

Pandas on homology: the real wolf and Tasmanian “wolf”

behavior and life-style of the Tasmanian wolf was likewise quite similar to that of the North American wolf. Despite these close parallels, because the two animals differ in a few features, such as their jaws, dentition, and their mode of reproduction, the standard taxonomic approach is to classify them in widely different categories—the North American wolf with the dog and the Tasmanian wolf with the kangaroo.

Besides wolves, there are also marsupial look-alikes to cats, squirrels, ground hogs, anteaters, moles, and mice. Marsupials raise an interesting question for taxonomy: If similarity is the basis for classification, what shall we do when similarities conflict? The marsupial wolf is strikingly similar to the placental wolf in most features, yet it is like the kangaroo in one significant feature. Upon which similarity do we build our classification scheme?