

EARTH TALK

Questions & Answers About Our Environment

Dear EarthTalk: Could global warming really already be a factor in the evolution of wildlife species?
 -- Vince Dominick, Camden, NJ

No doubt the quickly changing climate is already triggering various evolutionary shifts in a wide range of species. And while we can't be sure just how different wildlife species will adapt (or not), scientists are already noticing some surprising changes as a result of rising surface and ocean temperatures, thanks to human-induced global warming.

There's proof that global warming is shrinking wildlife species on land and water. An October 2014 study by scientists at Durham University in Britain found that chamois mountain goats in the Italian Alps weigh 25 percent less than their same age counterparts did 30 years ago.

University of Maryland researchers found that six out of seven species of U.S. salamanders studied have shrunk an average of 8 percent overall since the 1950s, with each successive generation shrinking in average body size by 1 percent.

Another example comes from a National University of Singapore study that found that ectotherms (toads, turtles, snakes) are also shrinking around the world in response to hotter climatic conditions.

A February 2017 review of scientific literature on global warming's broad footprint on wildlife by 17 researchers collaborating from around the world suggests that we may actually be underestimating how much climate change is affecting wildlife populations.

The analysis of 130 studies on the ecological consequences of climate change revealed that 47 percent of land mammals and 23 percent of birds—more than 700 wildlife species overall—have already been affected by global warming.

"There has been a massive under-reporting of these impacts," said University of Queensland researcher and study co-author, James Watson, adding that only 7 percent of mammals and 4 percent of birds showing a negative response to climate change are currently listed as "threatened" by the IUCN, which maintains the world's "Red List" of endangered species.

"We need to greatly improve assessments of the impacts of climate change on species right now, we need to communicate this to wider public and we need to ensure key decisions makers know that something significant needs to happen now to stop species going extinct," warned Watson. "Climate change is not a future threat anymore."



Scientists credit human-induced global warming with causing many marine and terrestrial wildlife species — such as the chamois mountain goat of the Italian alps — to become scrawnier with each successive generation. (Photo by Fulvio Spada, FlickrCC)

Contacts:

Fish study, onlinelibrary.wiley.com/doi/10.1111/gcb.13831/abstract; goats, www.dur.ac.uk/biosciences/about/news/?itemno=22559; salamanders, onlinelibrary.wiley.com/doi/10.1111/gcb.12550/abstract; broad footprint, <http://onlinelibrary.wiley.com/doi/10.1111/gcb.13831/abstract>.

EarthTalk® is produced by Roddy Scheer & Doug Moss and is a registered trademark of the nonprofit Earth Action Network. To donate, visit www.earthtalk.org. Send questions to: question@earthtalk.org.

Be sure to advertise in the "Halloween in the Village" special section in the October edition of *The Post*.
Mention this offer and save 20 percent off the open rate!
 Call Don at 503-244-6933 or email don@multnomahpost.com for more information or to place your ad.



Deadline for space reservations is Sept. 20.

You know your **FAMILY**. We know **SENIOR LIVING**. Together, we will find the **RIGHT PLACE**.

INDEPENDENT LIVING • ASSISTED LIVING • MEMORY CARE

A Place for Mom has helped over a million families find **senior living solutions** that meet their **unique needs**. Our Advisors are **trusted, local experts** who can help you understand your options. Here's what's included with our *free* service:



A dedicated local Advisor



Hand-picked list of communities



Full details and pricing



Help scheduling tours



Move in support



There's no cost to you!
CALL (844) 269-4351

! We're paid by our partner communities

◀ **Joan Lunden**, journalist, former host of *Good Morning America* and senior living advocate.



aPlaceforMom