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DEER: FAMILY CERVIDAE

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Deer (or *cervids*) belong to the order Artiodactyla, the hoofed animals with an even number of toes on each foot, and the suborder Ruminantia, the cud-chewing plant eaters. Deer have four toes on each foot. The two middle toes are well-developed and support all or most of the weight of the body, while the two small lateral toes (the so-called false hoofs or dewclaws) do not usually touch the ground. The last bone of each toe is encased by a thickened, hard-edged hoof of keratinous material. Deer have a four-chambered stomach, one of which (the rumen) stores undigested food that is later passed back into the mouth, where it is chewed and swallowed a second time. (Ruminants have the ability to take in a large quantity of rough forage in a short time, then retire to a safe hiding place to chew it thoroughly.) As in other ruminants deer lack upper incisor teeth (most lack upper canines as well), biting off their food between the lower incisors and a hard pad on the upper gum, then grinding the cud with the premolars and molars. Most deer have 32 teeth (formula $i0/3$, $c0/1$, $pm3/3$, $m3/3$); however, upper canines are present ($c1/1$) in red deer, wapiti, sika, sambar, rusa, Pere David, muntjac, tufted deer and water deer for a total of 34. Upper canines are also usually present in caribou and reindeer, and may (or may not) be present in brocket deer. The following external glands may be present, depending on the species: preorbital (in front of the eye), tarsal (inner surface of hind legs at the hock), metatarsal (outer surface of hind legs between hock and hoof), and interdigital (between the hoofs). All cervids lack a gallbladder.

Cervids differ from other ruminants in that males (except in water deer) grow antlers of solid, dead bone. They are shed and re-grown annually, increasing in size and complexity each year until the animal reaches its prime, after which they decline. Females do not grow antlers, except in caribou/reindeer, or the occasional freak in other species. While growing, antlers are covered in a furry skin ("velvet") and nourished by blood vessels. Blood supply stops once full growth is reached, and the velvet dries out and comes off. Antlers are usually branched and sometimes palmate. They serve as sexual ornaments and weapons, and are used to determine dominance among males – through combat, intimidation or both – and to guard females from other males during the mating season.

There are about 40 species of deer worldwide, most of which are found in Asia; however, seven species are native to North America, where they are by far the most common larger animals:

American Elk or Wapiti	<i>Cervus elaphus ssp.</i>
Moose	<i>Alces alces</i>
Caribou	<i>Rangifer taransus</i>
Mule and Black-Tailed Deer	<i>Odocoileus hemionus</i>
White-Tailed Deer	<i>Odocoileus virginianus</i>
Red Brocket Deer	<i>Mazama Americana</i>
Yacatan Gray-Brown Brocket Deer	<i>Mazama pandora</i>