

Readers interested in endangered species in general and those that occur in national parks in particular may want to look up the March 8, 1991 issue of **Science** for articles by Chuck Fergus ("The Florida Panther Verges on Extinction") and by Stephen O'Brien and Ernst Mayr ("Bureaucratic Mischief: Recognizing Endangered Species and Subspecies"), and the July 19 issue for provocative letters commenting on these articles and answers by the authors.

The implications for those trying to protect and perpetuate threatened or endangered species, and for those who must decide what shall be protected, would appear to be confused, complex, and profound. What are the operational definitions of "species," "subspecies," and "populations" as they relate to protection afforded by the Endangered Species Act of 1973? In the case of the Florida panther, does the discovery that two very distinct genetic stocks are represented in the surviving animals mean that they are now unprotected, due to the Interior Department's "Hybrid Policy"? And how might the unresolved dilemma be exploited by development interests targeting panther habitat?

The gray wolf (*Canis lupus*) and the red wolf (*Canis rufus*) are similar cases in point. Is the red wolf today a hybrid between gray wolf subspecies and coyotes, and thus imperiled by strict enforcement of the Hybrid Policy? Already that policy has prompted a formal petition from the Farm Bureaus of Wyoming, Montana, and Idaho to remove the gray wolf from the Endangered and Threatened List. Similar logic has been used to prevent reintroduction of gray wolves into Yellowstone NP.

In the July 19 Letters column, some high-powered experts from various backgrounds go at the problems being raised – whether species should be defined on the basis of process or pattern, whether molecular data always provide final answers, how increasing knowledge of the natural occurrence of hybridization should affect management policy –. Although none of the questions raised are laid to rest, and only more questions are suggested, a reading of these two issues will deepen (and darken) the maze out of which operational decisions will emerge.