

Mother and cub emerging from the den.

Photo by Lynn L. Rogers

People and Wildlife — Bringing Them Together

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WILDLIFE INTERESTS MANY PEOPLE and there are numerous ways, both passive and active, for them to pursue this interest. Many people derive pleasure from indirect wildlife contact through various media. Others seek more direct involvement, purposely choosing a wildlife-oriented activity or encountering wildlife while participating in other outdoor pursuits. While viewing and hunting wildlife are probably the most popular activities, they are not the only satisfying ones. For example, detecting signs of animal presence, listening to animal sounds, and just being in areas where certain animals are known to live can add a new dimension to an outdoor experience. It is not surprising, given the tremendous satisfaction people derive from wildlife, that in the past decade or two, many imaginative, successful programs have been devised to assist people seeking new experiences with wildlife.

Most of these programs have two components: 1) enhancing people-wildlife contacts, and 2) enriching the experience through expanding public awareness and knowledge of wildlife. Although both factors are important and require careful planning, this article deals primarily with the first component—bringing people and wildlife together.

We have been studying various details of the natural history of bear, beaver, deer, moose, and wolves at the Kawishiwi Field Laboratory near Ely in northeastern Minnesota. Because these animals have wide public interest, we point out various aspects of their natural history that might be used to enhance human contact.

BEAR

The black bear, which physically resembles man more than any other animal of the northern forest, is loved, feared, hated, and respected. Some Native American tribes regarded the black bear as the most intelligent forest animal. Public interest in bears is high as shown by the response to a call for volunteers to help conduct a study of black bears in northeastern Minnesota during several weekends each winter for about 10 years. During the study more than 1100 people volunteered their weekends and some traveled over 240 miles to participate.

While many people place sighting a bear at the top of their list of desired wildlife encounters, this is not a universal goal. Recreationists may therefore consider it fortunate or unfortunate that the easiest place to see a bear in northeastern Minnesota is in campgrounds. Some campers intentionally put out food to attract bears; others demand that they be killed or moved elsewhere. Bears enter campgrounds most frequently in years when wild berry crops fail.

It is very difficult to see bears outside a campground because they have a wary nature and live in dense cover. Most bears frequenting residential areas and some in natural habitats are nocturnal. However, most bears in natural habitat are active from a half hour before sunrise, through much of the day, until an hour or two after dark. Most of this time is spent feeding on wild fruit, nuts, and insects. In northeastern Minnesota, oak stands and abandoned orchards are among the best places to see wild foraging bears. These habitats are

uncommon however and in late summer, for example, bears may migrate up to 60 miles to oak stands to feed on acorns, hazelnuts and mountain ash berries. People walking through these stands have a good chance of seeing bears. Some bears linger past leaf fall before returning to their territories to den, making it even easier for people to spot them.

In the past, though some found it aesthetically displeasing, "garbage dumps" offered the most consistent opportunity to see bears and practically the only chance to watch bears interact. Before the advent of sanitary landfill practices, it was common for tourists to sit in their cars on summer evenings and watch bears forage in the garbage dumps. Bears that eat garbage also continue to feed on wild foods and commonly forage in a 1.5 mile radius surrounding these sites. There is no conclusive evidence that feeding on garbage predisposes bears to become nuisances, although landfill sites located within a mile or two of residential areas may concentrate bears so undesirably close to people that they might become a nuisance.

Managers might help people to see bears foraging under natural conditions by identifying oak stands frequented by bears in state parks, national parks, or refuges closed to hunting, constructing hiking trails through them, and providing maps of them to interested persons. Where circumstances are suitable, (e.g. at sites termed "modified landfill" in Minnesota) managers might also consider making arrangements with local authorities (in Minnesota, contact the Pollution Control Agency for an inventory of approved locations and names of local permittees) to allow individual or group access to landfill sites for the purpose of watching bears. This would let people easily and safely see bears during the nondenning season.

BEAVER

The Canadian beaver, which appears frequently in folklore, was one of the motivational forces in the exploration of North America. Aside from its historic importance, the beaver is not only interesting to watch, but remarkable for its creation of dams, lodges, food caches, channels and trails. It also leaves abundant signs of its presence in the form of cut trees and shrubs and debarked pieces of wood floating in the water. Exploring structures built by beaver and looking for other signs of its presence can be a very interesting experience. Moreover, beaver often live in aesthetically pleasing areas that may provide opportunities for viewing other wildlife. All these factors make it an ideal species on which to focus a wildlife program.

Our research suggests that there are few barriers to viewing beaver or seeing evidence of their presence. Beaver live in a variety of lake and stream habitats, many of which are accessible. Beaver also adjust to the presence of humans at reasonable distances and soon ignore their presence. The only real limitation is visibility. Watercraft may be needed to get close enough to view beaver on large bodies of water. On small bodies of water where distance is no problem, it is necessary to select a good vantage point with little vegetation (such as flooded shrubland, heavy emergent vegetation, channels



Adult Beaver

Photo by Richard R. Buech

through bogs, etc.) to obstruct the view. Stream habitats are generally less desirable than lakes as vegetation is usually dense and beaver are likely to range more widely, therefore limiting viewing possibilities. Keeping these possible limitations in mind some effort should be made to locate beaver colonies where conditions are appropriate for visitor groups. However, there is one shortcut that may facilitate beaver viewing. If the only aspen resource in a beaver colony is some distance from shore, beaver can be attracted closer to observation sites by placing aspen tops at the water's edge. Beaver will keep using this resource as long as it is replenished. Managers could help individuals or small visitor groups overcome view-obstructing vegetation by having elevated platforms constructed near the beaver lodge or at favored feeding sites.

The timing of beaver observation is especially important. While they can be observed almost any time during the ice-free period, certain times are better than others. During spring and early summer, when beaver do little but swim and feed, biting insects can make observation extremely unpleasant for visitors. As the season progresses, the insect problem lessens and beaver begin to display the behavior people normally associate with them. In northern Minnesota, the kits appear regularly outside of the lodge in August. In September, the tempo of tree and shrub cutting on land increases as they rebuild and maintain dams and lodges. After leaf fall, tree and shrub cutting is at its peak as they transport branches to a cache near the lodge for use as a winter food resource. This continues until ice-up.

The best time to observe beaver is in the evening and early

morning hours. Adults usually become active one to two hours before dark and continue until several hours after dawn. Kits however are usually active only at night. Obviously, darkness poses a problem to observation. While a night vision scope is one alternative, it is extremely expensive. A more practical solution is to use spot or flood lights powered by auto batteries in conjunction with binoculars since beaver become used to them quite rapidly. Another alternative is to listen to sounds of their activities at night, the chewing and gnawing of bark, the cutting of trees, the whining of kits, etc. However, most activities can be viewed when light is adequate for binoculars, especially in fall when they tend to be more active than usual during daylight hours.

DEER

Canoe campers surveyed recently in the Boundary Waters frequently mention that the highlight of their day was their sighting of white-tailed deer. This reflects both an interest in deer and the frequency with which they visit aquatic habitats. Often deer are seen feeding on aquatic or emergent vegetation in shallow water in spring and early summer. As summer progresses, feeding on aquatic vegetation declines.

Winter is another time when deer are particularly visible. Deer in the Superior National Forest gather into traditional deer yards. They become traditional because mothers lead their young there and in subsequent years, the young return leading their own offspring. The largest deer yards are also near human population centers. Deer in these yards become quite tame because people feed them hay and commercial deer foods. Logging operations in wintering areas also tend

to concentrate deer. The sound of chain saws act as a dinner bell, and deer materialize from the forest to feed on lichens and branch tips of the newly-felled trees. Away from logging areas, wintering deer feed on old man's beard and arboreal lichens that become abundant on dead or decadent conifers. These lichens are now abundant on balsam fir killed or weakened by the spruce budworm epidemics of 10-20 years ago.

In spring, deer seek low growing evergreen forbs such as wintergreen and twin flower after the snow melts. As new leaves appear on the roadsides, the forest floor, and finally the branches of shrubs and trees, deer diets change rapidly because they tend to take each species of plant when it is at its fastest growing, most digestible and nutrient-rich stage. During this period deer are frequently seen in evening and early morning hours along roadsides and in openings where vegetation tends to develop earlier.

Managers could help people see deer by 1) directing people to habitually used areas, 2) providing seasonal information on habitat use, and 3) feeding deer in winter to concentrate them in accessible areas.

MOOSE

A large bull moose, which weighs a half ton or more, stands six feet at the shoulders, and carries antlers spreading to six feet, is an impressive and memorable sight. Moose,

one of the most frequently sighted large mammals in the Boundary Waters, can be seen feeding on aquatic plants along canoe routes. However, moose in more accessible areas of Minnesota are generally more wary and not as easy to observe as in national parks or other protected areas.

Moose are most easily seen in late May, June, and early July when their consumption of aquatic plants is highest. During these months they gravitate to areas of abundant wild rice, pond lily, burreed, horsetail, and pondweed. This is also when moose frequently visit natural salt licks. Moose also use roadside ditches with poor drainage that collect road salt as salt licks. One such ditch in northern Minnesota was used from spring to fall. A time-lapse camera revealed an average of two moose visits per daylight period. Night time use was even higher according to an enthusiast who regularly took groups there to watch moose.

Moose sightings are also frequent in September and early October during the mating season. At this time rutting bulls become bolder and more active than usual.

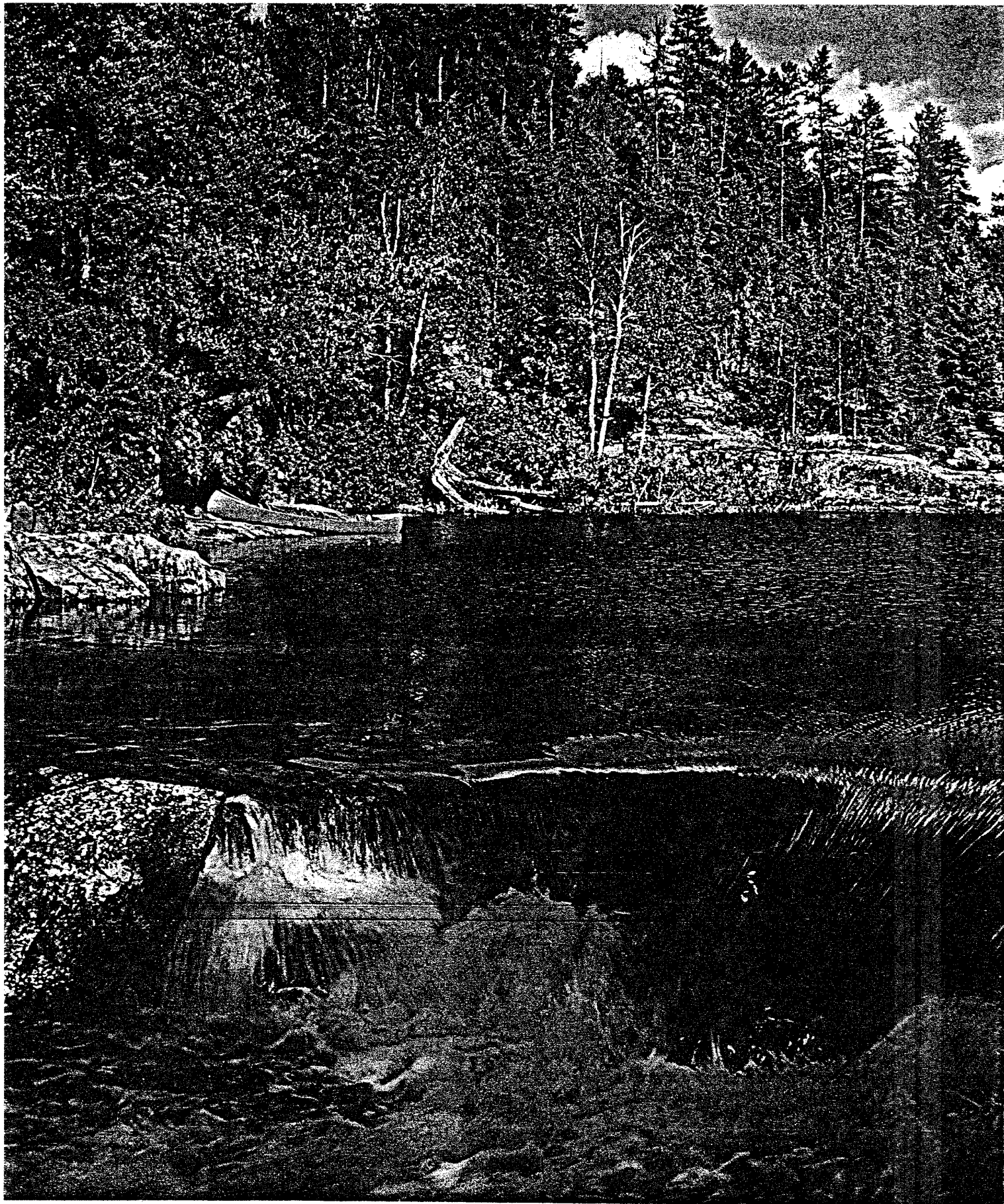
Despite their well known aquatic feeding habit, moose in northeastern Minnesota spend most of their time in upland areas where leaves or twigs of birch, willow, mountain ash, aspen, red maple, and hazel are staples. Balsam fir is an additional winter staple. The highest populations of moose are found in young extensive clear cuts. Although moose are usually difficult to spot from the ground in these clear cuts,

Adult Male White-tailed deer

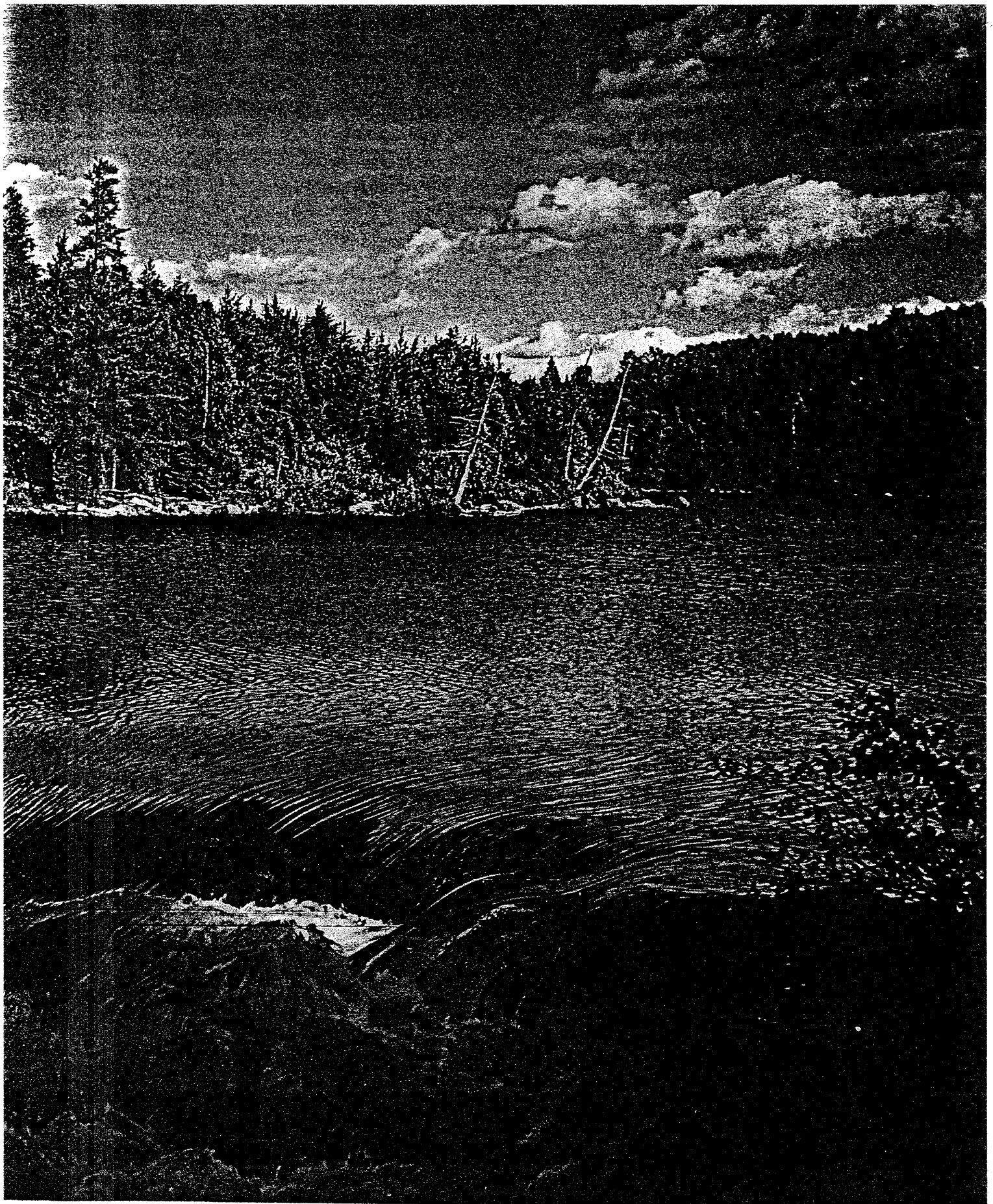
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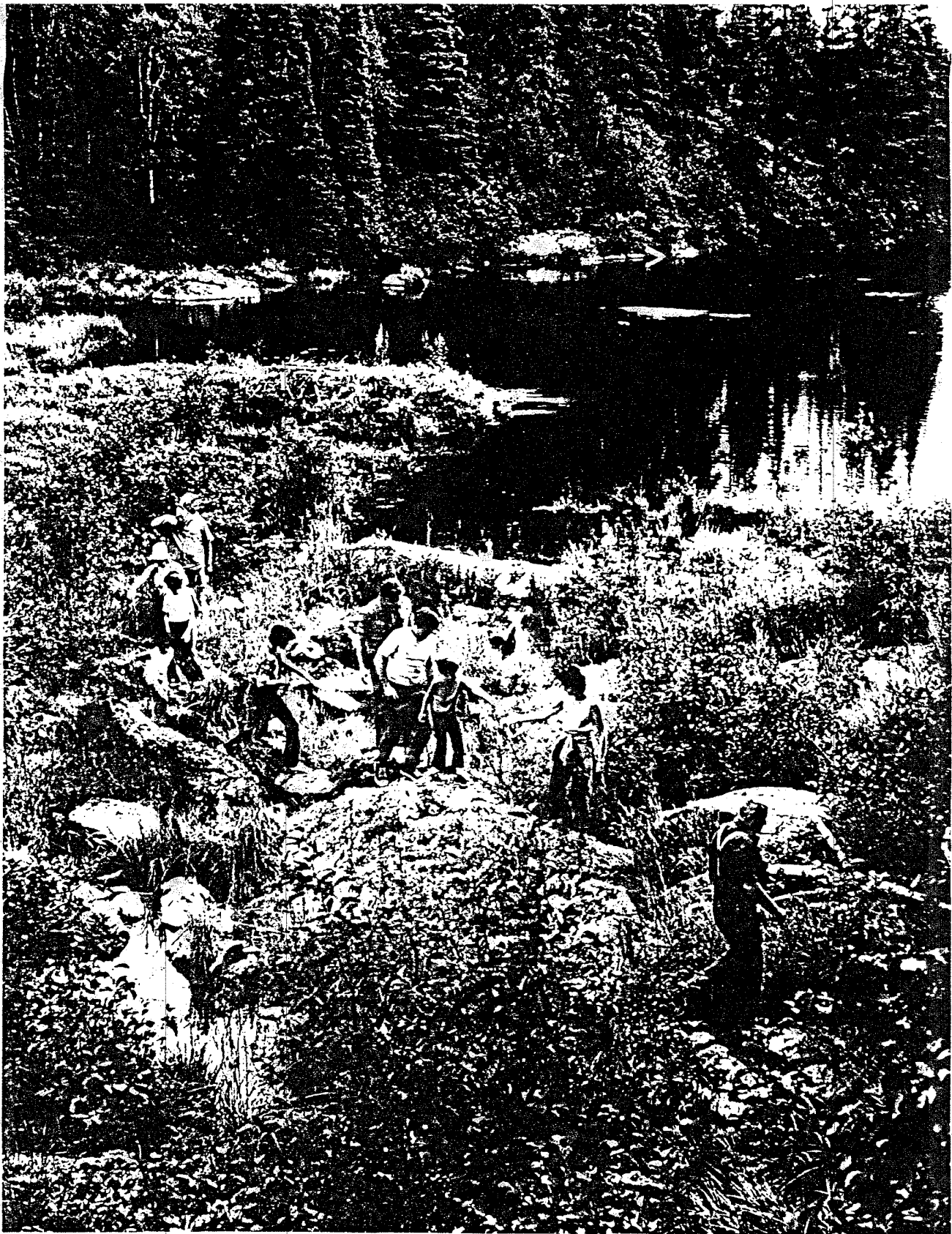
Photo by Lynn L. Rogers



Granite Falls near Gunflint Lake

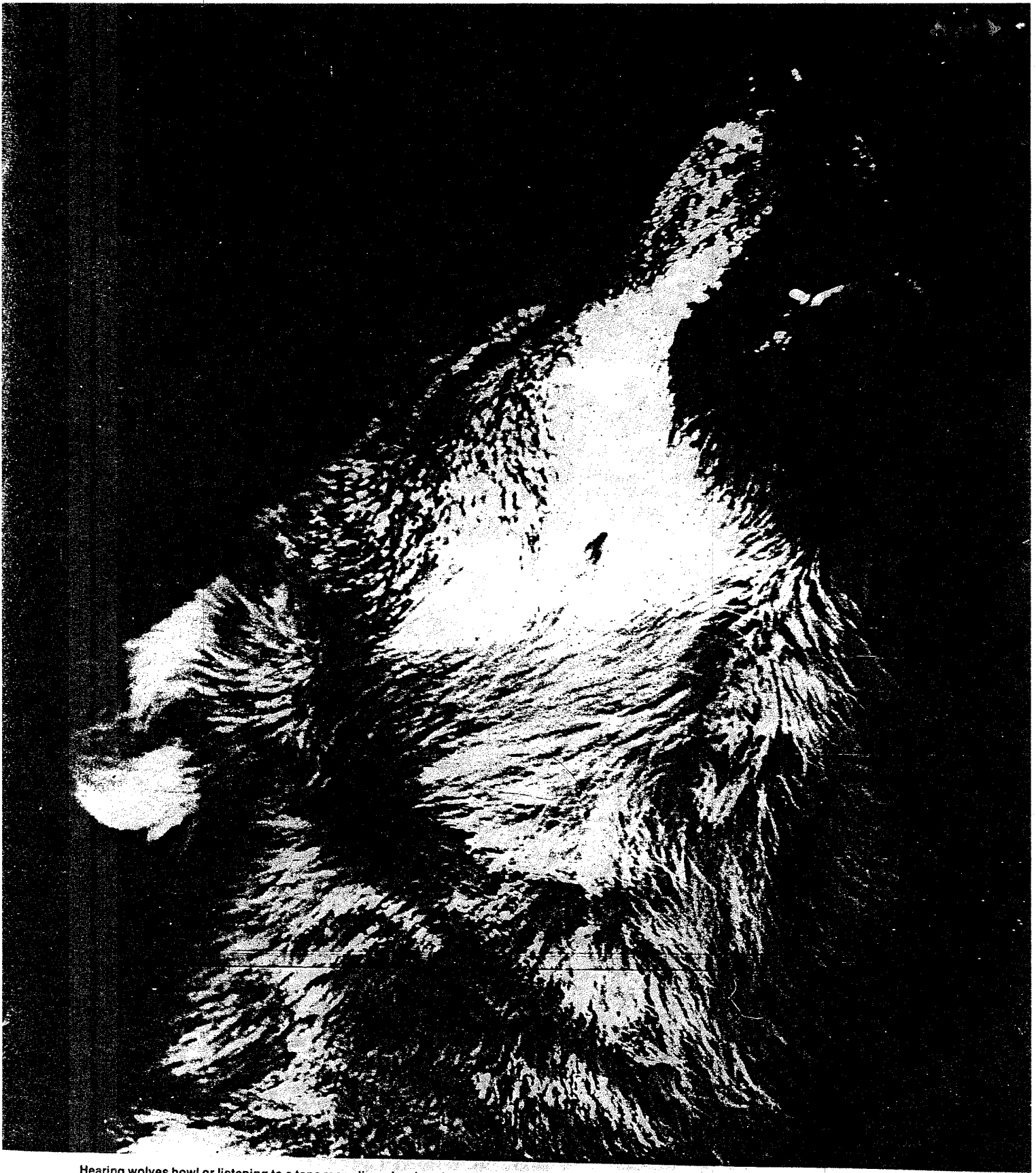


Kodachrome by Les Blacklock



Wildlife excursions should involve as many activities as possible, such as exploring a beaver pond and house, looking for signs of other animals, and learning about animal ecology.

Photo by David W. Lime



Hearing wolves howl or listening to a tape recording of wolves howling can be a thrill.

Photo by David Mech



A well loaded canoe, with gear properly distributed.

they are easily seen from an airplane, especially in early winter when they stand out against the snow.

In winters with exceptionally deep snow, moose commonly travel on plowed roads. Seeing moose by vehicle is easy in these winters, but must be done with caution. Startled moose tend to run down the plowed road rather than stepping off into the forest. This depletes their energy and can result in injury. They can also be seen frequently along roads in spring.

Contact between moose and people could be increased by directing people to 1) existing or artificial salt licks, 2) habitually used aquatic feeding areas, and 3) other high use upland areas.

WOLVES

Wolves grab the imagination of recreationists more than most other wildlife in the north. Unfortunately they are rarely observed because they occur in such low densities (usually less than one per 10 square miles) and because they are so secretive. Thus the most that recreationists can expect is to detect indirect signs of wolves. For many people this is a thrill in itself.

Wolf tracks, scent-marks, droppings, and kills can be found at any time of year in wolf country. Signs are most easily found in winter, of course, and frozen waterways and old woods roads are the best places to look. When a pack cuts through an area, it leaves strings of tracks that separate and merge, criss-cross and zig-zag, but all generally head in the same direction. These strings are punctuated by yellow urine marks on snow banks, tree stumps, rocks, and small bushy evergreens, especially at road and trail junctions. Sometimes the marks are double, indicating that a mated pair of wolves have re-affirmed their pair bond and asserted their ownership over their territory. Scratch marks several feet long near the urine spots sometimes emphasize this ownership and the willingness to back it up. One can most easily find kills — usually the bones, hair, and blood of deer and moose — on frozen waterways, merely by following wolf tracks, although it may take many miles of skiing or snowshoeing. However, flocks of ravens swirling over the ice sometimes give away the locations of wolf kills and shorten the observer's travels.

During summer, wolf signs can best be found along old wood roads. Most dog-like tracks (4 toes with claw marks showing) usually larger than 3 inches long in wolf country far from residences are probably made by wolves. In the same areas, droppings or "scats" over 1 inch in diameter and containing hair and bones represent wolf fecal remains. They

may persist for months and thus sometimes are the only wolf sign to be found. Around dirt road junctions, however, one may detect scrape marks in the soil, 3 to 6 feet long, which show that a wolf has scent-marked a nearby bush or stump.

One of the most thrilling indications of wolves that a forest visitor can detect is their howling. One might hear it at anytime of day or any season. However, wolves can sometimes be made to respond to a human howl, especially during July through September. If one chooses an open area along a lakeshore or on a ridge, when winds are less than about 7 mph, and howls a few times during the evening, a pack of wolves may possibly reply. Not only does such a reply provide an indication of the wolves' presence, but it has the tremendous added value derived from the knowledge that one has actually communicated with such a wild creature as the wolf.

Many and varied programs have been directed at bringing people and wildlife together. While much has been accomplished with displays, organized tours, etc., we believe more could be done, especially for dispersed recreationists. Unless visitors are familiar with an area, it would be difficult for them to locate specific sites where they would have a good chance of seeing animals they are interested in. Therefore it may be appropriate to provide maps and brochures containing not only specific area information on wildlife location, but also suggestions on how and when to view the wildlife. Brochures could also contain information which might increase visitors' awareness and knowledge of wildlife. For example, this might include information on the natural history of the species, why they are seen where they are, what they are likely to be doing and why, considerations being given to management of their populations or habitat, etc. Information of this sort would enrich their experience and expand their knowledge of wildlife. As more and more people seek outdoor experiences year-round, it becomes increasingly important to provide more opportunities to help vary and enrich their experiences. Increasing human-wildlife interactions certainly accomplishes this.

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