



Creating the Nation's first BioPark

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Letter from the Desk of David Challinor  
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This letter concerns wolves and turtles, an unlikely combination of animals to appear in the same newsletter. These twin subjects and their interaction were brought to mind recently (October 17) when a pair of red wolves were put on exhibit at the National Zoo's Beaver Valley. The importance of the occasion was noted by the participation of both Secretary of the Interior Lujan and Smithsonian Secretary Adams, for it celebrated the Zoo's participation in a red wolf breeding and reintroduction effort that had begun elsewhere several years ago.

First, about the wolves: the red wolf (Canis rufus), unlike its more common relative, the grey wolf (Canis lupus), is an endangered species. As the smallest and most secretive of the world's wolves, it started disappearing from its original range in the forests of southeastern United States before many realized how rare it had become. Human encroachment plus hunting pressure evidently reduced the red wolf population to the point where individuals became so isolated that they started to hybridize with the slightly smaller coyote. A few years ago, in a major effort to save the species before its genes became too diluted, seventeen red wolves thought to be relatively pure wolf stock were captured from the wild and used to establish breeding pools in carefully selected facilities throughout the country.

The pair now at the National Zoo was raised at the Point Defiance Zoo in Tacoma, Washington and now occupy the Beaver Valley run formerly used by our aged pair of grey wolves. The latter are presently so numerous in zoos that there is no demand for young zoo-bred grey wolves. Red wolves, on the other hand, are needed for restocking some of the large, federally owned, contiguous forest tracts still remaining in the southeast.

Among the sites chosen for release of a radio-collared pair of red wolves is Bull Island, located off the South Carolina coast northeast of Charleston and in the center of the Cape Romain National Wildlife Refuge. I spent Christmas vacation on this island as a child (about 1930), when it was a privately owned hunting facility, well-known for its duck and turkey shooting. After World War II the heirs of this and other privately owned sites gave or sold their property to the Fish and Wildlife Service to create the Refuge. About 1971 I revisited Bull Island



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the education and recreation of the people."

with my son and can vouch for its suitability as a red wolf release site. Although the feral goats and cattle of the 1930's have been eliminated, there are still feral pigs and a multitude of prey species for the wolves.

This island of about 20 square miles was devastated by hurricane Hugo in 1988, which went directly over it and felled much of its pine forests. The then recently released wolf pair fortunately survived and even bred last spring. Wildlife Service scientists, by monitoring their prey, have learned that the wolves feed primarily on raccoons, rabbits and some deer, all of which are in great abundance on the island.

Now for the connection between the wolves and the turtles: the wolves are actually helping the turtles to survive on the island. The large number of raccoons taken by the wolves benefits the conservation of nesting loggerhead turtles who use the long, sandy beach on the island's ocean side for their nest holes. Raccoons are perhaps the principal consumers of turtle eggs, thus the presence of the red wolves is an important component in sustaining biodiversity on this refuge.

Although the link between wolves and marine turtles may at first seem remote, it soon becomes clear that a wolf presence can have many, often unanticipated, wide effects. With increasing understanding of the role of wolves in nature, their legal protection from indiscriminate slaughter has been relatively successful. With such protection grey wolves have expanded their range from northeastern Minnesota to Wisconsin and northern Michigan. In Montana, timber wolves are moving south from Canada with the most southern resident group now near Missoula, about half way between the Canadian border and Yellowstone Park. By the time local ranchers and Park Service officials reach a decision in their long drawn arguments over reintroducing the grey wolf to Yellowstone, the wolves might make it there on their own.

Scientists know much less about the habits of red wolves than about the larger grey ones. However, as a result of the cooperative breeding program in which the National Zoo is now participating, the red wolf population should increase in size to where its reintroduction into former habitats could become as feasible and successful as that of the Zoo's Golden Lion Tamarin program in Brazil, about which I have previously written.

Tamarins, ferrets, and now red wolves are three good examples of how habitat destruction can threaten to extirpate mammal species. Our reintroduction programs are an equally good example of how zoologists and environmentalists can fight back. More such species will undoubtedly be included, but our rapidly expanding experience in combating these extinction threats gives hope for the future of seriously threatened animals.