

# Black Bear

BY STAN CUNNINGHAM • ILLUSTRATION BY ZACKERY ZDINAK

**Scientific Name:** *Ursus americanus*.

From the Latin *ursus* meaning bear or “destroyer” and *americanus* referring to where this species is found. Early scientists recognized 18 subspecies, but used much less rigorous methods in making distinctions than those used today. Size and color differences do exist, however, throughout North America.

**Description:** Southwestern black bears average 28–33 inches at the shoulder when on four feet, and about 6 feet tall when standing up. Adult females average 145 pounds; males 275. Some males weigh more than 400 pounds, but they are rare. In the Southwest, 75 percent of black bears are actually dark or reddish brown or even blond. A black female may have both black and brown cubs, but they are all black bears.

**Distribution:** Black bears inhabit 38 states, 11 Canadian provinces, and seven Mexican states. In Arizona, they occupy southeastern, central, and northeastern mountain ranges. Due to less reliable food sources above the Mogollon Rim, density is half to a third of that found in central and southeastern Arizona. Interestingly, they are rarely seen in coniferous areas north of the Colorado River.

**Habitat:** Black bears inhabit most forest types, are common in interior chaparral adjacent to forests, and during prickly pear fruiting season, even use the Sonoran desert. Riparian areas are important in all vegetation types. They seek large trees, high cover, tree canopy of greater than 50 percent, and steep slopes. Large trees are important for cubs to avoid predation.

**Biology:** Hibernation is the central component of a black bear’s annual cycle. A hibernating bear generally does not drink, eat, defecate, or urinate for

up to seven months. During hibernation, metabolic activity is generated from energy stored in fat. A bear’s heart rate can drop to 8–10 beats per minute, lowering their metabolic rate 25–50 percent.

Breeding occurs in early summer, although fertilized embryos remain in the fallopian tubes and development does not begin until the female constructs or enters her den. If the female is healthy, the fetus implants in the uterine wall and a 90-day gestation period follows. If she is not in good shape, the fetuses abort. Cubs are born in January or early February and weigh only 8–10 ounces at birth. Litter size averages two.

During the breeding season, males travel long distances trying to impregnate as many females as possible. Females with yearlings or no cubs are receptive to males. Females with new cubs avoid males since they often kill cubs. It is assumed that male black bears recognize and do not kill their own cubs, but this has yet to be demonstrated.

Cubs generally remain with their mothers 14–18 months, denning with them the second winter. The bond is broken when adult females come into estrus. Young bears, especially immature males, must leave to avoid encounters with adult males and often disperse long distances. Conversely, female bear cubs often establish their home range adjacent to their mother’s. Natural life expectancy of black bears varies regionally, but 20 years or more in the wild is not uncommon.

More than 75 percent of the Arizona black bear’s diet is vegetation, primarily grass for the first two months after leaving the den, switching to

early maturing fruits and animal matter (primarily insects) in midsummer, and important mast species late summer and fall. Areas that provide several species of acorns are premium habitat.

**Status:** Increased interest by hunters prompted the reinstatement of black bears as big game animals in 1968. The most important restriction in black bear hunting is the female quota system, which closes a hunt unit after a certain number of females have been taken.

**Management:** Because of their high selection for cover, research on the effects of forest thinning is important for the preservation of black bear habitat.

*Research biologist Stan Cunningham has focused his career on the study of large mammals, including mountain lions, bighorn sheep, and black bears.*

