

BEHAVIOR

Up a cup with a paddle

No one likes to be outdone by a fruit fly (SN: 10/13/79, p. 246), so now rats are proving themselves similarly capable of learning earlier in life than was previously believed. In a warm environment, rats just one day old can learn to work for food, reports Warren G. Hall of the North Carolina State Department of Mental Health in Raleigh.

Previous research has indicated that baby rats cannot eat or drink by themselves until they are about 15 days old. But Hall seems to have found the answer to that problem in the bottom of a styrofoam cup.

Placed in the bottom of the cups at temperatures several degrees above room temperatures, the hungry, day-old rats learned to distinguish among various terry cloth-covered paddles inside the cup. Each paddle had a different odor, and the rats were able to remember which of the paddles released milk when they pushed it with their noses.

The achievement is "significant," Hall says, "because the rat develops rapidly over a three-week period from a fetus-like newborn to an adult-like juvenile." He says that changes in the behavior patterns of rats are paralleled by changes in the physiology of the brain. The research, which is funded by the National Science Foundation, might have implications in understanding the brain functioning of human babies, he suggests.

Memory and the un-choline

Recent research has indicated that the brain transmitter acetylcholine is associated with memory function. Some results suggest that memory performance in young persons can be improved by the administration of choline, a nutrient that is the chemical precursor of acetylcholine. Other research suggests that choline activity in the brain declines among the elderly, particularly among those with Alzheimer's disease — further suggesting that elevation of the acetylcholine levels might improve memory functioning in the elderly. But researchers report in the October *AMERICAN JOURNAL OF PSYCHIATRY* that administration of choline chloride — a drug reported to increase brain acetylcholine levels in rats — does not appear to improve memory performance among eight elderly volunteers ranging from 64 to 86 years of age (also see p. 265), reports a research team headed by Kenneth L. Davis of the Palo Alto (Calif.) Veterans Administration Hospital.

Italian marriage: Airing dirty diapers

If one is to believe the results of a new European attitudes survey, marrying an Italian man is about as good a risk as sporting a disco dress to dinner at the Ayatollah Khomeini's. Among the main conclusions of the nine-country survey by the European Community Commission is: "British, Dutch and Danish men make the best husbands; Italians make the worst."

According to the survey, 85 percent of British husbands say they are willing to do the dish-washing chores, and one-third say they don't mind changing the baby's diapers; Dutch and Danish men are nearly as enthusiastic about such chores. At the other end of the spectrum, among Italian husbands, only 20 percent believe they should wash dishes, 13 percent would change a diaper and 6 percent would do the ironing.

As for actual performance, northern European men envision themselves as somewhat more helpful around the house than their wives give them credit for. In Belgium, for example, 82 percent of the husbands surveyed claimed they help "often" or "sometimes" with the housework, while only 68 percent of the wives agreed. The gap between answers of Italian husbands and wives was 21 percent.

ENVIRONMENT

China cites interest in CITES

CITES — the Convention on International Trade in Endangered Species of Wild Fauna and Flora — has become a powerful tool for combating trade in products made from endangered species. Signers of the Convention, drawn up in 1973, follow a complex set of rules to regulate the import and export of rare pelts, seeds, pets and other items. China, long a major market for many of these products — such as ivory — is reported to have made an offer to representatives of the international World Wildlife Fund in recent weeks. The offer includes not only China's involvement in the exchange of plants and animals for species-conservation programs, but its joining CITES immediately.

Says Lee Talbot, a wildlife ecologist and WWF's new scientific advisor, it's hard to halt exploitation of endangered species when only species-producing nations abide by CITES. So long as a legal market for endangered-species products exists, he says, poachers will maneuver around the Convention to feed it.

A rare bird indeed

By 1973, signs indicated that there were probably no more than five or six wild Mauritius kestrels (*Falco punctatus*) left on their small Indian Ocean island or anywhere else. Then Fay N. Steele and colleagues moved in to help the bird. Five years of field research paid off in the first successful captive-breeding program to raise a chick to flight stage.

Monkeys introduced to Mauritius by humans have shown a predilection for kestrel eggs. This rare member of the falcon family — whose population still numbers fewer than 25 — is staging a shakey comeback, however, through an adaptive nesting switch from forests to cliffs — out of monkeys' reach. A second pair of captive kestrels, now at reproductive age, are expected to aid the first pair in restocking the wild community. But the creature's survival seems to hinge more than anything else on whether new chicks buy the value of cliff dwelling.

Fired for protesting snake steak

What do you do when you're a staff herpetologist with the Interior Department's endangered-species office and learn that an animal struggling for survival is the featured entree at a local French restaurant? That's the dilemma C. Kenneth Dodd faced when he decided to write the cookery requesting that it drop sauteed Pennsylvania rattlesnake in a red-wine sauce with onions from its menu. While the restaurateur was willing, Interior's Secretary, Cecil Andrus, was "mortified," according to the *Washington Post*. It all climaxed last week in Dodd's firing. But few escape blameless.

Dodd, acting on his own, used office stationery that "... could and did mislead the recipient into believing that [the] letter represented the official position of the Department," the agency charged in Dodd's dismissal letter. Dodd is appealing the Agency's action.

Andrus, in an apology to the restaurant, explained that this rattler "is not listed as either threatened or endangered ... and consequently there are no prohibitions ... which would prevent you serving it..." Dodd, praised as "the most productive branch biologist in his office," referred in his original complaint, however, to a 1979 study in *BIOLOGICAL CONSERVATION* which concludes that Pennsylvania's timber rattler "is rapidly approaching extinction."

Finally, since Pennsylvania prohibits commercial sale of rattlers, the restaurant's purchase of snake steak could violate federal bans on interstate shipment of poached game. But seeing the light, the owner has revised his menu: It now features nonendangered Texas diamondback.