Warming climate may starve bamboo-eating pandas

By Monte Morin
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A new report says climate warming could leave giant pandas in China with insufficient food. (Associated Press / November 12, 2012)

Already endangered by deforestation, poor reproductive rates and hunting, China's giant pandas may now face a new threat: global warming.

According to a study published online Monday in the journal Nature Climate Change, rising temperatures could eliminate much of the bamboo that pandas rely on for sustenance in
China's Qinling Mountains.

In the wild, giant pandas are notoriously finicky eaters. Ninety-nine percent of their diet consists of bamboo, and in the Qinling Mountains region, in Shaanxi province, pandas eat only three species of the plant.

Researchers at Michigan State University and the Chinese Academy of Sciences say these three varieties of bamboo -- Qinling arrow, dragon-head and wooden -- are themselves slow to disperse and take root in new areas.

While these bamboo might find suitable growing areas at higher, cooler elevations as the planet warms, it’s unclear whether they could actually spread to these higher areas. They flower and reproduce only every 30 to 35 years, researchers said.

Pandas need to eat 26 to 48 pounds of bamboo each day to survive. Consequently, they spend most of their day eating. The Qinling Mountains are home to around 275 wild pandas, about 17% of the world’s remaining population.

Using a variety of climate change models and estimates for bamboo distribution, researchers mapped the potential loss of panda habitat. If the bamboo showed unlimited ability to adapt and spread on its own, it could survive for the rest of the century under certain warming conditions, researchers said.

However, most of the estimates indicated significant loss of habitat in the region by the end of the century. In some cases, all of the panda's dietary bamboo was estimated to die off by the middle of the century, and other estimates suggested that anywhere between 60% and 100% would vanish within 100 years.

Evolutionary biologist and coauthor Mao-Ning Tuanmu wrote that while pandas have survived large-scale die-offs of single bamboo species in the past, they could face extinction if several bamboo species died at the same time.

Tuanmu said he hoped the study and others like it would help officials protect areas that might sustain pandas in the future, and areas that would serve as "bridges" between new and old habitat. "We will need proactive actions to protect the current giant panda habitats," Tuanmu said.
advotect at 5:28 PM November 12, 2012
A song lyric comes to mind: "... they say the human race is falling on its face and hasn't very long to go ..." and no I'm not feeling very optimistic. Sorry.