

KANSAS WILDLIFE

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Editorial

Midwesterners typically think of rain when contemplating the Pacific Northwest. And untravelled residents of that region consider the area between Colorado's Rockies and the Mississippi River to be one big, dusty wheatfield, cut by a few superhighways and dotted with clusters of farm buildings. Neither view is correct, of course.

The Cascade Range separates the rain forests of western Oregon and Washington from the drier country that actually comprises about two thirds of the land mass of these states. Rolling Palouse grain fields border sagebrush scablands in eastern Washington. These merge with pine-barren vegetation to the north, cheatgrass slopes to the south. The Blue Mountains cut a swath through both states, augmenting the densely-timbered Selkirk Range in Washington and the majestic Wallowas in Oregon. Oregon's high-desert sage stretches for miles across its southeastern sector, while the rowdy Snake River churns its way through Hell's Canyon and around the northeast corner of the state. Orchards, cattle ranches, and wheat farms occupy most of the agricultural land on the east side of the Cascades, though row crops and even grapes are raised in central Washington's "basin."

For the last eleven years I've lived in the Pacific Northwest. Still, my roots are in the breadbasket of the nation, where I grew up milking cows, cutting hay, shelling corn, and combining wheat. Though Kansas is a new home to me, much of its wildlife, topography, and vegetation is familiar. Its resource problems are not unlike those of other areas I've seen.

Kansas is also unique in many respects. Perhaps these were more instrumental in drawing me to the state than a feeling of familiarity. First, the Kansas Fish and Game Commission is a highly professional group of people. While other wildlife agencies also boast competent staffs, none has impressed me more than that of the Sunflower State.

Secondly, KANSAS WILDLIFE has a unique story to tell, a message for Kansans concerning the incredible natural resources right at their back doors. We've all heard about the fabled wildlife wealth of the west coast states, of salmon and steelhead, brant and chukar, mule deer and elk. Well, I've been there, and the stories are true—for those who search out that wealth. But the same holds for Kansans: Our state provides some of the finest outdoor recreation in the country—to those who diligently seek it.

Have you ever shot a record-book whitetail buck? Your chances in Kansas are about as good as they are anywhere. Have you ever reeled in an eight-pound bass or netted a big flathead catfish? Those are fish stories that never get told in the Pacific Northwest. And bird hunting! The bobwhite is *the* classic upland fowl, and Kansas has a booming population. Pheasants, sharptails, prairie chickens—did you know Kansas was number one in the nation last year in the harvest of prairie chickens? Wild turkeys are present only in token populations west of the Bitterroots; here they're not only prized, but available.

No, you needn't shoot creatures or pull them out of the water to have a good time in the outdoors. Kansas obliges the photographer and bird-watcher with spectacular vistas, the chance to view whooping cranes and other rare wildlife. While harvesting animal surpluses is an essential part of game management and a benefit to wildlife populations, appreciative (non-consumptive) users are on the increase. That's good. If you're one, you're interested in wildlife and its habitat, concerned for the future of both. The Kansas Fish and Game Commission needs the support of concerned, informed people like you.

Where can you—as a hunter, angler, or appreciative user—go to increase your knowledge of Kansas wildlife? Well, I hope you turn first to this publication. As its name so boldly states, it *is* about Kansas wildlife. Here you'll find not only a trove of information concerning your state's natural resources, but well-researched up-dates on conservation issues, in-depth how-to articles dealing with hunting, fishing, and other outdoor activities, an educational section, news notes—all illustrated with first-rate artwork and full-color plates provided by one of the best wildlife photographers in the business.

One more thing: KANSAS WILDLIFE has fallen behind schedule in its mailings. That will be corrected. Timely reporting is an essential function of any magazine; this one *will* be on schedule within two issues and will remain that way.

I feel privileged to be in Kansas and to assume the editorship of a fine magazine. With your support, it will get even better.



*Experienced hunters adapt their
tactics to the quarry.*



hoofing it after big bucks

Gene Brehm

Rapidly-melting frost dripped from the native grasses near my deer stand as the sun broke above the trees. Twelve mule deer, all does and fawns, grazed their way toward a bedding area somewhere to the northeast. "Will a buck follow?" I scanned the cut where the herd had materialized minutes before. . . .

My brother, Gary, eased up beside me as the last of the herd moved, unaware, out of sight.

"What's the plan?" I asked.

He answered with hand motions rather than talk. "Let's still-hunt toward the south." We both knew that the deer in this area were scattered and that covering more ground might be in our best interests. Besides, still-hunting in the sandhills is almost as productive as stand hunting. You needn't show yourself over a sandy knob until you have surveyed the swale beyond.

Separated by a couple hundred yards, the two of us moved parallel, only occasionally glimpsing each other. But the surrounding countryside captured my interest, as subtle variations in soil type became evident through changes in the vegetation it nurtured. A scattering of sandlove, Indian grass and sandreed augmented stands of big and little bluestem on the hillsides. Sand-plums dotted old blow-out areas, and small groves of black locust laced the depressions.

Suddenly, Gary's hand motions caught my eye. I moved toward him quietly, in a crouch. He resumed glassing to the south. Some object commanded his absolute attention. My binoculars revealed a mature muley buck leisurely feeding at a range of three hundred yards. The deer was near the far side of a large flat and, judging from his actions, would soon be bedding for the day.

Circling wide to the west, Gary took full advantage of the terrain and the cross-wind—two items an experienced hunter keeps foremost in his mind. He made occasional stops to watch for the hand signals which might mean a change in the buck's position. Halting for a full minute's rest on the blind side of

the last rise, he checked his rifle and scope, then quietly slipped a round in the chamber. His nerves had been honed sharp by twenty minutes of intense but controlled moves; now he tried to calm himself. The last twenty feet of cat-like movement seemed to take minutes, but suddenly it was all over. The rifle's report rocked the silence. I raced forward to congratulate my partner.

That is the way deer hunting can be in Kansas. Unfortunately, because of the state's accessible terrain, much deer hunting includes the unwarranted use of vehicles. While most such hunts are legal and do not entail the actual pursuit of game with a motorized conveyance, (a violation, incidentally, which ranks as the second most common in Kansas game fields), the 'road hunter' may be cheating himself out of a quality outdoor experience.

To get the most from your deer hunt, you'll want to focus your interest on the hunt itself, not the kill. The kill is the climax, its prospect an enticement that leads you through the other steps of a great outdoor adventure. But to make the kill your goal is to ensure yourself of failure when you do not upend a buck. Who wants to fail that often?

One of the most fascinating aspects of deer hunting is the study of the deer themselves. To be a successful hunter you must study deer; to make the most of your time afield, you'll want to. And you can't do it from a vehicle.

Two species of deer inhabit Kansas. The majority of our animals are whitetails, their populations dispersed statewide. Mule deer range primarily in the western half of the state. Latest surveys show Kansas holds approximately 80,000 whitetail deer and 15,000 muleys.

Whitetails and mule deer behave in different ways. Muleys do not exhibit the territorial habits for which whitetails are so well-known. Research obtained in banner whitetail states shows that a whitetail may spend most of its life within an area as small as one square mile. This data also applies to areas of eastern

Kansas where the population density of the species is great. In central and western regions, however, where habitat is marginal, a whitetail's home range is significantly greater.

There are many ways to hunt whitetail deer. But no matter how you approach the challenge, you must first choose a promising area. This cannot be stressed enough. Knowing what is good whitetail habitat is essential if you are serious about bagging a buck. Tracks, of course, are a sure sign deer are in the area. But when were they made? Is there a big buck with the group? Where do the animals bed and forage? What escape trails do they use? Do they migrate with seasonal changes? As you gain experience, tracks will yield more information to you. Study them when you go afield. Follow them in mud or snow. And always examine the tracks of any deer you jump.

Rubs are where bucks polish their antlers to rid them of summer's velvet. Rubs first start showing up in September and are visible throughout the breeding season. A rub should mean little more to the hunter than a track. Although it does indicate the past presence of a buck, it is not a territorial boundary marker. The size of the tree used and the damage inflicted may, however, give a good indication as to the size of the buck. Young deer rub saplings that 'give' under their ginger scrubbing and usually select trees of less than two inches in diameter. When you find a large rub on a tree as husky as a cedar fence post, you're on the trail of a mature buck.

Scrapes are among the most important signs for hunters. A scrape is an area on the ground that a buck has cleared of debris. Often these scrapes are located under overhanging tree branches. They may be as small as a dinner plate or may cover more than a square yard. The buck sometimes makes an antler "rake" in the cleared earth and will often leave a hoof print. The hoof print results from the deer leaving scent from the interdigital gland

between its toes and may be a visual sign to does approaching estrus. When a buck "works" a scrape, he paws the disturbed area. Then, crouching on his rear quarters, the buck urinates on his tarsal glands (located on the inside of the hock). The urine drips to the bared earth. Sometimes mature bucks stand on their hind legs in order to rub their noses on overhanging branches. This may be an attempt to transfer scent to these branches via the preorbital glands in front of the eyes.

A buck may open scores of scrapes as the rut approaches, but most are one-time sign posts and will appear old by mid-rut. When December's firearms deer season arrives, the rut is on the wane and the bucks are actively using only those scrapes located in "good doe territory." If you find a freshly-worked scrape at this time, you can assume that a buck is in the area and that a stand downwind from the scrape—and from the cover through which the deer is likely to approach—will be a good one. Such a stand can be as effective at noon as during the traditional morning and evening activity periods.

Still-hunting is another productive way to hunt whitetails—whether they're actively rutting or not. Still-hunting is almost like stalking; it is slowly, deliberately moving through promising deer habitat. Frequent pauses will let you monitor surrounding cover. Remember that too rapid a pace will enable the quarry to spot you and slip away, often unseen. This type of hunting works well only if you keep the wind to your face or side, make minimal noise, and are alert to the pulse of the woods around you. Still-hunting is the most demanding method by which deer may be hunted and, to many nimrods, the most rewarding. A buck taken this way is truly earned.

Mule deer hunters can use still-hunting to advantage, as well. But many elect to walk more rapidly, covering ground between high



Gene Brehm photo

Whitetail bucks in heavy cover are elusive animals, masters of camouflage and concealment in grass as well as timber. Scrape hunting (below) can be productive during the rut.



Ron Spomer photo



Gene Brehm photo



Wayne van Zwoll photo

Mule deer are primarily open-country creatures but can blend into the sparest cover and make expert use of terrain to give hunters the slip. Careful and frequent use of binoculars is essential when hunting these creatures. Rifleman (above) uses a tree to break up his silhouette on a dawn vigil.



Gene Brehm photo



Gene Brehm photo

points, then stopping on promontories to glass likely cover. Whitetails can be hunted by using binoculars at long distances, but generally this is effective only during the dawn and dusk feeding periods, as these deer bed almost exclusively in thick cover. Mule deer in more exposed beds are still difficult to see, but can be discerned if you'll use your binoculars and spotting scope carefully. It's a real thrill to watch big antlers materialize in a patch of grass or out of a fencerow through the eyepiece of a good spotting scope. Game spotted in this manner can then be stalked.

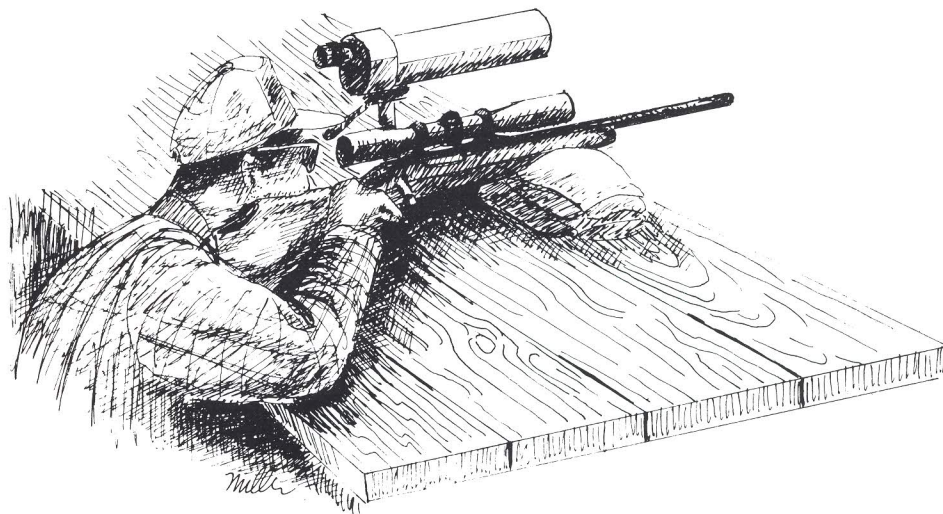
Since mule deer are not territorial

animals, it is difficult to hunt individual bucks repeatedly. They generally will not return to the same feeding and bedding areas in whitetail fashion. When harassed, a muley's first thought is to put distance between himself and his pursuer. Before these deer became heavily pressured by hunters, distance alone was enough to ensure safety. But with far-reaching modern rifles and the proliferation of roads in prime mule deer range, the modern muley now uses cover as expertly as his whitetail cousins. He's become a tough nut to crack. Proper still-hunting technique and the painstaking use of binoculars

are essential for success when you're after today's muley.

Whether you're chasing whitetail or mule deer in Kansas, your hunts will be more successful if you regularly use proven techniques. But as you find yourself filling more tags you'll also discover that the hunting, not the killing, becomes the focus of each hunt. The use of a vehicle will seem less desirable, and the thought of a buddy shooting a deer for you will mean that he has not only broken game laws, but has pre-empted your sport! Ethics in field sports aren't just a set of moral obligations; they point the way to a more fulfilling outdoor experience.

sighting in



Mike Miller illustration

. . . knowing how to do it could mean venison on the table.

Wayne van Zwoll

Sighting in a rifle is not like shooting a shotgun 'just to get the feel of it.' A shotgun's rear sight is the shooter's eye, the front bead non-adjustable. If the shotgun fits, it will hit where you point it—or close enough for its 40-yard range limit.

A rifle, however, is an instrument of precision. Its projectile is a far-ranging one and must be directed precisely to be effective. For the purpose of directing the bullet, a rifle's "iron" sights are adjustable. So are all telescopic sights, or their mounts. But those adjustments are of no use if the shooter doesn't know how to zero (sight in) his rifle.

If your rifle is not precisely zeroed, you're setting yourself up to miss or cripple game. And sighting in needn't consume many boxes of ammunition. A couple will do, and leave you plenty of rounds to kill your game. Besides, it's better to spend thirty-nine cartridges zeroing a rifle, and take your trophy cleanly with one shot, than to neglect zeroing and lose that animal.

Sighting in is not a test of marksmanship; it is a fine tuning of your hunting equipment. When you sight in, be sure you do it from a rest—sandbagged, if possible. Eliminate as much of the human error as you can. Your rifle's grouping ability should be evident when sighting in.

Your target should be a big one, with an aiming point that will not be obscured by your front bead or reticle. I use a sheet of white notebook paper on a large box. This is set up 25 yards from the bench. The next step is to be sure my rifle is ready to go. I check the bore for obstructions, then cinch every screw with a properly-fitting screwdriver to be sure they're all tight. (Front and rear guard screws on bolt rifles should be very tight, but the middle one need only be snug. Likewise, the forearm screw, if the rifle has one, can be left a bit loose to relieve forend pressure. Scope and mounts screws, of course, must be absolutely tight.)

When my breathing and pulse are at a relaxed rate, my ammunition

within easy reach, my spotting scope focused on the target, and my rifle firmly wedged in the sandbags, I load up. Then I get comfortable. The rifle now rests so solidly that I needn't hold it on target; it would require effort to move it *off* target.

My rifle barrel, incidentally, is free of contact with the sandbags; only the forearm is couched. To rest the barrel is to exert unwanted pressure that will cause the tube to vibrate away from the pressure point. When a shot is fired, the barrel shudders violently at a high rate of oscillation. Accuracy will suffer if this vibration is not allowed to occur in the same pattern shot to shot. So resting the barrel—at the bench or in the field—is bad business. So is wantonly adjusting forearm screw pressure, which also affects barrel vibration.

A corollary to this is the effect sling tension has on point of impact. Since a tight sling exerts pressure down and pulls the forearm *away* from the barrel, groups fired from a

rifle strapped solidly to the shooter's arm will generally be lower than those fired from a bench, where the rifle is free to recoil upward only. The difference won't be noticeable at a hundred yards, but is a factor at longer ranges.

Now, back to the bench.

With the crosswires quartering the paper, I squeeze off a shot, then spot it. I move the scope adjustments in the direction I want the impact to be moved and in the amount that will bring it to the center of the paper. Some scope adjustments are calibrated with one-minute clicks (each moving the impact one inch at a hundred yards.) Others use half-minute clicks (half an inch at that distance), and still others employ quarter-minute clicks. Some varmint and competition sights and scopes may be graduated in eighth-minute clicks. Your equipment should be labelled as to its adjustment potential. Remember that moving the knobs one minute moves the point of impact only one quarter inch at 25 yards, the range at which all initial sighting should take place.

After adjusting the scope, I shoot again, note bullet impact, and refine the adjustment. I repeat this procedure until my shot strikes very close to center. Then I set up another target at a hundred yards and, going back to the bench, once again get comfortable.

My first shot at this longer distance will be on the paper, but probably not exactly where I want it. I adjust the scope as before, remembering that only one quarter of the clicks I used at 25 yards will be necessary to move bullet impact each inch at a hundred steps. When my shots are on target, I fire at least one three-shot group, letting the barrel cool between shots. If the center of impact is where I want it, I set up another target at 200 yards. By the time I've shot a 200-yard group, the scope probably needs no more adjustment. Still, to ensure that I'll be able to take advantage of my rifle's full potential, I'll trot out a

300-yard target and shoot a group at that range. If my smokepole is capable of 400-yard kills, it will also be targeted at that distance. I'll probably not adjust the scope at the longer yardages, but will note the impact points of the bullets for future reference.

At what range should your bullets print on point of aim? That depends on your rifle and the range at which you expect to shoot. If you're sighting in a slug-shooting shotgun, you'll obviously be ill-advised to even experiment at ranges much over a hundred yards. Probably the best formula for smoothbores is to effect a 75-yard zero. You'll then be about an inch high at 50 yards, four inches low at a hundred. A center hold on the chest of a deer should get you venison anywhere within the effective range of your gun.

Short-range rifle cartridges like the .30-30, .358, and .45-70 are usually teamed with iron sights or low-power scopes. Their best application is in heavy-cover deer hunting. Shooting for a hundred-yard zero will let you make practical use of the rifle out to 150 steps or so and will keep your bullet within a couple inches of the line of sight at mid-range.

Most modern deer rifles—the .243, .257, .270, .308, to name a few representative rounds—should be sighted in to hit point of aim at 200 yards. Most will strike about three inches high at 100, an insignificant deviation for big game hunting. All will kill a deer with a dead-on chest hold at 250 yards, and a few will do it at 300. At 400, some are out of their league, with residual energy insufficient for proper bullet expansion or clean kills. But cartridges like the .270, .30-06, or the medium-bore magnums can be used effectively even to this extended range. Holdover is necessary, of course. A .270 sighted dead on at 200 yards will hit about six inches low at 300, 18 inches low at 400 with a 130-grain bullet.

After you've sighted in your rifle, it's a good idea to clean it, let it cool

thoroughly, then shoot a single round at 200 yards. Sometimes the first shot from a clean bore will print slightly off point of aim; and the first shot at a deer is nearly always the best.

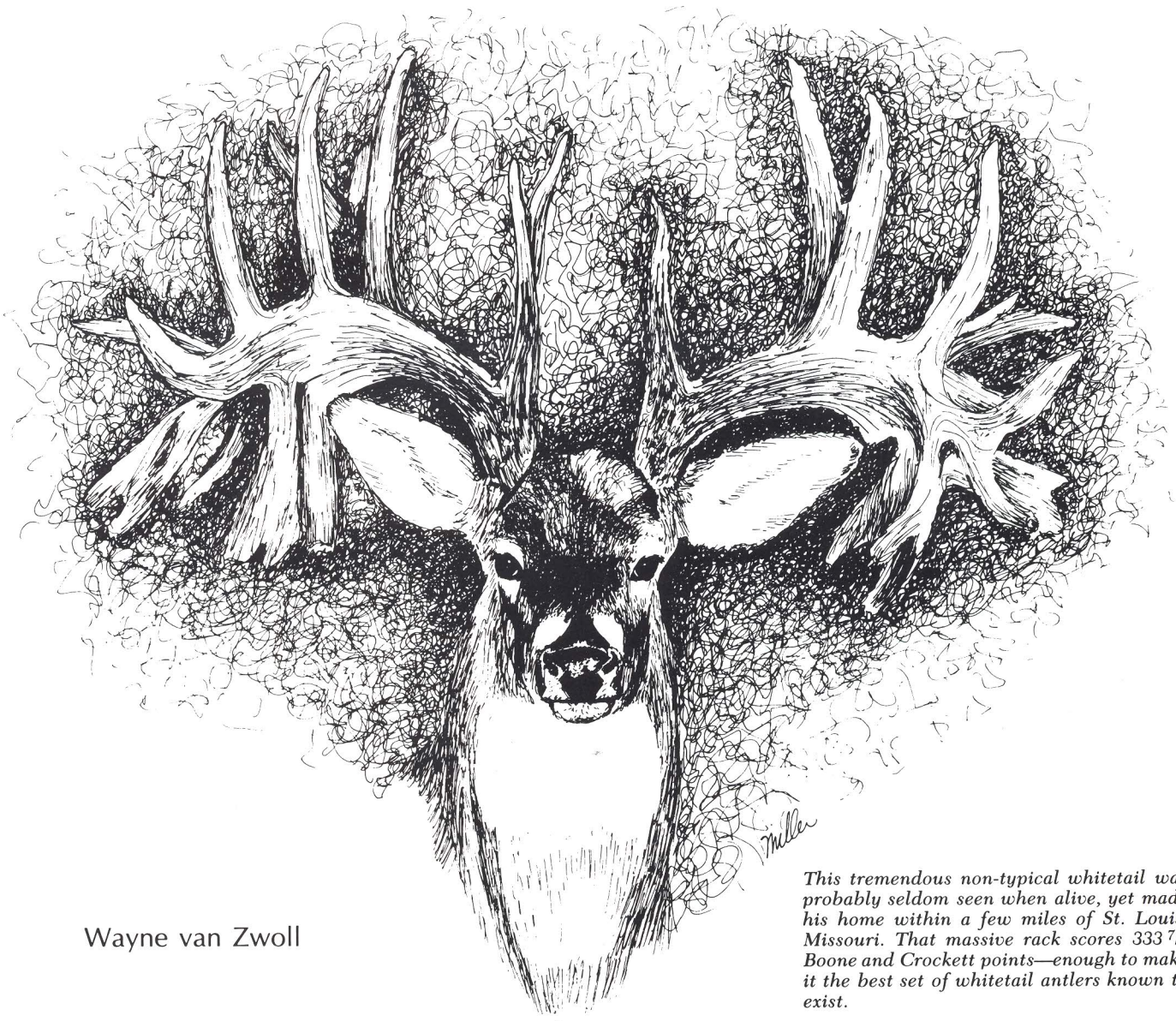
Bench shooting is essential not only for the initial zeroing procedure, but for determining the grouping ability of your rifle. Guns that will shoot within a minute of angle (an inch at a hundred yards) are to be cherished. But those that don't will still garner venison. What is acceptable accuracy? Well, a good rule of thumb is to tolerate groups no larger than six inches at the maximum range the gun will be used. That may be 100 yards for a slug gun, 150 for a .30-30, 300 for your 7 x 57. Accuracy is essential for clean kills, but your deer-getter need not shoot with the precision of a 1000-yard match rifle to do its job.

More important than the grouping ability of your gun is *your* ability to place shots where you want them under hunting conditions. Like all skills, marksmanship requires practice. Not just from the bench, and not just once a year. Your success afield will often hinge on a single shot that may need to be taken off-hand at a running target in a bedroom-size thicket. The opportunity may come at long range after you've topped a ridge, before you can get your breath. You may be able to shoot prone—or be forced to kneel to get your rifle above tall grass. You may have time to employ a sling; you may not. The point is that before each season you will do well to practice shooting from every conceivable hunting position, become proficient in the quick deployment of your sling as a shooting aid, and fine-tune your range-estimating eye. Placing a good first round is your goal; filling your deer tag is the inevitable consequence.

So, if you haven't benched that rifle lately, why not do it this weekend? Then pick up an extra box of cartridges to use as practice ammunition. Come deer season you'll be glad you did!

those alluring antlers

*. . . from nubbins to battle gear in
six months; here is their story.*



Wayne van Zwoll

This tremendous non-typical whitetail was probably seldom seen when alive, yet made his home within a few miles of St. Louis, Missouri. That massive rack scores 333 ⁷/₈ Boone and Crockett points—enough to make it the best set of whitetail antlers known to exist.

Mike Miller illustration

A thick cloud of blue smoke belched suddenly from the muzzle of Charlie's rifle. A thunderous "pa-Pow!" boomed through the hardwoods. Before the hunter could even see through the curtain of black-powder smog, his quarry was gone. The heavy-antlered whitetail ducked as the ball whizzed between its antlers, then sprinted into thick cover, vanishing like a wraith in the early-morning mist.

Charlie had no excuse for missing that buck. But many hunters each year pull the same stunt—shooting at antlers instead of an animal's vitals between its shoulders. There's something almost hypnotic about big antlers, something that mesmerizes hunters and causes them to miss. In fact, the bigger the antlers, the more difficult it is for *anyone* to remain calm behind a trigger.

Just what are antlers? Do they have supernatural powers?

First, antlers are not horns. True horns, like those on mountain goats, bighorn sheep, and domestic cattle, are never shed. Each year a new basal portion is added to the horn. In many species, a season's increment is evident, because winter's growth is slower than that of summer and a ring forms on the horn—much the same as a tree's winter dormancy creates seasonal rings in the trunk. But horn growth is lengthwise, not circumferential.

Antlers aren't solidified hair, either. The African rhino and our own pronghorn (antelope) have headgear with longitudinal striations in a hard, erect growth that is more like congealed hair than anything else. The rhino's horn is not shed; a pronghorn buck drops the main part of his horn each fall but retains a small, bony core.

True antlers are shed annually, then produced again by the animal the following year. Deer antlers can be shed at any time from December through February. Occasionally antlers will be seen on bucks well into the spring, and more than one trophy hunter has watched in dis-



Mike Miller illustration

may as a November buck prematurely lost his rack upon hitting the ground.

The base of each antler is called a pedicel. It is actually a slight indentation of the frontal skull plate and a permanent feature on bucks and bulls. After each shedding, a scar forms over the pedicel, making it hard to see. By April, however, new growth is commencing, in the form of a soft, bulbous projection that will become the hardened burr or antler base come fall.

As the antler grows, its bony, mineral-rich core is nourished by a blood supply piped under a soft, fuzzy covering called velvet. During early antler growth, bucks are very careful to avoid contacting hard objects with their headgear. The still-soft core is easily bruised, and ruptured velvet bleeds readily. Injuries at this time will result in permanent antler deformation. "Acorn tips" at the end of antler tines are classic examples of minor abnormalities resulting from early injury. Parasite infestations, skeletal injuries, castration, and other trauma can also result in bizarre antlers later on. The most important factors governing size and shape of antlers, however, are heredity and nutrition.

Antler conformation is determined in large part by genetic influences. Wide antlers, high antlers, the presence of drop or brow points, palmation, and other characteristics are traits passed from one generation to another, though some features may not show up until the buck is mature. Proper nutrition is necessary to maximize antler dimensions. Since antler growth suffers if other body needs are not readily met, only a high-protein, high-mineral diet will allow antler development to reach its genetic potential.

'Spike' antlers on yearling bucks are common in many populations of both whitetail and mule deer. Since antler growth the first 18 months of life is subordinate to body development, this isn't surprising. But whitetails fed a diet of at least 12 percent protein have consistently produced two, three, even four points *per antler* their first fall!

At the peak of their summer development, some antlers grow several inches a week. Branching occurs by genetic edict, and the beams and points thicken. At the same time, their cores harden. In August, the velvet dries on the core, then shrivels. This apparently

causes discomfort to the animal, as it makes a concerted effort to scrape the velvet off. Sometimes this is accomplished in one night. Young, inexperienced males or those in barren habitat may retain their velvet into the rut.

Antler color in September is white, with dark red streaks from the dried blood vessels contained in the velvet. As rutting season nears and the animal polishes its rack on trees and brush, the antlers take on a mahogany tint, varying in shade and density with the plant species used as polishing agents.

By the time a buck's neck swells and increasing testosterone levels turn his thoughts to lust, those antlers have become effective weapons, ensuring his niche in the pecking order of amorous bucks and enabling him to defend a territory. After the mating season, testosterone levels drop, and, soon after, the antlers will, too. They dehisce at the juncture of burr and pedicel and become food for rodents that gnaw at them for their high mineral content. In desert areas, undiscovered antlers may last for years, but humidity accelerates decomposition.

A buck's antlers do not change shape dramatically from one season to the next. As a yearling, one buck's headgear will look much the same as another's. At 2½ years, individual features become noticeable, the antlers markedly longer. At age three, the conformation is the same, barring accident. Length and weight increase, as does the spread measurement. A 4½-year-old buck is mature. Body growth requirements have been met, and antler development is near its potential. Probably the buck has his full com-

plement of points by this time. The next three years may show increases in weight and length of times and main beams. But most bucks don't live that long in the wild. After age eight, antlers often regress, becoming shorter, sometimes grotesquely shaped. A few retain their size and develop 'non-typical' conformation.

Hormonal imbalances can cause females to sprout antlers. Usually such freaks have small, misshapen headgear that never loses its velvet. Occasionally, though, a nice rack is garnered from a doe.

Antlers are made for scoring. At least most hunters seem compelled to compare their animal's rack with that taken by someone else. This is a vain, if understandable, urge. Everyone wants to claim the biggest buck ever to scrape velvet. But shooting one big specimen doesn't elevate a nimrod to the status of master hunter. It's a fact that many, if not most, record-class bucks are taken by hunters who expected to see—and would have been satisfied with—a younger animal. Luck brought them a big set of bone. A few sportsmen hunt trophy antlers exclusively, passing up smaller racks and working hard in season and out to gain the skills necessary to consistently take mature, wary old mossbacks.

Scoring antlers can be done in several ways. The oldest systems are the CIC (Council Internationale de Chasse) and Rowland Ward. Both were designed primarily for horned game and are poorly adapted for measuring the complexities in antler growth. Rowland Ward's system, long the standard for African game, has no provisions for measuring a branched beam!

In the U.S., no official scoring was done until 1932, when P. N. Gray published the first edition of the *Records of North American Big Game*. Limited to 500 copies, the book is now a collector's item—though the scoring system used was crude by today's standards. In 1935, James Clark of the American Museum of Natural History initiated a better procedure and an annual big game competition. The Boone and Crockett Club published its first record book, called 'North American Big Game', in 1939. Ten years later a committee comprising several big game authorities (including well-known hunter Grancel Fitz) hammered out a more complete scoring system that was used to score antlers listed in the 1952 Boone and Crockett records. It has required few changes since.

Currently, the Pope and Young Club uses the same methods to score bow-killed game. Safari Club International has its own, somewhat different procedure. All three—B & C, P & Y, and SCI—give points for circumference, length, and inside spread of antlers. The number of antler tines is only indirectly scored. Deductions are taken for nonsymmetry and the presence of abnormal tines. Each species is accorded its own score sheet and special rules; each has its own minimum score for entry in the record book. Official measurers are trained to judge antlers impartially and consistently.

Now that you know antlers are simply physical appendages with no magical properties, you'll surely be able to hold that brass blade on that big buck's shoulder . . . won't you, Charlie?



Mike Miller illustration

to a bowhunter's wife:

Mike Blair

The weak afternoon sunlight filters through the kitchen window as we finish a busy day. The countertops are scrubbed clean, the pans and knives put away, and the hours of cutting and wrapping this year's venison are behind us. Throughout the task, you patiently listened again to fragments of yesterday's hunt, knowing you had heard it all before at other places, in other seasons.

Bow season is more than a cancelled deer tag. It is work; it is strategy; it is a curious combination of success and failure, luck and skill. It is spending days on end waiting for that special moment when the hunt's outcome hangs in the balance. But mostly it is time away from home, time that could be spent in other ways, were it not dedicated to hunting. Now, before I hang up my bow to end another season, I

want to thank you for your patience in allowing me a preoccupation you will probably never fully understand.

For I would hunt until winter's last legal hour for a chance at one ghost-like creature that walks the woodland trails, learning all the while, absorbing nature's secrets, gambling on the chance for high adventure so lacking in our daily routines. I would taste the pleasure

Wayne van Zee photo

and hardships of life in the wild, revel in the cutting wind, feel the relentless tug of deep snow, huddle against driving rains, bask in the warmth of an autumn sun. Once these things are known, how can life be full without knowing them again? For it is the hope of all of us to revisit and renew places and things once loved. So beckons yet another hunting season. . . .

This was a special season for me, a treasure of unforgettable impressions. Gold and crimson had burst upon the shadow-mottled green of summer's forests. For a time, to walk the woodlands was to step into an infinite series of skillfully-done autumn paintings, each one creatively framed, exquisitely detailed. During these weeks a strange sense of restlessness pervaded the air. Dry, fluttering cottonwood leaves played nature's sonata as preparations were made for the inevitable hardships of winter. To sit quietly in the woods was to become part of the changing of seasons. The signs were visible in the silent passing of monarch butterflies on their way south; in the cries of geese and sandhill cranes sailing overhead; in the gradual ebb of the mosquitoes' hum; in the long-abandoned spider webs hanging wet with early morning dew; in the sounds of dropping acorns on still afternoons; in the shrill chatter of squirrels; in the blanketing chill of a killing frost, the subsequent sadness of leaves raining down. These were winter's harbingers. Without them hunting would have seemed a lesser experience.

But none were alluring enough to warrant a daily vigil. They were the media through which I touched the gifts of nature; that which nature withheld was the siren that drew me to the forest daily. My quest was a whitetail buck—wary, elusive, cunning. My weapon was a bow, a short-range tool of primitive derivation. The challenge would be equal to the reward.

The decision to harvest only a buck gave me many opportunities to

observe deer, without feeling pressured to shoot. A doe and fawn came regularly by my stand, browsing a bud here, nibbling a leaf there, constantly alert for danger. Time was a constraint foreign to them, and they'd stand for long minutes to interpret the snap of a breaking twig, to learn the reason for a squirrel's excited barking. Scarcely a sound could be heard as they passed. Little evidence did they leave of their visit, yet they lived their entire lives in that small area.

Then came those magic moments when glimpses of approaching antlers quickened the pulse and called for action. You knew the disappointment I felt when such moments yielded nothing but memories. You knew my consternation when, after 11 years of bowhunting, I still missed four easy shots at close

range. You remained patient as I redoubled my efforts to fill a tag.

Finally, success was mine. One moment the afternoon woods were quiet; the next, a buck was racing away with a lethal hit. A season of hard work had finally paid off. Your genuine excitement at the news made me that much prouder of the accomplishment, and together we celebrated a successful hunt. In that minute, I was grateful for your patience through the many days since deer season began.

Now another episode is over. Long ago, a plains warrior knelt beside the river and thanked Waconda for making true his shot, for providing a winter's supply of meat. Tonight I, too, will thank God for a successful season and for the privilege of hunting. That privilege—and your support—I hope I never lose.



Gene Brehm photo

the yellow pages

WRITING READERS “?&...!”

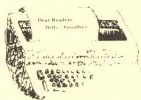
Bad News Good News

Dear Readers:

I have some good news and some bad news.

First the bad news: A few of the people who have helped to bring KANSAS WILDLIFE to you in past years are no longer on the magazine staff.

Former KANSAS WILDLIFE editor Chris Madson has gone to Wyoming to work as editor of Wyoming Wildlife. After six years with the Kansas Fish and Game Commission, Chris decided to move on. His impeccable writing skills and incisive editing will be missed.



Ron Spomer, former assistant editor of KANSAS WILDLIFE, also left the agency a short time ago to expand his horizons as a freelance writer and photographer. Ron left after two years on the magazine staff. His expertise as a photographer and writer will surely continue to delight the wildlife enthusiast.

Deb Schmidt worked her last day as temporary illustrator for the Kansas

Fish and Game Commission on October 28. Deb had been with the agency, working on the magazine as well as other projects, for the past seven months. Her energy and dedication have been great assets.

Now the good news: We have had the good fortune to find skilled, dedicated people to replace those who have moved on.

The new editor, Wayne van Zwoll, has come from Washington State, where he worked for the Department of Game for three years. Wayne's skills as a writer and editor are highly polished, and his expertise as an outdoorsman provides him with a broad source of experiences and knowledge with which to embellish the magazine. His work has appeared in major outdoor publications and in state wildlife magazines. He brings with him a great deal of energy and dedication. KANSAS WILDLIFE will surely be the better for having Wayne on its staff.

Rob Manes is the new assistant editor. Rob started with the Fish and Game Commission in 1982 as a wildlife information representative, stationed in Wichita. His background as an outdoorsman and public educator add to Rob's skills as a writer to make him an important addition to the KANSAS WILDLIFE staff.

Mike Miller is the most recent addition to the KANSAS WILDLIFE staff. Mike worked as editor of Lakeland U.S.A., a monthly outdoor newspaper, before joining the Fish and Game Commission as the new illustrator. Mike will be able to draw on his education in journalism and graphics, as

well as his expertise as a hunter and fisherman, to make a large contribution to the magazine.

All of these people, though new in their positions, will work together with the rest of the agency to produce the best KANSAS WILDLIFE ever. Their dedication to perfection and timeliness will result in great benefits to readers.

Mike Cox, Supervisor
Information and Education

Keep On Drivin'

Editor:

Mrs. Kramer and I have been gone from Kansas for



the past 5 years and have enjoyed receiving every issue of KANSAS WILDLIFE.

We have come back to our wonderful state to make our home near Hays. I thought I'd write this letter for our address change so we won't miss an issue.

Some of the people in the "other state" judge Kansas by what they have seen from I-70; and they say, "What a flat, unscenic place that long drive is." I've always answered by saying, "Good, just keep on driving, because the less people we have a 'spoilin' all that beauty, the more unspoiled our Kansas will be for our grandchildren to enjoy."

Thank you for giving us our beautiful state through KANSAS WILDLIFE.

Dennis Kramer
Hays

A Lesson Learned

Editor:

Your article on the scissor-tailed flycatcher brought back fond memories. When I was a child, my second grade teacher belonged to the Audubon Society. The Society would send her pictures of different birds. On the back of the picture it would tell about the bird. She received one on the scissor-tail, and I thought that was the most beautiful bird I ever saw. I never forgot the scissor-tail.

We enjoy your magazine.

Mrs. Layne Woodson
Wichita

Thanks

P.S. to the Biologists:

Although most people think Kansas is a flat prairie with nothing to offer, I feel we have some of the all around best hunting found anywhere. Keep up the good work! All my hunting partners and I feel we owe a lot to you and the other game managers in Kansas. Thanks.

Charles Small
Wichita

CHIEF OF LAW

THE LAW



The Kansas Fish and Game Commission has announced the appointment of Omar Stavlo as the new chief of law enforcement. Stavlo is a native of Wisconsin, born in Adams County in 1944. He served in the 101st Airborne Division with the U.S. Army after graduating from high school, and attended college at the University of Wisconsin at Stevens' Point, graduating in 1969 with a degree in Biology and Natural Resources.

Stavlo started with the Wisconsin Department of Natural Resources that year, and worked as a field officer until 1978, when he joined the agency's special investigations team, and was in charge of undercover operations.

Stavlo's experience with the Wisconsin D.N.R. has made him particularly adept at handling the special problems encountered in the field of wildlife law enforcement. Operations in the Minneapolis-St. Paul area gave him opportunities to work in an area where human populations were extremely high and landowners were often less than tolerant of hunters. Time spent in the Black River Falls country, where deer are abundant, taught him a great deal about big-time poachers.

Stavlo and his wife, Denise, have a son, Eric, and two daughters, Kari and Kristen. He is optimistic about his career in Kansas and says he finds the scenery

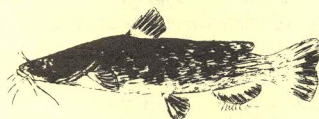
and wildlife diversity to be quite pleasing.

As the Chief of Law Enforcement, Stavlo sees a great need for increased cooperation with the public sector. He feels that the concerned sportsmen of Kansas can be of great value in protecting and conserving the state's wildlife resources.

Manes

High Dollar Fish

When two northeast Kansas men went fishing a while back, they probably were expecting things to go a little smoother than they did. A Topeka man and a Junction City man put a lot of effort into designing and building a canoe that would make fishing easy. A super quiet generator that ran a trolling motor at the rear of the canoe also ran through a switch box which could divert the "juice" to a pair of electrodes hidden under a seat in the center of the small craft. Needless to say, the outfit made for some mighty interesting fishing stories. Fish and Game law enforcement officers Bill Burlew and Glen Hurst pitched in to make one particular evening especially lively for the two electro-anglers.



Acting on a tip from a concerned sportsman, the officers staked out the site where the canoe was launched. They waited in the sumac near the culprits' pickup parked on the bank of Mission Creek in Shawnee County.

When the fishermen returned, Burlew and Hurst were there to greet them. The suspects were issued tickets for use of an illegal fishing device, and the owner of the boat was additionally cited for not having the craft registered.

The one flathead catfish they had cost them a bundle. Each man was fined \$250 for use of illegal fishing device, and the boat owner paid an additional \$25 for the registration offense.

The judge also saw fit to confiscate the canoe, the trolling motor, the generator, and all of the boat's accessories. They didn't even get to keep the fish.

Manes

You Can't Do That

There are a lot of folks around who take squirrel hunting very seriously, but a couple of guys went too far recently. Game Protectors Larry Kramer, Doug Whiteaker, and Ralph Adams were working the Marias des Cygnes area, in Linn County, when they discovered the pair of squirrel hunters in the act of burning the base of a hollow tree. What were they

doing? Why, smoking out those tricky squirrels. What else?

Upon closer examination of the situation, the officers discovered that the violators had been very successful in their hunting quest. They had taken 33 squirrels in the day's outing — just 23 more than the daily bag limit would have allowed them.

The Game Protectors dutifully issued the two citations for being over (ever



so slightly) their limit on squirrels. They also rightfully viewed the den tree burning as "destruction of habitat," for which the perpetrators received tickets; and one of them received a third ticket for hunting without a license.

A Linn County judge fined them each \$75 for the 33 squirrels, an additional \$75 for the "tree torching offense," and the no license violation drew a \$100 fine. They also paid \$19 in court costs to top it off.

Hats off to the G.P.s and the judge for helping to protect our precious wildlife resource.

Manes

Serious Business

A recent decision by Municipal judge Norman Smith of DeWitt, Arkansas

found Ronnie Owens of Monticello guilty of violating two Arkansas fishing regulations--taking over the limit of catfish and fishing with an electrical device.

The incident in question occurred early in the morning hour of August 8, when wildlife officer Don McSwain of Arkansas County saw four men acting suspiciously in two boats below Dam Number 2 on the Arkansas River below Tichnor.

"I watched these men for about 30 minutes as they shocked and picked up fish," said McSwain, "Then I called (wildlife officers) Bill Grunnell and Louis Pike in for backup."

McSwain said the three officers then watched the four men until four a.m., and then they made the arrest as the men were pulling their boats out of the water. They had a total of 109 catfish in their boats, far over the legal sportfishing limit of 10.

"Things got a little mixed up, and three of the men escaped in one of their two vehicles," said McSwain. But Owens was detained, and the trio who escaped abandoned their two boats, motors and trailers, as well as a CJ-5 Jeep.

Judge Smith set a bond of \$10,000 on the vehicles, which he later reduced to \$5,000. Owens paid this bond and was allowed to retrieve his Jeep until the trial date.

That's when the hammer fell. Judge Smith found Owens guilty and fined him \$1,000 for electrocuting fish and \$250 for exceeding the legal limit, both maximum fines. In addition, he sentenced Owens to 10 days in jail, suspended his fishing privileges for one year,



and confiscated all equipment that was used in the commission of the violations -- two 14-foot flat-bottomed boats and trailers, a 20-horsepower Johnson outboard, the CJ-5 Jeep, and accessory equipment such as spotlights, life jackets, batteries and landing nets.

"This is the first time we've ever received a judgment to seize a vehicle used in the commission of a violation," said Red Morris, enforcement chief. "Maybe this will wake a few people up to the fact that breaking the game laws is serious business."—*Arkansas Outdoors*

Nabbed Nappers

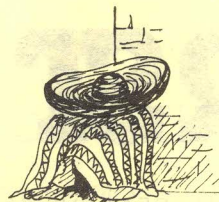
Oklahoma Citians Terry Gilley and Robert Hunter each made \$500 contributions to Oklahoma's Operation Game Thief recently; but both were made under extraordinary circumstances.

Not only were the \$500 payments made for restitution of white-tailed deer taken in closed season in February, the men were ordered to pay \$500 fines plus court costs in Kingfisher District Court.

Circumstances surrounding the arrest of the two men were a near-blizzard the night of the poaching, and a flat tire on the van the men were driving.

Instead of fixing or changing the tire, the men elected to call it a night and curled up on the seat of the van for a siesta.

That was a mistake. An alert night patrolman was intrigued by the strange van parked against the curb with a flat tire and aroused the men from slumber. Suspicious traces of blood led to discovery of two button



bucks in the back of the van.

State Game Ranger Jack Witt confiscated the two bucks, charged the two men with possession of deer in closed season and hustled the now wide-awake violators to the local hoosegow.

The next day they pleaded guilty to the charges, made bond and were released on their own recognizance. District Judge Robert Lovell gave suspended 10-day jail sentences provided the two men paid the fines within a specified time. The judge also ordered restitution payments to the state of \$500 for each deer with the money going to Operation Game Thief.—*OK D.W.C.*

Greed is Costly

A Phoenix, Arizona man has been fined \$3,425 in the Northwest Phoenix Justice Court for fraudulently obtaining hunting licenses and big game tags.

According to Court records, Michael H. Salter, Sr., pled guilty to twelve counts of violating Arizona's game and fish laws and regulations. These included obtaining resident hunting licenses, and deer and elk permits by fraud in 1981, '82 and '83; submitting more than one application for deer and elk permits in those same years; and possession of parts of wildlife that were unlawfully taken.

Witham says the court records show that Salter fraudulently obtained eleven licenses, six deer and four elk

permits from 1981 to '83, and submitted 21 separate applications for deer and elk in that time.

Besides the fine, Salter agreed to forfeit a mounted white-tailed deer head and a mounted elk head from animals taken in '81 with fraudulently-obtained licenses and tags.

Gotta' Have It

A call comes in to a Kansas Fish and Game office. The voice of "somebody's mother" sounds a bit unsure as she explains that her son left his hunter safety card in his wallet, which just happened to be in his jeans, which Mom just happened to wash without giving the pockets a feel.

She wonders if there is any way in the world that a person could get another card, and if so, how much would it cost. The Fish and Game person on the other end can hear her son in the background, "I've gotta' have it, Mom."

He's right. Anyone born after July 1, 1957 must have completed a hunter safety course before hunting in Kansas. Persons under the age of 16 must carry with them, when hunting, a card bearing their hunter safety number, which proves that they have successfully completed such a course.

Getting a duplicate hunter safety card isn't as difficult as some folks might think. By contacting one of the six regional Fish and Game offices, and giving a name, address, and the date when the course was originally taken, a new card can be obtained in short order. The service is free for the time being.

Manes

FIRST HUNT

HUNTING



Among the many rewards that hunting has to offer is the personal satisfaction that comes from introducing a newcomer to the sport. To share, for example, in the excitement when a novice bags his first game is the highlight of many a veteran's season. Yet it is not an experience without obligations, the most important of which is firearms and hunting safety.

No one likes to preach, yet no hunter should hesitate for one second to correct the mistakes of the novice in a helpful but firm manner. Keep in mind that most accidents in the field are the result of carelessness or a violation of a basic safe gun handling rule.

There are, of course, many things that go into making a safe hunter, and not all can be covered in a single outing. Three fundamental safety concepts, however, cover many of the safety considerations important in the field.



1) TREAT EVERY GUN AS IF IT WERE LOADED. No new hunter can be too conscious of this basic rule. Whether it's in or around a vehicle or in the field, every new hunter should understand that firearms should be handled in only one manner: unloaded, but carried as if they were loaded. New hunters should also be fully aware that a gun's safety is a mechanical device that is not intended to serve as a substitute for common sense and safe handling. Under no circumstance is there any reason for a gun to be loaded until the hunter is in the field and ready to use it.

2) MUZZLE CONTROL. A second fundamental rule for every new hunter is always to handle his gun so that the muzzle is never pointed at something he does not intend to shoot. This means always carrying a gun so that the muzzle points in a safe direction at all times and also knowing when to unload briefly, such as when going through difficult terrain or crossing a fence or stream. Every new hunter should be aware that muzzle control is a key to safe gun handling.

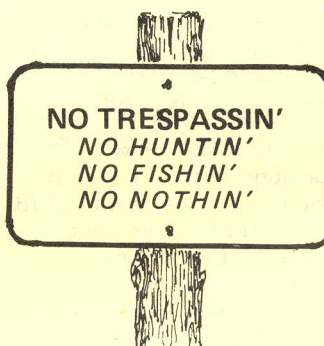
3) TARGET IDENTIFICATION. New hunters are particularly prone to become excited and anxious when they believe game is nearby. Yet every new shooter must understand that he shouldn't even think about taking a shot until he is absolutely sure of his target. Under no circumstances should a shot be taken unless the target is fully and clearly visible, and the shooter knows he has a safe background beyond his target. Particular caution should be taken during the

low-light periods of dawn and dusk.

An excellent booklet for the new hunter, "Firearms Safety Depends on You," is available for 25 cents from the National Shooting Sports Foundation, Literature Department, P.O. Box 1075, Riverside, CT 06878.

Laying the Blame

The fence is down on the south side of the pasture, a gate is left open on the north side, and in between are the deep scars of four-wheel-drive ruts and one dead heifer. Add to this scene some beer cans strewn along the way and a few spent .30-06 shells, and it looks like "hunters have done it again."



It seems like every time some sort of vandalism occurs on farm or ranch ground, hunters or fishermen catch the blame. The often-overlooked culprit may be partiers from a local town who get out of hand while out drinking a beer or two. True sportsmen wouldn't

dare do such damage at the risk of ruining carefully cultivated relationships, which allow them the privilege of hunting on privately owned land.

Still, hunters are easiest to blame. They generally do their recreating during daylight hours so they are more visible than after-dark joy riders.

Programs that teach hunter ethics, such as the state-mandated Hunter Safety Program, have increased awareness among young hunters of the importance of responsible behavior in the field. Sportsmen concerned about their sport have begun to police their own ranks; "slob hunters" are not tolerated by responsible outdoorsmen. It makes a person wonder how many landowners have made a decision not to allow hunting based on some wrong that was done by someone with nothing better to do than drink beer, wreck fences, tear up fields, and harass cattle under the cover of darkness.

A recent situation in Kansas involved one injured cow and another one dead. Gates were left open and four-wheel-drive tracks were everywhere. The landowner, rightfully angry, indicated that hunters would not be welcome on his property in the future, but there was no evidence that hunters had been involved. In fact, the only evidence that pointed to hunters was that hunting season was open at that particular time.

The result is that outdoorsmen wind up paying for the mistakes of nonhunters, as well as the few "slob hunters" that give the true sportsman a black eye.

Manes

What's That Ya Say?

Shooting more but not hearing much lately?

It could be the noise of exploding shells is damaging your eardrums, causing serious hearing impairment.

Loss of hearing may be very gradual, so gradual that it's unnoticeable, . . . until one day you're aware a problem exists.

The National Shooting Sports Foundation notes numerous tests show prolonged exposure to sound levels of 130 decibels can result in hearing loss. Most gunfire achieves or exceeds this level.

Rifles tested at the U.S. Army Proving Grounds in Aberdeen, MD, produced sound measured at 172.5 decibels. The shorter the barrel, the louder the report. A .22 rifle may hit 130 decibels, but a .22 pistol will reach 153.



It makes good sense to wear ear protection while sighting in a high-power big game rifle, or shooting a round of clay birds. And be aware the loudest sound reaching a shooter's ear may be from the gun at the next station rather than from the firearm he's using.

Typically, ear muffs give the greatest protection.

The hard outer shell reflects sound and the inside air space muffles noise. There are also effective plug-type ear inserts. Failing these devices, a shooter may resort to plugging ears with cotton or paper wads. However, this provides minimal protection and should not be relied upon while exposed to prolonged gunfire.

Booklets on hearing protection and firearms safety are available for 25 cents from the NSSF, P.O. Box 1075, Riverside, Connecticut 06878.

Golden Year

Nineteen-eighty-four marks 50 years for the Federal Duck Stamp and next year's commemoration promises to spark the greatest amount of public interest in the history of America's national conservation stamp program.

The Interior Department expects this fall's Duck Stamp art competition to select the design for the 1984-85 anniversary year stamp to draw the highest number of entries and the largest attendance in the contest's history. The judging will take place over two days in Washington, D.C., to accommodate the increased public interest in the 50-year celebration.

The 50-year success of the Duck Stamp is tribute, in large part, to the efforts and foresight of J.N. "Ding" Darling, an Iowa political cartoonist for the Des Moines Register, who first conceived the idea of a self-generating revenue stamp by which waterfowl hunters would pay to sustain their sport.

Considered the "Father of the Duck Stamp," Darling later became director of the Bureau of Biological Survey, predecessor of today's U.S. Fish and Wildlife Service.

The Duck Stamp is a principal means by which the Federal Government generates revenue from waterfowl hunters to buy and preserve vital wetland habitat for ducks, geese, and non-game shorebirds and waterbirds.

Now sold for \$7.50 each fall, the Duck Stamp is required of all migratory waterfowl hunters 16 years of age and older. Over two million are bought each year by sportsmen and non-hunting conservationists and stamp collectors. Thus, sportsmen and others who purchase Duck Stamps contribute directly to the acquisition and protection of national wildlife refuges.

The 1983 judging ceremonies to select the 50th anniversary stamp design will be held November 8 and 9 at the Interior Department auditorium in Washington, D.C. This year's judging will be highlighted by several new features designed to enhance the ceremony for the benefit of audience members, according to Peter Anastasi, the Fish and Wildlife Service's Duck Stamp contest coordinator. They include an overhead projection system by which every design can be viewed by visitors and an electronic numerical scoring system by which the rankings of all entries will be displayed instantly and totaled.



The design will go on sale as the 50th anniversary year Duck Stamp on July 1, 1984, at post offices throughout the country.

Bad Bullets

Bridgeport, CT. September 27 — Remington Arms Company, Inc., today announced the recall of defective 6mm Remington cartridges loaded with 80 grain hollow point "Power Lokt" and 80 grain pointed soft point bullets. Reports from customers indicate that a small quantity has shown abnormal pressure growth. In several cases, firearm damage has occurred, and use of this ammunition could present a hazard to the shooter.

The 6mm Remington cartridges covered by this recall have the following markings on the packages:

Product: 6mm Remington
80 Grain Hollow Point
"Power Lokt" or
6mm Remington
80 Grain Pointed Soft
Point

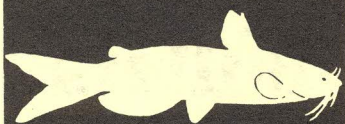
Index Numbers: R6MM2 or
R6MM1 (Located in
the lower right hand
corner of end flaps)

Code Numbers: Located on
side of left end flap. If
first letter is S, T, or U
this product is subject
to recall.

Consumers who have purchased 6mm Remington cartridges in boxes so marked should return them to Remington for prompt, free replacement. They should be sent via UPS transportation C.O.D. to: Remington Arms Company, Inc., Attention: G.T. Porter, Interstate Route 40 & Remington Road, Lonoke, AR 72086.

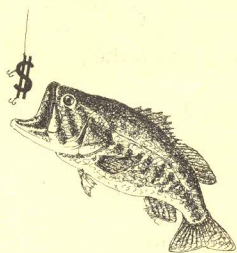
BASS FOR CASH

FISHING



In the history of sport, 16 years isn't much of a life span to brag about. Yet, in that period of time, professional bass fishing has grown from a piddling \$5,000 cast-for-cash event into a \$1 million-plus B.A.S.S. Tournament Trail.

This season five of the six qualifying events feature a \$112,000 purse, boosting the pay-out by \$37,000 from last year's top of \$75,000 in awards.



Harold Sharp, B.A.S.S. Tournament Director, said the big increase to \$112,000 in awards in the B.A.S.S. Invitationals is the result of growing support and sponsorships by companies and manufacturers. "Entry fees have provided most of the payouts in the past," said Sharp. "Now, the B.A.S.S. Tournament Trail is reaching major sports status with the added sponsor participation."

The B.A.S.S. Invitationals are split into East and West Divisions, with the top 10 anglers from each circuit and the top 15

fishermen from the overall Bass Angler-of-Year standings qualifying for the coveted berths in the Classic championship.

Ray Scott, President of the Bass Anglers Sportsman Society (B.A.S.S.) has announced plans for a \$1.4 million payout in cash and awards in a nine-tournament circuit for the 1983-84 B.A.S.S. season.

"Competitive bass fishing is on the brink of reaching major professional sports status," believes Scott. "When a bass fisherman can go to work — fishing for four days — and win \$100,000, that's big league bucks."

The ante for the richest of all B.A.S.S. events is \$1,250 per fisherman. The Super B.A.S.S. contests are open to 250 anglers. The top 60 finishers share in the \$325,000 awards. The runner-up nets \$47,500 including \$32,000 cash and a \$15,500 Ranger bass boat rig.

"When we started pro bass fishing," said Scott, "folks used to joke about a professional bass fisherman being anyone with a 'week off work and an entry fee in their pocket.' Everyone has stopped joking and laughing now." —B.A.S.S.

Autumn Angling

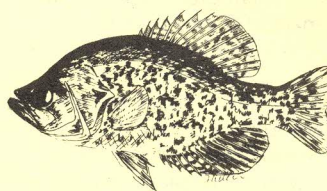


Anyone who has done much fishing knows that spring is a great time to wet

a line. They also know that the sweltering days in the dead of summer aren't the best for catching many species of fish. What many experienced anglers overlook is that the autumn months of September, October and November can bring some of the best fishing of all.

One favorite of fall fishermen is crappie. When the water reaches temperatures above 85 degrees during mid-summer, fish slow feeding activities almost to the stopping point. So, when the water begins to cool in the fall, things start to "heat up" again for the fishermen.

Most crappie fishermen



like to use a long pole to lower live minnows or jigs into brush piles where crappie take cover. A slow, straight up-and-down motion works best to attract the fish's attention with a minimum risk of getting snagged on the brush. Another successful method of getting the bait in front of the fish employs a bobber to suspend the jig or minnow in cover.

Another favorite of fall fishermen is walleye. Generally found 15 to 20 feet deep in the fall, walleye can be taken on a jig and night crawler or shad-imitation lure. A popular method for taking walleye with these baits involves drifting in a boat with the lure bouncing on the bottom.

Angling action for all Kansas fishes picks up in the

fall. The weather is generally pleasant, and fall scenery is a treat for the eye. So, why not?

Manes

Stripers Seek Shad

Some fishermen have expressed concern that striped bass and hybrid striped bass might prey on other game fish species. Recent studies appear to indicate this is not a serious problem. Stomach analyses of 405 striped bass and 1,666 hybrids collected from Texas reservoirs found shad to be the predominant food item consumed.

Of the 295 striped bass stomachs which contained identifiable food, 77.5 percent of the items were shad, 8.5 percent were silverside minnows, 6.5 percent were tilapia, 3.5 percent were sunfish, 2.1 percent were grass shrimp and one percent was freshwater drum. Channel catfish and white bass comprised the remaining one percent.

Of the 1,666 hybrid stomachs examined, 809 contained food. The survey revealed 86.9 percent shad, 5.2 percent sunfish, 2.2 percent silverside minnows, 1.8 percent insects, and less than one percent each for channel catfish and log perch. Other items were freshwater drum, crayfish, crappie, tilapia, grass shrimp and shiners, all one-half percent or less.

Nature's Notebook

by Joyce Harmon

Wildlife Education Coordinator
Kansas Fish and Game Commission

It might seem unusual to credit wild animals with helping to settle America, but that's just what furbearers did. Native Americans had made use of furbearers as a source of food and clothing for thousands of years. When Europeans began to explore North America, they found the fur from these animals to be of great value for warm clothing, and they used the furs as a unit of currency in the unsettled land. Wealthy Europeans paid high prices for fashionable clothing made of mink, beaver, and other furs. The popularity of felt hats made from beaver fur caused a deeper search into the territory for those animals.

The French, English and Dutch established forts, trading posts, and villages further inland than had been settled prior to this time. The voyageurs, tough wilderness fur traders, traveling by huge birch-bark canoes, discovered major waterways, and mountain men pioneered the high passes. Wilderness trails were established by such famous pioneers as Daniel Boone and Kit Carson. These trails became the roads of the future.

Wars were eventually fought over the control of the valuable fur trade. Early settlements established by fur traders grew into towns and cities such as St. Louis, Missouri. The impact of furbearers on America will always be present.

Fashions changed in the 1830's, and agriculture took over areas that had once been wilderness. These changes caused people to view many furbearers differently. They were now labeled as predators of domestic stock, and much of their habitat was converted to crop fields.

Laws and regulations, along with proper management, keep furbearer populations healthy in Kansas. Furdealing remains a major business in the state. There is much yet to be discovered about these history makers. Here's a closer look at some of the furbearing species in Kansas.

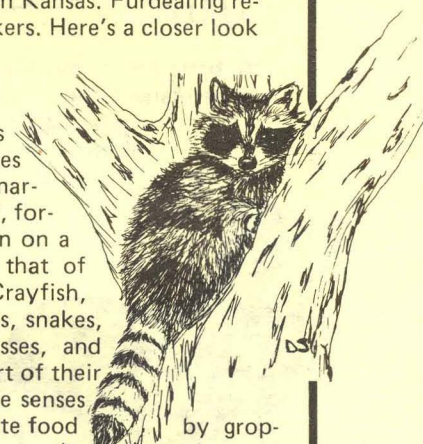
coyote

Nocturnal scavengers and predators, coyotes are respected for their craftiness and cunning. Their adaptability has enabled them to expand their range despite large-scale attempts to reduce coyote numbers. They prefer semi-open country and establish dens in unused fields and pastures. They also may establish residence under hollow trees, in rock cavities, and under deserted buildings. Although they do occasionally kill young livestock and poultry, they have often been blamed unjustly for damage done by free-running dogs. They rely on rabbits, mice, and other small rodents for the bulk of their diet, as well as carrion and some plant foods.



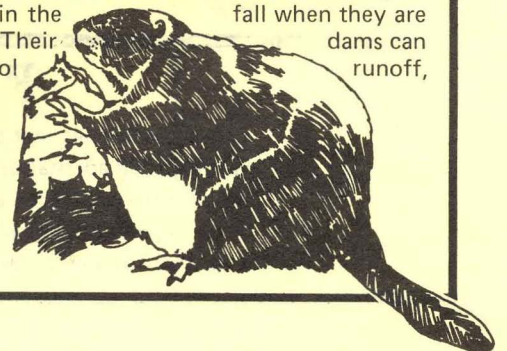
raccoon

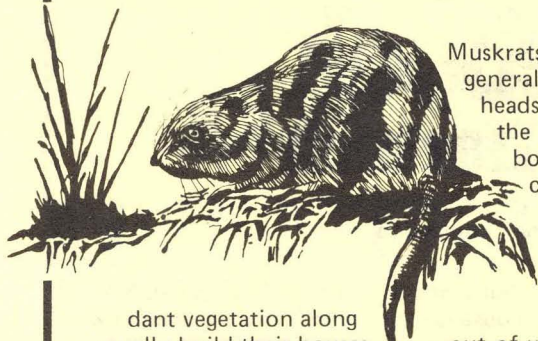
Expert climbers and swimmers, raccoons usually live in hollow trees near streams, lakes and marshes. They are nocturnal, foraging from dusk to dawn on a diet more varied than that of any other furbearer. Crayfish, clams, fish, insects, frogs, snakes, turtles, wild fruits, grasses, and nuts make up a large part of their diet. They use the tactile senses in their front feet to locate food by groping in shallow pools, under rocks, or in rotting logs. On rare occasions, they can cause problems for rural residents by feeding on corn, eggs, or poultry. They also can be a suburban nuisance by taking up residence in and around buildings inhabited by humans.



beaver

The beaver, largest of North American rodents, is famous for its dam-building capabilities. Beavers customarily confine their activities to a small home range, subsisting largely on the cambium of tender twigs, young trees, and woody plants. They are especially fond of cottonwood and willow bark. Beavers are nocturnal but may be seen during the day, especially in the fall when they are busiest with dam construction. Their dams can stabilize stream flows and control runoff but sometimes cause problems by backing up water and flooding roads, meadows, and crop fields. Their tree-gnawing tendencies also can cause damage in orchards located near beaver habitat.



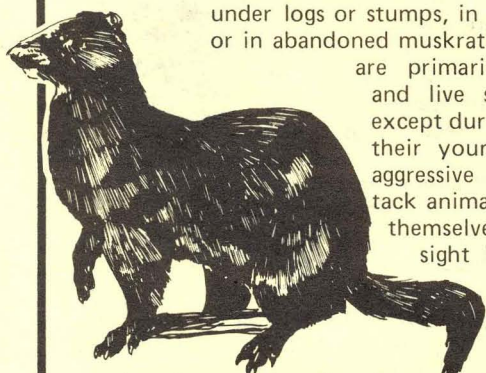


Musk rats are good swimmers, generally seen with their heads just above water, the remainder of their body submerged. They can stay under water for fifteen minutes. Musk rats prefer still or slow-moving water with abundant vegetation along the shore. They usually build their houses out of vegetation, with an entrance tunnel that opens under water; or dig their homes in a stream bank. During most of the year a muskrat lives alone, but several may bunch together in a den or lodge during winter. Chiefly vegetarians, they prefer the roots of aquatic plants, but also will feed on snails, crayfish, fish, frogs, reptiles, and young birds. They sometimes cause problems by tunneling in and around dikes and earthen dams.

musk rat

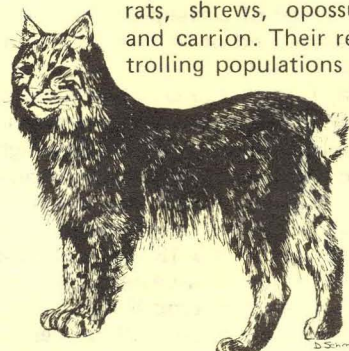
mink

A basic requirement for mink is permanent water. Mink live along banks of streams or shorelines of lakes and marshes, making their homes in cavities excavated in stream banks, or under logs or stumps, in hollow trees, or in abandoned muskrat lodges. They are primarily nocturnal and live solitary lives except during rearing of their young. They are aggressive and often attack animals larger than themselves. Their eyesight is not acute, but they rely heavily on a highly developed sense of smell to locate prey. Mice, rabbits, and other small terrestrial animals, as well as fish, crayfish, frogs, and other small aquatic creatures are preferred mink food. Their living habits cause humans few problems.



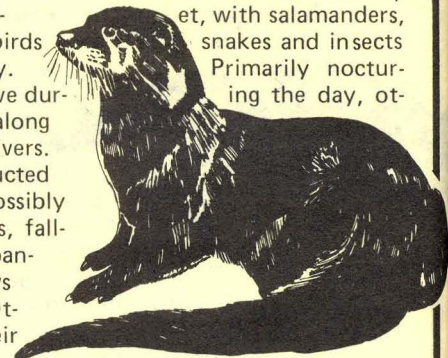
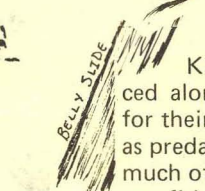
bobcat

Primarily nocturnal and seldom seen by humans, bobcats prefer life in lightly populated areas of broken terrain. They depend on keen eyesight and superlative hearing for their nightly hunting forays. Bobcats are good climbers and readily take to trees to rest or observe their surroundings. Although capable of killing an animal as large as a deer, they primarily consume rabbits, squirrels, mice, rats, shrews, opossums, small birds, and carrion. Their reputation for controlling populations of rodents is tarnished by occasional reports that they destroy domestic fowl and young pigs. Their dens are usually located in inaccessible areas, often in rocky cliffs or hillsides.



otter

River otters have regained residency in Kansas just this year when they were reintroduced along the Cottonwood River. Otters are known for their agility in water and their abilities of all kinds make up for their lack of land predators. Fish, crayfish, frogs, birds, and insects are added for variety. Otters are primarily nocturnal but also active during the day. They forage along streams and rivers. Dens are constructed near water, possibly under tree roots, fallen logs, or in abandoned burrows and thickets. Otters mark their territory with scent posts, informing other otters of their presence. Breeding season may find otters away from a large body of water as they search for a mate. Future reintroductions will expand the otter's range in Kansas.



FURBEARER REVIEW

1. List those species that are predominately nocturnal.
2. What special adaptation do raccoons have to help them find food?
3. Which furbearer listed above is a member of the dog family?
4. Mink depend on which one of their senses to locate food?
5. List the furbearers that are rodents and explain similarities and differences of these species.

When the days get cooler and you're spending more time indoors, take some time to discover more about Kansas wildlife through books and observations.

DECEMBER

1st week

There are some who can live without wild things, and some who cannot. Like winds and sunsets, wild things were taken for granted until progress began to do away with them. Now we face the question of whether a still higher 'standard of living' is worth its cost in things natural, wild and free.

—Aldo Leopold

December 1, 1967. Marion Reservoir formally Army Corps of Engineers acreage, was added to the lands managed by the Fish & Game Commission. Locate Marion Reservoir and research the Corps of Engineers.

December 2, 1921. A \$1.00 trapping license was required for the first time. 1982 was the last year trapping licenses were sold in Kansas. Now trappers and hunters of furbearers need a furbearer license.

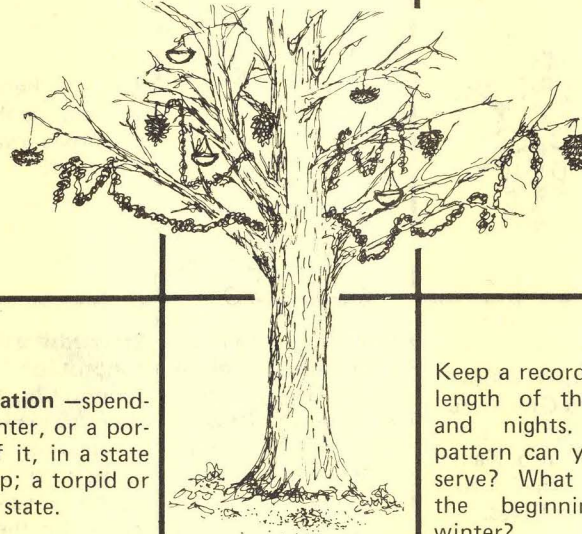
December 4, 1843. Manila paper was patented on this date. Use some manila paper and a crayon to make a study of textures in nature.

December 6, 1886. Explorer William T. Hornaday killed a 1,700 lb. bull buffalo while gathering specimens for the Smithsonian Institute. What is the average weight of buffalo today?

2nd week

December 7, 1873. Willa Cather, author of *My Antonia* and other prairie pioneer books, was born on this date. Go to the library and find out more about this author and her books.

Decorate a pioneer-style Christmas tree for the birds. Pine cones stuffed with peanut butter and rolled in seeds make great edible decorations, along with sunflower heads, balls of suet, and chains of popcorn.



Once you begin to feed the birds, don't stop! They'll learn to depend on you for food to survive the winter.

Woodpeckers, nuthatches and chickadees can use the fat of suet for heat energy. You can get suet from a meat market or save cooking grease.



3rd week

Some animals hibernate during winter. Make a list of true hibernators.



Hibernation—spending winter, or a portion of it, in a state of sleep; a torpid or resting state.

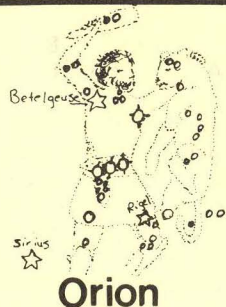
Don't forget the ground-feeding birds!

Keep a record of the length of the days and nights. What pattern can you observe? What marks the beginning of winter?

Winter solstice—About December 21. When the sun is at its greatest distance from the equator.

Observe the winter sky for constellations that are visible this time of year. Keep a look out for Orion. The two bright stars, Rigel and Betelgeuse, will guide you.

4th week



Other winter constellations you might observe are: Auriga, Cassiopeia, Taurus the Bull, Canis Minor the Dog, and the Big and Little Dippers.

Watch for tracks and traces of wildlife after a snow.

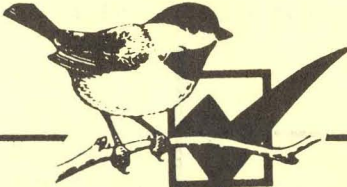


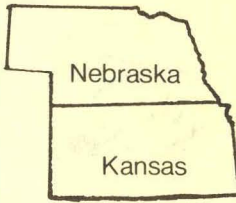



December 28, 1973. The Endangered Species Act of 1973 came into existence. This Act attempts to protect many species of wildlife from further reduction in number.

After the holidays, gather Christmas trees from your neighborhood to build a brush pile for wildlife. They make a good shelter from predators and the wind.

December 30, 1981. Further acres of the Mined Land Area in southeast Kansas were donated to the Fish & Game by Gulf Oil and Pittsburgh & Midway Coal Mining Company. Locate the area and list the wildlife you'd find there.

JANUARY

<p>"We believe in Kansas, in the Glory of her Prairies, in the Richness of her Soil, in the Beauty of her Skies and in the Healthfulness of her Climate." —Charles Moreau Harger From 1927 Kansas Facts</p>		<p>Make a New Year's Resolution to save and restore wildlife habitat. What components are necessary for good wildlife habitat?</p>	<p>January 1, 1865. A census of buffalo in the plains estimated the number to be 15,000,000. Imagine what Kansas was like then!</p>	<p>January 2, 1920. Birthdate of science-fiction author Isaac Asimov. Read a science-fiction book. Then, attempt to write some of your own.</p>	<p>DO SOMETHING WILD</p> 	<p>1st week</p>
<p>January 1970. U.S. National Environmental Policy Act (NEPA) started. Designed to prevent environmental problems, it required that federal agencies prepare a detailed statement, now known as an Environmental Impact Statement.</p>	<p>Write an Environmental Impact Statement for a new project going on in your area. Research what impact this project will have on your environment now and in the future.</p>		<p>January 11, 1872. A severe storm, combined with a buffalo herd, caused a Kansas Pacific Railroad engine to halt. The herd moved across the tracks and crowded on the lee side of the engine to get away from the storm.</p>	<p>Lee — the side or part that is sheltered or turned away from the wind.</p>	<p>Here's your chance to help nongame wildlife by donating money to the Nongame Wildlife Improvement Program (also called "Chickadee Checkoff"). This program works on projects for all wildlife that is not hunted, fished or trapped. Taxpayers can make donations to the program on their state tax form each year. Your help is needed.</p>	<p>2nd week</p>
	<p>How do Rio Grande turkeys differ from Eastern wild turkeys?</p>	<p>January 1966. 125 Rio Grande turkeys were transplanted into Kansas from the King Ranch in Texas.</p>	<p>League of American Sportsmen established by George Oliver Shields on January 18, 1898. Main goals of this group were to protect wildlife, enforce game laws, and promote stewardship of natural resources.</p>	<p>Stewardship — the concept of land responsibility; that we do not own land but are managers of the resource and responsible to future generations for the condition of the land when we leave it.</p>		<p>3rd week</p>
<p>Ornithology — the branch of zoology that deals with birds. An ornithologist is someone who studies birds. How many famous ornithologists can you discover?</p>		<p>The Western meadowlark was selected in 1924 as the State bird of Kansas. The Kansas Chapter of the Audubon Society had school children vote for their favorite bird. Runners up included quail, cardinal, and robin.</p>	<p>The National Audubon Society was established in 1906. Named for the great ornithologist, John James Audubon, its goal is to promote education and conservation of wildlife and the natural environment. Visit an Audubon chapter.</p>	<p>January 29, 1861. KANSAS DAY Kansas became the 34th state in the United States. Look at what wildlife Kansas had in 1861 and compare it to 1984. How has the variety and abundance changed?</p>	<p>Ducks Unlimited, a nonprofit organization dedicated to restoring and creating habitat, was incorporated in Washington D.C. on January 29, 1937. Contact your state or local group to see how you can help.</p>	<p>4th week</p>

1854 — Senator Stephen A. Douglas of Illinois reports a revised Nebraska Bill, which calls for the creation of two territories — Nebraska and Kansas.

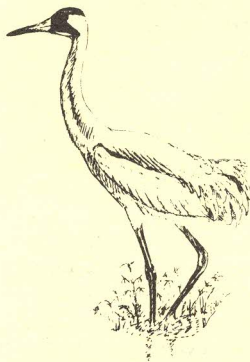
HOORAY FOR WHOOPERS

NATURAL ISSUES



A federal District Court in Colorado has upheld a decision by the U.S. Army Corps of Engineers requiring the builders of a proposed dam in northeastern Colorado to take necessary measures which would protect downstream habitat of the endangered whooping crane.

The project builders, the Riverside Irrigation District and Public Service Company of Colorado, had applied for a "nationwide"



permit from the Corps of Engineers which would have allowed the dam to be built without careful scrutiny of impacts on either the environment or endangered species.

That permit application, made under Section 404 of the Clean Water Act, was denied by the Corps.

The favorable ruling, announced National Wildlife Federation (NWF) counsel, which joined the suit in support of the Army Corps'

decision, is a decisive victory not only for the whooping crane. "The ruling by Judge John Kane upholds the right of the Corps of Engineers to compel dam builders in western states to build their water projects in a way that insures against further jeopardy to endangered species," said Robert Golten, counsel with NWF's Natural Resource Center in Boulder, CO.

The farmer-organized Riverside Irrigation District and the Public Service Company of Colorado, an electric utility, proposed constructing a dam on Wildcat Creek which flows into the South Platte River. Riverside wanted a dam for irrigation purposes, while the public utility wanted cooling water for a new coal-fired power plant.

The Corps was concerned that Riverside's dam and reservoir would deplete some 11,000 acre-feet of water annually from the South Platte system. This would have degraded critical staging grounds for the endangered whooping crane 260 miles downstream in Nebraska. The riparian habitat is used by roughly 70 whoopers during spring and fall migrations.

Riverside Irrigation District, the public utility, and others supporting their appeal argued that the Army Corps of Engineers was intruding on the farmers' water rights granted by the state of Colorado. They claimed the federal government had no authority to regulate what the state had legally granted — the right to capture and divert water in the South Platte River system.

NWF, with the Army Corps of Engineers, argued vigorously that the Corps

was not taking away any private water rights. Rather, the Corps was using its police power to regulate the way those rights were developed in order to protect the "physical, chemical and biological" integrity of the South Platte River. Those quality standards come under the Clean Water Act. The Federation also pointed to provisions in the Endangered Species Act mandating that the Corps take no action (in this case issuing a Section 404 dredge or fill permit) that could jeopardize an endangered species or its habitat.

In reaching his decision, District Judge Kane concluded that the Army Corps of Engineers was not attempting to take away any state-authorized water rights. Rather, the Corps acted to ensure those water rights were used in a way consistent with federal laws.

The case is expected to be appealed by Riverside Irrigation District and the public utility. — *National Wildlife Federation*



Faux Pas

An August Tipsheet item on the U.S. Fish and Wildlife Service's new rule on selling birds of prey bred in

captivity contained misleading information. The new rule gives raptor breeders limited authority to take raptor eggs and young from the wild and sell offspring raised from those birds. The tip mistakenly reported breeders were given limited authority to directly sell raptor eggs and young taken from the wild. Contact: Brian Millsap at National Wildlife Federation's Vienna, VA office, 703/790-4268.

Everybody Checkoff!

Twenty-eight states now have nongame checkoff programs in operation, the Wildlife Management Institute reports. These programs provide state income taxpayers an opportunity to donate a portion or all of their refunds to the state wildlife agencies for nongame management. Twenty states had their programs in effect early enough to cover the 1982 tax year. They have collected almost \$6 million so far in refunds to support nongame efforts.

The states with nongame checkoffs include: Alabama, Arizona, Arkansas, Colorado, Delaware, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Massachusetts, Minnesota, Montana, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, Utah, Virginia, West Virginia and Wisconsin.

Oil & Water

Concerned outdoorsmen have been sending up flares of distress, bemoaning the enormous losses of wildlife habitat that have resulted from depletion of Kansas' water resources. The following reprint from Kansas Farmer tells of one case where the results of years of water exploitation are being painfully experienced by man as well:

Rising gas prices have forced John A. Hays, Haskell County, to take a half section out of flood irrigation and put it back into dryland fallow wheat. That could be just the start of a major shift back to dryland. "The way gas prices are now on that one well, I can't even break even on irrigated corn and wheat," Hays explains. "The gas on that well was \$1.40 (per 1,000 cubic feet) 4 years ago and it's \$3.27 now." Hays put one quarter into dryland wheat last year when he shut down that well. The field made 60 bushels. He'll leave that quarter fallow this year and plant the adjacent quarter to dryland wheat.

The big mistake was going to irrigation in the first place, Hays believes. "I wish we could go back to dryland farming overnight," he says. "When we were dryland farming, we operated strictly on a cash basis. Now we irrigate 8 sections and we have to keep borrowing and borrowing. We have to work harder now, too." If the irrigation equipment and wells were paid for, the

transition back to dryland could go more quickly. But with an average of \$50,000 invested in each well system, only extremely high gas prices can justify shutting one down.

Inefficient wells get shut down first. Hays operated seven pumps last year, six this year and he'll go down to five next year. "The one I shut down last year was the most inefficient (1,100 gpm) and it had no tailwater pit. Some of my others run about 1,300 gpm." Gas prices on some of his pumps are still around 40 to 45 cents, and he waters corn with them. His wells are about 585 feet deep, with static water at about 220 feet, a slight drop from past years. The water pulls down about 90 feet. Hays still farms about 1,200 acres of dryland wheat and milo in addition to his irrigated acreage. "I come out better now on the dryland acreage than on most of my irrigated land. It costs me about \$150 an acre to farm irrigated corn land." — *KANSAS FARMER, "All Around Kansas," August 20, 1983.*

Owl Watch

In 1983 burrowing owls were colormarked in south-central Saskatchewan in conjunction with a research program investigating movements of these owls during the breeding season. Information is requested from anyone seeing a colormarked owl to aid in determining migration routes and wintering areas which are presently unknown. Each owl carries a Fish and Wildlife band and from one to three

colored plastic leg jesses. Jess colors are yellow, fluorescent red, light blue and dark green, and are one centimeter wide and extend approximately 1.5 cm beyond the leg.

Persons observing colormarked owls should record the following: location, date, color and position of leg jesses, leg of attachment of metal band, and any details of the owl's situation. This information should be sent to Bird Banding Office, Canadian Wildlife Service, Ottawa, Ontario, Canada K1A 0E7, plus an additional copy to the bander, Elizabeth A. Haug, Department of Veterinary Anatomy, University of Saskatchewan, Saskatoon, Saskatchewan S7N 0W0.

More Screams For Streams



Stressing the need for state and local governments to become more involved in river protection, Senator David Durenberger (R-MN) has introduced legislation, S. 1756, that provides matching funds to establish and upgrade state river preservation programs, clarifies and encourages use of existing laws concerning volunteer efforts and tax incentives for river protection, and permits states to veto federal licenses and permits for development projects that adversely affect rivers included in state conservation programs. Known as the "State and Local River Conservation Act," this bill is intended to complement the National Wild and Scenic River Act (16 U.S.C. 1271) which presently protects 61 rivers or river segments totaling over 7,000 miles. According to the National Park Service, another 60,000 miles of rivers (1,524 river segments) have been identified for potential inclusion in the National Wild and Scenic Rivers System. "But," says Durenberger, "it is clear that the national system cannot, nor is it appropriate that it should, protect all 60,000 miles. . . the states and local governments must play a vital role." — *Land Letter*

More Ravaged Rivers

Several conservation groups, including the National Wildlife Federation and its Texas affiliate, the Sportsmen's Clubs of Texas, have filed suit against an International Boundary and Water Commission river channelization project along 200 miles of the Rio Grande. Work to stabilize the river channel and retain it as a border between Texas and Mexico has disrupted considerable riparian habitat used by a number of game species, including mourning and white-winged doves, mule deer, javalina, quail, pintails, shovellers, mallards and Mexican ducks. Half of the project still is not finished, but dredging has come to a halt for the time being. — *National Wildlife Federation*



Victory in Montana

A \$1.65 million fund to acquire conservation easements to offset the impacts of a high-voltage power line on prime Montana fish and wildlife habitat has resulted from a negotiated settlement of a power line case in Montana.

Under an agreement with the Montana Power Company and the Bonneville Power Administration, three conservation groups will withdraw their appeal challenging construction of the 400-mile power line in western Montana. In turn, the companies will give \$1.65 million to the state to buy conservation easements in the Rock Creek drainage, one of the finest blue-ribbon trout streams in the country.

The three conservation groups involved in the case — the National Wildlife Federation, the Montana Wildlife Federation, and Trout Unlimited — will have their choice of which state agency will get the funds and acquire easements.

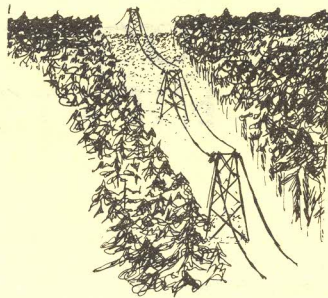
"This agreement achieves our goals of saving critical wildlife habitat, protecting a vital trout fishery, and preserving the open-space character of Rock Creek's valley by limiting development," said Jay D. Hair, Executive Vice President of the National Wildlife Federation. "And we did it without lengthy and costly litigation. This agreement is not simply a cash settlement. It is a creative approach to resolving a difficult conflict between energy demands and wildlife needs."

Hair said the National Wildlife Federation and Trout Unlimited envision a program

to monitor water quality of the drainage and to secure the development rights, through conservation easements, on remaining tracts of land in the lower Rock Creek Valley.

The Bonneville Power Administration, a federal power-marketing agency, will build the power line on behalf of the Montana Power Company and four other utilities. In 1981, the BPA proposed a power line corridor that crossed, wherever possible, U.S. Forest Service and other federal lands. The Forest Service authorized construction, despite threats to important wildlife ranges of whitetail deer, elk and mule deer, and to the Rock Creek drainage.

The three conservation groups appealed the Forest Service's authorization in July, and later that month, the Service blocked the line's



construction until the appeal was settled.

"We challenged the Forest Service to limit the impact of the power line on fish and wildlife — not to stop construction of the project," said Thomas France, attorney at the Northern Rockies Resource Center of the National Wildlife Federation in Missoula, Montana, who filed the appeal.

As a result of that appeal, the Montana Department of Fish, Wildlife and Parks was able to secure an agreement with Bonneville Power for \$431,000 to study elk and mule deer

migration across the power line corridor, and to develop a policy to patrol and close power line access roads in prime elk habitat. —*National Wildlife Federation*

Don't Sell Us Short

The Administration is beginning to learn that Americans will not stand for the disposal of their public lands, according to the Wildlife Management Institute. Petitions are beginning to surface in Washington, D.C. that show conclusively that citizens place great value in the recreational opportunities provided by national forests and other public lands.

A recent petition arrived from Mrs. Jo Anne Brooks in Prescott, Arizona, with almost 400 signatures. It protests the "selling of our public lands to private individuals under the President's Asset Management Program."

Mrs. Brooks wrote: "Prescott is a small town and I had no trouble acquiring this many signatures in a short amount of time. We are not a community of radicals so I can only imagine that the rest of the country feels much the same."

Future Wildlifers

A Connecticut study of school-aged children and their attitudes, knowledge and behaviors toward wildlife has

shed some light on the need for more education in these areas.

The study, funded by grants from the U.S. Fish and Wildlife Service and the G.R. Dodge Foundation, is part of a series of studies on American attitudes toward wildlife. Four age groups were focused upon for this study: second, fifth, eighth, and 11th grades.

Testing these children's attitudes revealed that most took a humanistic approach, viewing animals as lovable pets. Next in line was a naturalistic view, an interest and affection for wildlife and the outdoors, followed by a negativistic view, avoiding and even fearing animals.

The most significant finding was a change in the perception of animals at various age levels. Grades 2-5 took a strong emotional,



humanistic view of wildlife. Grades 8-11 showed an increase in moral, ethical and ecological concern for animals and the environment.

The report concluded there is a need for more education on the requirements and characteristics of wildlife as well as the ecological processes. Wildlife management agencies will have to devote far more attention and resources to the needs of children and their environmental education, the report stated.

The future of wildlife depends on the commitment and concern of these future adults.

Like Old Times

The Senate Labor and Human Resources Committee is reviewing legislation that would establish a program to employ young people for conducting conservation projects on federal and state lands, the Wildlife Management Institute reports.

The bill, S. 724, was approved by the Senate Committee on Environment and Public Works in May. It would create the American Conservation Corps (ACC), a revised version of the Civilian Conservation Corps of the 1930s and the more recent Youth Conservation Corps.

Supporters of the bill argue that hiring young people at minimum wage has proved to be a cost-effective way of getting needed conservation work done on the nation's public lands. The program would be

administered by the Interior Department, which would distribute 35 percent of the funds to state programs, 25 percent to the Agriculture Department, 25 percent to Interior, five percent to Indian tribes, and the remainder to other federal agencies. The bill would authorize \$300 million annually for five years to employ young people.

The House passed its ACC proposal on March 1 of this year. — *The Big Sky*

Action Manual

A comprehensive new handbook, published by the Izaak Walton League of America, (IWLA), is designed to give citizens the tools they need to tackle local environmental threats and to take advantage of opportunities to make their communities better places to

live. The IWLA Guide to Conservation Action offers advice on how to research the problem, develop support for a conservation fight, and have an impact on official decisions. It also covers working with supporters, getting the message out through the local media, and raising money to fund the effort.

This 56-page guide, illustrated with pen-and-ink drawings, is available to the public for \$3 per copy plus 75 cents postage and handling. Checks must accompany orders. Send your orders to: "Conservation Action Guide" IWLA 1701 N. Ft. Myer Dr., Suite 1100 Arlington VA 22209.



Gift for Life

At \$400 for a combination license, \$200 for either hunting or fishing, the Kansas Lifetime License is an economical way to make every year one of rich outdoor experiences. Applications may be obtained from county clerks and regional Fish and Game offices. An installment plan is available.

WISDOM

If future generations are to remember us more with gratitude than with sorrow, we must achieve more than just the miracles of technology. We must also leave them with a glimpse of of the world as it was created, not just as it looked when we got through with it.

Lyndon Johnson.

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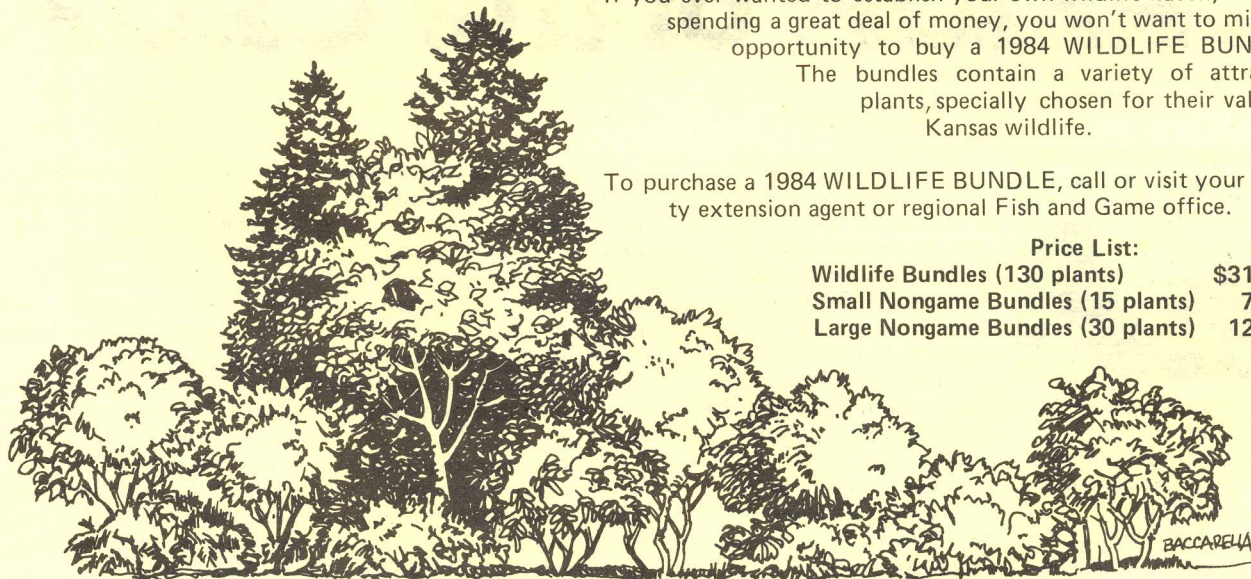
If you ever wanted to establish your own wildlife haven, without spending a great deal of money, you won't want to miss the opportunity to buy a 1984 WILDLIFE BUNDLE.

The bundles contain a variety of attractive plants, specially chosen for their value to Kansas wildlife.

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COCHRAN'S ART

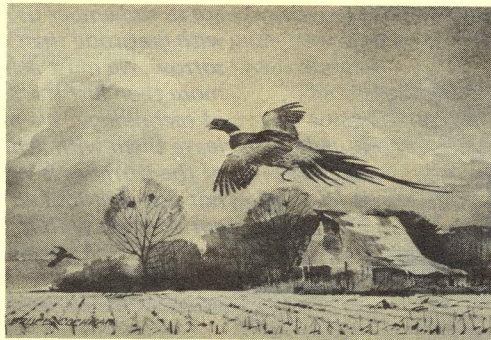
BEAUTY & the BEASTS



Bruce Cochran is an ardent hunter, fisherman, and wildlife photographer.

Anyone who enjoys wildlife art can appreciate the effect Cochran's avocations have on his vocation.

Cochran has been a commercial artist and magazine cartoonist since 1960. His work has appeared in publications across the nation, including major hunting and fishing magazines. He spends a great deal of his time doing a daily cartoon for one of the



nation's largest daily newspapers. Many of his cartoons have appeared in previous issues of KANSAS WILDLIFE.

Although Cochran has only been painting since 1978, his works have been exhibited in several major art shows, including the Ducks Unlimited show in Kansas City, the National Hunting & Fishing Day show in Wichita,

and the Oklahoma Wildlife Federation show in Tulsa.

Cochran blends technical expertise with practical knowledge of wildlife and the outdoors to yield a product that depicts the sportsman's perspective very accurately. His sense of humor and love for the outdoors are evident throughout his works.

Manes

CREAM of the CROP

SPECIAL NOTES



Three employees of the Kansas Fish and Game Commission were presented with awards for excellence in the field of wildlife conservation at the 34th Annual Meeting of the Kansas

Wildlife Federation.

Education Coordinator Joyce Harmon was presented with the Conservation Educator award for her outstanding efforts to establish a program for teaching Kansas children about wildlife conservation. She has been recognized for developing curriculum materials for use in classrooms, as well as for professional development services offered to the state's educators.

Game Protector Ralph Adams of Garnett received the Conservation Communicator award for his work in informing the public about issues and events involving wildlife in the state. The Communicator award stresses cooperation with the news media in informing the public.

Southwest Regional Wildlife Supervisor Joe Kramer received the award for top Wildlife Conservationist. The award

recognizes outstanding contributions to the effective management, control, and restoration of wildlife resources in Kansas.

Nominations for these awards and six others in the field of conservation are solicited from the Kansas public. The nominations are then screened by a panel of three judges from different parts of the state, and finally reviewed by the Conservation Awards Program Chairman for final selection.

Manes

A gift that lasts the year.



Is the holiday nibbling relentlessly at your pocketbook? KANSAS WILDLIFE can help! Here is a magazine for all Kansans—a gift that will be enjoyed the entire year. Whether that special person is a hunter, angler, or someone who just appreciates wild critters, you can't miss with a subscription to KANSAS WILDLIFE!

Crammed with information on the natural resources of our state, KANSAS WILDLIFE also offers up-to-the-minute reports of hunting and fishing activities and conservation issues, an educational section, and technical

how-to articles for outdoor enthusiasts. Striking full-color photos and professional artwork make KANSAS WILDLIFE a delight to youngsters as well as adults. No other outdoor magazine gives Kansans the news coverage, information, and top-drawer wildlife illustrations of KANSAS WILDLIFE.

So if expensive gifts are gnawing through your Christmas cash, why not give a subscription to KANSAS WILDLIFE? The great outdoors for just five dollars a year—or three years for only \$12.50! How can you beat a deal like that?

Notification of gift subscriptions will be sent to the receiving parties and will include your name and address as donor. Just fill in the reverse side of the subscription forms.



Volplaning into the milo against a reddening dawn sky, prairie chickens evoke a mystical mood for this hunter.

Phantoms of the Prairie

Rob Manes

Like so many times before, the first move made by the birds was a short flight from a draw low on the soft, grass-covered slope to a newly sunlit spot a little higher on the hillside. I huddled in my blind and watched them . . . gray silhouettes against a fluorescent dawn, a neon sun.

Seeing prairie chickens in their first flight of the day always stirs something deeply reverent in me. They materialize out of the grass maybe a quarter-mile away, and suddenly they are in the sky, performing a sort of silent aerial ballet. I am the audience, my balcony a chickenwire blind festooned with bundles of bluestem, switch grass, Indian grass—all elegantly laced with a translucent frost that plays every ray of new sun.

Sometimes the chickens shuttle from place to place in groups of 20 to 50 for more than an hour, while the sun takes its time lighting the valley between the pasture and the milo field where I wait. The unmistakable wing-beat of prairie chickens never ceases to entertain me . . . a brief burst of rapid pulses from their short wings, followed by a long fixed-wing glide. I have often wondered what endows them with this mystical power to come and go on the prairies, like some airborne apparitions, appearing and vanishing at will.

Some mornings they never come. I sit there by a familiar fence post, trying not to move, struggling to keep my attention directed at the grassland in front of me. Getting to my spot 20 minutes before any light appears on the horizon, I know

there is a chance the birds won't show until after I go home. On such mornings I listen to the waking sounds of countless other birds; or I study the feathery form of Indian grass, sometimes so close that my eyes cross, making it difficult for me to focus again on the pasture slopes. . . .

But more often than not the chickens come.

Without warning, they again rise out of the grass and swing toward me. It seems as though it takes hours for them to come within range. As they approach, I can make out their dun-colored plumage, their quail-shaped torsos. On a still day I can hear them cackle and cluck to each other in flight. Suddenly it's time to shoot. I often hear the wind in their pinions as I rise . . . one shot, then another. They're gone.

More often than not, they come back after a brief brush with gunfire. It's always hard to remember that they look a little like quail at a distance, but they're more than twice that size, so they appear closer than they really are. "Let 'em get close before you stand up and start blazing," I tell myself. "Here they come. Now put it on 'em."

All the good wing shooters I know say they swing their gun up from behind the bird, and just when the bead comes on target, they swing hard out in front of the bird and squeeze the trigger at the same time. Maybe that will work. . . .

Some mornings the prairie chickens move on the hills once or twice, and then a lone bird breaks off and comes to the milo. The first

few times this happened, I let the loner pass, even if it flew right to me. Later I learned to shoot when I got the chance. It might be the only one, and a shot never seemed to stop the entire flock from following later.

My first prairie chicken was one of those lone "scouts." It was a foggy morning. "Good for chicken hunting," my dad told me, "so I want you to kill one today." He didn't need to put any more pressure on me.

I was sitting there by my designated fence post, in a fog so heavy it almost made breathing difficult. Dad guaranteed me that, if they came in, they would fly over that spot. He was right, as he so often is in such matters. The loner was the only bird we saw that morning. It came stealing in under the cover of the mist, and only the sound of air rushing over the bird's flight feathers prompted me to wheel around. I shot with the gun barely to my shoulder. The chicken went down, and I felt like a man at the age of fourteen.

Dogs can do their part in chicken hunting too; but you have to let them. I remember one morning Dad and I took Cap, our Brittany, with us to hunt chickens. We moved into the field before dawn and settled behind one of the huge feed stacks that were scattered in the milo stubble. First light misted over the setting, and I could see the miniature snow drifts that had blown into the furrows left from spring planting. As the sky brightened, anticipation of the shoot became a shiver in my legs. Cap's anticipation was becoming obvious as well. First, he refused to remain seated. Dad pushed his hind quarters down and told him to sit. Reluctantly, Cap sat . . . for a minute. Then he was up again, whining and prompting Dad to hiss "sit!" a little louder than he wanted to. The next time Cap got up he caught a swat. He winced, then returned a look that only a bird dog owner could appreciate. Finally deciding that the birds weren't coming in that morning,

Dad gave Cap the O.K. to move. Cap bounded straight for the open stubble field, then slammed onto point not more than 30 yards away. We hadn't bothered to keep track of his antics. The big flock of chickens flushed as Dad and I were walking the other way toward the pickup. We could only watch as the birds sailed over the next rise. Neither of us looked Cap in the eye during the ride home.

Several times our dogs have pointed prairie chicken—often when we were looking for them, but other times when we were hunting pheasants. These points nearly always occurred in dense grass, where the birds felt secure enough to hold.

We have flushed prairie chickens without dogs on several occasions, especially early in the season, and again in good grass cover. I've also jumped chickens while walking in fallow wheat grown up to sunflowers and weeds. The birds don't make a lot of noise when they take off, but they always seem to be airborne and out of range in short order. And there's always that split-second thought process that even the seasoned hunter goes through when chickens flush: "Hen pheasants . . . no . . . yes . . . Cryminilly, those are prairie chickens!"

Of course we haven't always found them in the grass. Sometimes we flush them out of the milo stubble. They jump wild there; a tightly choked twelve-bore is still inadequate for many such rises.

Foggy mornings always seem good for working chickens with dogs. Maybe the birds don't like to fly if they can't see where they're going, so they sit a little tighter when the sun is blotted out by haze in the air.

I remember feeling like I was breaking some sacred code of prairie chicken hunting the first time I walked up a bunch of birds during the course of a "sit down" shoot. The birds had avoided me on their way into the milo, and I had

watched them until they landed. I sat for about 45 minutes, thinking that the birds would get up and move, affording me a shot; but they never did. Gradually my patience expired: "What if they go out over the same flight path they followed in? Or what if they go out too high? Or what if they sit there till dark? They might sneak out, or tunnel. . . ."

I walked a long loop behind the spot where I had marked the birds, hoping I could at least push them in someone else's direction, if I didn't get a shot. Miraculously enough, I got my chicken, and the rest of the flock sailed over another gunner who scored—a rare success story.

Since then, I've come to believe that prairie chickens can be flushed within range while feeding if a person carefully marks where they land and hustles to flush them soon after they alight. It is very helpful to keep the wind in your face while moving in, so any noise you make will not be carried to the birds. Still, my favorite way to hunt chickens is the traditional "sit 'n' wait 'til they fly to ya" method. This type of hunt tops my list because I've seen more birds taken by this method than by any other.

As with other wild creatures, habitat is the key to survival for prairie chickens. And the key to success for chicken hunters. Experts tell me that, though chickens concentrate in crop fields, they actually get most of their winter victuals from grass and forb seeds. A grassland to cropland ratio of about three to one is ideal for prairie chickens, provided the grass is well-managed. I've always been grateful for cattlemen who don't abuse the grasslands. Good range practices make all the difference to so many prairie creatures—and those of us who appreciate them.

Milo or soybeans bordering grass is perfect for chickens. They roost and loaf in the protection of the grass. Then, sometime between first light and mid-morning, they come to the crop field for breakfast. I

always feel late if I'm not in position before light shows in the east.

Mid-afternoons may be just as good as early mornings for chicken hunting. Many of the aesthetic qualities of a morning hunt are lacking, but afternoon trips offer the added attraction of warmer feet. The routine for an afternoon hunt is pretty much the same as for a morning hunt. Being completely hidden isn't so important as sitting still and being quiet—preferably with some trees or a fence-row to break up your outline. One luxury probably introduced by an off-season duck hunter is a bucket on which to park your backside. A padded seat will also work. Coveralls and warm boots are a must, and a little hot coffee is nice too. Oh yes, there's always the problem of keeping the hands warm, without making the index finger bigger than the trigger guard.

Prairie chickens can be fine table fare. The medium-colored meat is tasty when baked, smoked, or prepared with the traditional upland gamebird gravy. My favorite method for preparing chicken is to cut the meat loose from the bone and deep-fat-fry small chunks in an egg-and-flour batter. Still, the pleasure of eating the birds comes in a distant second to shooting them, and shooting them is anticlimactic to the experience of watching the birds rocket out of the grass and volplane into the milo. I've had many shoots that left me empty-handed, but I'll continue to enjoy such "fruitless" efforts. It gives me the opportunity to enjoy the finest portion of the day, when creatures are beginning to stir and chatter in the sweet, predawn air. It puts me in a gallery where light and form are truly pleasing to the eye, and it allows me an audience with the land clothed in its finest prairie attire.

Such hunts also give me a chance to share something of substance with my family and friends. But most of all, they afford me an association with those elusive fliers of the grasslands, the prairie chickens.



Kansas Fish & Game photo

a moral view of recreation

Marvin Henburg

*condensed and reprinted
courtesy Idaho Wildlife*

Why, you may be asking yourselves, a moral view of recreation? And what has recreation to do with the environment?

Let me answer these questions in reverse order—reverse, because the second is the easier to answer. I have chosen to write about recreation for the simple reason that millions of Americans choose to “get away from it all” by enjoying the varied splendors of our national landscape. Obviously our decisions about how and where to spend a vacation, a weekend, or an afternoon away from work have tremendous impact upon the health—if I may so describe it—and well-being of our public lands, especially in a state like Idaho with two-thirds of its land administered by the government. . . .

Now to the first question—why a moral view of recreation? Let me answer this one in a more roundabout fashion, for the question involves my special field of study, philosophy.

Many people have, I’m afraid, two negative images of philosophers—neither wholly deserved. The first image is that of men and women with their “heads in the clouds,” hardly ever bothering to breathe the same thick atmosphere, whether wholesome or polluted, as everyone else.

The second negative image is that philosophers are dour, grumbling men and women with hardly anything cheerful to say. They explore grim concepts like fate, meaning, essence and moral responsibility. In fact, Dr. Johnson once quipped that he tried to become a philosopher but cheerfulness kept breaking out. The only joke in philosophy is that there are no jokes—everything is serious, serious, serious. Now comes a philosopher who wants to talk seriously about recreation. Already philosophers take the fun out of everything else, and here’s one who wants to take the fun out of fun.

I have a pair of observations about this second image. My first observation is that if my lecturing about recreation helps take the fun out of it, I have had many helpers in corporate America. Recreation has become serious business in this country—billions of dollars spent for skis, Winnebagos, trail bikes, backpacks, camp stoves and snowmobiles, to name only a few of the things we Americans consume in pursuing our leisure. . . .

You may already have guessed that part of my message about “right recreation” involves minimizing this emphasis on consumption. If so, you are correct. But I do not do so because consumption is naturally evil or bad. We must, after all, consume to live. The question is, how

much consumption is reasonable and prudent?

This is where philosophy comes in. Philosophy’s great task, now as it has always been, is to make us more reflective about the choices we make and the values we pursue. Moral philosophies have long struggled to answer two great questions. The first is: What should I seek? What combination of ends are good ends? How do I pursue wealth, happiness, power, pleasure and self-respect, attaining a balance I can live with? Once I have decided on a personal vision of the good, the second great question comes into focus: What means may I employ to realize my vision of the good? How may I pursue my own good while attaining a balance other people can live with?

Now because recreation is so linked in our minds with fun—often with a grasping, frankly unenjoyable “fun”—there is a tendency to think that ethics applies only to the serious world, not to the world where we get away from it all. Indeed, that last phrase is partly symptomatic of the problem I am describing. Many people treat public lands and public properties with a laxness, even an abusiveness, they would never consider in their homes or workplaces. Getting away from it all too often means getting away from the strictures of serious life, including moral rules that are sometimes tiresome and typically hard to obey. My first real point is that such getting away from it all is an illusion. We are as responsible for our fun, our leisure, as we are for our supposedly more serious choices—our votes or our decisions where to live and how to work. . .

According to the American Heritage Dictionary, the word recreate means “to impart new life to; refresh mentally or physically.” This definition is an extension of the meaning of an allied word—recreate—“to create a new.” Both recreate and re-create stem from a Latin word meaning “to fashion again.” If we look at the noun form, recreation, the dictionary tells us

that the word means, "refreshment of one's mind or body after labor through diverting activity; play."

I wish to linger for a moment at this stage of definition, for a great lesson about the proper role and function of recreation may be learned simply by studying our commonplace understanding of the word. Recreation has something to do with creating afresh and with diverting ourselves from work. Nonetheless, what is it we create afresh, and why do we need diversion from work? My answer to the first question is that we must create afresh the whole person; one should make of himself as rounded an individual as possible, learn as much, acquire as many skills, and experience as much that is good as his abilities and his respective share of fortune allow. In this sense, recreation is something that must attend all aspects of our life, not simply our leisure.

The answer to the second question: Why do we need diversion from work?, is simply an offshoot of the answer to the first. Rightly understood, happiness is the ultimate end for human beings, and happiness, as John Stuart Mill reminds us, is a balancing of tranquility and excitement. Too much of one thing—even when we enjoy it—leads to stagnation rather than refreshment of our personalities. Recreation in the sense of diverting ourselves from work is hence intimately bound to the more fundamental sense of creating ourselves afresh, gaining skills and making discoveries.

It is clear that getting away from it all is one of the goods of recreation. One gains perspective, restores his sense of humor, and releases tension by enjoying a recreational activity. Nonetheless, this aspect of recreation is often overemphasized. We too easily think it enough to be away from work and as a consequence pay little attention to the quality of our leisure. Here we would do well to focus upon the dictionary's sole descriptive adjective in regard to recreation. That

adjective was, if you recall, "play."

Play is, I am persuaded, a deep and natural drive in human beings. It is both serious and nonserious. It is precultural in that animals play and post-cultural in that there are play elements in everything from religious ritual to the contests of National Football League professionals. Play is comprised of the urges to make and to imitate as much as it is comprised of the urge to compete. Play is what enables children to learn skills in the first place. And the fun that is so invariably a part of true play comes from a deeply natural urge to laugh when, after engaging in a complex activity, we at last master it. Aren't the best smiles, after all, the unforced smiles of a child who finally says the new word properly, of the Saturday craftsman who finally lathes the chair leg truly, or of the novice rock climber who at last makes it atop the cliff? If there were no skill, no imitation, no concentration of energy, there would be no enjoyment—and no true play. Johann Huizinga, from whom I have borrowed these insights, goes so far as to name us *Homo Ludens*, Man-the-Player. This honorary title is, Huizinga argues, at least as accurate as the title we usually parade under—that of *Homo Sapiens*, Man-the-Wise. I am inclined to agree with him, for man is inarguably a player but only arguably wise.

Part of wisdom, however, is to recognize that play can be serious without ceasing to be play and that recreation, therefore, can be equally serious without ceasing to be fun. When I say that recreation can be serious, I mean that it can and should be the object of serious planning as well as serious scrutiny. We should look at what we do in our leisure, ask if it measures up to the standards we set for ourselves, and be willing to change if we find ourselves wanting. This attitude is nothing either more or less than the attitude we should adopt toward any other of our activities.

What I have said so far argues for the view that recreation is an end in itself. However we choose to spend our leisure, we will do better if our choice includes something that involves skill, something that takes time to perfect, something that cannot be gotten on the cheap—as, say, the gong on a slot machine can be rung for a quarter. This emphasis on skill is the very opposite of the consume-and-destroy mentality pandered to by so many salesmen in the recreational equipment industry. A root cause of the ugly consumerism underlying the present realities of recreation in this country is the idea that the amount a person earns ought to be directly reflected in the conspicuousness of his recreational goods. Manufactured goods can indeed help us acquire skills and therefore help us enjoy the use and further mastery of these skills as well. When we have it the other way around, when adjuncts to leisure are more for display than for use—as too often happens—the good of recreation is turned to an ill. We seek to be envied rather than improved or refreshed.

So one part of the moral view of recreation focuses upon the development of skills. We should all have at least one recreational activity that challenges us to be excellent, to do the best we are able. It can be as dramatic or as undramatic as you like—anything from learning how to shoot whitewater rapids in a kayak to learning a sound fly casting technique. We should all experience the satisfaction of a skill well acquired and enjoy the secret smile that comes as we approach the point of mastery. We should likewise enjoy the continued use of our skills, for the longer they stay with us, the better friends they become. We experience their depths as well as their initial challenges.

Before you decide, however, that I am some sort of self-improvement nut run wild, let me say something more about recreation as an end in itself. There is another neglected side to play in addition to the urges to make and to imitate. I am think-

ing of its utter simplicity. A litter of puppies plays with nothing but their paws and muzzles, improvising endlessly upon the theme of advance-and-retreat. Young children can play contentedly for hours with nothing more than an ordinary cardboard box, which their imaginations shape into countless things—tables, trains, suitcases, and the like. Adults, I want to say, can play in equally simple ways. Take hiking, for example. A simple walk through the forest or across the plains can do wonders in creating afresh, in restoring one's sense of perspective and well-being. Why is this? I suggest it is because we love falling back on something familiar and uncomplicated such as walking as much as we love acquiring and using more complex skills. To the extent that recreation fosters the good of taking us away from work, I would argue that simple activities are among the best means of restoring ourselves. . . .

Just how much energy and how many material aids to recreation should we allow ourselves to use? I cannot say in any precise way, but I can draw your attention to a helpful test. Aristotle claims—rightly, I think—that virtue is the midline between extremes of defect and excess. For instance, courage is the mean between the defect of cowardice and the excess of recklessness; charity the mean between the defect of miserliness and the excess of prodigality. In nearly every case, the mean is difficult to identify, while the excess or defect is readily apparent. I think it is clear that in recreation we Americans err on the side of excess—we consume far too many natural resources, including scarce and increasingly expensive supplies of energy. So while I cannot say how much energy or how many goods a recreational ideal would have you use, I can say with fair certainty that cutting back on whatever you presently consume will be a step toward the mean, a step toward virtue.

In all that I have said so far, there is no hint how we should treat other

people in our pursuit of recreation. After we have recognized the good of recreation in our lives, we must acknowledge that we cannot pursue this good without restraints. Here, then, we focus upon the second great question of moral philosophy: What means may I employ in pursuing my vision of the good? It is, I think, the tougher question.

My own view is that there is no special moral theory of recreation as distinct from other activities. I believe that, with some qualification, the most adequate moral theory for guiding us in recreation is the precept of distributing the greatest amount of happiness as widely as possible among as many people as possible. This is utilitarianism. When our own pursuit of happiness impinges upon other peoples' happiness, reducing theirs more than it increases our own, we are morally obliged to restrain ourselves. Take as an example a person playing a transistor radio loudly in a forest picnic area. However much he may love hearing disco music amidst the shimmer of aspen leaves, he is morally obliged to turn down the radio or use an earplug whenever other peoples' enjoyment is reduced.

My advocacy of utilitarianism is not, however, unqualified, for I think that what we discovered in analyzing the nature of recreation justifies an important amendment. One school of utilitarianism claims that the happiness of each person counts equally with the happiness of every other. The difficulty is that this formula makes no allowance for quality—one man's happiness, however obtained, is as good as any other man's so long as total happiness is unaffected. This view is, I believe, both false and dangerous. In the case of recreation, for instance, this view overlooks the important dimensions of skill and simplicity. . . .

Imagine first the satisfaction of a hunter who has spent his entire day along the Selway River in a fruitless quest for elk. Though he returns empty-handed (as do most elk hunters in the wild), he is by no means

unhappy. He has enjoyed the challenge of the hunt, exercising skill and patience. He has enjoyed moments of simple reflection, at times virtually merging with the stillness of the autumn forest. In contrast, now imagine a "hunter" who drives to a game farm where, after paying five hundred dollars, he kills a mature bull elk with prize antlers. I am willing to think that this second man's satisfaction, quantitatively speaking, is equal to that of the unsuccessful hunter—particularly when we take account of long-term satisfaction. After all, the antlers will adorn the den of the second "hunter" for the remainder of his life. Nonetheless, despite this man's undeniable satisfaction with his trophy, most of us would, I trust, express a clear preference in favor of hunting in the manner of the first man. Difficult as it may be, our public goal of distributing the greatest happiness as widely as possible must strive to honor such qualitative differences in recreation.

The modified utilitarianism I have argued for also makes clear our responsibility to nonhuman species and to our inanimate environment. Some philosophers and ecologists have suggested that the way to safeguard, say, endangered species is to include animals when we establish the scope of moral rights. Others would extend moral rights to features of the landscape as well. I regard all such claims as nonsense. Rights imply duties. For instance, I have a right to liberty only if I accept the duty of protecting every relevantly similar person's right to an equal liberty. If I don't cooperate in guarding against infringement of your liberties, what meaning can my right possibly have? I may be the next victim. It is simply a matter of logic that I cannot, therefore, extend rights to animals for they can have no duties toward me in return. I may be and should be kind to animals, but they won't be any better protected for my granting them what I mistakenly call "moral rights."

Utilitarianism makes clear that

while we may not owe kind treatment to animals as a matter of moral right, we do owe it to ourselves to accord animals such treatment. Smith, who is cruel to animals, is acting wrongly not because the animals' suffering should count as if they were human beings' suffering, but because Smith is injuring himself, making himself less of a person. In addition, right-minded observers will suffer upon learning of Smith's cruelty, while his disregard for animals will often accompany a similar disregard for human beings. Neither do we owe it to an endangered species to preserve its remaining members because that species has some inalienable right to existence. We owe such preservation to ourselves, for when species disappear, our world of experience is less varied and less rich, ultimately providing fewer possibilities for human happiness.

As I have already mentioned, many people also hold that we owe protection to certain landscapes as a matter of moral right. This view would argue, for instance, that we should leave a campsite tidy out of obligation to the area itself. This is again nonsense. We do not violate the land's rights when we litter; we violate the rights of those human beings who come after us. And equally important, we deprive ourselves of the satisfaction of enjoying our recreation to the fullest by doing what is right. Our responsibility for nature is and can only be founded upon our responsibility for other human beings.

Please bear with me for one anecdote before I proceed to my closing suggestions about "right recreation" for the coming decade.

Last fall my wife and I were in Wyoming visiting Yellowstone National Park—surely a prime example of a recreational activity. We were at Old Faithful awaiting its eruption. Hundreds of like-minded people waited as well. The geyser was distinctly uncooperative, holding off a full fifteen minutes beyond the projected (and prominently posted) time. Finally, a few bursts of steam

rose, then water gushed perhaps five feet high, falling back almost immediately. A man behind us, grown impatient at the wait, expressed his conviction that he had been rooked by park officials and Mother Nature alike. He gathered his kids and angrily left the area—no doubt having some distance to drive before his next scheduled stop. A few minutes later the geyser erupted to its full and spectacular height, though the man was nowhere around.

Clearly this fellow is an extreme case, but I mention him because there is, I think, a bit of him in all of us. Reflected in the foolishness of wanting nature to conform to our schedule is an impulse that can be quite destructive to recreation as I have tried to describe it. . . .

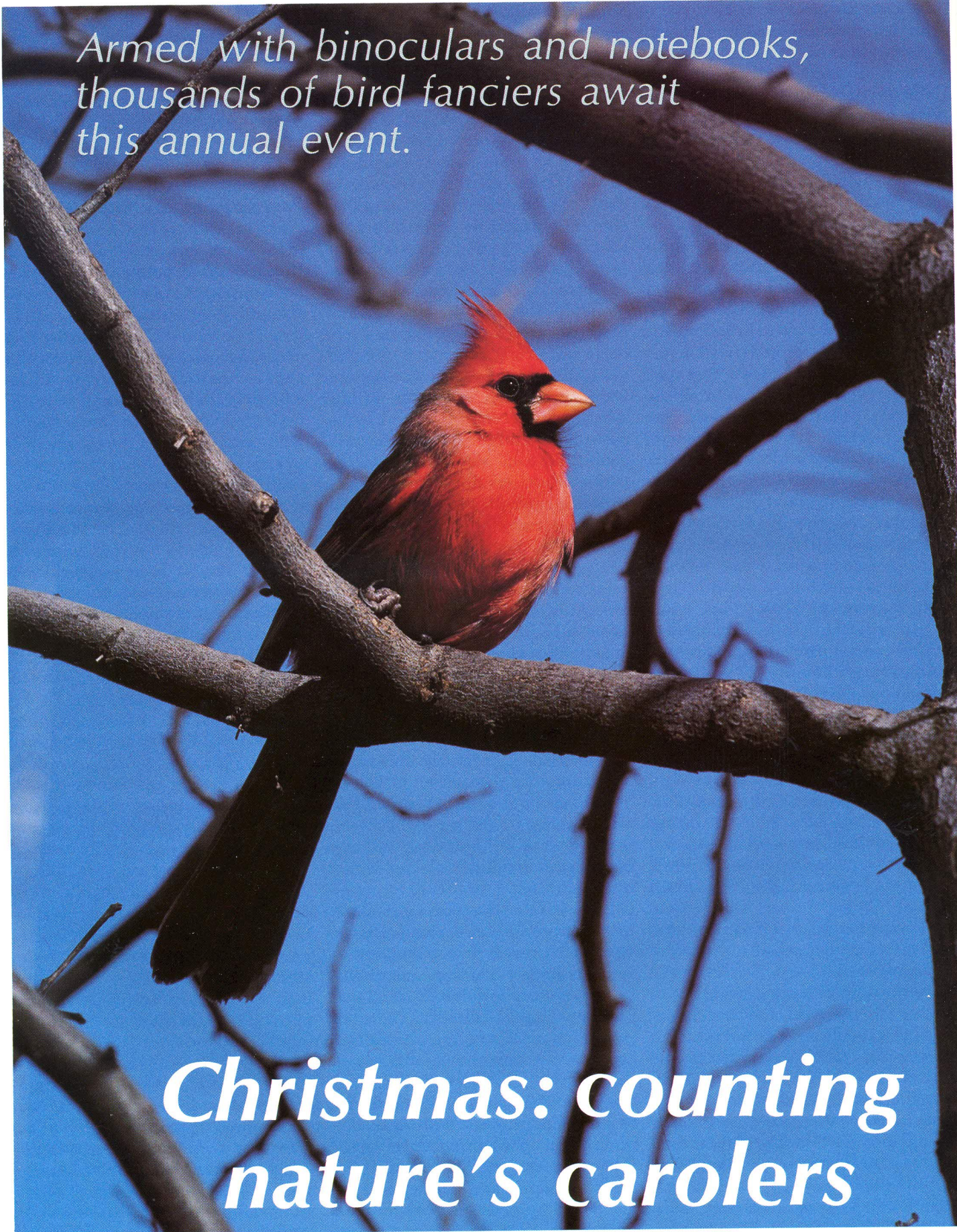
For the future, then, the imperatives are clear. In starting us toward a recreational ethic in the 1980's, I know of no better guide than the trinity of values suggested by the economist E. F. Schumacher in a rather different context. These values are health, beauty and permanence. The essentially playful recreation I have described is obviously conducive to health, both mental and physical, whereas goods-intensive leisure, consumptive leisure, often is not. Beauty is something our natural environment has in great abundance, but I remind you that to the extent beauty is in the eye of the beholder and the beholder is behind the windshield of a vehicle, a precious core of beauty is lost. We see with more than our physical eyes; we see with our spirits as well, and so long as our spirits vibrate to the cadence of pistons, we are poorly situated to appreciate beauty. Finally, there is permanence. That great American home away from home, the enormous eight-mile-to-a-gallon recreational vehicle, fares badly in terms of permanence. Most will be on the scrap heap in fifteen years at most. Recreation in the 1980's must make the recreational vehicle a thing of the past. We cannot afford the energy either to make or to run them.

That, I am sure, will displease many. To compensate we must build greater numbers of permanent, substantial, and tasteful on-site housing in many of our places of natural beauty. We shall thereby encourage people to come, stay longer than in the past, and enjoy their leisure without being in an environment that literally begs them to hit the road, as does the interior of a recreational vehicle. Building more permanent facilities in, say, popular national parks will also no doubt displease many of you. It is nonetheless true that not everyone can be expected to or is able to carry their accommodations with them in a backpack or ordinary passenger car.

None of what I have said, of course, supplants the continuing need for common courtesy and good sense in respecting the environment. I hope all of you will think about the role of recreation in your lives. It should be a source of joy, not of frustration and conspicuous consumption. I encourage you to know both yourselves and your natural environment a bit better. A reflective, playful recreation can be an aid to both. Perhaps the ideal should be as T. S. Eliot has said in "Little Gidding":

*We shall not cease from exploration,
And the end of all exploring
Will be to arrive where we started
And know the place for the first time.*

The place we must start is with ourselves. An unreflective conception of recreation is bound to lead to unreflective and potentially destructive behavior. I would argue that our responsibility toward the natural environment must be founded upon our responsibility toward other human beings. We can, in turn, only know our responsibility toward others if we have a clear sense of what is best for we ourselves to pursue. Recreation is clearly a part of the good life, and to start with a skewed vision of recreation can only lead to a skewing of the other parts of that life.

A male cardinal with vibrant red plumage and a black face mask is perched on a dark, bare tree branch. The bird is facing right, and its long tail feathers are visible. The background is a clear, bright blue sky. The text is overlaid on the upper left portion of the image.

*Armed with binoculars and notebooks,
thousands of bird fanciers await
this annual event.*

Christmas: counting nature's carolers

Birding is, by its nature, a solitary sport. Most birders prefer to pursue their avocation alone or in the company of a select few. But there is one notable exception to that rule. Once a year bird observers gather for the biggest birding social event of the year—the Audubon Christmas Bird Count. What began on a modest scale in the year 1900 has become an eagerly-awaited event that today spans the North American continent and beyond.

Frank Chapman would be amazed at the modern version of his brainchild. It was Chapman, an ornithologist with the American Museum of Natural History, who proposed the first Christmas count at

the turn of the century. His idea was to send troupes of volunteers into the woods and fields on Christmas Day to take stock of the bird life in various areas of the U.S. Twenty-five counting parties in twelve states and two Canadian provinces participated in that first count. In 1982, more than 1,450 counting parties filed their observations from such diverse locations as Canada, the West Indies, and South America, in addition to the continental U.S.

Besides the huge increase in their numbers, Christmas Bird Count participants have seen numerous other changes in the event during its history. In the beginning, observers reported their sightings along a linear census strip; today, each counting party confines its activities on count day to a well-defined circular plot fifteen miles across. Originally, the Christmas Bird Count was conducted only on Christmas Day; the modern version allows observers to choose a single day from a framework of sixteen or seventeen days in December.

As early as 1909, Christmas counts were made overseas. During the next forty years, counts were taken sporadically from various points around the globe, usually by displaced Americans. In 1951, the policy was changed to limit the count to the contiguous U.S., Alaska, and Canada. In 1972, the count was expanded to include Mexico, Central America, the West Indies, and the southern rim of the Caribbean.

Robert Arbib, editor of *American Birds*, in which count results are published, sympathizes with birders in foreign countries who would like to be a part of the Christmas Bird Count. But he and his associates have had to limit the scope of the count.

While Europe and other parts of the world are still trying to duplicate the success of the American Christmas count, participants in the count here have established a familiar annual pattern.

The event begins with a pre-count meeting. Depending on the size of the count, this meeting may



Gene Brehm photo



Kansas Fish & Game photo

resemble a military strategy planning session or a cozy breakfast. The count takes place in a prescribed area and is run for 24 hours. Birds that are seen or heard qualify. Indeed, some birds must be heard in order to distinguish them from physically similar kin; the western meadowlark, for example, looks nearly identical to the eastern meadowlark but has a significantly different song.

Many of the counts are traditionally done on foot or by car, but as the counts expanded and technology allowed, new modes of transportation have been put to work during the Christmas Bird Count. Observations have been made from airplanes, canoes, ships, ferries, snowmobiles, all-terrain cycles, bicycles, snowshoes, ice skates, golf carts, even hang gliders.

Once the count period is over, the tabulation begins. Information recorded includes the number of observers, number of party hours, weather conditions, day, time, habitat types, number of birds, number of species, and names of people involved.

The "compiler" is a vital component of each count, especially those

with a large number of participants. The compiler generally volunteers for the position, or is gently prodded to volunteer. This person transfers raw data into a format suitable for submission to *American Birds*. In some large groups, the compiler may organize the count and assign group leaders prior to the actual count.

Among the compiler's most challenging tasks is that of determining whether an extremely rare bird should be included in the party's count. Each compiler has his or her own way of avoiding this problem. Many require that at least two observers must have seen a rare or unusual species for the bird to qualify. If the details are unclear or questionable, a report of such a bird will probably be excluded from the counting party's report. Accuracy is an overriding concern for each of the observer groups.

"We ask every participant, compiler, and sponsoring organization to make every effort to promote accuracy in every detail," says Arbib. "Cast out the questionable, question the outlandish, doublecheck the doubtful, doubt the unusual, make enemies rather than mistakes,

and submit counts that you know are sanitary, impeccable, and beyond reproach."

Many contend that the real object of the count is to record as many species as possible. There have even been challenge contests between counting parties. Most, however, compete only against themselves, trying to better the previous year's total.

If tallying the numbers of species and birds was the only incentive to participate, counting parties in the northern latitudes might go begging for help every year. The variety and density of bird life in the north are not nearly as great as encountered in milder southern climates. A counting party working near the equator stands a good chance of sighting more than 300 bird species during the Christmas Bird Count. In Kansas, the average is around sixty species. In Tok, Alaska, last year's party tallied only four species. The count was conducted in sub-zero temperatures and three feet of snow.

Last winter the number of individual birds observed ranged from twelve on one count to 37 million at the other end of the spectrum. This poses a particular challenge for observers in those areas with large concentrations of birds: How does one count all of the birds in an aggregation of thousands? One doesn't. One estimates. If huge flights of a particular species are passing an observer, the observer will estimate the number of birds in a particular time increment. Once that estimate is established, the observer multiplies that number by the number of time increments comprising the duration of the flight. The result is a ballpark estimate of the total number of individuals in the flight.

When birds are stationary, as with waterfowl on a marsh or lake, the observer "slices the pie." By estimating the number of birds contained within a small segment of the group, then multiplying that number by the number of segments, the total is determined.



Gene Brehm photo

Roughlegged hawk (opposite), ringneck pheasant, mallard, short-eared owl are a few of the birds Kansans can expect to see on a Christmas bird count. Snow geese (page 27) pose a unique problem to the most nimble arithmetic minds!



Kansas Fish & Game photo



Kansas Fish & Game photo



Gene Brehm photo

More than 36,400 observers participated in last year's Christmas Bird Count. Twelve of the counting parties comprised one lone soul attempting to cover the standard 177-square-mile-circle solo, while 310 counts had less than ten observers. Twenty counts were conducted by groups of 100 or more. The biggest counting party contained 207 members.

Last year, a Kansas counting party reached the 100-member plateau; 100 Manhattan-area participants recorded a total of 91 species. (The record number of species seen in a Kansas Christmas Bird Count is 101.)

But numbers alone don't make a Christmas Bird Count. It is a form of entertainment, as well as a learning experience for those who participate. It is a day when the amateur can rub shoulders with the experienced and learn about the art and science of birding. Arbib wrote: "Perhaps the most important, when all is considered, is the excitement of the mad, marvelous bird chase. There is, of course, a secondary benefit. The novice birder of today's count becomes the accomplished teen-age amateur and is often in-

spired to go on into a career of zoology or conservation. But beyond the fun and inspiration, there is great scientific import in the very mass data the count represents."

There is talk that the Christmas Bird Count is not scientific enough. Admittedly, it is difficult to see how the data can be used for population analysis or any hard scientific studies. The number of participants may vary, climatic conditions on count day may be aberrant, and some observers may lack experience. Efforts are made to send the novice afield with the experienced birder, but this is not always possible. Raw recruits may misidentify or exclude some birds.

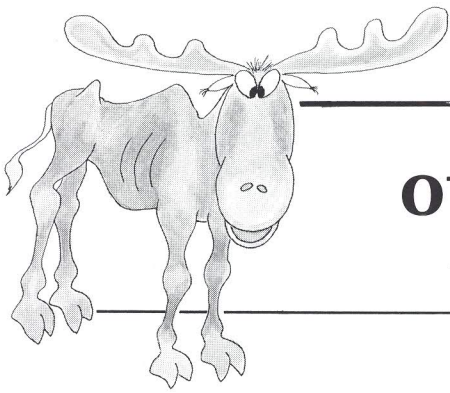
However, most biologists agree that the Christmas Bird Count does produce useful data of a general nature. Marvin Schwilling, nongame biologist with Kansas Fish and Game, says that in most instances the count can identify species rarities, determine population highs and lows, assist in mapping winter habitat, and provide comparative census figures from year to year. Over 100 technical papers have already been written using data that was gathered in Christmas Bird Counts.

Some of the studies are particularly interesting. The house finch, a bird commonly kept as a pet, escaped (or was accidentally released) on Long Island New York in 1940. Since the incident, the Christmas counts have helped researchers monitor the spread of house finches up and down the Atlantic coast. One such study delineates the causes of the spread; another notes that with the increase of the house finch, house sparrows have decreased in number, because they inhabit the same ecological niche.

The real essence of the Christmas Bird Count is the thrill of sighting and improving one's knowledge of birds. The follow-up is learning to be an authoritative birder. This year, the counts will be conducted one day between December 17, 1983 and January 2, 1984. If you wish to spend time afield with savvy ornithologists, test your observation skills, or just have fun, why not get involved? John Zimmerman (913-532-6659) is the person to contact for more information. You may find the Audubon Christmas Bird Count becomes an annual outing. And a step toward greater year-round appreciation of nature's carolers.



Gene Brehm photo



off trail

... with Stub Snagbark®

When the new editor of KANSAS WILDLIFE asked his friends in the Pacific Northwest if any had been to the Sunflower State, several responded in the affirmative. "I was stationed in Oklahoma," one replied. "Kansas blows south 'cross Fort Sill in the spring, then Texas blows north 'cross it in the fall. Won't be long before the Kansas prairie will all be in the Panhandle and Wichita will be sitting mostly on Lone Star dirt." I assured him later the wind only blew hard once in a while, that calm days were the rule in July.

Another amigo observed that Kansas was so flat you could stand on your bumper in Topeka and look down the storm drains in Goodland. "Nonsense," I snorted. And it is; the storm drains in Goodland are covered.

Despite the ribbing he was getting from his cohorts in the mountains, my friend was eager to move. He figured he'd even forego elk hunting a few years, provided Kansas yielded good whitetail antlers in exchange. I promptly assured him it could—though I hastened to add that whitetails weren't like elk.

"You can't bugle bucks," I explained. "And whitetails don't need lodgepole thickets for concealment; an old buck can disappear behind a protruding staple on a fencepost. Still, deer antlers grow just like an elk's once the animal is on the ground. Remember that little forkhorn you arrowed that grew to be a seven-point herd bull after you had the antlers stashed in your garage?" He winced at that. I went on.

"And the fish—they're the same in Kansas. Different species, of course; but just as a ten-pound steelhead doubles in weight after it's been eaten, so does a striped bass. Flathead cats that a kid could pull out of a creek with a string and a piece of lath are suddenly record-class fish when the dishes are washed."

At this point my colleague fell to reminiscing about his early angling career, observing that, while lath lacked the sensitivity of split bamboo, it was much easier to hide in a fourth-grade locker. I agreed, pointing out that lockers were somewhat like shotgun patterns in that they were always a bit too small. It wasn't until seventh grade that I had one large enough for my Brittany — and then I had to carry my football helmet to classes.

My companion nodded thoughtfully. Then, abruptly, he asked me to come to Kansas with him — said I had the ability to tickle the funny bone in people and that an occasional look at things from a zany perspective was healthy. He liked his readers to be in good health.

I wasn't expecting the invitation. And I had reservations about living in flat country. Oh, Kansas may have hills, but to perch on a bona fide slope is to be able to touch the ground without bending over. A mountain is two slopes leaning on each other. Lots of things live exclusively in the mountains—goats, for example. Now, when you Kansans talk of goats, you mean pronghorns, which, admittedly, are more like goats than antelope. But in the mountains goats are *really* goats, bouncing merrily up and down slopes so steep even the pikas carry petons. I went goat hunting once. I got lost.

Now most folks will tell you it's hard to get lost on a goat hunt. You simply climb until anoxia takes over; then you go back down. Your camp or vehicle is the lowest point on your route. I made the mistake of using a compass, however, and neglected to compensate for the effect of topography.

It was mid-morning, and wispy tentacles of fog were embracing the Cascade peaks. With my rifle sling snagged on a bush and my hiking boot inextricably wedged between a root and a rock, I decided this was as safe a time as any to take my bearings. The

fact that the peanut butter sandwiches in my fanny pack were now nestled against my shoulder blades should have warned me to pick a more horizontal spot.

The compass needle wouldn't move. One end seemed glued to the glass, the other to the scale. After unsuccessfully trying to dislodge the pointer with a few vigorous shakes, I said to heck with it, I'd just climb a few more feet, then descend. The blood was already pooling between my ears, and the wind had picked up, causing the peanut butter sandwiches to flap annoyingly against my scapulae.

Still, it didn't dawn on me that topography had played its hand until I upended my canteen and the water drew itself into the bottom corner, avoiding my lips as effectively as did that second-string cheerleader at the Sunset Drive-In back in '69.

I finally got off the mountain by loosing some water from my canteen, then following it down. I've since given my compass to a flatlander; in future goat hunts, I'll just carry two canteens.

Though the mountains in the Pacific Northwest are steep, the winters wet, natives tend to exaggerate when describing their environs. My first traffic ticket in Portland was for driving in scuba gear—a common offense, committed for the most part by new residents who believe all the stories told of the rainy coastal climate.

Few, I discovered, are true. All those rumors about Washingtonians falling off their bikes and drowning proved as far-fetched as Oregon's claim that half the household accidents in the state happened to people who rolled out of bed and couldn't swim. I found that as long as I pedalled on Seattle sidewalks, I could keep my handlebars above the surface. And Oregon's bedroom statistics included shark attacks as well as drownings.

So I looked with jaundiced eye at Midwest rumors of dust storms that last from Easter to the Fourth of July, locusts that wrest ears of corn from raccoons, and summertime heat that not only cooks eggs on asphalt but melts the macadam into your hash-browns.

After a lot of thought and a few phone calls concerning turkey and prairie chicken prospects in Kansas, I decided to come. And I will. As soon as I take the Evinrude off my bicycle.

cover: Gene Brehm photo

