



(US Fish and Wildlife Service)

There really is no free lunch in the world of environmental restoration, and often the consequences are difficult to predict.

Last month, [Scientific American reported](#) that 41 bald eagles were found dead on Rat Island in the western Aleutians after an aggressive rat extermination effort. Rat Island was so named because it had been overrun with Norway rats descended from the survivors of a 1780 shipwreck. Because the rats were devastating native ground-nesting birds, the US Fish and Wildlife Service, in cooperation with The Nature Conservancy and Island



Conservation, decided to poison them.

An [environmental assessment](#) based on small-scale testing concluded that the rodents would die in their burrows, where they would not be available to scavenging birds. When the full-scale poisoning was done, however, blanketing the island with enough poison to kill all the rats, dozens of eagles and gulls turned up dead.

Now testing at the National Wildlife Health Center [has confirmed](#) that the birds were in fact poisoned by the rat bait. Scientists think that glaucous-winged gulls may have eaten the poison cake, and then been preyed on by the eagles. The eagle death toll now stands at 43.

The good news is that [the rats do appear to have been wiped out](#), and a variety of sea birds are returning to nest on rat-free Rat Island. So the short-term costs in eagle deaths may well be outweighed by the long-term benefits of making the island once again available for ground-nesters. The cautionary tale is that the EA missed the threat to birds. That should be a reminder to the drafters of environmental studies to consider all the pathways by which harm might materialize, not just the ones they think are most likely.