

A YEAR IN THE LIFE OF A BLACK BEAR IN NORTHERN MINNESOTA

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JANUARY. The first moon of January is sometimes called the bear moon in honor of the birth of bear cubs. The mother rouses slightly from sleep to lick them clean, keep them warm, and nurse them.

FEBRUARY. The bears continue to snooze, as they have for months, without eating, drinking, or eliminating. They won't resume these functions until they leave their dens in the spring.

MARCH. In preparation for the coming mating season, the hormone levels of male bears begin to rise.

APRIL. Snow melts. Adult males, who have been denning alone, are the first to emerge. Mothers with cubs stay in the den a bit longer. Food is scarce and the bears feed mainly on the catkins of aspen and willow trees. All bears lose weight. Adult males begin to roam, but most others remain lethargic.

MAY. Bear lethargy ends as the forest turns green and they begin to feed on energy-rich foods like sprouting grass, emerging herbs, and aspen leaves. The cubs taste what mother eats, but ingest little besides milk. Nursing mothers lose weight. Other bears slowly gain weight.

JUNE. As green plants mature, they become unpalatable. The bears feed on ant pupae, which become abundant. The mating season begins in early June and lasts for about a month. Males roam great distances to find eligible females without cubs. Cubs begin to eat solid foods. Other bears put on weight.

JULY. Cherries, blueberries, serviceberries, wild sarsaparilly berries, and raspberries become major foods as they ripen. All bears gain weight rapidly if these crops are good.

AUGUST. Weight gains continue as bears add viburnum berries, dogwood berries, wild plums, hawthorn berries, mountain-ash berries, and hazelnuts to their diets. Rich in fat and calories, hazelnuts are preferred if there is a good supply.

SEPTEMBER. As berries and hazelnuts become scarce, acorns ripen. Bears with access to a supply of acorns continue to fatten up for the winter. Others lose weight. Nursing ends and lethargy begins. Some bears prepare and enter winter dens.

OCTOBER. Most bears enter dens, but hibernation is light. All bears den alone, except mothers with cubs. An evolved response

to winter food shortages, hibernation allows bears to save energy until spring foods become available.

NOVEMBER. Hibernation deepens. Heart rates are as low as eight beats per minute, with a breath taken only once each 45 seconds. If female bears are healthy enough, eggs fertilized during the mating season will begin to develop into cubs.

DECEMBER. Hibernation continues. Bears might be licking their feet because the summer callouses on the paws are sloughing off.

Annotation and/or abstract: Month by month changes in diet, activity, physiology, and weight are described. The annual cycle of behavior and physiology is tied to the annual cycle of plant growth and fruiting because much of the diet is fruit, nuts, and vegetative material.