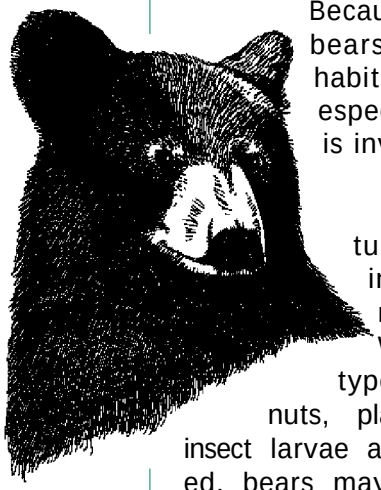
PRIVATE LAND PARTNERSHIPS
WORKING TOGETHER FOR WILDLIFE

BLACK BEARS

Biologists have been researching black bear in Michigan for nearly one-half century and know more about Michigan's black bear population and distribution than many other wildlife species. Currently, Michigan contains approximately 12,000 bears statewide, with an estimated 10,000 living in the Upper Peninsula and 2,000 residing in the northern Lower Peninsula.



Black bears often appear to be much larger than they are. Females typically weigh from 100 to 250 pounds, and males vary in weight from 150 to 400 pounds. Bears are usually heaviest in late fall prior to hibernating. Although they are large, heavy mammals, bears are suprisingly good swimmers and fast runners. In Wisconsin, one 200-pounder was clocked running 33 miles per hour.

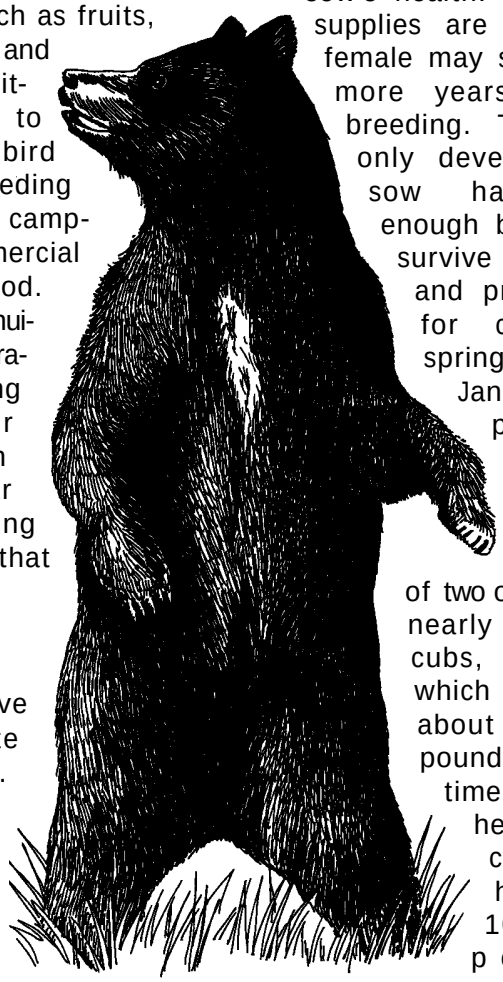
Bears are shy, reclusive animals that avoid direct contact with humans. Non-aggressive by nature, bears rarely attack people, except when threatened. In larger expansive forests, bears tend to live without conflict with humans. However, bear-human conflicts are on the rise due to habitat loss and human encroachment. The conversion of forested and wetland cover types to agriculture and other uses has forced bears to live in smaller geographic areas. Because of this, some bears have become habituated to people, especially when food is involved.

Bears are opportunistic animals taking advantage of many foods. When prime food types such as fruits, nuts, plants, and insect larvae are limited, bears may turn to garbage dumps, bird feeders, livestock feeding stations, farm crops, campgrounds, and commercial bee huts to find food. When this occurs, bear-nuisance complaints rise dramatically. Managing for bears on your property may lessen these human-bear conflicts by providing the natural foods that they need.

Life Cycle

Black bears leave their dens in late March into late April. The breeding season begins in late May and lasts through early July. Females are usually capable of reproducing by age four, and they may breed with several males to ensure conception. By early fall, females begin searching out potential denning sites, which they will enter from mid-October to December. Black bears spend four to seven months of each year in their dens.

Females (sows) produce a litter every other year, depending on food availability and each sow's health. When food supplies are short, the female may skip two or more years between breeding. The fetuses only develop if the sow has stored enough body fat to survive over-winter and provide milk for cubs until spring. By late January most pregnant females have given birth to an average of two or three blind, nearly naked cubs, each of which will weigh about a half-pound. By the time she leaves her den, the cubs will have gained 10 to 12 pounds,



depending on the number of cubs. They will remain with their mother for 1 1/2 years.

In Michigan, den sites are typically brushpiles, open nests, or excavations under standing trees. An open nest is created by bears breaking off twigs or branches for a base and then adding grass, tree bark, and leaves for bedding. Bears will also hibernate in caves, rock crevices, burrows, slash piles, windfalls, and other forest debris. Bears have even been known to den in old beaver houses, road culverts, and basements of abandoned homes.

Seasonal Foods

After emerging from their dens in spring, often lethargic at first, bears turn to small wet areas with vernal ponds. Here they feed on lowland swamp grasses such as bluejoint reedgrass, fowl mannagrass, wild calla, skunk cabbage, jack-in-the-pulpit, clover, and some ferns. In June and early July, when vegetation growth has slowed, bears spend much of their time feeding on ants in logs and stumps, which they find in upland forest openings. They gain weight slowly in spring and early summer. Resting habitats are primarily in upland areas in close association with lowland feeding and escape covers.

In the breeding season, bears begin to look for wild strawberries, raspberries, blackberries, blueberries, thimbleberries, serviceberries, and wild sarsaparilla. These plants thrive in open areas such as clearcuts, abandoned apple orchards, logging roads, rights-of-way, and regenerated openings within hardwood stands.

As summer deepens into fall, bears turn to dogwood berries, pin cherries, chokecherries, acorns, beechnuts, and apples. Weight gain becomes more dramatic because soft mast is high in sugars and carbohydrates, and hard mast is high in fats and protein. These foods allow bears to recover energy deficits that occur in winter and spring. When necessary, bears will also feed on deer fawns, calves of elk and moose, and other weak mammals.

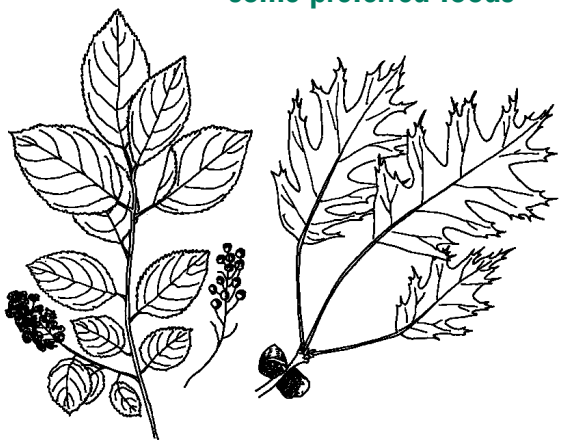
Water must be readily available and well distributed thoughout the year. Black bears drink frequently when feeding on vegetation, nuts, or insects but seldom when eating berries. They wallow to cool off on hot days. Wetlands and wooded stream bottoms provide relief from heat, as well as important seasonal foods and denning sites. Bears use wetlands dominated by balsam fir, black spruce, and tamarack year-round. In the northern Lower Peninsula researchers found 68 percent of den sites in conifer-dominated wetlands, and the same preference is probably true in the Upper Peninsula.

Management Considerations

The home range of the black bear is dependent upon natural food availability, which itself is linked to climate, soil, and topography. Breeding success is also a function of habitat quality. Optimal bear habitat contains unfragmented swamps mixed with upland forests and forest openings. Forest openings are small clearings with plenty of edge and non-forest plant diversity. Bears use these open areas throughout the year for feeding.

Within your forest it is important to maintain both closed and open canopies. Closed canopies (close-growing

some preferred foods



trees whose thick crowns block sunlight) provide important security and escape cover for bears. Open canopies (trees which allow sunlight on the forest ground) support a dense understory that produces berries and other fruit. The understory will be dense with fruiting shrubs and there will be plenty of hard and soft mast food reserves. This combination of adequate food and inaccessible terrain typically includes a large geographic area. When food is not available, bears will wander great distances to find it.

The following are options to consider when managing habitat for black bears:

•Do not fragment woodlands with roads, trails, and homes. Bears prefer connected habitats.

•Maintain diverse forests of many age classes in close proximity, and thin pine stands as they mature to enhance fruit production of understory shrubs.

•Maintain important diversity of plant types and increase or maintain the abundance of key foods. This can be done with responsible logging practices.

•Manage timber cutting rotations in hardwood stands of 60 years or more, or use selective cutting.

•Encourage the growth of both soft mast (blueberries, raspberries, wild grapes, chokecherries) and hard mast (red and white oak acorns, beechnuts, and hickory nuts) food types. Leave downed logs to decay and produce grubs and insects.

•Protect large eastern white pine and eastern hemlock trees in excess of 20 inches in diameter 4 1/2 feet above the ground. Sows with cubs rely on these trees with their rough bark to help cubs escape danger.

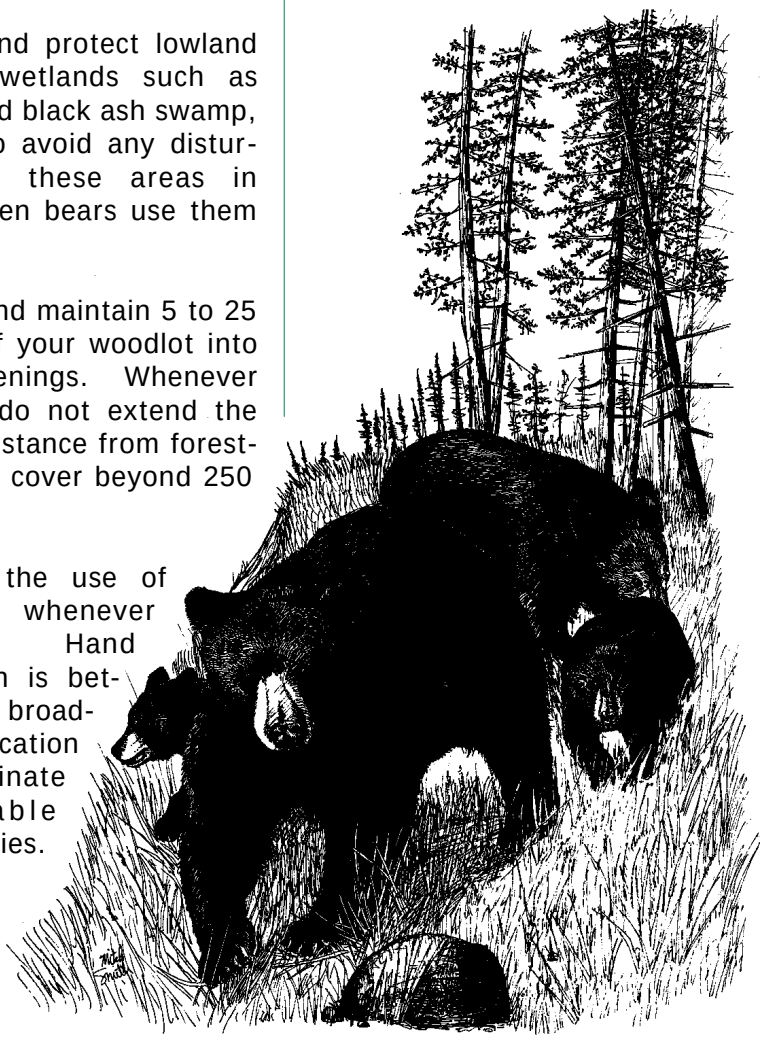
•Retain and protect lowland forested wetlands such as conifer and black ash swamp, and try to avoid any disturbance of these areas in spring when bears use them the most.

•Create and maintain 5 to 25 percent of your woodlot into forest openings. Whenever possible, do not extend the farthest distance from forested escape cover beyond 250 yards.

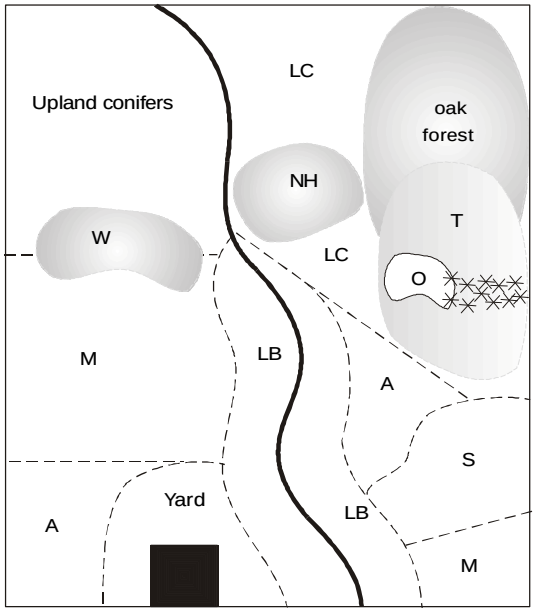
•Restrict the use of pesticides whenever possible. Hand application is better than broadcast application to eliminate undesirable plant species.

•Gate, or otherwise close timber roads and skid trails to human access and revegetate with clover and appropriate grasses as soon as possible. Please see the chapter on **Forest Openings**.

In summary, bears and humans can live without conflict if large expansive forests and swamps are left unfragmented and food producing forest openings are maintained. It is important not to artificially feed bears and attempt to bring them around your house. They are a species that you can share your land with but should be admired from afar.



160 acres



Existing features

- Road
- House
- Stream
- LB Lowland Brush
- NH Northern Hardwoods
- W Wooded Wetland
- LC Lowland Conifers
- M Mature Aspens

Habitat projects

- T Oak Thinning
- O Opening
- Brushy shrubs
- A Aspen clearcut
- S Aspen saplings

This map is an example that demonstrates the many management options discussed throughout this chapter. The option(s) you choose should depend not only on your goals, but the location, condition, and present use of your land.

FOR ADDITIONAL CHAPTERS CONTACT:
Michigan United Conservation Clubs
PO Box 30235
Lansing, MI 48909
517/371-1041
MUCC

PRIVATE LAND PARTNERSHIPS
WORKING TOGETHER FOR WILDLIFE

Private Land Partnerships: This partnership was formed between both private and public organizations in order to address private lands wildlife issues. Individuals share resources, information and expertise. This landowner's guide has been a combined effort between these groups working towards one goal: Natural Resources Education. We hope this guide provides you with the knowledge and the motivation to make positive changes for our environment.

FOR ADDITIONAL ASSISTANCE: *CONTACT YOUR LOCAL CONSERVATION DISTRICT*