

HOW THE CLASSIFICATION SYSTEM WORKS

Modern classification (taxonomy) is based upon the work of Karl von Linne (Linnaeus), a Swedish botanist, who in 1753 published a classification of plants and in 1758 a classification of animals. He viewed his system as a convenience for cataloguing and ready reference. His hierarchy of classification (with subsequent additions) consists of the following categories (reading from the largest group at the top to the smallest group at the bottom):

Kingdom
 Phylum (plural phyla)
 Class
 Order
 Family
 Genus (plural genera)
 Species
 (subspecies, varieties, etc.)

By way of illustration as to how an animal or plant might be classified under this system, let us take the Cougar (also called Mountain Lion, Puma, and Panther). The Cougar is called couguar on the species level, and is found throughout North America.

The Cougar species is classified, together with the Jaguar species, the Ocelot species, and the Domestic Cat species, under the larger category of the genus Felis (the truly "catlike" cats).

In turn, the genus Felis and the genus Lynx (also called Bobcat and Wildcat) are classified together under the larger category of the Cat family (Felidae)

The Cat family, together with a number of other families (e.g., the Dog family (Canidae) the Hyena family (Hyaenidae) the Weasel family (Mustelidae) the Raccoon family (Procyonidae) and the Bear family (Ursidae)) are classified under the order Carnivora (flesh-eaters).

The order Carnivora is grouped with the orders of Insectivora (insect-eaters), Rodentia (rodents), Proboscidea (elephants), Cetacea (whales), etc., under the class Mammalia (mammals), which includes all backboned animals which reproduce on land, possess hair, and nurse their young.

The class Mammalia, four classes of fishes, the class Amphibia (salamanders, frogs, toads, etc.), the class Reptilia (turtles, lizards, snakes, crocodiles, etc.), and the class Aves (birds) are classified under the phylum Chordata (Chordates), which includes all animals possessing a well-developed nervous system and a body supported by a bony chord or spinal column.

The phylum Chordata is one of the 15 phyla which together make up all living animals in the kingdom Animalia (animals).

Thus a Cougar may be classified on any one of these levels, depending upon the closeness or remoteness of similarity which he bears to other members of the animal kingdom. The scientific name (which always includes both genus and species) of the Cougar is thus Felis couguar.

Synopsis of the Classification of the Cougar

Kingdom: Animalia (animals)
 Phylum: Chordata (chordates)
 Class: Mammalia (mammals)
 Order: Carnivora (flesh-eaters)
 Family: Felidae (cats)
 Genus: Felis ("true cats")
 Species: couguar (Cougar)