

Project Pudu

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The southern pudu *Pudu pudu*, a small forest deer, now occurs only in the temperate Valdivian rainforests of Chile and Argentina.⁶ Ninety per cent of its historic habitat, the lowland forest, has been occupied and cleared by man, bringing the pudu increasingly into contact with both man and his domestic livestock. This, coupled with increased predation, livestock diseases and competition from introduced exotic deer, has made the pudu extremely rare and locally extinct in many areas, especially in Argentina. In the IUCN Red Data Book it is classed as vulnerable.

Little is known about the pudu's ecology and sociobiology, and pudu have not been studied extensively in the field. Until recently they had not done well in captivity, but now there are 34, according to the 1981 International Zoo Yearbook, 24 of them captive bred.

But in 1978, concern for the pudu's survival in Argentina prompted the New York Zoological Society, the Parques Nacionales Argentinos, and the Fundación Vida Silvestre Argentina to start a pudu propagation programme in Argentina's Nahuel Huapi National Park. A small group of two males and four female semi-captive animals were available on Isla Victoria in the park, and an active management programme began in January 1978. Since then four young have been born to the group.

The breeding centre, completed in May 1979, was built at Puerto Radal, a relatively isolated part of the island. Designed by the author and constructed by national park staff, it consists of ten interconnecting enclosures with an eight-metre-high observation tower, a small food storage area and a nursery for hand rearing young, when necessary. Two large pens are used primarily for behaviour observations; four wooden corrals house breeding pairs, and the small stalls are isolation areas for pregnant females, surplus males, or newly arrived animals.

Management and care procedures are similar to management practices for other small deer¹ and for pudu in European zoos.^{2, 4, 5} Diet consists of a standard cattle feed (16 per cent protein) produced by Purina in Argentina – alfalfa hay, Purina dog chow and native browse, such as maiten *Maytenus boaria*, and maqui *Aristotelia chilensis*, with mineral-impregnated salt blocks always available.

This is only a first, but an important, step to ensure the pudu's survival; it will also give valuable information on pudu behaviour in captivity. Data are being collected on daily activity patterns, food preferences, reproductive behaviour, aggressive behaviour, mother and young interactions and intraspecific communication.

In conjunction with extensive field studies on wild pudu populations in Chile,³ the project will provide a sound basis for an effective conservation scheme for the southern pudu and should give Argentina a valuable breeding collection as a buffer against the possibility of a catastrophic decline, or crash, in wild populations.

The project can also be used to increase public awareness of the plight of both the pudu and other wildlife in Argentina. Puerto Radol is only 15 kilometres from Port Anchorena, a major tourist attraction that receives more than 500,000 visitors annually. A brief pamphlet and explanation by park guards about wildlife conservation and a visit to the pudu breeding facility could help increase public understanding and support for conservation efforts.

Acknowledgments

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Galapagos Penguins and Cormorants

A census of penguins and flightless cormorants in the Galapagos Islands showed little change in the numbers of both since 1971, although there was a reduction in penguins in southern Isabela. Feral dogs and the eruption of Volcan Chica in November 1979 could both have contributed to this. A mummified penguin that had been cut off from the sea by the lava was found in a lagoon.

Reward for Non-Game Killers

The Corvallis, Oregon, Audubon Society, Oregon State Police and US Fish and Wildlife Service have offered a reward for information leading to the conviction of people shooting non-game birds and mammals. This follows the killing of a rare burrowing owl *Athene cunicularia* which had been under observation

by Audubon birdwatchers and was found shot and hanging on a fence, the usual Western way of displaying dead predators.

Bighorn Project Fails

Ten bighorn sheep *Ovis canadensis* from British Columbia, reintroduced in 1970 to California's Lava Beds National Monument where they had been shot out 60 years before, had by 1979 increased to 43, from which another 10 were taken to start a herd in the Warner Mountains in Modoc County. But the move caused six of the transplants to die of stress, while the 33 at Lava Beds were struck by bacterial pneumonia and wiped out.

WWF/UK Move

WWF/UK's head office has moved to Panda House, 11-13 Ockford Road, Godalming, Surrey.