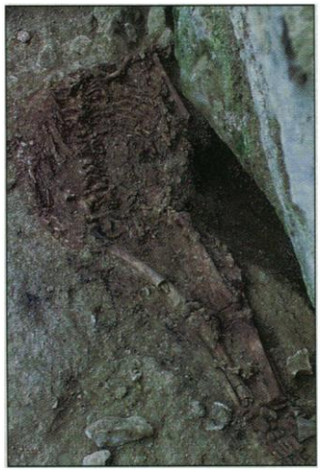
Making Neandertals Part of the Family

Were the stocky Neandertals a separate hominid species, too remote to interbreed with modern humans? Or did they disappear not through extinction but by being absorbed into the human line? That question has dogged anthropologists for almost a century. But now researchers studying a 24,500-year-old skeleton found in Portugal say they have preliminary evidence that Neandertals and humans did indeed mix it up together.

Late last year, scientists led by Joao Zilhao of the University of Lisbon found the skeleton of a 4-year-old child buried in rural Lapedo Valley, near Lisbon. Although the skull had been crushed, the intact jawbone led the scientists to conclude that it was an early modern human, probably a boy (*Science*, 8 January, p. 169).



Skeleton at burial site.

But then paleontologist Erik Trinkaus of Washington University in St. Louis loaded the skeleton's measurements into a computer. He agrees that the child's chin, which juts out "like a snowplow," looks human. But he says other features—such as the broad trunk and relatively short forearms and lower legs—have a distinctly Neandertal look. Trinkaus won't divulge any more details of the analysis, which has been submitted to the *Proceedings of the National Academy of Sciences*. But he insists that "this child has a mosaic of features that are distinctly Neandertal and distinctly early European modern human." The scientists decided to talk about the find after being besieged with inquiries, triggering a global media flurry.

Anthropologist Ian Tattersall of the American Museum of Natural History in New York City, who has argued that Neandertals and humans were too different from each other to interbreed, is still skeptical. He has not seen the bones, but "my inclination would be to believe this is probably a modern human, fairly heavily built," he says. "Nobody knows what a hybrid would look like."

Flipper Makes A Pass

Learning to whistle the same tune may help gangs of male bottlenose dolphins stake a claim on females. Researchers have long known that small groups of male dolphins form alliances to scare off rivals for the attentions of females. And they have recognized that individual dolphins appear to adopt a distinctive "signature" whistle by the time they are 6 months old. But studying how they communicate in the wild is tricky, as it can be impossible to pinpoint which animal in a swirling school is producing a particular whistle.

In the shallow inshore waters of Shark Bay, Western Australia, however, wild dolphins allow researchers to wade among them and record their calls. Behavioral ecologists Rachel Smolker of the University of Vermont, Burlington, and John Pepper of the University of Michigan, Ann Arbor, took advantage of these conditions in the late 1980s, listening in on the chatter of one three-dolphin alliance over a 4-year period. Now, after comparing almost 1700 whistles produced by the trio, they've found that over time, the members gave up their own whistles and converged on a new, shared signal.

Dolphins hanging out in Shark Bay.

Learning the common voice may allow the gang to announce "that they represent a formidable competitive force," say the authors, whose study will appear in *Ethology* later this year. Bioacoustics expert Bill Evans of Texas A&M University in Galveston calls the discovery "interesting," as it means that dolphins are among the few types of vertebrates—the others being birds and humans—capable of learning new vocalizations throughout their lives.

The Oryx: Life on a Tightrope

Poachers are once again threatening to drive the Arabian oryx into extinction. A paltry 100 of the antelope-like animals, which used to roam the deserts between the Persian Gulf and the Red Sea, now survive in Oman, says John Newby, director of the World Wildlife Fund (WWF) International's Species Conservation Unit in Gland, Switzerland.

A traditional symbol of beauty in Arab culture, oryxes are prized by trophy hunters because of their long, straight horns, as well as by private collectors of live animals. In 1961, the WWF sought to save the species by breeding them at zoos in the United States and Europe. Two releases of captive-bred oryxes in Oman during the early 1980s helped jump-start the wild population, which by 1996 totaled about 400. But more oryxes led to a resurgence of poaching, leaving a small herd with only 11 females, says Newby.

Ironically, poached oryxes often die before they reach the hands of collectors. "These animals are finely tuned to living in one of the most hostile environments on Earth" but often succumb to dehydration after being hunted down, says Newby.

The Arabian Oryx Project, based in Oman, is planning future releases of captive-bred oryxes in Oman, Jordan, and Saudi Arabia, which also now has a small, reintroduced population. To avoid a repeat catastrophe, the sultanate of Oman has pledged to crack down on poachers and to discourage collectors. Newby says the WWF is lobbying other Arab governments for similar protection.

Not-So-Bright Design?

"I personally cannot discern a shred of evidence for '[intelligent] design' [of the universe]. If 97% of all creatures have gone extinct, some plan isn't working very well."

—Harvard anthropologist Irven DeVore, speaking at a conference on "Cosmic Questions" at the Smithsonian Institution in Washington, D.C., this month, sponsored by the AAAS and the Templeton Foundation.

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