

Kitty™s family tree analyzed

by Bend_Weekly_News_Sources

House-cats around the world can now trace their ancestors back to the Near Eastern wild-cat, *Felis silvestris lybica*, researchers say after a new DNA analysis.

Domestic cats come from a "founder" population of five or more felid lines that were domesticated in the Fertile Crescent zone of the Near East probably sometime over 9,000 years ago, they said. A wild-cat, *Felis silvestris lybica*, which was trapped as part of the research into the origin of cat domestication. (Image © Science)

These cats would have come from a lineage that split off from *F. s. lybica* around 107,000 to 155,000 years ago. They likely began their association with humans by feeding on rodent pests in festering grain stores of the first farmers, wrote the researchers, reporting their findings in the June 29 issue of the research journal *Science*. The scientists, Carlos Driscoll of the University of Oxford, U.K. and colleagues studied evolutionary relationships among domestic cats and the wild cat subspecies: the European wild-cat, the Near Eastern wild-cat, the Central Asian wild-cat, the southern African wild-cat, and the Chinese desert cat.

Wild and domestic cats have often been bred so closely that it's almost impossible to tell the two apart, they noted. The domestic cat is sometimes considered a subspecies of its own, *F. s. catus*, though technically "domestic cat" can mean any domesticated felid line. Using genetic material from 979 cats, Driscoll and colleagues analyzed the variation among DNA sequences at a variety of "marker" spots within the genomes, to determine which lineages were most closely related. They found that each of the subspecies as well as domestic cats fell into a distinct, genetically related group, or "clade." One clade included domestic cats and some wild-cats from the Middle East, suggesting that this group stems from the ancestral founder population of all domestic cats, they wrote.

Courtesy Science and World Science staff