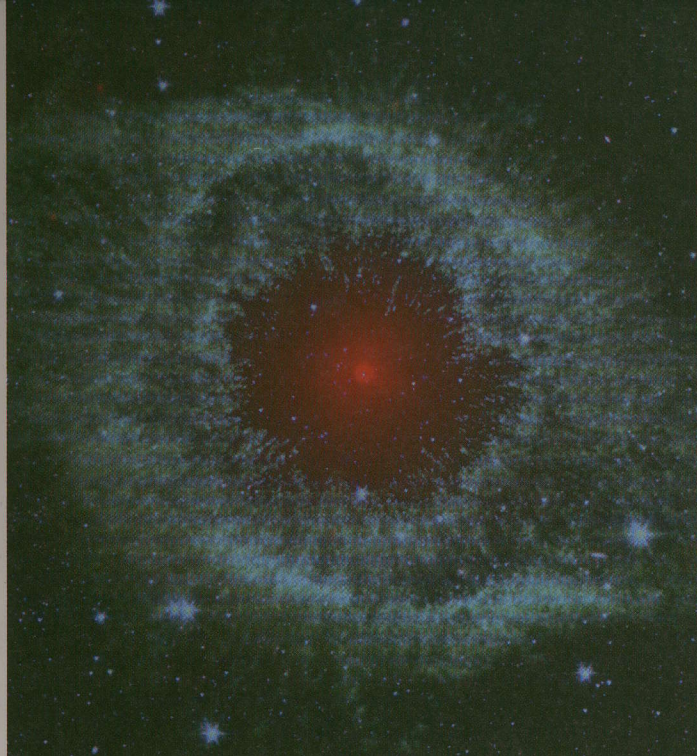


Astro Tool Kit

Whether rummaging through reams of data files or manually cleaning up charge-coupled device images of galaxies, astronomers face their share of drudgery. The National Virtual Observatory (NVO)* aims to make these tasks less burdensome by pointing space researchers to tools, databases, and other useful sites. Run by scientists from around the United States, the portal is part of an international network of astronomy resources. It includes a master list of cosmic catalogs, image archives, and other information caches. If you've already nabbed an exposure of the night sky, another feature will "unwarp" it to remove telescope distortion and scour the image for celestial objects. For more timesavers, such as a module for analyzing and comparing spectra, check the related VO Web Services site.† >>

NET
WATCH

* www.us-vo.org † www.voservices.net



Algorithmically Yours

Like other controversial proposals, a plan for protecting polar bears threatened by receding ice touched off a torrent of mail—more than half a million comments—to the U.S. Fish and Wildlife Service (FWS).

This time, to head off a logistical nightmare, social scientists and computer researchers funded by the National Science Foundation are creating language-recognizing algorithms to spot form letters, group similar comments, and even determine whether a comment is pro or con. The hope is to enable bureaucrats to sample relevant letters without having to plow through all of them.

But teaching computers to get the gist of a letter isn't easy, says political scientist Stuart Shulman of the University of Pittsburgh in Pennsylvania. "People will say 'I hate the Bush Administration,' ... but they are for the listing." He adds that hundreds of thousands of emotionally charged form letters from environmental groups create "noise" that can drown out what the agency wants to hear about most: science and economics. FWS has until January to make a final decision.

Modern Life Bad for Boys?

A study this month reported a slight but steady decline in the ratio of boys to girls born in both the United States and Japan since 1970.

Normally, 105 boys are born for every 100 girls. Epidemiologist Devra Lee Davis and

colleagues at the University of Pittsburgh, Pennsylvania, report that the decline is small, but the changes between 1970 and 2002 are equivalent to a shift from male to female of 125,000 babies in the U.S. and 135,000 in Japan.

Many industrial chemicals have estrogenic effects that can sabotage male gestation, the authors relate online in *Environmental Health Perspectives*. But increasing obesity, late-age childbearing, and the use of reproductive technologies could also have a hand. Nailing causes will require more detailed studies, they say. For example, researchers at the University

of Ottawa, Canada, reported in 2005 that in the Aamjiwnaang First Nation community in Sarnia, Ontario, the sex ratio had declined to about 103 since the early 1990s—believed to be related to the tribe's proximity to petrochemical plants.

The decline in male births coincides with "other signs that male reproductive health is in danger," such as lower sperm counts, Davis warns. Harvard epidemiologist Marc Weisskopf says the study adds to evidence that "there are secular changes in sex ratio occurring," but the causes are still not clear.

THE RABBIT AND THE CUCKOO

A bird in hand led to a rabbit in the bush recently for a Wildlife Conservation Society (WCS) team working in Sumatra, Indonesia. In January, a local trapper presented them with a live Sumatran ground cuckoo, a species once thought extinct (below). Seeking more data, the team set up camera traps in Bukit Barisan Selatan National Park. Instead of a bird, they got shots of the equally rare and endangered Sumatran striped rabbit, last spotted by camera trap 7 years ago. "You don't expect to see rabbits in a tropical rainforest," much less striped ones, says Nick Brickle, head of the WCS Indonesia Program. It was believed to be the only striped rabbit in existence until researchers discovered one in 1999 in Laotian mountains.

Meanwhile, the team recorded the call of the captured cuckoo. "We went back into the forest, played the tape, and out pops a couple of wild ones," the first ever seen by scientists, says Brickle. The group plans further studies of both species. Perhaps more importantly, says Brickle, they have gained two appealing symbols for the ongoing battle to protect the forest from farmers and loggers.

