Kittyâ€™s family tree analyzed

by Bend_Weekly_News_Sources

HouseÂ-cats around the world can now trace their anÂ-cesÂ-try back to the Near EastÂ-ern wildÂ-cat, FeÂ-lis silÂ-vestris lyÂ-bica, reÂ-searchÂ-ers say afÂ-ter a new DNA analÂ-yÂ-sis.

DoÂ-mesÂ-tic cats come from a â€œfoundÂ-erâ€• popÂ-uÂ-laÂ-tÂ-ion of five or more feÂ-lines that were doÂ-mesÂ-tiÂ-catÂ-ed in the FerÂ-tile CresÂ-cent zone of the Near East probably someÂ-time over 9,000 years ago, they said. A wildÂ-cat, FeÂ-lis silÂ-vestris lyÂ-bica, which was trapped as part of the reÂ-search inÂ-to the orÂ-iÂ-gin of cat doÂ-mesÂ-tiÂ-caÂ-tion. (ImÂ-age Â© SciÂ-ence)
These cats would have come from a lineÂ-age that split off from F. s. lyÂ-bica around 107,000 to 155,000 years ago. They likely beÂ-gan their asÂ-sociaÂ-tÂ-ion with huÂ-mans by â€œfeedÂ-ing on roÂ-dent pests inÂ-festÂ-ing grain stores of the first farmÂ-ers,â€• wrote the reÂ-searchÂ-ers, reÂ-portÂ-ing their findÂ-ings in the June 29 isÂ-sue of the reÂ-search jourÂ-nal SciÂ-ence.The sciÂ-enÂ-tists, CarÂ-los DrisÂ-coll of the UnÂ-iversÂ-ity of OxÂ-ford, U.K. and colÂ-leagues studÂ-ied evÂ-oÂ-luÂ-tionÂ-ary relaÂ-tÂ-ionÂ-ships among doÂ-mesÂ-tic cats and the wild cat subÂ-speÂ-cies: the EuÂ-roÂ-peÂ-an wildÂ-cat, the Near EastÂ-ern wildÂ-cat, the CenÂ-tral Asian wildÂ-cat, the southÂ-ern AfÂ-riÂ-can wildÂ-cat, and the ChinÂ-ese desÂ-ert cat.

Wild and doÂ-mesÂ-tic cats have ofÂ-ten inÂ-terÂ-bred so closely that itâ€™s alÂ-most imÂ-posÂ-siÂ-ble to tell the two apart, they notÂ-ed. The doÂ-mesÂ-tic cat is someÂ-times conÂ-sidÂ-ered a subÂ-speÂ-cies of its own, F. s. catus, though techÂ-nicÂ-ally â€œdoÂ-mesÂ-tic catâ€• can mean any doÂ-mesÂ-tiÂ-catÂ-ed feÂ-line.UsÂ-ing geÂ-netÂ-ic maÂ-teÂ-riÂ-al from 979 cats, DrisÂ-coll and colÂ-leagues anÂ-aÂ-lyzed the variaÂ-tÂ-ion among DNA seÂ-quences at a vaÂ-riÂ-eÂ-ty of â€œmarkÂ-erâ€• spots withÂ-in the genomes, to deÂ-terÂ-mine which lineÂ-ages were most closely reÂ-latÂ-ed. They found that each of the subÂ-speÂ-cies as well as doÂ-mesÂ-tic cats fell inÂ-to a disÂ-tinct, geÂ-netÂ-icÂ-ally reÂ-latÂ-ed group, or â€œclade.â€• One clade inÂ-cludÂ-ed doÂ-mesÂ-tic cats and some wildÂ-cats from the MidÂ-dle East, sugÂ-gestÂ-ing that this group stems from the anÂ-cesÂ-tral foundÂ-er populaÂ-tÂ-ion of all doÂ-mesÂ-tic cats, they wrote.

Courtesy Science and World Science staff