetation humming with excitement as the zero hour of invasion began.

Hunger, that driving biological urge for self-preservation, soon forced the ladybugs into infested fields where they methodically began to take their toll of tiny aphids. This was only a natural function, but to Goodheart it meant survival of all-important crops at a far smaller cost and longer lasting effect than any chemical treatment.

Goodheart, with Dick's help, had purchased a self-sustaining predator at a cost of 50¢ per acre compared to \$2.50 per acre for chemical control. At a price of \$7.50 per gallon, including air freight costs from California, he had obtained living organisms capable of working throughout the entire growing season. As long as the food supply of aphids remained, the ladybugs would be present, moving from landowner to landowner—even from milo fields to alfalfa patches and from hay fields to orchards.

Unlike chemicals, there would be no development of resistance by the aphids to the ladybug's powerful jaws, nor would there be dilution of the beetles' effectiveness by rain. Neither would there be pollution of streams from the wastes of their bodies.

Upon death, the beetle's small bodies would serve to fill the gizzard of a quail or migrating swallow—there would be no chemical residue to accumulate and later be ingested by an unsuspecting eagle or sportsman enjoying a baked quail dinner.

Goodheart's release was more than an experiment. It expressed the concern of private landowners toward persistent pesticides and their eagerness to take alternative measures.



Because of their voracious appetite for aphids, ladybugs are extremely beneficial insects to man. (Photo by Harry Mantyla.)

Several farmers in the Wilson Reservoir and Glen Elder Reservoir Game Management Areas soon joined in the experiment. Within a few days, more than 60 gallons of ladybugs, numbering 75,000 per gallon, were working on aphids at the two locations. It is estimated that one ladybug will eat between 20 and 40 greenbugs daily.

As news of the experiment spread, inquiries were received from Garden City, Neodesha, WaKeeney, Concordia, Mankato, and many other areas throughout Kansas and surrounding states.

As interest grew, Mantyla and his firm were required to hire more personnel to meet the increasing demand from the Sunflower State. In 1969, the company shipped more than 4,000 gallons, or about 300 million of the aphid destroyers to Kansas—not to mention one gallon which broke open in the luggage compartment of the airplane and caused some excitement among passengers.

The 1969 success in aphid control by ladybugs is technically inconclusive although most farmers who used them agree they did a fine job. However, persons in favor of chemical controls contend the aphids

diminished due to weather and the presence of a parasitic wasp, not because of the ladybugs. The fact remains that these too are natural controls and the necessity for chemical control of insects in many cases is unwarranted.

While biological control may appear too simple for effectiveness to technical man, it should be of prime interest to everyone concerned about the future of our environment.

Admittedly, it is difficult for the so-called "superior man" to place his faith in an insignificant bug. It is equally difficult to believe that bugs can replace scientific laboratory chemicals to provide the quantity of crops needed for a starving world.

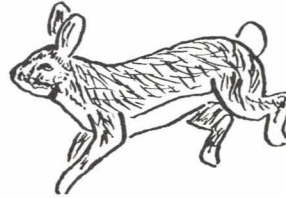
Introductions of insects for control are similar to past attempts to introduce exotic game species and must have extensive study and consideration for the ecological community.

However, natural controls like the ladybugs may be the answer to providing the nation and world with a better tomorrow.

In the final analysis we must ask ourselves this question: What good are crops and food for the mouth if, in the long run, we destroy the total environment which feeds our souls?



By MARVIN SCHWILLING



Summer is the season when wildlife increase their kind the natural way—quite independent of state commissions or federal subsidies—but entirely dependent on habitat that support their existence.

Rabbits, squirrels and some birds have already produced the first wave of a growing army of young. Some squirrels will produce a second brood and cottontails will have several more litters before summer ends. Prairie chickens, pheasants, early-nesting quail, and waterfowl are herding early broods. Those that fail in first attempts will try again and again.

Unusual, but significant, is the way many species of wildlife regulate production of young to fit conditions of their environment. If sufficient food and cover are available, rabbits will have more litters with more young. Likewise, ducks will lay more eggs than when adverse habitat conditions are present.

Increased production and a determination to increase numbers to fill all available habitat has been noted in deer, muskrats, quail and many other species. It's an indisputable argument for a full use of the annual game crop by hunters. Otherwise, surplus animals and birds are wasted.

Or, if a higher than normal population is carried over to the next production season because of a lack of predators, severe weather conditions, or other population reducing factors, these unneeded individuals act as a drag on the reproduction potential of the population. Reproduction in wildlife is a determined force and a calculated sparsity is an effective technique to stimulate full production.

A small migrant flock of least sandpipers, headed north, passed low over the house at dusk. Others have already arrived, headed south, return-

ing from the arctic breeding grounds. Each year small numbers of late migrating shore birds are still moving north when the first southbound migrants arrive in Kansas.

While it's a phenomenon we don't fully understand, we assume the late northern migrants are late-hatched birds from the previous year which experienced slower development during their first winter. While they probably don't travel all the way to the arctic, they do seem to have a strange urge to make part of the trip.

The first southbound migrants are usually birds which were unsuccessful in their one nesting attempt. The season on the tundra is too short to permit re-nesting so these unproductive birds move south early.

Migration is indeed a fascinating wildlife characteristic.

"We are brought face to face with the greatest mystery which the whole animal kingdom presents, a mystery which attracted the attention of the earliest writers, and can in its chief point be no more explained by modern men of science than by the simple minded savage," said Alfred Newton, the famous British naturalist.

A light fog hung low to the ground following a summer shower. The day was warm and balmy with little wind—a perfect day for nest building since most nesting material was soft and could be easily woven and shaped.

A female dickcissel, coaxed into the territory of a persistent singing male and perched on a telephone wire just

west of my mail box, was busy nest-building. About every six minutes she added material to her enlarging nest located in a clump of spindly dock just 15 feet from the wheatfield's edge. By nightfall the nest should be complete.

On my way home to lunch the next day, I checked the nest. The female flushed, providing a view of the nest which now contained one pale blue egg.

Three days later four eggs were in the small, deep-cupped nest.

On the sixth day, the male was not on his telephone line perch as I passed enroute to work. At noon he still was not to be found and his persistent ZIP-ZIP—zip-zip-zip-zip call was noticeably absent.

I stopped to examine the nest and found not the well-built, deep-cupped structure, but one which was completely round like a ball with an arched-over roof and a small entrance hole on one side. Opening the structure, I found a wide-eyed, female white-footed mouse with four tiny young. Frightened as she was, the female did not leave her young. I gently closed the opening I had made and left the family.

No trace of the dickcissel eggs could be found. Had the rain-soaked ground driven the mouse to destroy the eggs and take over the nest to provide a dry place to bear her young? I wondered. Or had she taken over the nest after it was destroyed by a snake or other predator?

Only one thing appeared certain. Not often do white-footed mice bear their young in a swaying clump of spindly dock nearly 18 inches above the ground.

Nature harbors many secrets!

Commercial Fishing

A Vanishing Way of Life

By LEROY E. LYON



Kansas' only remaining full-time commercial fisherman, Bill Van Horn, finds his trade to be a vanishing way of life. (Photos by Leroy E. Lyon.)

Bill Van Horn is a unique individual—Kansas' lone representative of a vanishing breed.

Like the village blacksmith, he and his kind are silently but surely slipping into oblivion.

A short, stocky Atchison resident only a few years removed from retirement, Van Horn is the last remaining commercial fisherman who depends solely upon the sale of fish for a living.

Of course, he isn't the only commercial fisherman in Kansas. Nearly a dozen more annually purchase the \$25 permit and post a \$500 surety bond for the privilege of catching and selling certain fish. However, all of them have other sources of income and interests to occupy their time.

Such is not the case with Van Horn. Like his father, Joe, and his grandfather before that, his only interests lie with the trade he has so masterfully learned.

"I started by helping my uncle seine minnows from the river when I was nine or ten years old," Van Horn says. Since then he has spent a half century fishing the Missouri River which forms about 123 miles of irregular boundary on the northeast corner of the state.

For several years, the Missouri has been the only place in the state where fishing for commercial purposes is allowed under special regulations. Even here, only certain species of fish may be caught and sold—carp, buffalo, quillback, suckers, paddlefish, sturgeon, gar, and catfish—both channels and flatheads. However, catfish must be at least 15 inches long. Small catfish and other species must be released if caught.

Commercial fishing is defined by Kansas law as fishing "for the purpose of sale, trade, or exchange for a valuable consideration." Seines,



Fish are easily removed from the hoop net once it has been collapsed on the deck of the flat-bottomed boat.

trammel nets, hoop nets or set lines may be used to take fish for commercial purposes.

While some people may question the value of these rough fish species, Van Horn finds a "pretty good" market for his fish—good enough that he tries to have a 4,000-pound surplus on hand by October, all cleaned, frozen and ready to sell to customers through winter months when he cannot run his nets.

The majority of fish caught by commercial fishermen are carp, with buffalo and catfish running second and third. All are sold directly to local customers. None are shipped to large dealers in metropolitan areas. In 1968

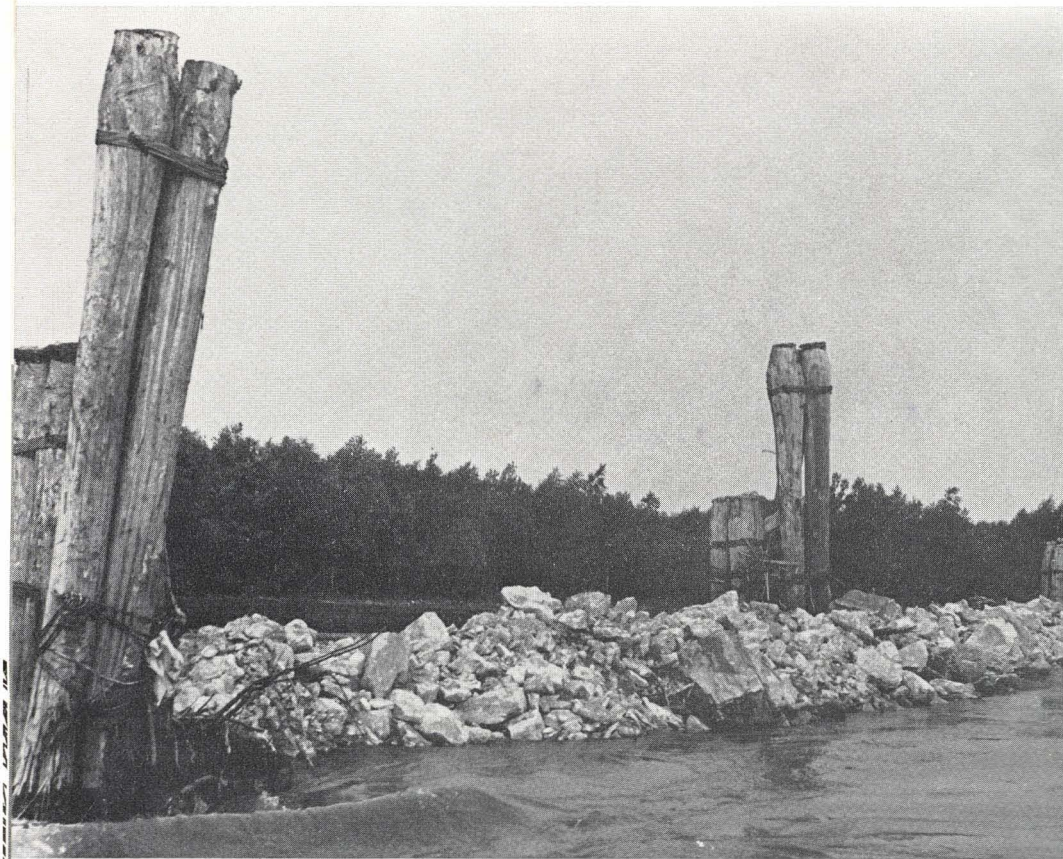
commercial fishermen estimated about \$8,000 in total fish sales.

While catfish are most in demand and the hardest to catch, Van Horn's customers are eager to purchase carp and buffalo. Some will loudly proclaim you haven't lived until you've eaten some Missouri River carp! And, almost to a man, they will contend there is a heap of difference between river carp and those caught in a lake.

After a fish is cleaned, a speedy process for Van Horn, it is wrapped and priced per pound according to live weight. Current prices are 25 cents per pound for carp, 30 cents for buffalo, and 65 cents for catfish, both channel and flatheads.

Van Horn's largest sale ever was a 4,000-pound order of carp to the Atchison Chamber of Commerce. During a local business sales promotion called Mo-Kan Days, residents of the area were served all the fresh fried carp they could eat. Van Horn was given only a 90-day advance notice to fill the two-ton order but, thanks to favorable conditions on the river, was able to meet the deadline.

Except when the river is flooded or covered with ice, Van Horn spends considerable time each day either on the river which has become an important part of his life, or at his fish "shanty" on the river bank where he sells his fish.



Rock structures, called "jetties" or "dikes" are a common sight along the Missouri River. They are designed to divert the water into the main channel and to plug chutes and shallow pools.

The Missouri River, called "Nishodse" by Indians, which translates to "Muddy Water," is not the same stream Van Horn remembers as a youth. Formerly a wide stream with many shallow, backwater areas, it has been altered by the Corps of Engineers to provide low cost navigation and flood control. As it has been narrowed and deepened to provide a nine-foot channel, backwater areas and shallow pools, valuable fish spawning and feeding sites have disappeared, resulting in noticeable declines of fish populations.

Rock structures, called "jetties" or "dikes," have been constructed all along the river by the Corps of Engineers to help prevent excessive bank erosion, to plug the chutes and shallow pools, and to divert the water into the main channel. Construction of these "dikes" is part of the overall project to use all the water for navigation and to help maintain a deep, self-cleaning channel for barge traffic.

As the river has been altered, com-

mercial fishing methods have also changed. Trammel nets, once used extensively by many commercial fishermen, are now only used by most permittees in late winter or early spring shortly after the ice has broken up. According to Van Horn, the rock "jetties have pretty pretty well wiped out trammel netting."

A trammel net, usually about five feet wide and from 50 to 100 feet long, is a rectangular net which is actually three nets hanging together. The middle layer is slack and made of fine mesh while the two outer layers are stretched tight and constructed of coarse, or large, mesh. As a fish attempts to pass through the net in either direction, it will carry some of the fine net through the coarse mesh and become pocketed. Fishermen either "dead set" the nets or float them across a gravel bar. However, by law all trammel nets must be attended at all times by the permittees.

Like other commercial fishermen, Van Horn catches most of his fish

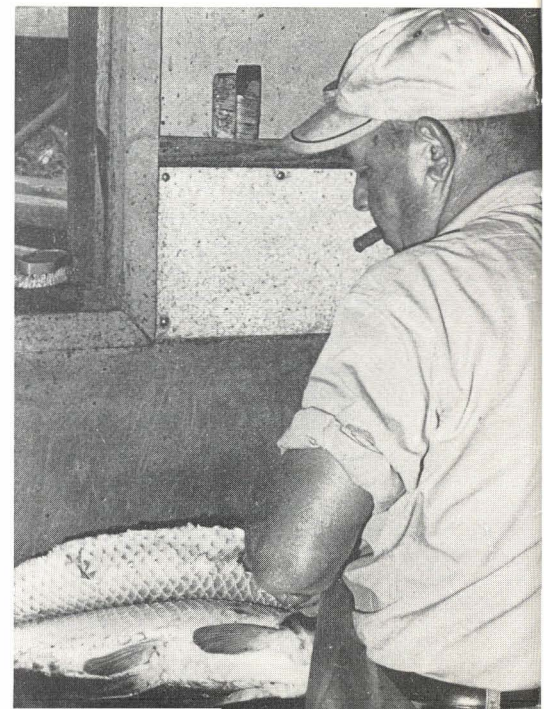
with hoop nets—funnel-shaped nets with "throats" through which fish may enter but not escape. These nets may either be baited or unbaited, depending upon time of year. Baiting, successful only for carp and buffalo, is a warm weather technique and is used only during the months of June, July and August when warm water can maintain the fermenting action of the bait.

While each fisherman has his secret formula for bait, soaked wheat has proved to work consistently well. It is left in the sun for three or four days until sour, then placed as needed in small cloth sacks in one end of the hoop net.

At other times of the year, commercial fishermen must rely on "blind sets" in areas where fish either travel or congregate to rest from the swift river current. Productive locations for these sets are difficult to find and maintain and can only be located by long experience and trial and error. Experienced fishermen like Van Horn can pick these spots with amazing accuracy. Once a productive location is found, fishermen use it as long as they can, claiming a distance of two feet one way or the other can make the difference between a good catch or failure.

Finding good locations for hoop

Bill Van Horn has a speedy technique for cleaning fish. All are skinned, then entrails, head and fins removed. Fins are chopped off flush with the body. It takes Van Horn about one minute to clean a six-pound buffalo or carp.



nets is getting more difficult each year due to the numerous rock jetties and rock-lined shoreline. A net placed along the rocks will soon be cut to pieces by wave action created by boat traffic and river currents.

To further complicate matters, other nets can soon be buried in the sand as the currents shift. In a week's time, a six-foot hole can completely fill. As a result, Van Horn spends considerable time looking for new locations for his ten nets.

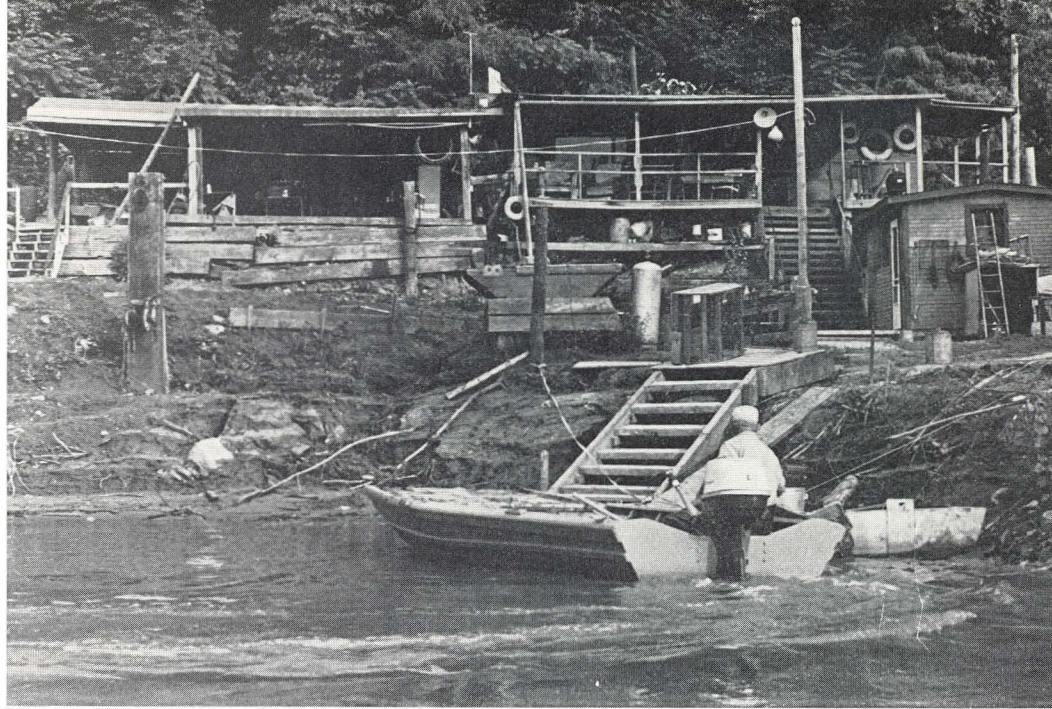
Regardless of whether the net is baited, Van Horn dips all of his nets in tar to darken the mesh. A fresh, white net is a poor producer, he claims, because it is highly visible to fish and has a tendency to frighten them.

In actuality, less than half of Van Horn's time is spent running and re-baiting nets. Removing fish from a hoop net is a simple matter once it has been collapsed on the deck of a boat. Fish are then tossed in a built-in live box where they can be kept alive for a long period of time if necessary. For him, the complete operation of raising the net, removing the fish and resetting it normally takes about five minutes. By law, he is required to run his hoop nets at least every 24 hours.

For Van Horn and other commercial fishermen, it's a painful experience to realize their type of fishing is in the twilight hours. Like Van Horn most commercial fishermen now operating under Kansas permit are older men who learned the trade as youngsters. Each year the list of permittees grows smaller—in 1925, 119 commercial fishing permits were issued compared to 12 who have purchased permits for 1970.

Reasons for the decline in commercial fishing are numerous but all commercial fishermen feel the Corps re-channeling project and pollution are major factors.

Thanks to the re-channelization project, started above Kansas City in 1927, shallow pools and sluggish chutes have been eliminated as has 75 miles of river from straightening. The losses to fish, ducks, geese, beaver and other wildlife are beyond estimation.



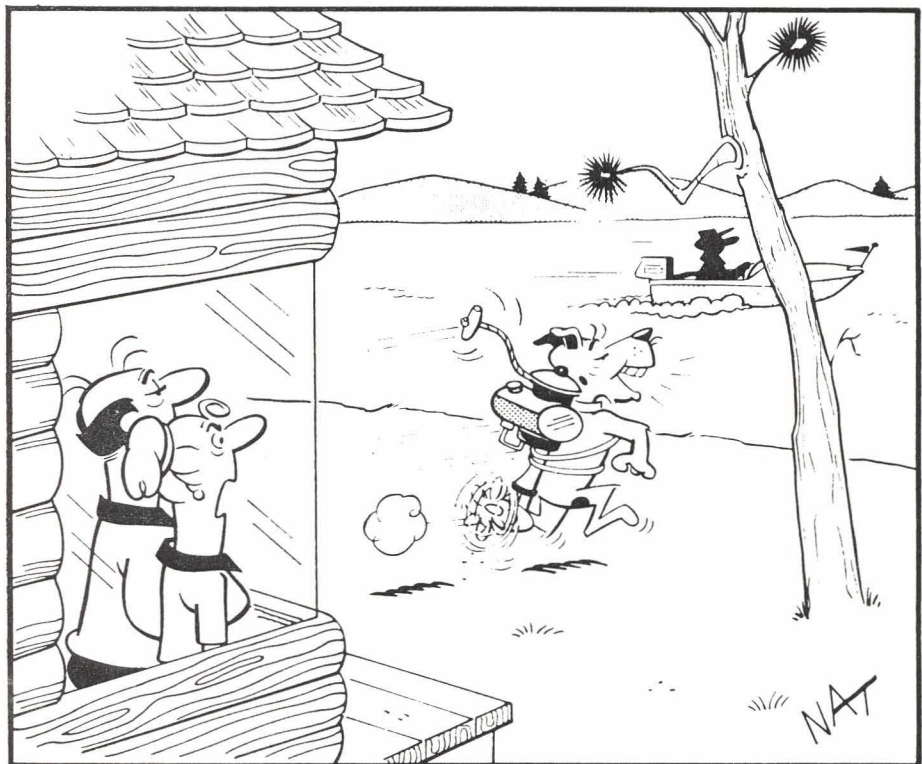
After running his nets, Van Horn returns to his fishing "shack" where the fish are cleaned and sold. This is the fourth location for his commercial fishing operation—constant expansion of businesses along the river keeps moving it farther upstream from downtown Atchison.

The river's natural environment has also been nearly destroyed by those who practice the theory that the "best use for the Missouri River is for the removal and ultimate disposal of sewered wastes of cities and industries!"

Thus the river, once home to huge flocks of waterfowl and immense

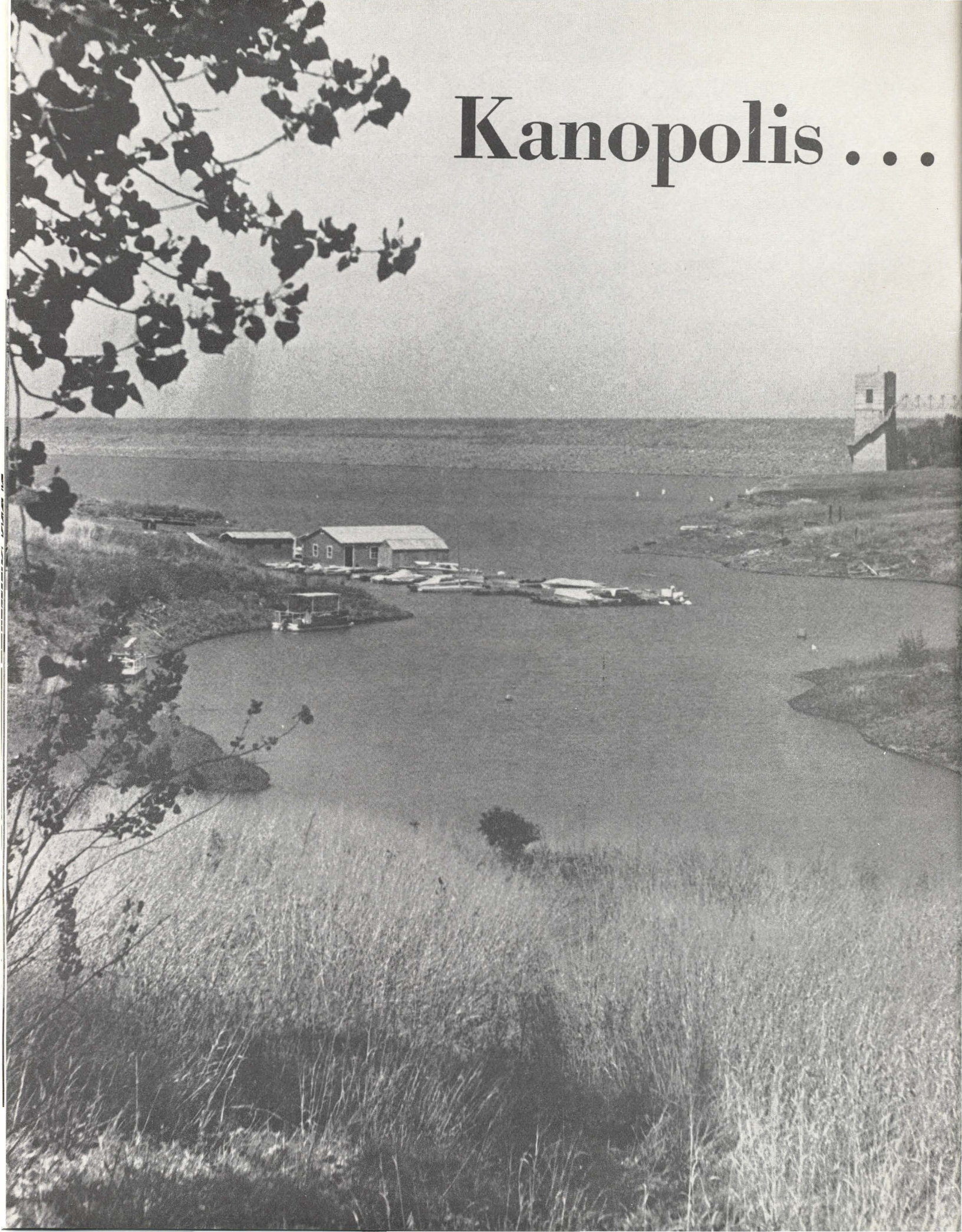
schools of numerous species of fish, is now an important artery for barges as they shuttle up and down stream.

But despite the bleak outlook for the future and despite the changes for so-called "progress," Bill Van Horn remains on the job, running his nets, selling his fish—a tribute to a vanishing way of life.



"WHY CAN'T HE JUST CHASE CARS LIKE OTHER DOGS DO?"

Kanopolis . . .



It Really Started Something

By THAYNE SMITH

Kanopolis. It really started something!

The year was 1948, and the eyes of many Kansas sportsmen turned to a big earthen dam constructed by the U. S. Army Corps of Engineers across the beautiful Smoky Hill River valley about 35 miles southwest of Salina.

Built at a cost of nearly \$13 million, Kanopolis became the state's first "big lake."

Constructed primarily as a flood-control structure, it wasn't long until Kanopolis proved its worth. The big flood of 1951 gave it a supreme test, when water backed up in the lake prevented millions of dollars damage to downstream farms and cities, and came within 18 inches of going over the spillway. That was the highest water the first big Kansas man-made lake has seen.

It was soon apparent, even with limited facilities provided by the Corps of Engineers and other agencies, that big lakes were popular among the state's people—and especially the sporting public.

Boaters swarmed from throughout the state to Kanopolis' shores, followed by fishermen and hunters. In those days, the lake offered only native fish species—channel catfish, crappie, black bass, bluegill and other perch, and rough fish. They grew fast in the lake's rich waters, and for several years, Kanopolis was a top fishing spot with native species alone.

Later, with completion of Fall River Reservoir in eastern Kansas, and others coming through the years,

(Continued on next page)

Kanopolis Beauty

LEFT: Outlet tower, marina and dam of Kanopolis lake show in view from South Shore State Park area.

UPPER RIGHT: Kanopolis attracted nationwide attention in July, 1966, when 10,000 members of National Campers and Hikers Association gathered in a week-long convention at its East Shore State Park.

LOWER RIGHT: Big oak trees and rocky shoreline frame view of upper part of lake and Yankee Run cabin area on Kanopolis' south shore. (Photos by Thayne Smith.)



the Fish and Game Commission initiated plans to stock the big reservoirs with so-called exotic fish—species not native to Kansas.

Kanopolis and Fall River received the first Kansas stockings of walleye and white bass. Both have flourished in Kanopolis waters. Today, it is considered an excellent fishing lake, with good walleye and white bass runs coupled annually with still-excellent fishing for crappie, catfish and other species.

Since that time, too, Kanopolis has chalked up a lot of other “firsts.”

In 1957, with the formation of the Kansas Park and Resources Authority by the State Legislature, Kanopolis was chosen—because of

its central location in Kansas—for the state’s pilot State Park project.

Initial park construction centered on picnic shelters, improvement of existing Corps facilities for swimming, camping and picnicking, addition of a modern shower-latrine building, and a water system on the lake’s East Shore area. Later, a second State Park was added to the south shore, near the dam, boasting excellent camping facilities, a trailer park with electrical, water and sewage connections, a fine marina with sales and service for boats, food and tackle supplies, baits and other items; a large bathhouse and swimming beach, concession stands, and picnic areas.

In addition, the Corps a few years

ago chose Kanopolis for its first extensive Kansas park development, constructing an excellent shower-latrine building, picnic and camping and other public facilities below the reservoir outlet. They recently completed similar facilities in the Venango area on the north end of the reservoir dam.

Along with its many other assets, Kanopolis also offers some of the state’s finest public hunting areas. The principal acreage is on the upper end of the lake, in the Thompson creek area, and adjacent to the northeast side of the dam.

The hunting areas abound with Bobwhite quail, pheasants, rabbits, squirrels and deer. Much of the credit for the excellent hunting can be attributed to Emil Kroutil, resident engineer for the Corps at the lake.

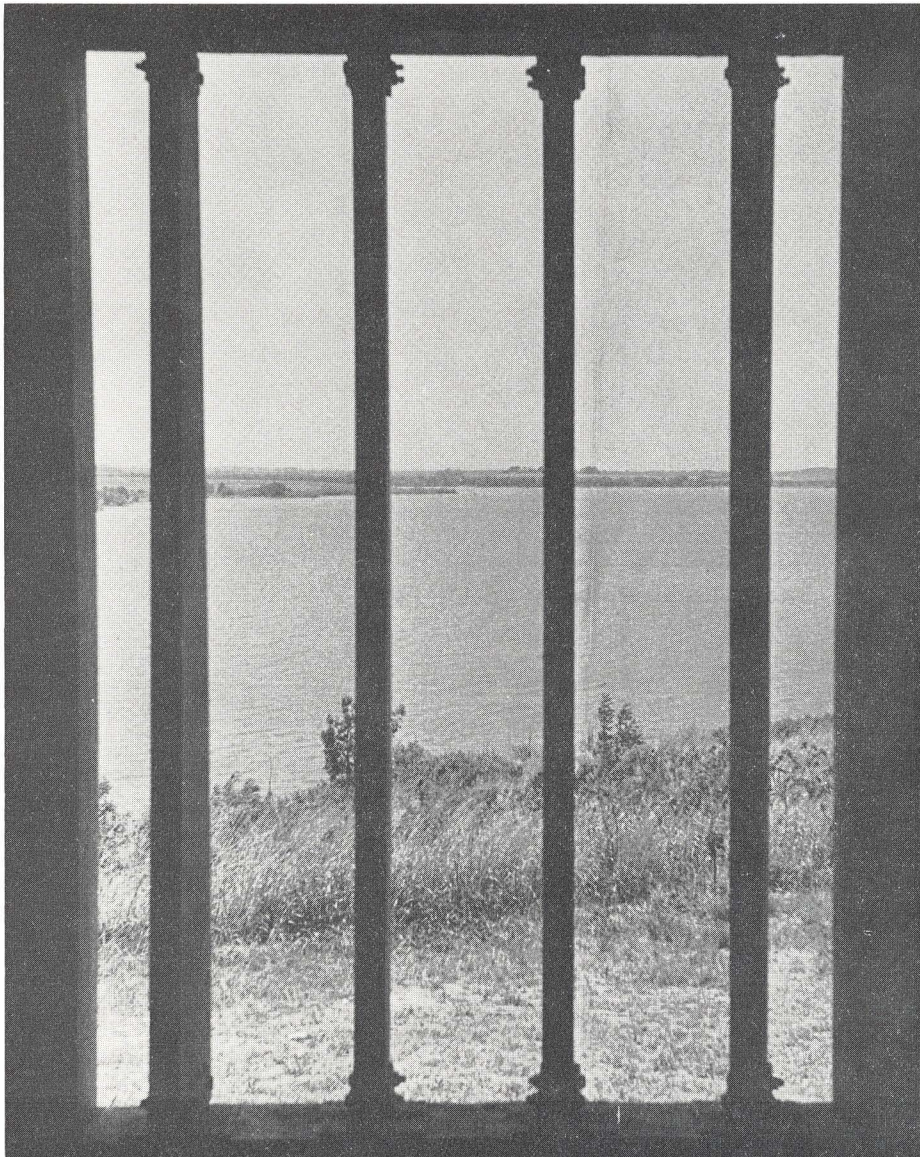
Called the “Pied Piper of Kanopolis” by friends, Kroutil—a biology graduate—knows the value of managing land for game, and has done extensive game management work around the public hunting areas.

He has, through the years, worked game management into the lease agreements of farmers who till and graze the public lands on a percentage basis. He has also planted extensive food plots for wildlife in areas thick with cover which are not tillable.

Kroutil’s “Pied Piper” title comes from the fact that he is an excellent sportsman, devoting most of his spare time to hunting and fishing. He knows the lake well, and when he goes fishing, many anglers who frequent the lake follow him, knowing that if fish are to be caught, he will find them.

Kanopolis isn’t large as Kansas lakes go—boasting only about 4000 surface acres of water. Other facilities make up for the small size of the lake, however. The public hunting area totals more than 5000 acres, and six parks—including those operated by both the Corps and the State Park Authority—cover another 2000 acres.

Through the years, development has been kind to Kanopolis. Hundreds of trees have been planted around its parks and public areas, and have flourished to give it added beauty.



Window in Corral Shelterhouse, sitting high atop a hill on north side of Kanopolis, offers excellent view of upper end of lake and surrounding area.



Attractive stone monument and plaque, located in Kanopolis East Shore Park, commemorates National Campers and Hikers Convention held there in July, 1966.

Many unusual rock formations dot the lake's shore, and canyons leading from it, make it a treasured spot of scenic beauty.

Horse Thief Canyon, on the northeast side of the lake, sports famous Indian Rock, which is covered with many Indian petroglyphs (rock carvings). Other rock formations in Horse Thief and Red Rock Canyons bear Indian writings along with the carved initials of such early and notorious figures as the Younger brothers, soldiers who served at nearby Fort Harker, an historic early-day frontier Army post at the city of Kanopolis, and pioneers. Horse Thief also offers the excellent Buffalo Track nature trail, developed by the Kansas Park Authority. It is a haven for rock hounds and fossil collectors.

Since becoming operable, Kanopolis has prevented flood damages of more than \$16 million, and has provided a steady, flowing water supply for cities downstream.

Its future is bright, too, from many standpoints. It is living proof that big lakes in Kansas can continue to provide—year after year—good fishing, boating, hunting

and camping for the sporting public.

Sometime in the next few years, it's a good bet that a long-sought irri-

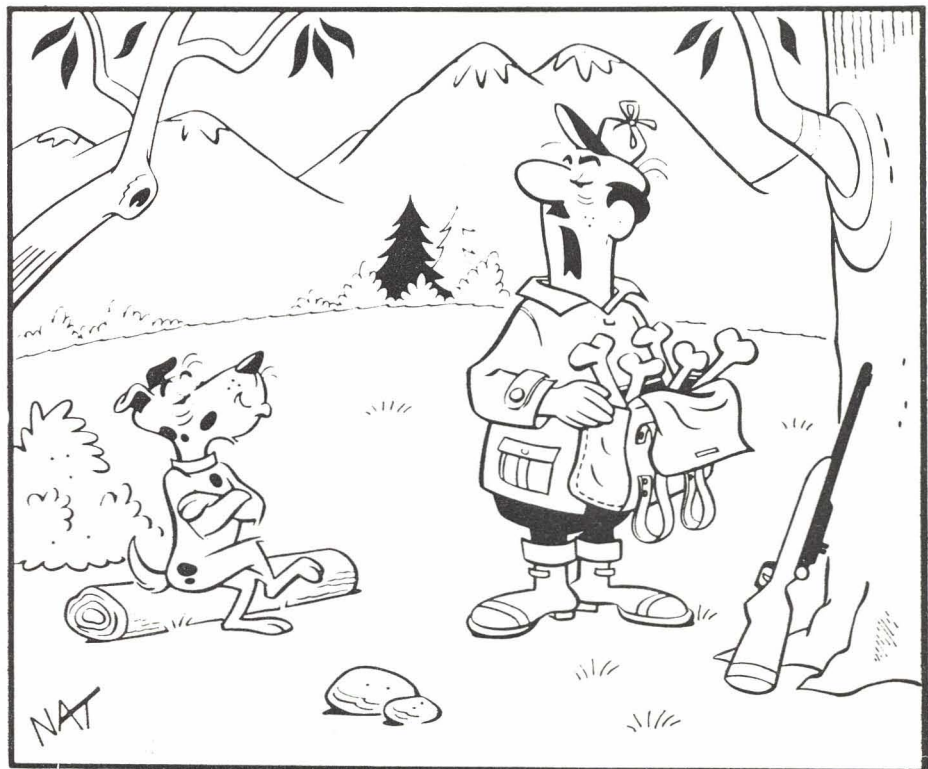
gation district below Kanopolis will become a reality. When it does, the lake will be authorized to hold another 20 feet of water, swelling its surface area from the present 4000 acres to more than 8,200. Additional public use areas will be developed for the larger pool, to keep pace with public needs and demands.

Kanopolis, as man-made reservoirs go, isn't large. In fact, it's somewhat on the "small" side even in Kansas, when compared with the state's 18 other reservoirs.

It's had many days of glory, however, including the hosting of the National Campers and Hikers Convention in 1966, an event that brought 10,000 campers from throughout the nation to its shore for a week in July. A large, attractive plaque on a stone monument at the lake's East Shore Park now commemorates the event.

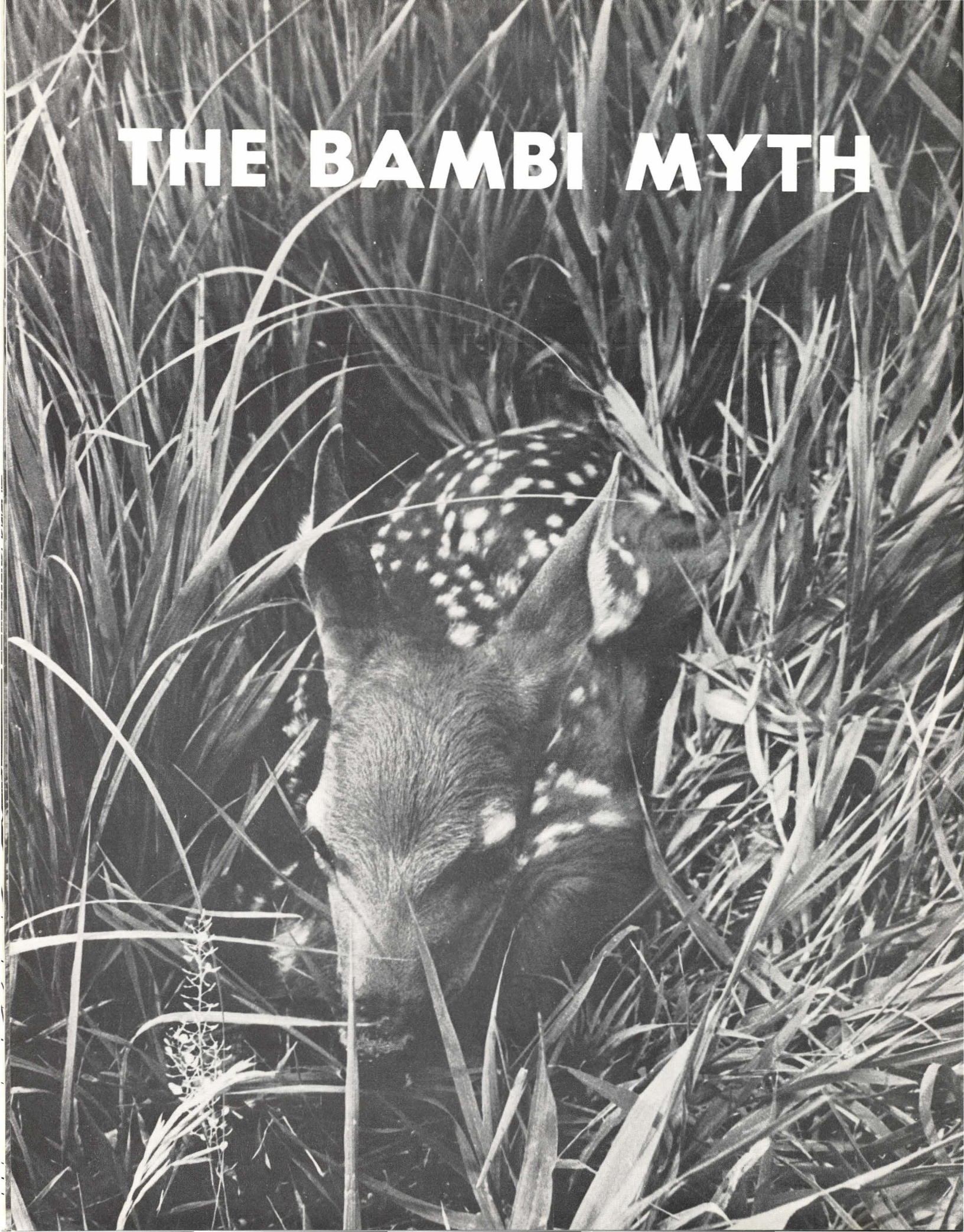
With its central location in Kansas, close proximity to Interstate 70, good fishing and hunting, excellent camping facilities, natural beauty and historical surroundings, Kanopolis will hold a favored spot in Kansas for many years.

And there's no doubt about it, it really started something!



"NEXT TIME, I'LL PACK THE FOOD!"

THE BAMBI MYTH



By CLARENCE BEEZLEY

Reprinted from Texas Parks and Wildlife

A wild Bambi never did, doesn't, and never will exist. Unfortunately, a fawn deer looks just like a Bambi. But a fawn deer is wild and you cannot make a wild thing something that was created with a cartoonist's pencil and a photographer's camera. But people keep trying—several hundred times a year.

They will find it just lying there, no larger than a twiggy-legged housecat, all curled up like a caterpillar, a bundle in the grass, with smooth, tawny skin flecked with small spots of frozen sunshine. There will be just enough black for highlights—a line down the back, around a tiny muzzle, and a shadow around the eyes.

Large in proportion to the head, the eyes will be set below a pair of long, soft, slightly floppy ears. The eyes will do it—slightly almond-shaped with long lashes, they will be soft and innocent and dark, yet so limpid that one can almost see a pure soul reflected in the depths. The fawn will have a beauty that will put a lump in the throat, and someone is sure to say, "Oh! It looks just like Bambi!"

The beauty is a flaw. It would be better for deer and people if fawns looked more like wart hogs. Then they wouldn't be taken home.

Fawnapping is a violation of both state and natural laws. But a fawn is beautiful and this makes it easy to rationalize the crime—"It looks so thin and alone," or "The mother is probably dead," or "We had better take it home and save its life." They do, and when they do, they might as well kill it.

They usually name the new pet Bambi. It will follow children and suckle their fingers. It will drink milk from a bottle and soon learn to drink from a pan. It will romp about like a little lamb on its dainty, razor-sharp, little hooves. An affection giving child may pick up Bambi, the fawn may lash out with its razor hooves, and there will be some nasty gashes.

"But after all, the child should have known better! Bambi was frightened."

A good many Bambies die within the first three months. One minute it will be all right and suddenly it will have dysentery. Within a few hours it will be dead because baby deer need their mother's milk. Bambi will have a suitable burial and for a long time there will be sad memories about the lovable pet that died suddenly. But this only happens to lucky fawnappers and lucky pet fawns. Less fortunate fawns will thrive on cow's milk.

Each year there is an annual Bambi roundup. It is heralded by calls from people attempting to get permits to adopt Bambi. They want to legalize fawnapping. Their justifications are all the same. "It was starving," or "Its mother was run over by a car," or "The mother was shot."

The request will be refused and it will be explained that a complaint will be filed. The phone will go quiet, then the rebuttal. "Well, if you think

Gene Hitt, game protector for Barber, Pratt and Kiowa counties, poses with a "Bambi" before taking it to a zoo. Rounding up Bambies and other captive wildlife is one of the most unpleasant duties that a game protector must perform.



I would let that poor little thing starve . . .," or, "How could you be so cruel?"

The agent will probably not say it, but he may think about the real cruelty—the taking of something that can never fit into a domestic life and making it something that can never be wild.

The Bambi roundup is one of the most unpleasant duties that an agent must perform. He will face crying mothers and crying children, the latter who will remember him as the man who took away Bambi. The father will tell his friends that he had to pay a fine for saving a deer's life.

Bambi must be taken to someone who can give it the proper formula, and located in an area where it can be conditioned to a life in the woods. Finding the proper reformatory is often a problem; but the sooner this happens the better the chance the



Being children of a game protector has advantages or disadvantages—depending on the way you look at it. True, they have more opportunities to temporarily mother wild Bambies as Vickie and David Burlew, children of Bill Burlew, Topeka, game protector for Shawnee County, will attest. But they also suffer more heartbreak than most kids when dad has to take it away or when the cuddly little fawn suddenly dies. (*Topeka Capital-Journal* photo.)

young deer have of living, and the less problem they will be to society.

More of the Bambies will be discovered when neighbors call in because, "That pet deer 'so and so' has been eating all my flowers." If Bambi's foster parents find out which neighbor called, a neighborhood feud may be spawned. This is only one of the problems caused by a Bambi.

A young fawn has no scent. When it becomes older, it will develop an odor indiscernible to humans, which brings out the hunting instinct in the friendliest of dogs. Many wild-born Bambies, trained to trust, are slain by house-born dogs whose primitive instincts are stirred by a wild odor. But philosophizing

is redundant. The end results are again bad neighborhood relationships.

Some Bambies, unfortunately, live long enough to become well-developed deer. When they do, there is a good chance some humans are going to be hurt. Remember little Bambi's razor-like feet? Grown deer still have the razors plus more muscle to wield them. A tame doe can and has scarred children's faces with a playful paw of a hoof.

Does are dangerous but buck deer are deadly. Stories about people being injured or killed by pet buck deer are regular newspaper fare.

In the second year of his life, a buck deer reaches maturity and in

addition to sharp hooves, acquires antlers supported by a muscular neck. During mating season he is no longer Bambi—he is a buck. He is looking for a territory to defend and does for a harem. A tame buck deer has no friends and no fear of people. They are capable of killing people, and often turn on their foster parents.

What do you do with pet deer that suddenly revert to their wild ways? Give them to a zoo? Zoos have no room or need for deer. Years ago, they became overstocked with other peoples' Bambies.

Turn them loose in the woods? You can, but you must take them a long way or they will very likely return home. If you are successful and they stay in the woods, they will be outcasts. They own no territory and other deer will chase them into marginal deer country where, if a buck, it may take out its frustration on people.

Sometimes one of these misfit deer will adopt a country road as its territory.

It is a place where it can meet people. Such a tame deer may become a local institution as people stop and feed it tobacco and chewing gum. It seems like a good arrangement until sooner or later along will come the scum of humanity with the eyes of a mink and the heart of a shrike—and another Bambi will have been butchered.

Of course, a deer can be put in a pen. It will exist there for a long time. Deer are built to jump so it will have to be a high fence, at least eight feet. But is a pen the place for an animal created to run and leap? Is a box of food a substitute for the smell of fresh succulent browse? Is the odor of humans a substitute for the aroma of wild things?

To make a Bambi a wild creature again is impossible—it already has been robbed of the chance to be what nature intended. It is too wild for civilization and too civilized for the wild. It will be an outcast forever.

The name Bambi is a misnomer. "Billy Budd" would be a much better name for a pet deer. A fawn left in the woods has at least a chance to survive, but one made into a Bambi must die a cruel death.

"All-American" Duck

Most waterfowl have long since left us, headed north—to the deltas, the prairie potholes, the tundra—for the nesting season. Most, but not all. One species remains behind from coast to coast—excepting only the treeless Great Plains and the Southwest—and from the Gulf to the Canadian border, nesting along tree-bordered streams and in timbered back-waters, bayous and swamps. This is the wood duck.

Of the 48 varieties of waterfowl that frequent North America, the "Woody" is the only major species whose year-around range is confined almost entirely within U. S. borders. He's truly an "All-American."

The "Woody" has other claims to fame. The drake, gleaming in iridescent green, bronze, violet, purple and chestnut, offset by black and white, is easily the most beautiful of North American waterfowl.

Even his feeding habits are unusual. Unlike most of his waddling cousins, woody is a nimble mover on land, gleaning the floor of streamside woods for fruits, acorns and nuts. His powerful gizzard can pulverize the toughest hickory-nut shells.

The hen wood duck disdains nesting on the ground. She sets up house-keeping in tree holes and cavities, more like a woodpecker than a duck. Her flying approach and entrance to a tree-hole hardly larger than herself must be seen to be believed.

And what happens when the youngsters, only a day or two old, leave the nest cavity, perhaps 30-40 feet above the ground? They put their faith in Momma as all good young'uns should. When she calls from the ground below the tree, her babes pop out into space obediently (no one's gotten close enough to see if they close their eyes). Their stubby wings are useless at this age, but downfeathers buoy up their tiny bodies, and injuries in the long drop are rare.

We came close to losing this unique, All-American duck. The

best of the woodies' range was riverbottom country, the very area first and most heavily settled by man. Tasty and available—young and old—the year around, wood ducks were prime targets for market hunters in the days before effective hunting regulations. Equally or perhaps more important, drainage and logging destroyed much of their nesting habitat.

By the early 1900's the wood duck was judged extinct, or nearly so, over most of its range. From time to time it has been given complete protection. But protective regulations alone, while safeguarding the remaining birds, could not increase their numbers. True restoration came only with the creation of federal and state refuge and management areas, preserving and improving nesting habitat, and with the widespread erection of man-made nest boxes, replacing lost hollow trees.

So successful was this work that the wood duck rejoined the list of waterfowl open to hunting in 1941. In the last few years this bird—once nearly extinct—has numbered among the top two-three species in the waterfowl harvest of the Atlantic and Mississippi flyways.

The moral is clear: Unrestricted hunting combined with habitat destruction can spell doom for a game species, and protection from hunting, by itself, can do little but save

the remnants. But habitat restoration and management (mostly paid for directly or indirectly by the hunter) can rebuild a population and enable sustained hunting harvests under wise regulations.

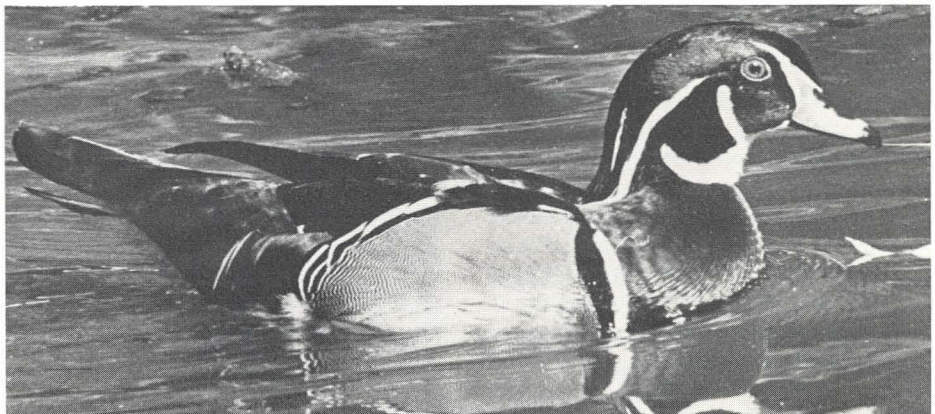
It's been a quiet comeback. This spectacular recovery has received so little fanfare that many people still consider the wood duck in danger. When woody was in trouble the news was shouted from the housetops, and rightly so. But let's give equal acclaim to the magnificent job of restoration—and credit to the many agencies and individuals responsible.

Correction

If you scored 100 on your "Feathered Friends" quiz which appeared in the Spring issue, you better check again for we made a glaring mistake.

Since photograph numbers 7 and 10 were nearly identical in size, they were inadvertently transposed. The Common Grackle pictured in number 10 fits the description listed in number 7 and the description listed for number 10 fits photo number 7 of a Red-Winged Blackbird.

Our congratulations are extended to many readers who wrote us explaining our error.



Bucks and Bows

By DUDLEY FOSTER

State Game Protector

"So long as the new moon returns in heaven, a bent, beautiful bow, so long will the fascination of archery keep hold of the hearts of men."

This quotation, taken from *The Witchery of Archery*, is as true now as when written by Maurice Thompson in 1880. Today, archery holds fascination for tens of thousands, making it one of the fastest growing sports in the nation.

Why does a person endeavor to conquer the odds in hunting game with a primitive weapon instead of a rifle? Undoubtedly there are many reasons, but hunting with bow and arrow is both challenging and demanding.

When compared to a firearms hunter, the modern-day bowman starts with two strikes against him. His weapon has a comparatively limited range and he must be a good hunter. He must use his intelligence and ingenuity to get within range before making the killing shot.

Without question, archery gives game a sporting chance—a better opportunity to escape. As a result, an archer's success ratio is low when compared to a firearms hunter. Usually it's necessary for him to spend many more hours afield to bring home game—a prime time to observe the scurry of squirrels and listen to the scolding chatter of bluejays.

In Kansas, archery interest has increased significantly in recent years, particularly since the first archery deer season in 1965. Last year, 3,938 archery permits were issued.

For the novice who is considering bowhunting for the first time, or for the experienced hunter who has more misses than hits, serious consideration should be given to equipment. Archery is hard to master without making it more difficult with unmatched or improperly set equipment.

First, let's consider the bow. Today various sizes, shapes and forms of bows are available. Early-day wood bows of osage, hickory and bamboo have been replaced by solid fiberglass and wood-fiberglass laminates. Fiberglass bows are more durable and can be shaped to provide more thrust to the arrow.

There are two basic bow designs—

straight and recurve. A straight bow is exactly as the name implies, when unstrung, while a recurve design has limbs which curve opposite to its strung position when unstrung. Although most straight-end bows have been replaced by the faster recurves, a few are still used for target practice, fishing and small game hunting.

The recurve design is most effective.

Using a blind for cover and wearing camouflage clothing are two basics in archery form.



tive for hunting since it provides greater accuracy with less physical conditioning. A 50-pound recurve bow may have the same thrust as a 75-pound straight bow—and at the same time be much easier to draw.

Three basic factors should be considered in choosing a hunting bow: (1) length; (2) pull-weight; and (3) fit of the handle.

Most hunting bows are 58 to 60 inches in length, depending on size and physical ability of the hunter. Extremely short bows are often too lightly constructed for proper stability and the extreme angle of the bowstring may cause a binding of the fingers. Short limbs—ends of the bow—cause a drastic reduction in thrust and should only be used for close-range hunting.

While longer bow lengths may be more accurate, they may be a hindrance in heavy brush or while shooting from cramped quarters such as tree blinds.

Pull-weight—the maximum amount of strength required to draw the bow 28 inches—is determined by an individual's physical strength and experience. Most female archers draw from 25 to 28 inches due to short arms and narrow chest widths while men usually draw from 27 to 32 inches.

The arrow's thrust and penetration is determined by pull-weight. Speed also determines the amount of trajectory, or curvature of the arrow from release point to target area—the flatter the trajectory, the more accuracy and control.

The first advice to any new archer is: "Don't overbow." There is often a tendency among younger groups and women to purchase bows in weights too light for hunting. Men, who think they are stronger than they actually are, often purchase bows which are too heavy. Generally, it's better to start with a bow that's easier to handle, then as accuracy and confidence develop, move to a heavier bow.

Archery deer hunting laws in Kansas require a minimum pull-weight of 35 pounds. While this is a liberal regulation, most men prefer a pull-weight of 45 pounds or more. Some bowmen have a tendency to use a heavier bow to insure penetration,

but more pull-weight will not shoot straighter or replace the necessity of skill—it will just cast the arrow further.

Any bow should feel comfortable when held in the hand and have a smooth, even pull through the full length of the draw. The handle should fit the hand comfortably without unnecessary bulk. Hunting bows have a cut-out in the handle which provides a centrally located sight picture, or window. A reputable dealer can be of immense value in aiding the novice to select the proper grip.

Next, consider the arrows, the most important part of archery accuracy. If an arrow is to fly true and straight from the bow, it must be of the proper length and spine, or stiffness. Length merely depends on length of draw. The spine should match the bow's pull-weight, otherwise the arrows will wobble in flight and go off target.

There are three types of arrow material: Wood, fiberglass and aluminum. Difference is mostly cost versus quality, but don't cut corners with arrows, even if it means spending less on the bow.

Wooden arrows are cheaper and can be bought in colorfully-matched, properly-spined sets. However, they are susceptible to weather changes which can cause them to warp and fluctuate in weight. Breakage is also a problem.

Fiberglass and aluminum arrows are best. Not only are they more accurate, they are impervious to elements and can last for years. Aluminum arrows are more expensive but are faster, more accurate and weigh less than fiberglass. However, they have also been known to bend when ricocheted off a rock or tree.

It is important for practice arrows to be of the same length, fletching materials and point weights as broadheads which will be used during the actual hunt. Generally, 125-grain field points will weigh the same as most popular broadheads.

Broadheads depend on personal preference, but here again, stick to quality. They must be honed to razor sharpness, possible only with good hard steel. In addition, broadheads must maintain strength and accuracy, hold a good edge, and be



Keeping a broadhead sharp to make a quick, effective kill can often mean the difference between success and failure.

designed so they will not wind-plane.

After bow and arrows have been purchased, practice is of prime importance. A suitable backstop of baled hay may be quickly constructed but care should be taken to erect it in a safe place away from pets and children.

The novice should begin by using an extremely small target at close range to help concentration. After he becomes proficient at 10 feet, he can move back to 15 and then to 20 feet, always using the same method of aiming.

Since most clean, killing shots are made at 30 yards or less, a bowhunter should concentrate on short distances. Those fabulous 60 to 100-yard shots are the exception, not the rule, and should not be attempted by a conservation-minded archer. In archery, skill should be based on the ability to stalk or wait-out an animal until it comes into close range.

A variety of shooting positions such as kneeling, standing and sitting should be practiced. Shooting around or through obstructions and from elevated positions will imitate actual field conditions and determine bow length allowance. When shooting down on a target—such as from a tree blind—sight pictures and trajectory must be adjusted.

Practice with broadheads should start two or three weeks before the season opens, but soft sand or dirt targets should be used since rocks

and wood are hard on points and shafts.

The manipulation of a bow or firearms is a mechanical function and once acquired, woodcraft skills must be learned by the archer. Since a bowhunter must get close for a good shot, he must know something of deer habits—where they loaf during daylight hours, feeding habits and other signs which indicate their presence. An archer is always looking for debarked tree branches and saplings where antlers have been rubbed, fecal droppings and tracks. Above all, he must resort to old Indian tricks of moving silently and slowly through the woods, stopping often to listen and observe—always moving downwind of his quarry.

Deer are creatures of habit and follow fairly set patterns. Basically they move between daytime bedding areas and nighttime feeding areas over fairly set trails. Knowing these trails and movement periods is invaluable to bowhunters.

Once deer trails or feeding areas are located, a tree blind can be most productive. The blind should be above the animal's line of vision since deer will not normally look up unless noise or movement attracts them. However, if the blind is too high, shooting difficulty will be encountered. If too low, the deer may either see or smell the hunter.

After the blind has been constructed, clear out any branches or brush that might rattle against the bow or deflect the arrow while in flight. Bowhunters should be careful of the background and never silhouette themselves. Deer know and fear the human form.

Shot placement is of great importance. When an animal comes within range, stay calm, even though it is quite difficult, and pick a small target spot—never shoot at the whole animal. Lungs provide the largest area while neck and heart areas are also lethal targets, but smaller.

Many articles depict the shooting of moving animals but the novice should stay with basic techniques. Inexperienced hunters who take extremely long shots or shoot at moving targets are only wasting natural resources. A shot at a running animal is most difficult, even for an expert.

If an archer is lucky enough to place a well-aimed arrow into a deer, he should not expect the animal to drop in its tracks since a broadhead kills by bleeding, not by shocking power as is the case of a bullet. After the hit, give the animal plenty of time, usually from 20 to 30 minutes, to bleed out and stiffen up before approaching. During this time the best rule is to watch the direction the wounded animal has headed, stay quiet and wait. With a good hit, a deer will usually lie down after a short distance if he doesn't suspect human presence.

All bowhunters should make every effort to secure game that is hit—and not quit after walking 100 yards. Sometimes, tracking a wounded animal takes most of a day.

Since the beginning of Kansas' deer season, controversy has raged between firearms and archery hunters—an issue which will probably continue for some time.

Admittedly there is a certain percentage of wounding loss by both bows and guns but when a dead deer is found with an arrow, the cause is more evident than with a rifle wound. A bullet is small and may remain undetected—the cause of death being classified as unknown.

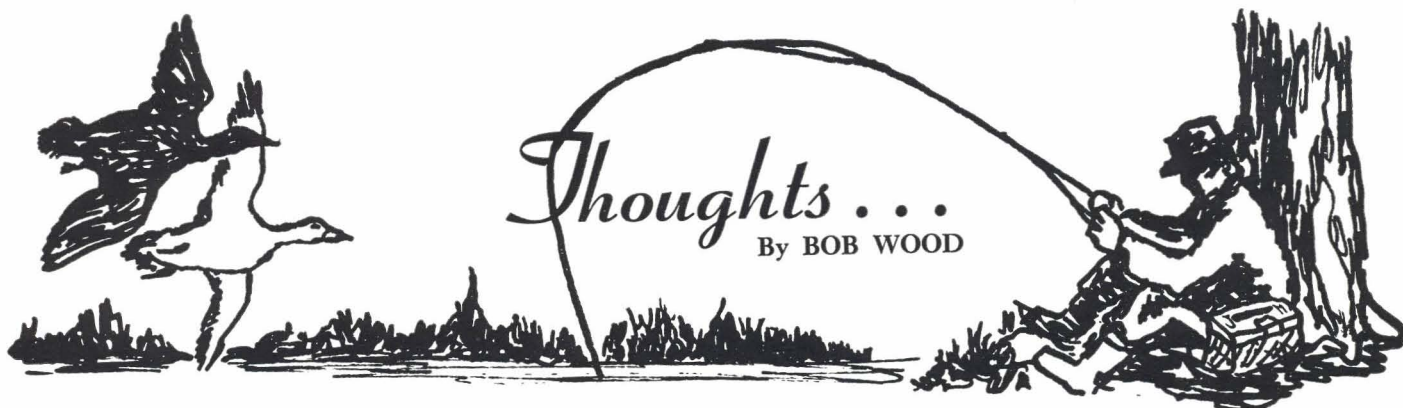
Archery has provided many hours of esthetic recreation in Kansas. Archers agree they have observed more wildlife in their natural surroundings than ever. And, of equal importance, through the purchase of permits, bowhunters have helped to guarantee future studies and the management of Kansas' healthy deer herd.

Bowhunting is not a spectator sport and there are no referees. There is only the individual's personal knowledge that he has played the game fairly and to the best of his ability.

Who could ask for more?

A bowhunter is always alert for fresh signs of game he seeks. To an archery deer hunter, this antler rub along a well-traveled deer trail is a most welcomed sight. (Photos by Gary Heskett.)





By nature, we humans are highly competitive in nearly everything we do. We strive to be on top—in business, play and personal accomplishment.

Competition is good in its place, since it is only through competition that improvement is achieved. However, due to our psychological makeup, there is a need for relief from pressures of everyday competition. Fishing is an excellent source for that relief.

While another fishing season is upon us—a prime time to get away from it all for a few minutes to relax—there are those among us who cannot dampen strong competitive desires.

Nearly every week we hear of a fishing contest or derby with prizes being awarded for the biggest fish, or for the most fish caught in a given time period. Such contests are fine where only adults are involved, but similar activities are also organized for children.

Although a fishing derby by design and intent should entertain kids, it seems to serve as a function where adult behavior traits are imprinted on the minds of our offspring.

In promoting such contests we may just as well say, "Hurry! Hurry! Hurry! Enter your children in Youthsville's Fishing Derby. Prizes Galore!"

1. A new reel goes to the greediest contestant for catching the most fish.



2. A new tackle box will be presented to the entrant bringing in the best bragging size fish.

3. A complete new fishing outfit will be awarded to the Grand Champion Fisherman who takes by any means the best combination of the largest fish and the highest number of fish.

(Sponsor's Note: The Grand Champion prize is presented as proof the entrant has shown the least regard for fishing as a noncompetitive outdoor activity.)

Undoubtedly a fishing derby for kids is based on an adult's idea that the children will benefit. However, since most derbies and contests em-

phasize the only benefit of fishing to be taking the most fish or catching the largest one for a purpose of material gain, the results may be a lessening of individual appreciation for wildlife and our natural surroundings.

Perhaps we are asking too much. Our competitive behavior has evolved through the millennia, but there must be some way to more adequately emphasize that aspect of fishing we consider the esthetic. Before running, we must learn to walk. It is only by walking that we learn to appreciate the ground under our feet.

It is not our intention to discourage adults from competing for fishing prizes, state records, or Master Angler Awards. But for children, fishing experiences should be "walking steps" where they become aware of the sport itself rather than learning to gain notoriety by attempting to out-fish others.

NOTICE TO READERS

Kansas Fish and Game Magazine is distributed free to Kansas residents, upon written request. Complete name, address and zip code number should accompany any correspondence relative to the publication. Anyone moving to a new address must notify the Information-Education Division, Kansas Fish and Game Commission, Box 1028, Pratt, Kansas (67124) if they desire to continue receiving the magazine.



From a high bluff near White Cloud, one can observe a scenic portion of the Missouri River as it twists its way between the states of Kansas and Missouri. Once home to many species of fish and other forms of wildlife, the natural environment of the river has been nearly destroyed—thanks to navigational priority and water pollution. See Story entitled, "A Vanishing Way of Life" on Page 8. (Photo by Leroy E. Lyon.)

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