

## The Galápagos' Lost and Found

Of the 15 species of the iconic Galápagos giant tortoise, four have already gone the way of the dodo. Charles Darwin wrote about the relentless culling of one now-extinct species on Floreana Island, *Geochelone elephantopus*, for food and lighting oil. In a second chapter of this story, a team from Yale University reported in this week's *Proceedings of the National Academy of Sciences* that they have found 13 descendents of this species alive and well on neighboring Isabela Island.

"It's strange that the human activities responsible for depleting this population have allowed it to survive elsewhere," says senior author Gisella Caccone. She theorizes that whalers left the tortoises on Isabela's highest summit, Volcan Wolf, as larder to feed them on a return trip.

By comparing the DNA from 93 Volcan Wolf tortoises with that of museum specimens, the team discovered 13 had some Floreana lineage. "It's extraordinary to find descendents of a species when it already has gone extinct," says George Amato, director of conservation genetics at the American Museum of Natural History in New York City. Caccone says it may even be possible to resurrect the species in captivity by selectively breeding out the Isabela genes.

## WoW—NSF Funded What?

Bloggers have been heaping scorn on the U.S. National Science Foundation (NSF) for awarding \$100,000 to computer scientist Bonnie Nardi of the University of California, Irvine, to study the popular role-playing computer game *World of Warcraft* (WoW).

Users can freely make add-ons to the basic WoW software, and Nardi wants to know why American users edit the software more often than their Chinese counterparts do. WoW players say they already know the answer: As one wrote in a post to the Web site GamePolitics, "More Americans play WOW on computers they own.



More Chinese players play at internet cafes and computer centers."

But NSF is sticking up for its grant. "While we have previously supported research on highly formalized open-source software development," says NSF program officer William Bainbridge, "this may be the first study we have supported on how software is developed in the nearly complete absence of formal organization."

## True to Stereotype

Behind every stereotype lies a kernel of truth, the saying goes. A recent study of regional personality differences in the United States seems to agree. Jason Rentfrow, a psychologist at University of Cambridge in the United Kingdom, invited Internet users across the United States to take a survey devised to assess psychology's "Big Five" personality dimensions: openness, conscientiousness, extraversion, agreeableness,

and neurotic tendencies, such as anxiety.

More than 619,000 people responded. Breaking the responses down by state, Rentfrow found that personality traits clustered by region: New Englanders scored highest on the neuroticism and openness scales but were not particularly conscientious or agreeable. Denizens of the Midwest and the South had the highest conscientiousness and agreeableness ratings. For extraversion, the Midwest, the South, and the Great Plains states ranked highest, Rentfrow reported in a paper published online this month in *Perspectives on Psychological Science*. Although participants were slightly younger than the general population, their racial and gender breakdown mirrored that of the country, Rentfrow says.

The study is the latest in a growing field that uses the Internet to study aggregate personality traits of entire populations. Robert McCrae, a psychologist at the National Institute on Aging in Bethesda, Maryland, who studies personality differences between countries, calls the study "a very ambitious attempt to get at a new way of analyzing personality data."

## Probing Near-Death



Books have been written about "near-death" experiences—visions of tunnels and figures of light, or accounts of hovering over the operating table watching doctors bang on their chests—occurring when a patient's heart and brain have stopped functioning. Now, a British physician is spearheading a large-scale project aimed at finding out what's going on.

The study of Awareness During Resuscitation, sponsored by the University of Southampton, U.K., was announced this month at a United Nations symposium on consciousness by project leader Sam Parnia, a resident at Cornell New York Presbyterian Medical Center. Parnia has recruited 25 hospitals, mostly in the United States and the United Kingdom, to monitor as many as 1500 people during cardiac arrest who then survive to tell about it. "About 10% of such people report some kind of cognitive process" while "dead" for a few seconds to more than an hour, Parnia says.

Psychiatrist C. Bruce Greyson of the University of Virginia, Charlottesville, says emergency rooms and intensive-care units will measure oxygen flow to patients' brains and will test their blood for proteins released when brain cells die. Researchers will also ascertain whether patients accurately describe things from their out-of-body experiences that they could not have seen.

What if the phenomenon proves real? "I think that shows that the current understanding of brain and mind"—that to have such experiences you need "a coherent neural network involving a good portion of the cortex"—is "inadequate," Greyson says.



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