

'Extinct' animals found, join endangered list

Two supposedly extinct animals, the eastern cougar and the northern Rocky Mountain wolf, have recently been reported alive in the wild and have been added to the U.S. Interior Department's list of endangered species. The Santa Barbara song sparrow has also been put on the list, although it may in fact be extinct.

Five other domestic creatures have also been listed: the Utah prairie dog, of whom only 48 "dog towns" were known in 1972; the Mississippi sandhill crane, with 38 to 40 birds known; the Puerto Rican whippoorwill, with an estimated 300 pairs remaining; the desert slender salamander, with a population of under 500; and the Okaloosa darter, a minnow known only in five small streams that originate on Eglin Air Force Base in Okaloosa County, Fla.

In addition, 13 creatures have been added to the list of endangered foreign species, including the Mexican aquatic box turtle and a dozen Australian animals.

Conspicuously absent, however, are the Australian red kangaroo and the eastern and western gray kangaroos. The United States has deferred listing them because of an Australian export ban which went into effect in April. Australian hide merchants are pressuring to rescind the ban. □

Mosquito crisis: A call to biology

Mosquito control today is in a state of crisis. This is the blunt appraisal of a National Academy of Sciences panel asked to assess the situation.

For the past 30 years, the panel notes, mankind has depended on synthetic organic pesticides to control mosquitoes. But environmental opposition and rising mosquito resistance to chemical pesticides have made many agents useless. In areas of California, for example, encephalitis-transmitting mosquitoes have become resistant to virtually all insecticides used for killing larvae. As the panel puts it, "Effective chemical weapons are vanishing."

The problem is hardly trivial. Malaria, spread by mosquitoes, is probably the most prevalent disease of mankind. The World Health Organization estimates that at least 100 million cases occur annually, resulting in 1 million deaths.

Biological control of mosquitoes is the most prominently mentioned alternative to chemicals. The panel calls biological control "a well publicized but undersupported" approach. "Some

have presented biological control as rather simple, but in reality it is complex and challenging."

In transmitting the report to the Agency for International Development, NAS Foreign Secretary Harrison Brown says information "justifies a prediction that significant breakthroughs in biological control can be expected within five years—given adequate support and sustained research efforts." He conveys the panel's "strong recommendation" that the United States support field studies of biological control agents. □

The poor psychologist and his \$25,000 prize

"I am only a poor psychologist," said Jean Piaget last week in New York. He was referring to the ironic fact that he, a child psychologist, was there to accept a \$25,000 award for psychiatry (SN: 4/21/73, p. 73). But the awarders of the prize, the Kittay Scientific Foundation, did not see it that way. According to Norris Herman, chairman of the advisory board of the foundation, Piaget was the unanimous choice to be the first recipient of their international award for psychiatry—the largest of its kind.

Piaget, a 77-year-old Swiss psychologist, is considered to be the father of modern child psychology. His major work has been the formulation of a body of knowledge, known as genetic epistemology (the science of the methods of knowledge), that explains the cognitive development of children. Piaget has described four basic phases that reflect a consistent movement on the part of the child toward the ability to reason abstractly. Piaget arrived at many of his conclusions through experimentation with children and through a process similar to the psychoanalytic one. He developed a rapport with children and then noted precisely what they did and said at various ages or stages of development. But Piaget's relationship to psychiatry is on a more fundamental level than methodology.

George Serban, the Kittay Foundation's medical director, noted how Piaget's model for the development of thought has implications for the entire field of psychiatry. Imposing adult concepts on a child's thinking, for instance, can disturb the process of mental maturation. This, says Serban, can cause emotional responses that are sometimes carried over into adulthood and result in neuroses.

Theodore Lidz of Yale University pointed out that Piaget's model not only helps understand neurosis but also provides major keys in the comprehension or schizophrenic disorders. The thoughts of the pre-operational child (from two to seven years when a child

reasons by proceeding from particular to particular without generalization or logic) and the egocentricity of children, he said, are very similar to schizophrenic thought. When we understand that disturbances of schizophrenic patients are similar to those of childhood thought, he concluded, then schizophrenia need not be described as a brain disorder but as a personality disorder.

Piaget expressed surprise that his work had such applications, but, discussing the future of developmental psychology, he predicted that it will become the central explanatory model for all psychology. Child psychology, he said, explains the development and construction of the mind. Adult psychology is only the end result. Even Freud understood this, said Piaget, and he based the whole field of psychiatry on it. □

Soviet SST crash may affect Concorde

As a crowd almost equal to the population of Alaska looked on Sunday at the annual Paris Air Show, the Soviet Union's supersonic transport plane, the Tupolev 144, made a low flyby over Le Bourget Field and pulled up into the beginning of a spectacular, steep climb. Suddenly the plane pitched over into a nose dive, pieces began to fall off, there was a burst of orange flame and the plane broke apart just before crashing into the nearby town of Goussainville, killing at least 14 people, six of them on the aircraft.

The plane was the production version of the TU-144, enlarged and refined since the prototype, the TU-166, was unveiled two years ago. Ten more have reportedly been under construction. The crash, however, may well affect not only Soviet SST plans but also the Anglo-French Concorde and efforts to restart a U.S. SST program.

The future of the Concorde has been looking less than radiant for some time. Several U.S. airlines, including Pan American, Trans World and United, dropped their options to purchase the plane several months ago, and Japan Air Lines announced the day after the Tupolev crash that it was delaying its option as well, with one Japanese newspaper reporting that JAL was "certain to give up purchase. . . ."

The Soviet Union has reportedly been planning to ask Boeing for help in beating out the Concorde for the world SST market. Boeing was to have built the prototypes of a U.S. SST before the program was suspended in 1971. Some observers believe, however, that the crash will provide more ammunition for anti-SST forces in the United States. □