

Keeping pandas off endangered list ledge

August 28 2017



A young panda peers from its perch in a tree in the Wolong Nature Center in the Wolong Nature Reserve in Sichuan, China. Credit: Sue Nichols, Michigan State University Center for Systems Integration and Sustainability

Things aren't all black and white for giant pandas.

The beloved Chinese icons have basked in good press lately - their

extinction risk status downgraded from "endangered" to "vulnerable," their good fortunes shown to rub off on their less charismatic forest neighbors that benefit from panda-centric conservation efforts.

Yet endangered vs. vulnerable isn't a pass/fail status. In *Biological Conservation*, Michigan State University (MSU) scientists agree with the logic of the International Union for the Conservation of Nature (IUCN) for down-listing the [pandas](#) - to a point. The MSU team takes both a finer, and broader, look at panda habitat and finds gaps in understanding. Gaps big enough for panda survival to fall through.

"Sustainability of a species like the panda relies on holistic and thorough analyses," said Jianguo "Jack" Liu, Rachel Carson Chair in Sustainability. "We all want to do a victory dance for the panda, but need to continue to understand and address possible threats. There is no declaring a victory and moving on."

The IUCN drew heavily on data collected in the Third (1999 to 2003) and Fourth (2001 to 2004) National Giant Panda Surveys. The problem that researchers, led by PhD student Hongbo Yang, found is that the two surveys used somewhat different ranges and the habitat analyses based on the survey data did not incorporate range-wide information about bamboo (pandas' staple food). That meant they missed important changes in habitat suitability and how much of the habitat, however good, is fragmented.

The methods the MSU team used were a blend of detailed satellite images that provided rich information about bamboo and integrating that information with on-the-ground data. This study for the first time examines changes across the whole geographic range of panda habitat. What they see is agreement that high-quality panda habitat is indeed growing. In fact, they also find that areas outside nature reserves are showing increases in favorable panda habitat patches, thanks to sweeping

nation-wide conservation efforts to curb deforestation and return cropland to forest. However, there was a growing fragmentation between those [habitat](#) patches, due to human activities such as roads or development, and natural events, such as the catastrophic Wenchuan Earthquake in 2008. This insight infuses "vulnerable" status with concern.



A giant panda in the Wolong Nature Reserve takes a chewing break. Credit: Sue Nichols, Michigan State University Center for Systems Integration and Sustainability

More information: Hongbo Yang et al, Range-wide evaluation of wildlife habitat change: A demonstration using Giant Pandas, *Biological Conservation* (2017). [DOI: 10.1016/j.biocon.2017.07.010](https://doi.org/10.1016/j.biocon.2017.07.010)

Provided by Michigan State University

Citation: Keeping pandas off endangered list ledge (2017, August 28) retrieved 26 June 2024 from <https://phys.org/news/2017-08-pandas-endangered-ledge.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.