

RANDOM SAMPLES

edited by ROBERT F. SERVICE

Research to Continue on Infected Chimps

In a move that has dismayed primatologists and animal rights activists, the U.S. Air Force announced last week that it would hand over most of its chimpanzee colony to a research organization rather than retire the chimps. The colony, which includes more than 140 animals, was used for research ranging from the effects of heat and acceleration to hepatitis and HIV. At least

90 of the chimps are infected with either HIV or hepatitis.

Although the Air Force discontinued its own research on the chimps in the 1970s, it has since allowed the private Coulston Foundation, the new custodian of 111 of the chimps, to conduct experiments on them. The foundation plans to continue studying the effects of aging and HIV on the chimps. The other 30 animals, which are not infected, will be turned over to a retirement sanctuary in Texas.

The decision has angered some experts. Twice, they note, the Coulston Foundation has been cited for violating the Animal Welfare Act and causing chimp deaths. That should have set off "alarm bells," says Roger Fouts, co-director of the Chimpanzee and Human Communication Institute at Central Washington University in Ellensburg. The foundation responds that it treats its wards with care and dignity. "We take our chimp care very seriously," says Coulston's Don McKinney.



This Giant Pacific Octopus knows how to have a good time.

Suckers for Fun

Dogs do it. Dolphins do it. Now it appears that even octopuses play. Findings reported at the July meeting of the Animal Behavior Society in Carbondale, Illinois, contradict a decades-old assumption that only vertebrates—animals with backbones—are playful.

To be classified as play, a behavior must be repetitive and not provide any immediate benefit to the animal. Because octopuses are considered the smartest of invertebrates, animal behaviorists Jennifer Mather of the University of Lethbridge in Alberta and Roland Anderson of the Seattle Aquarium set out to observe whether octopuses play.

The researchers gave empty plastic pill bottles to eight octopuses living in an aquarium. Each animal at first would grab a bottle with a tentacle and bring it to its mouth, as if exploring its potential as food, Mather says. But two of the octopuses went further. They squirted jets of water to push the bottle toward the current flowing into the tank and allowed it to drift back before pushing it again.

The work is interesting, says Marc Bekoff, an animal behavior researcher at the University of Colorado, Boulder, because it marks the first time that play has been observed in invertebrates.

Mysterious fish kills at a remote lake in India may have been caused by a rare case of "natural" eutrophication—oxygen starvation that occurs when algae populations boom in response to a sharp rise in nutrients, in this case from bird droppings.

Tiny rainfed Kokilimedu Lake, on the isolated

Eutrophication Nature's Way

grounds of the Kalpakkam Power Reactor Complex in southern India, is 10 kilometers from the nearest settlement and hasn't been touched by human activity for 15 years. But in May 1995, about 100 grass carp—the lake's entire population—washed ashore dead.

Investigations revealed low oxygen levels, very warm water temperatures, and algal growth, says K.V.K. Nair of the power plant's marine biology program. On top of that, his team reports in the 25 May issue of the Indian journal *Current Science*, phosphate levels were "surprisingly high." That suggested an external source of enrichment of the key algae nutrient, which Nair's group identified as droppings from a large colony of cormorants nesting in trees near the lake. Nair speculates that the fish, robbed of oxygen in deeper waters, were driven to the surface where the heat finished them off. He says the lake is far from Kalpakkam's nuclear reactors and shows no signs of contamination.

Ecologist Eugene Turner of Louisiana State University, Baton Rouge, calls the conclusion plausible. But he warns that more detailed analysis is needed to rule out pathogens such as nematodes and viruses.



Cormorant droppings trigger oxygen-depleting algae blooms in India's Kokilimedu Lake.

A majority of Americans polled in a new survey believe global climate change is real, will bring undesirable effects, and that governments and businesses aren't doing enough to prevent it.

The findings, summarized in a report from the Washington, D.C.-based independent research group Resources for the Future, are based on inter-

Climate of Concern

views with some 700 Americans conducted before and after the international climate change treaty conference in Kyoto, Japan, last December. Following Kyoto, 75% of those polled believed global temperatures would rise if nothing is done to rein in greenhouse gas emissions, an opinion virtually

unchanged by the conference, report psychologists Jon Krosnick of Ohio State University in Columbus and Penny Visser of Princeton. More respondents said post-Kyoto that they support national and international restrictions on air pollution—but fewer people were willing to pay higher utility bills to bring about those cuts.

LEO J. SHAW/THE SEATTLE AQUARIUM

K.V.K. NAIR, KALPAKKAM POWER REACTOR COMPLEX