



CONSERVATION RESEARCH REPORT

Climate Change Threatens Hermann's Tortoises

The risk of extinction for Mediterranean populations of Hermann's Tortoises (*Testudo hermanni*) could be on the rise due to changes in the region's climate. Fernández-Chacón et al. (2011. *Global Change Biology* 17:3075–3088) monitored a tortoise population in northeastern Spain from 1988 to 2009 to evaluate the possible consequences of changes in temperature and precipitation patterns in the Mediterranean region. Factors, such as habitat destruction, illegal collection for the pet trade, use of pesticides, forest fires, and increases

in predation pressure already are negatively affecting the tortoise, which is listed as near threatened on the IUCN Red List. Modeling enabled simulations of the fate of these tortoise populations under three different precipitation scenarios (mean, wet, and dry). A predicted shift to a more arid climate would lead to a reduction in juvenile survival. Unless other human-mediated factors like poaching, fires, and habitat fragmentation are suppressed, extinction risks will increase throughout most of the species' current range.



The risk of extinction for Mediterranean populations of Hermann's Tortoises (*Testudo hermanni*) could be on the rise due to changes in the region's climate. Photograph by Orchi (Wikipedia).