eral (five to seven) research groups were gathered together—on the basis of sometimes questionable affinity—and granted a bulk sum to be shared (approximately \$6000 per single group, on average). A small number of the actually "coordinated" projects were also funded, but these grants did not exceed and often fell well (50%) below those of the originally single proposals. As is CNR's tradition, these funds will likely be available to research groups in several months.

Government funding policies contrast with those of private funding agencies, including the Italian Association for Cancer Research and the Telethon Foundation, which have been granting adequate funds to highly selected groups for the past several years. For a number of reasons, CNR committees dare not adopt the rigorously selective criteria used in most developed countries. The rising costs of scientific research, an inflation rate of the national currency likely to exceed 5% this year, and its considerable devaluation make international competition extremely difficult for Italian research groups.

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The Cost of Downsizing

In Lewis Carroll's *The Hunting of the Snark* (1), the Bellman cries, "I have said it thrice: What I tell you three times is true." John H. Gibbons, the Assistant to the President for Science and Technology, similarly prepares us for an incorrect conclusion in his editorial "The politics of science" (14 July, p. 143) when he asserts that "the spendthrift budgets of the 1980s and early 1990s were unsustainable and mortgaged much of our national future. To pay that inherited mortgage, we have made significant changes in the federal research system by downsizing, restructuring, and deregulating. We will need to do even more."

Downsizing can lead to a diminishment not only of research but also of future business profits, if new scientific ideas are not developed that lead to the industries of the future. Nobody decades ago would have predicted that so much of our economy would involve computers or lasers. Might the BoseEinstein condensation, recently discovered in a government-supported laboratory (2), be the base of future huge industries? Or might new scientific ideas based on observing the Bose-Einstein condensation or other new laboratory developments lead to importantly profitable ventures? We cannot know in advance, but the record shows that basic research can eventually pay off big. Even Michael Faraday was once questioned as to what good this newfangled relation between electricity and magnetism could possibly be. So it seems shortsighted to do "even more" downsizing, and I am sorry to see the President's science adviser calling for it.

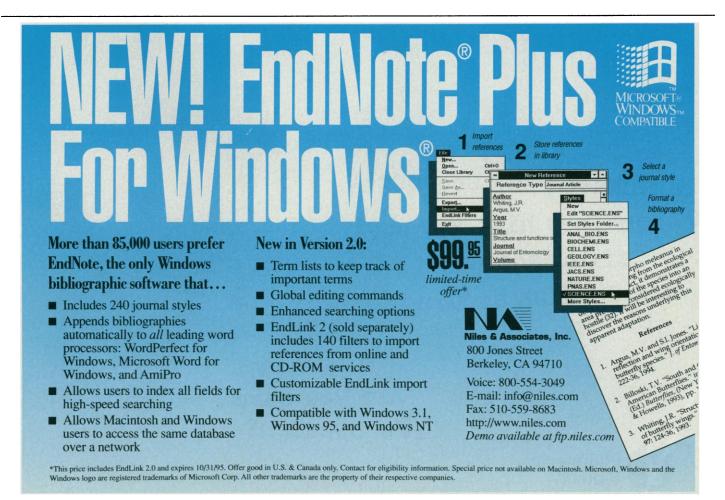
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References

- 1. L. Carroll, in *The Annotated Snark*, M. Gardner, Ed.
- (Simon and Schuster, New York, 1962).
 M. H. Anderson, J. R. Ensher, M. R. Matthews, C. E. Wieman, E. A. Cornell, *Science* 269. 198 (1995).

Land for Florida's Fauna

In the news article "Filling in Florida's gaps: Species protection done right" (Frontiers in Biology: Ecology, 21 July, p. 318), Charles C.



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Mann describes efforts to preserve wild lands for unique or threatened animal populations. However, the Florida scrub jay, the example used to describe our population viability analyses (PVAs), is the topic in the weakest section in our report (1). As we point out, new maps of scrub jay distributions emphasize several new nesting areas. The primary problem is that scrub jay habitat has been difficult to identify statewide without field surveys (2). The land-cover data are particularly weak in Brevard County, which has a substantial scrub jay population. Also, our selection of sites for scrub communities and scrub jays elsewhere in Florida relied heavily on analyses performed by many other organizations, which also deserve credit for their work (3).

In the article, Reed Noss, editor of Conservation Biology, suggests that we have not accounted for the importance of connecting populations of animals that may be isolated and unable to mix or interbreed. Some of the species we analyzed were birds that do not require physical habitat connections. We also focused on populations that could be meaningfully connected, and others seem to agree with our approach. A recent study (4) concludes that most bear populations in the southeastern United States—including those on large public lands in Florida—are effectively isolated and should be managed as such.

The connections we highlighted also were empirically based. For example, we have observed four bears moving from the Ocala eastward into commercial forestry lands in Volusia, St. Johns, and Flagler counties. We also have clusters of bear roadkills at the junctures of roads and certain forested wetlands that lie between the Ocala and these commercial forestry lands. The connecting corridors between the bear population in the Ocala and the population to the east were highlighted in our report (1). Although we may not have identified all the potential corridors that exist, we have identified many of the most important ones. The commercial forestry lands east of the Ocala also support swallow-tailed kites, another species of concern in this region. Jim Cox

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References and Notes

- J. Cox, R. Kautz, M. MacLaughlin, T. Gilbert, Closing the Gaps in Florida's Wildlife Habitat Conservation System, Nongame Wildlife Program Technical Report (Florida Game and Fresh Water Fish Commission, Tallahassee, FL, 1994).
- J. W. Fitzpatrick, B. Pranty, B. Stith, Florida Scrub Jay Statewide Map, 1992-93, Final Report by Archbold Biological Station for U.S. Fish and Wildlife Service Cooperative Agreement 14-16-0004-950 (U.S. Fish and Wildlife Service, Washington, DC, 1994).

- Archbold Biological Station, Nature Conservancy, Florida Natural Areas Inventory, Vero Beach office of the Florida Game and Fresh Water Fish Commission, and several others.
- 4. J. Wooding, J. Cox, M. Pelton, Proc. Annu. Conf. Southeast. Assoc. Fish Wildl. Agencies, in press.

Corrections and Clarifications

- In the news article "Filling in Florida's gaps: Species protection done right" by Charles Mann (Frontiers in Biology: Ecology, 21 July, p. 318), the university affiliation of Larry Harris was incorrect. He is at the University of Florida.
- In reference (1) on page 1202 of the letter to the editor "Ecological research" by A. R. Blaustein (1 Sept., p. 1201), and in line 19 of the response by W. Roush (p. 1203), the year of publication was given incorrectly as 1991. The correct, entire reference is A. R. Blaustein, D. G. Hokit, R. K. O'Hara, R. H. Holt, *Biol. Conserv.* **67**, 251 (1994).
- In the caption of the photograph accompanying the Perspective "Genetic networks" by W. F. Loomis and Paul W. Sternberg (4 Aug., p. 649), the name of the sculpture should have been given as "Mozart I," and the sculptor, Kenneth Snelson, should have been mentioned.
- In the editorial "Punctuated equilibrium in scientific publishing" by Ellis Rubinstein (9 June, p. 1415), the first name of Gerard Piel was spelled incorrectly, and his year of retirement, and that of Dennis Flanagan, should have been given as 1984, not 1986.

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