## FERALS THAT FAILED

bv

### David Cameron Duffy

In the 19th century it was man himself who was the most direct threat to Galapagos wildlife, as he slaughtered whales, fur seals, giant tortoises, iguanas and anything else that moved. Today the greatest danger comes from the foreign animals that man has introduced (rats, cats, dogs, pigs, goats, mice, cattle, donkeys, fire ants, chickens) and potentially from animals and organisms that may be imported in future, whether deliberately or accidentally.

The threats presented by these pests vary in intensity both because by no means all of them have been introduced into every island and because some of them have not prospered in some areas or have simply died out. It is a minor comfort to consider these failures and partial failures.

#### **GOATS**

If goats are the perfect feral animal, highly prolific, able to eat almost anything and to survive in the semi-deserts they create, then it is a pleasure to report that the northern volcanoes of Isabela seem to be tougher than the goats. A goat skull has been found on Volcan Wolf but no living animals. Presumably the vast lava fields proved too much for them and either they died out or were hunted out by fishermen: they never became numerous. Likewise, though goat droppings have been reported at Tagus Cove, the goats themselves have never been seen, so there cannot be many of them. On Volcan Alcedo there are certainly some goats and the Park Service is prudently trying to eradicate them but they show no signs of a population explosion such as produced the tens of thousands which devastated the vegetation of James or Pinta. Is northern Isabela too dry? Do these three volcanoes lack a moist area to which the goats can retreat during dry spells, as they do on James? The researches of CDRS staff scientist, Lucho Calvopiña, may provide the answer.

### SHEEP

In the temperate zone, sheep have a reputation for over-grazing and damaging fragile island vegetations. Sheep were introduced in the Sierra Negra area of southeastern Isabela in 1962 and were mentioned in CDRS reports for 1964. They now appear to be extinct, perhaps because of predation by the feral dogs, which are otherwise the greatest single threat to wildlife on Isabela.

#### **MONKEYS**

There is a record of three monkeys (species unknown) on Floreana in the 1930s but they all died. The cause of their death is not clear.

#### DEER

A male and a female were introduced on San Cristobal in 1966. Deer have become major pests in other countries but this pair had disappeared within the year.

# RABBITS

In 1965, and probably before that, there was a small colony of rabbits on the San Cristobal pampa, where they might have become a scourge as in Australia, Laysan and other dry habitats. J. Gordillo, Darwin Station representative in San Cristobal, reports that there is no longer any evidence of survival. Was the area too moist or the colony too small?

## **GUINEA PIGS**

A CDRS report of 1965 pointed out pessimistically that guinea pigs run free in highland households on Santa Cruz and San Crisobal and might well join the other prolofic feral species. However there is no evidence that th is has yet happened, perhaps because they are too domesticated to survive outside the farmhouse.

#### ANIS

As recently as 1980, a group of five Anis was reported on Santa Cruz. Rumour has it that these birds were deliberately introduced in the vague hope that they might control ticks on cattle. M.P. Harris (Field Guide to the Birds of the Galapagos, 1974) lists three previous records and states his conviction that such notoriously feeble fliers could not have flown the 1000 kilometres from the continent. Did these earlier introductions fail because the colony was too small? If the Ani became established it could compete seriously with the Galapagos Mockingbird and become a major predator on nesting landbirds; so to be on the safe side the National Park Service is trying to remove these invaders before they can spread.

#### DOMESTIC HENS

While there is so far no firm evidence that the chickens have gone feral, they have certainly transmitted their pox-virus to the wild birds. The domestic fowls are little troubled by this infection but it cripples and kills the native finches and mockingbirds which have not developed immunity.

While it is cheering to record that some ferals have failed, the CDRS is highly conscious of the fact that too many have succeeded in the past and that there is a constant threat for the future. C.S. Elton (The Ecology of Invasions by Animals and Plants, London 1958) suggests that most of the world is already so altered that humans must cease thinking in terms of "natural" habitats and instead plan the altered ones. But one of the special features of the Galapagos is that so many of its habitats are still more or less intact. Of the larger islands, only Fernandina can claim to have no known introduced species whatsoever but, taking the Galapagos as a whole, it can be said that "no other archipelago is at the same time as extensive, as isolated and as undisturbed by man" (P. Kramer in Noticias No. 31). Still Elton's point is valid at least in the sense that we must plan to manage what has been miraculously preserved. Goats have been eliminated from Plaza, Santa Fe, Rabida, Espanola and Marchena. Active studies and campaigns are under way in 1981 to control rats, dogs, cats, pigs, fire ants. Nobody likes these programmes, quite apart from their great expenditure of manpower and funds, but man has upset the balance of nature and only man can restore it — even partially. There may be no way of completely eradicating some of these pests but, given sufficient support, they can all be brought under an adequate degree of control.

Perhaps the worst danger is something no-one has yet thought of — some unknown organism that would wreak destruction among the flora or fauna, so vulnerable because isolation had given them no immunity. Therefore we need a strong team of scientists of various disciplines to detect dangers and take action before they get out of hand. In the Galapagos the price of conservation is eternal vigilance.



Little Ground Finch (Geospiza fuliginosa) Photograph by Peter Grant