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FOR IMMEDIATE RELEASE

MOJAVE DESERT TORTOISE GENOME

MARINE CORPS AIR GROUND COMBAT CENTER TWENTYNINE PALMS, Calif.–

Dr. Brian Henen, base ecologist, Natural Resources and Environmental Affairs, helped prepare the publication of the desert tortoise genome, which was published May 31, 2017.

Researchers from Arizona State University's School of Life Sciences and their collaborators have decoded the animal's genome, which is the complete set of genes present in an organism. Each genome contains all of the information needed to build and maintain that organism.

The breakthrough could help the animal survive a number of threats. The Mojave Desert Tortoise population has seen considerable decline in its habitat, in California, Nevada, Utah and Arizona. This species is listed as 'threatened' under the U.S. Endangered Species Act and is considered 'vulnerable' by the International Union for Conservation of Nature (IUCN).

The genome provides a starting point for a number of studies focusing on disease resistance, adaptations to the desert environment, distribution of genetic diversity across its range and

hybridization with its sister species.

Insights from the tortoise genome will help guide how this species is managed and improve its chances of long-term survival.

This genomic analysis also advance the understanding of the biology of tortoises in relation to reptiles and other species.