



LAST MEALS

Cracking a Very Cold Case

TWENTY YEARS AFTER HIKERS STUMBLED UPON Ötzi the Iceman's 5,300-year-old body poking out of a glacier in the Tyrolean Alps in Italy, researchers have finally located the legendary mummy's stomach. Retired Italian radiologist Paul Gostner was reexamining body scans of Ötzi taken in 2001 and 2005 when he noticed a previously unidentified organ near the mummy's intestine. Gostner realized it was the Iceman's stomach, shriveled beyond recognition after thousands of years on ice, and transposed with the colon, probably as a result of the body's having lain prone over a rock for so long.

Ötzi is the only ancient mummy ever found in the Alps, and his remarkably preserved body provides important insight into health and culture in the European Copper Age. He is also the subject of an international murder investigation. Aided by Gostner's find, paleopathologist Albert Zink of the Institute for Mummies and the Iceman at the European Academy of Bolzano, Italy, located remnants in Ötzi's stomach that genetic tests revealed to be goat meat and grains—evidence that overturns the dominant theory that Ötzi died hungry and hunted. "He was not in a rush or fleeing from enemies," Zink says. The Iceman, whose left shoulder was punctured by an arrow, was more likely the victim of an ambush soon after his last meal. JENNIFER ABBASI

ICEMAN DIARIES

1991: Hikers discover Ötzi's corpse with intact clothing and gear in a melting glacier.

1992: Finding no injuries, researchers conclude Ötzi died from cold and exhaustion after climbing 10,500 feet.

2002: X-rays reveal an arrow in his left shoulder. Was he fleeing a fight?
2003: New find: A deep wound on Ötzi's

hand was healing when he died. He was stabbed shortly before the arrow hit.
2007: Scans show the arrow pierced an

artery, suggesting Ötzi bled to death.
2011: Another look reveals a full stomach; Ötzi was not fleeing before he died.

SUPERFREAKS OF EVOLUTION



This bug injects prey with lethal saliva.

The Wind-Cloaked Spider Assassin

A good predator must be as cunning as it is strong, especially when its prey can turn the tables and kill it. The assassin bug has learned this well, becoming a master of deception in its hunt for spiders. Last year biologist Anne Wignall from Australia's Macquarie University discovered that the bug lures food by strumming webs with its legs, mimicking the vibrations of a trapped fly. Now she has found that the insects exploit the weather by stalking spiders in the wind.

Spiders have poor eyesight and so recognize intruders by sensing vibrations on their webs. But even a gentle breeze neutralizes that ability, a weakness that assassin bugs are wired to exploit. When Wignall turned on desk fans aimed at webs, she saw that the assassins took more steps toward their prey. They also masked their steps by flexing their legs and bouncing, mimicking the sensation of wind-swept debris striking the web. These tactics helped the assassins fatally stab their dagger-like snouts into four times as many spiders as when the fans were off.

Preparation does not always ensure success, however. "Occasionally the spider will come in, throw silk on the bug, and then bite it," Wignall says. "Most of the time the assassin bug won't struggle too much. It happens quite quickly." ED YONG

BITTER PILLS

65,000: Average number of children under the age of 5 admitted to emergency rooms annually for accidental ingestion of medications, according to a study published in the *Journal of Pediatrics* in September. Researchers drew on patient records of 453,559 children, collected by poison control centers in the United States between 2001 and 2008. Over that time, the number of ER visits due to the swallowing of painkillers jumped 101 percent. Randall Bond, an ER