FERAL ANIMAL CONTROL: SANTA CRUZ ISLAND, CALIFORNIA

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The impact of feral animals on natural ecosystem processes on Santa Cruz Island, California, has received increasing attention from land managers during the last decade. The 22,000-ha preserve (western 90 percent of the island) supports nearly 700 plant taxa, including 10 island endemics, as well as more than 250 migrant and resident bird taxa. In addition, another 30 plant taxa and more than half of the native terrestrial fauna are endemic to the Channel Islands. Predation, habitat degradation, and competition for food and other resources, as well as accelerated erosion, disruption of the nutrient cycle, and increased dispersal and germination of alien plant taxa, have been among the effects attributed to the presence of feral sheep and pigs.

After entering into a conservation easement agreement with the island's owner in 1978, The Nature Conservancy committed itself to the removal of the feral sheep population. In 1978 three research projects documenting the effects of the sheep on the island's flora, fauna, and soils were started. A 1980 census estimated the sheep population to be 20,000 animals. A comprehensive study on the

biology and population characteristics of the sheep, including practical recommendations for a control program, was completed by 1981.

After evaluating alternatives, a two phase control program to completely eliminate the sheep was initiated in 1981. The first phase consisted of repairing 160 km of existing fences, which created 22 pastures ranging in size from 400 to 4700 ha.

The program's second phase involved systematically hunting fenced pastures from the ground. The mechanics of conducting a long-term hunting operation in remote, rugged conditions were acquired through successive hunts. A group of eight to nine hunters equipped with radios, rifles, ammunition, and supplies for a full 14-hour day proved to be the most efficient. Previous hunting experience was not as important as physical stamina, common sense, dedication, and the willingness to work as part of a team. A core group of 12 hunters, supplemented by nearly 60 additional people, spent the equivalent of 1400 days (8-hour day) in the field. An estimated additional 3500 people days were spent on research, fence building, planning, public relations, logistical support, and travel.

The Nature Conservancy removed an estimated 32,400 sheep from Santa Cruz Island in seven and a half years. In July 1989 five sheep were known to remain on the western 90 percent of Santa Cruz Island. Periodic surveys will be required for several years to assure complete elimination. Although the sheep remaining on the eastern 10 percent of the island are a source of infiltration, a series of fences prevents rapid or extensive western migration onto the preserve.

The safety of staff, other island personnel, and visitors was the number one concern in all of The Nature Conservancy's hunting efforts. All hunters were fully briefed on safe hunting procedures and the location of emergency equipment and supplies. The safety record during the program was exceptional, with only a few minor injuries or incidents.

Public relations were also a concern during much of the program. Initially a low key approach with minimal public exposure was followed. Later in the program, after adopting a high visibility profile, The Nature Conservancy experienced a potential lawsuit. The California Wildlife Federation brought suit against The Nature Conservancy to halt the "ruin of the finest recreational hunting opportunity in western North America." The suit was dropped after the court rejected the initial temporary restraining order sought by the federation. On the whole, negative reaction proved to be minimal and often stemmed from lack of accurate information on the part of the concerned individual. Press and information packets were prepared and distributed by The Nature Conservancy to all inquiries.

A preliminary overview of the sheep removal efforts on Santa Cruz Island has been written and is currently in press. Copies of the report, "Control of Feral Sheep on Santa Cruz Island," may be obtained by writing to the preserve office.

Following control of the feral sheep, The Nature Conservancy has focused its stewardship efforts on designing a feral pig control program. Culminating a two-year research project, an experimental trapping and hunting program that was started in the summer of 1989 will lead to the design of an island-wide feral pig control program. A report documenting the problem and discussing the need for elimination of the pigs on the island is available from the preserve office.

Feral animal control programs are often long, costly, frustrating, and controversial. It is important for land managers to document and communicate successes and failures in this arena. The results of a particular program may provide the inspiration and guidance for other control and restoration efforts.

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