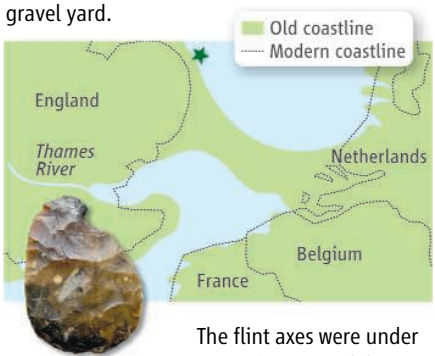
Probing Stonehenge

Archaeologists broke ground at Stonehenge last week for the first time since 1964, with the aim of using modern technology to pinpoint just when builders dragged the first bluestone pillars to the site some 4500 years ago. The team, which is re-excavating a trench originally dug in the 1920s, plans to analyze short-lived organic material such as twigs or grains with mass spectroscopy. They hope to establish the arrival date of the stones to within a couple of decades.

The dig leaders, Geoffrey Wainwright of the Society of Antiquaries of London and Timothy Darvill of Bournemouth University in the U.K., are looking to bolster their theory that bluestones—dragged 250 kilometers from the Preseli Hills in Wales—were valued for their healing powers. Inscriptions in Wales reveal that locals considered the stones magical. And deformed skeletons recently dug up nearby may have been from pilgrims seeking cures. Precisely dating the different building stages of the monument is "wrapped into a series of interesting debates" about pottery, metallurgy, and spirituality in northwest Europe, says Darvill. The project is part of a broader National Geographic–sponsored effort covering nearby Neolithic sites.

Stone Axes From the Deep

An amateur Dutch archaeologist has discovered 28 Neandertal hand axes in debris scooped off the North Sea floor and dumped at a Dutch gravel yard.



The flint axes were under 30 meters of water 13 kilometers off the east coast of England and buried 5 to 10 meters below the sea floor. They were found last December by Jan Meulmeester, a cook at a retirement home who was poking through gravel piles on his day off.

The axes match similar artifacts crafted by Neandertals more than 100,000 years ago and suggest that Neandertals hunted mammoths and other creatures in a landscape long since underwater, says Hans Peeters, an archaeologist for the National Service for Archaeology, Cultural Landscapes and Built Heritage in Amersfoort. Until the end of the last Ice Age about 10,000 years ago, Britain was connected to the European mainland, and much of what is now the North Sea was rolling plains.

"I've never seen such a large group like the one found by Mr. Meulmeester," says Peeters. The gravel-dredging company has stopped work in the area, and Dutch and English officials are planning a survey to look for further traces of the sunken landscape.

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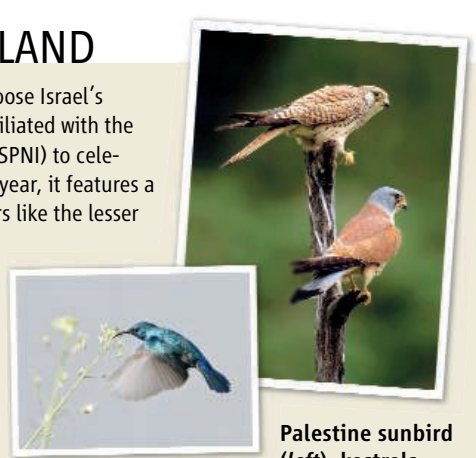
Rakish Rodent

Birds do it. Primates do it. Now even rodents do it—use tools, that is. Neuroscientist Atsushi Iriki and colleagues at the RIKEN Brain Science Institute near Tokyo reported online in *PLoS ONE* last month that they had trained five degus, rodents native to Chile, to use a small rake to reach beneath a fence to retrieve a sunflower seed. Through daily training sessions over 2 months, the degus went from simply pulling the rake forward to get the seed to sweeping the tool with the ease of an ice hockey player corralling a loose puck.

Iriki says the scientists believe it is the first time rodents have learned to use tools in a lab experiment. The experiments, which include detailing the neurological changes involved in acquiring tool use, should help pinpoint areas of the brain for closer study in primates. "The mental function behind tool use is the basis for many other abilities," such as constructing buildings or complex machines, Iriki says.

A BIRD FOR THE HOLY LAND

Politics is poking its beak into a contest to choose Israel's national bird. Set up by two ornithologists affiliated with the Society for the Protection of Nature in Israel (SPNI) to celebrate the Jewish state's 60th anniversary this year, it features a flock of oft-seen birds. Army brass and soldiers like the lesser kestrel, but peaceniks say that's too warlike. Israeli Arabs favor the yellow-tufted sunbird because of its alternative name, the Palestine sunbird; Israeli nationalists oppose it for the same reason.



Palestine sunbird (*left*), kestrels.

"Most people don't realize how important Israel is for bird migration," says ornithologist Yossi Leshem of Tel Aviv University, who hopes a million Israelis will vote. President Shimon Peres will announce the results on 29 May, and national stamps, coins, and telecards with the new symbol are planned. Most of the birds on the ballot are migrants, of which some 500 million pass through the Holy Land each year. The nine finalists include the hoopoe, the owl, the spur-winged plover, and the griffin vulture, but no doves.