BOBCAT

LYNX RUFUS (SCHREBER, 1777)

NATURAL HISTORY SUMMARY BY JAX ROBINSON

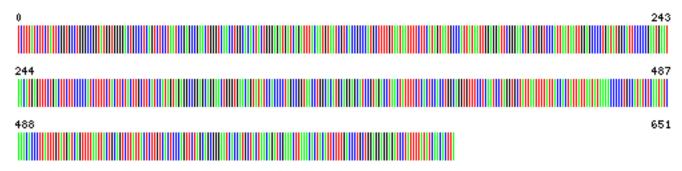


Figure 1. Lynx rufus DNA Barcode - Barcode of Life Databse - BOLD Systems (Ratnasingham and Hebert 2007)

Classification

Kingdom: Animalia Phylum: Chordata Class: Mammalia Order: Carnivora Family: Felidae Genus: Lynx

Species: L. rufus

Description

Bobcats (*Lynx rufus*) are known to vary in coat color from gray to brown. They have a whiskered face, black edges to their ears, stripes on their forelegs, and black on the end of a short, stumped tail (Ulmer et al. 1941). Their common name is derived from their very short bob length tail (Ulmer et al. 1941). *Lynx rufus* has 12 subspecies and is usually smaller than the Canadian lynx (*Lynx canadensis*), but twice the size of most domestic cats (Kelly et al. 2016). The species' lifespan is roughly 12 years in the wild, but some have been reported to have lived as long as 32 years in captivity. Their short lifespan could be due to the fact that their preferred large, northern range open habitats are often turned into urban areas. Bobcats are terrestrial animals and are very specialized in climbing (Kelly et al. 2016). They are mostly nocturnal, being most active at dusk and at night (Ulmer et al. 1941). Bobcats are carnivorous, using their very

specialized hearing, smell, and vision for predation. Even though they are well developed predators they tend to keep to themselves and rarely vocalize except when mating (Ciszek 2002).

Distribution

Bobcats are a largely solitary, territorial species. They mark their territory through scent (through urine and feces) and by depositing claw marks on the outskirts of their designated habitat (Kelly et al. 2016). This species ranges largely from Canada to central Mexico, including most of the contiguous United States, except Delaware (Ciszek 2002). Recently, due to urbanization and forest clearing, they have been found to extend their range northward, toward Canada (Lee et al. 2012). Their distribution is now seen as far north as the Canadian Rocky Mountains (Ciszek 2002). Bobcat populations are stable and increasing in the United States (over two million Bobcats) (Kelly et al. 2016). Lynx rufus' range map is available at Kelly et al. 2016.

Diet

Bobcats are carnivores. As specialized hunters, they stalk their prey and kill with a bite to the neck. They primarily eat rabbits (Leporidae) and hares (*Lepus*), but also hunt insects, chickens (*Gallus gallus domesticus*), birds (Aves), and small rodents (Rodentia) (Kelly et al. 2016). Prey and hunting is based off of the selection within a habitat, season, and abundance.

Habitat and Ecology

Bobcats live in a broad range of habitats. They prefer wooded areas, semi-deserted areas, urban edges, forest edges, and swamplands. They prefer dense understories with vegetation to take cover from predators and high prey densities (e.g., rabbit and rodent populations) (Kelly et al. 2016). Males are very territorial and scout out large habitat ranges (Kelly et al. 2016). Each male's territory will overlap with a few different females' and with one other male's territory. Female territories are much smaller and do not overlap with each other (Kelly et al. 2016). Both female and male territories are marked with scent to repel intruders. Bobcats are important predators to many species

of mammals and birds, but are susceptible to predation by coyotes (*Canis latrans*) and domestic animals in urban habitats (Lee et al. 2012).

Reproduction and Lifecycle

Bobcats' reproduction methods are similar to those of domestic cats, mating with multiple partners. Male and female Bobcats interact only when looking for courtship or copulation, usually in the winter and spring (Ciszek 2002). Gestation periods last two months and litters can have anywhere between one and six kittens, with an average of three per birth (Kelly et al., 2016). Bobcats have been known to show parental care both before and after birth (Ciszek 2002). Nutrients are provided to the fetus through the placenta before birth and through milk afterwards (Kelly et al. 2016). The kittens open their eyes around day ten and nurse through the second month. Mothers will provide food for their young, teach them to hunt after they are done weaning, and shelter them until they are ready to fend for themselves (Ciszek 2002). Kittens live with the mother until about eight to twelve months before venturing out on their own.

Conservation Status

In 2016, Bobcats were listed as a species of "Least Concern" for conservation according to the International Union for Conservation of Nature (IUCN) Red List of Threatened Species (Kelly et al. 2016). They are not considered to be threatened or near extinction but hunting and trading are closely monitored in the areas that they are prominent. In the past Bobcats were hunted by humans for their fur, but their populations have stayed stable and show little decline (Ciszek 2002). Some subspecies such as *L. r. escuinapae* are listed as endangered in Mexico through the U.S. Fish and Wildlife Service (Kelly et al. 2016). This specific species is found primarily confined to Mexico. Urbanization has led to habitat fragmentation, making the Bobcats susceptible to rodenticides and causing poisoning and increased mite infestations (Lee et al. 2012). These issues have recently been addressed and individuals are enforced to use natural repellants rather than poisons to help replenish the Bobcat species in those areas (Lee et al. 2012).

Cultural Significance

Bobcats are important to the Native Americans culture. In Native American mythology Bobcats represent fog and coyotes represent wind (Mudge 2015). Bobcats represent equality and identically. The Shawnee have a story about how the Bobcat got its spots. The Bobcat had chased a rabbit into a tree hole; the rabbit tricked the Bobcat into building a fire to smoke him out of the tree. The rabbit jumped out of the tree, into the hot fire, scattering the hot coals onto the Bobcat's coat, leaving its coat singed in every spot where the coals landed. (Jacksonville Zoo and Gardens 2005). When a Bobcat died, it received a significant, decorated burial. Scientists have uncovered fossil records of Bobcats with collars made with beads and pendants, suggesting that they were honorable members of the Native American society, they were cherished and kept as pets (Perri 2015). In today's society, Bobcats are primarily used for sport and hunting in order to make pelts with their fur (Kelly et al. 2016).

Specimen Specific Detail

The Bobcat (*L. rufus*) specimen from the <u>Burton Ostenson Museum of Natural History</u> at Pacific Lutheran University was identified by J.W. Knudsen.

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