

Case studies (continued)

7) Black Robin

- Endemic to Islands off the coast of New Zealand (quite a ways).
- Had been reduced to 1 breeding pair before recovery.
- Although a large part of the native fauna had been exterminated by the 14th century (18 taxa of birds), the Black Robin was generally unaffected until the arrival of Europeans in the 19th century.
 - usual story of cats, rats, etc., though this time rabbits were also introduced. These were apparently creating a problem, so cats were introduced to control the rabbits. The cats did exterminate the rabbits, but also exterminated an additional 12 species of bird. The black robin hung on on one of the smaller islands (though habitat was not ideal).
 - They were thought to be stable until color banding showed that the same few birds were consistently sighted.
 - An eventual transfer of the remaining birds back to a larger island proved successful.
 - Important - a big reason for the success was cross-fostering. Basically placing the eggs into the nests of other birds, and letting them raise the young.
 - Initially this created imprinting problems until the young were removed as fledglings.
 - The population has since increased to over 140 birds when the text was published, and now 250 birds . The New Zealand Department of Conservation is attempting to set up another population.
 - All birds descended from a single female that didn't even breed until she was eight years old!

8) African Elephant

- Note: the Asian elephant is probably in worse danger (at least the wild populations - the domestic ones are doing fine).
- Range used to include most of Africa, but has been getting smaller for centuries. Even early Roman writers noted that it's population was shrinking (locally, of

course).

- Several factors are driving the elephant populations down:

- habitat loss - where human populations are expanding, the elephant loses out. East Africa had a growth rate of 3% for much of the 20th century (that's a doubling time of less than 23 years!!).

- illegal hunting - ivory is very valuable, and generally the case is made that it's poaching that impacts elephant populations the most. Because of this, all ivory trade was banned in 1990. This had an immediate positive effect. Some elephants were still killed for food, and not all countries had adequate funds to control trade/poaching.

- the text makes a case for habitat loss being more important, but several indicators seem to show otherwise:

- poaching in Kenya was reversed after the introduction (believe it or not) of helicopter gun ships to control poaching. Elephant populations have recovered somewhat, or at least have stopped declining as fast (poachers were using automatic weapons).

- attempts by some countries to be allowed to export ivory legally have been consistently turned down. It is felt that any legal ivory on the market would spur poaching. A one time sale of stockpiled ivory was permitted recently (2000).

- sometimes one government agency doesn't know what another one is doing. While in the Sudan in 1985, I was told that the ivory in Khartoum could be legally exported to the United States (according to the State Department). The elephant was already recognized as being endangered by the Fish and Wildlife Service, so obviously importing the ivory (and there was lots of it!) was illegal.

- however, with the reduction in the ivory trade, habitat destruction is becoming more important as the major threat to elephant populations.

- in some countries, elephants are now real pests. The governments must cull herds to keep down human-elephant conflicts.

- one could spend an entire semester on this species alone.