

Dropping the Claws

American lobsters (*Homarus americanus*) are a brutal bunch—they've been known to lose a claw in a nasty scuffle. But they seem to recognize, and stay away from, a lobster that's delivered a thrashing in their presence, and scientists don't know whether they do so via sight or smell.



To find out, researchers at the University of Florence in Italy paired off 98 lobsters from a local seafood market in tanks separated by one of four dividers: clear; clear and perforated, to allow smells through; opaque and perforated; and opaque.

The lobsters that could see each other soon began bumping their heads and antennae against the divider; other lobsters barely budged.

Researchers then paired the lobsters again sans divider. Lobsters that had seen each other the first time either sparred immediately or avoided each other. The rest spent more time approaching or threatening their opponents. Despite the crustaceans' beady eyes and low-light habitat, vision seems to be how they recognize each other, says zoologist Laura Aquiloni, who with colleagues published the study online recently in *Animal Behaviour*.

The researchers still don't know whether the lobsters recognize a familiar fellow as an individual. Maybe, Aquiloni says, "they just have the feeling of having seen them before."

Bad Rap for Vaccines

A vocal opponent to vaccines has riled public health scientists with an antivaccine music video on YouTube. *Vaccine Zombie* (VaccineZombie.com), a rap song video with lyrics that question vaccine safety, was penned by Michael Adams, a software executive-turned-health advocate who promotes natural medical remedies over pharmaceuticals.

Adams, who founded NaturalNews.com and calls himself the "Health Ranger," says he

Found: One Lost Language

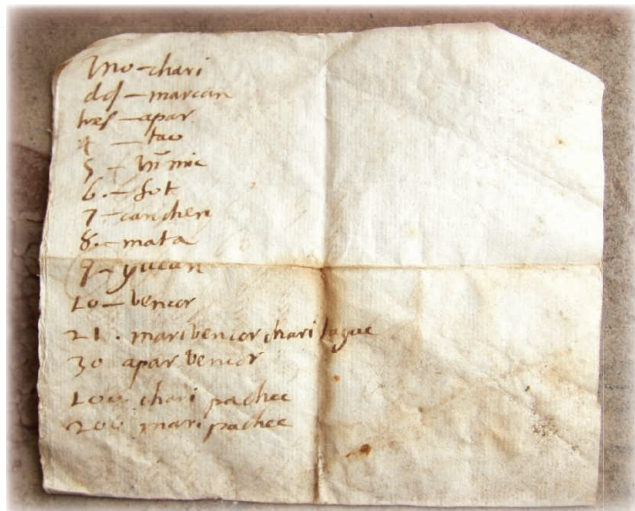
A yellowed piece of paper unearthed at a 17th century dig site in Northern Peru may be the only written record of a language not spoken in hundreds of years.

Harvard University archaeologist Jeffrey Quilter found the paper among other debris near church ruins in the ancient coastal village of Magdalena de Cao Viejo in summer 2008.

On one side of the paper is a note in Spanish describing the writer's haggling over cotton cloth. The real story is the flip side, where a list of Arabic numerals and Spanish words for numbers is translated into a language Quilter had never seen.

Based on the age and location of the site, Quilter and Harvard historical languages expert Marc Zender say it is most likely one of two extinct languages: Quingnam, spoken by the Chimor people, a kingdom that ruled Peru's northern coast from 850 C.E. to 1470 C.E.; or Pescadora, spoken by coastal fishing communities at the same time.

If it is one of these languages, it could help connect modern Peruvians to a lost past, says archaeologist Luis Jaime Castillo of Peru's Pontifical Catholic University. "Anything that can tell us more about these people is very interesting."



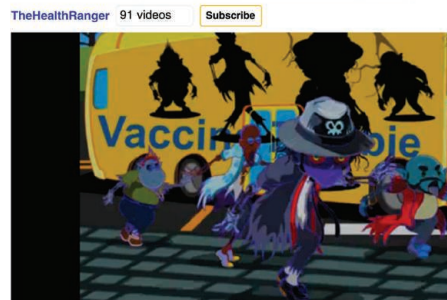
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released the song to coincide with the start of the flu vaccine season. In the animated video, a man suffers an array of side effects after receiving a vaccine. The cartoon figure dies and becomes a "zombie."

Despite the video's catchy tune, its antivaccine message isn't supported with scientific evidence, says Robert Kim-Farley, an epidemiologist at the University of California, Los Angeles. "It inaccurately and inappropriately magnifies the potential side effects of vaccines without balancing the benefits of vaccination," he says.

Though she disagrees with the video's claims, virologist Wendy Barclay of Imperial College London says there is an important message

Vaccine Zombie video www.VaccineZombie.com



there for scientists. "As scientists, we should be forthcoming, more proactive and educate school children and the public in general about vaccine success stories."

HIGHER GROUND

If a tsunami hits the capital of Western Sumatra within the next 30 years, as some seismologists predict, 100,000 people could be swept into the sea. Engineers say that number could drop if the city adds a hill to its flat landscape.

About half of the 900,000 residents of Padang on Sumatra's west coast live just above sea level and far from the safety of high ground. GeoHazards International (GHI), a Palo Alto, California-based nonprofit that helps developing countries build quake-resistant structures, wants to construct a 5- to 10-meter-high hill in a densely populated part of the city. The hill would be built with local materials—dirt, or even rubble from a 2009 earthquake—and would offer a safe haven for about 12,000 people. The planning phase of the project is under way, aided by a \$175,000 donation from the Swiss Reinsurance Co. Construction will cost about \$300,000 and could start as early as next year. GHI President Brian Tucker is alarmed by the risk for loss of life in Padang. "But ... I'm also not aware of any such risk that can be solved so cheaply as what we're proposing."

