Set Melon on **Ramming Speed**

Whaling ships in the 19th century chased sperm whales for the reserves of oil in the spermaceti organ, the spongy bump in their foreheads used for echolocation. That bump, as Ahab and colleagues well knew, can also be used to destroy ships. Now scientists suggest that what caused these bumps to evolve into powerful battering rams was malemale competition.

All toothed whales and dol-

phins have sonar "melons," oil-filled sacs in their heads that serve as acoustic amplifiers and emitters. But in male sperm whales they are huge, occupying up to a third of their length and a quarter of their body mass. The world's small community of spermaceti researchers has speculated that the size might have evolved to help produce sound pulses to stun prey, control buoyancy, or just serve as a sexual turn-on.

Curious about the biomechanics of a real-life encounter that inspired Moby Dick-in which a 26-meter sperm whale sank the 238-ton whaling ship Essex—comparative physiologist David Carrier and colleagues at the University of Utah,



Moby Dick upends a whaler.

melon, the larger the size difference between the sexes and the more likely the males were to be polygynous. Because sperm whales are polygynous, all the evidence points to a key role of melons in males who protect their harems in head-tohead combat, they say.

Biology.

Salt Lake City, ran comput-

er simulations to see how a

whale's noggin would per-

form in a head-on collision.

Although the massive or-

gan is springy enough to

protect a charging whale,

it is still hard enough to de-

port in the 15 June issue of

the Journal of Experimental

What's more, they

found from comparisons

species that the larger the

with 20 other cetacean

liver lethal blows, they re-

Experts find the idea intriguing, but whether male sperm whales joust with each other is hard to verify through observation because they rarely stray into shallow water, says biosonar specialist Bertel Mohl of Aarhus University in Denmark: "We can only do so much in the field with binoculars, hydrophone arrays, acoustic tags, and midget budgets."

Rare Cat Snap

RANDOM SAMPLES edited by CONSTANCE HOLDEN

> This rare photo of a Trans-Himalayan snow leopard-caught in the act of spraying while searching for a matewas taken by a remote camera, a new research technique being deployed by a recent Royal Geographical Society expedition. Scientists are looking for ways to save the big cats, which are threatened from all sides: being killed by local herders to protect their flocks, and sought for their luxurious coats and ostensibly medicinal bones.



Getting Null Results Into Print

After long hours, weeks, and months of labor, the results come in: negative. Nada. Zip. A researcher's gut reaction? Move on to more promising lines of inquiry.

But a multi-institutional group of researchers led by cell biologist Bjorn Olsen of Harvard Medical School in Boston will soon be asking researchers to write up those unpromising results and publish them in the new Journal of Negative Results in Biomedicine.

Speth

Olsen says the online journal will cover the basic biomedical sciences as well as clinical trials. He hopes it will correct a picture he believes is distorted by a general bias against null results, which, he says, can suppress challenges to dogma and allow errors-such as mislabeled cell lines-to propagate.

Having negative results widely available would save resources devoted to duplicating fruitless efforts, many scientists agree.

Two U.S. environmentalists have been named this year's recipients of Yankees Win the Japanese mega-environmental award, the Blue Planet Prize.

Harold A. Mooney, 70, a

the Blue

professor of environmental biology at Stanford University, is cited for his work on plant ecology and for being "instrumental in establishing the field of global ecology." James Gustave Speth, 60, trained as a lawyer and currently dean of Yale's School of Forestry and Environmental Studies, is cited for "creating ... environmental institutions of extraordinary importance," including the Natural Resources Defense Council and, later, the World Resources Institute.

Each will receive 50 million yen (\$400,000) at a ceremony in Tokyo in November.

They're "valuable," says geneticist Scott Kern, founder of NOGO, a Johns Hopkins University-based Web journal dedicated to negative results in cancer genetics. Database searches often aren't very good at finding negative results, he says, "since [they] may stay buried in the methods section.

But Charles Friedman, director of the Biomedical Informatics Center at the University of Pittsburgh, doubts whether hordes of

thwarted researchers will be eager to publish null results, which aren't noted for advancing careers. When the Journal of the American Medical Informatics Association solicited papers with negative results 2 years ago, they got only two publishable manuscripts, he says. One problem for the new journal, he adds, will be finding "work of such high quality that you are convinced that the problem isn't a failure of design, statistics, or methods."

Despite such obstacles, Olsen says the new journal will appear within 2 months at www.biomedcentral.com/ info/newjournals.asp.

Mooney