

A National Biological Survey: **Some Issues, Concerns, and Historical Background**

A Memo from the GWS Executive Office

By the time you read this, the Clinton Administration is to have officially proposed the creation of a National Biological Survey (NBS). The idea was announced in March 1993 by Secretary of the Interior Bruce Babbitt. All indications are that the NBS will be a separate agency within the Department of the Interior. The purpose of the NBS is to inventory the USA's biological resources, and to assay the nation's biodiversity.

On a more political level, the NBS could—by virtue of taking a proactive, ecosystem approach—conceivably head off paralyzing conflicts under the Endangered Species Act. As Babbitt said in a newspaper interview in March, the NBS could allow the government “to spot the problems coming while there's still flexibility and time to deal with them” rather than trying to address ecosystem issues after economic and environmental interests have locked horns.

The agency that will be affected most by the creation of the NBS is the U.S. Fish and Wildlife Service. It appears that most of the NBS's proposed funding will be transferred from the USFWS and USNPS, with other Interior agencies contributing lesser amounts. The nucleus of the NBS will be USFWS's existing research establishment. In some ways, the NBS will be patterned after the U.S. Geological Survey, whose genesis in 1879 came about as a collaboration between the Interior department, the Smithsonian Institution, and the National Academy of Sciences. The NBS would also seek cooperation with other non-Interior agencies (such as the U.S. Forest Service and state agencies). The Smithsonian has already expressed its enthusiasm for the NBS.

What we'd like to do in this memo is lay out a few of the issues and concerns that have been raised about the NBS. We also will discuss in some greater detail a few of the possible effects on the USNPS science program, which, perhaps, is in the most tenuous position of those that will be affected. (There is, in fact, a precedent in USNPS history for national park biological programs being conducted by other agencies.) We must emphasize that the information offered here should not be taken to imply any official judgment by the George Wright Society on the merit of creating an NBS, for none has been made.

There seems to be little disagreement that doing a nationwide survey of biological resources would be a worthy endeavor. Such an inventory is a pivotal part of the data sets needed for scientific management of protected areas. (The article in this issue by Gregg, Serabian, and Ruggiero is a case in point.) No such inventory of the USA exists, although many individual elements do, scattered among the files of universities, government agencies, and non-governmental organizations (especially The Nature Conservancy). Presumably the NBS will not only pull together and harmonize this disparate in-

formation, but will do extensive original research on biological richness and biodiversity.

One of the objectives of the *Global Biodiversity Strategy* (WRI, IUCN, and UNEP 1992) is to "establish or strengthen national or subnational institutions providing information on the conservation and potential values of biodiversity." The NBS could potentially coordinate the flow of information on biological resources to communities and users of that information. Sectors of society which could benefit from an NBS include education, agriculture, tourism, planning, forestry, biotechnology, investment, fisheries, and others. It is possible that the NBS could comprise database and collections management, inventories, monitoring, and other research functions. An effective NBS could help create successful regional management regimes in which protected area conservation is integrated with that of agriculture, forestry, fisheries, watersheds, and environmental services. And the NBS could raise the public's awareness of the importance and value of biodiversity (as opposed to charismatic individual species) and the healthy ecosystems upon which biodiversity depends.

Other countries have taken what is basically the same idea and adapted it to their own needs—in the process producing some innovative institutions. Probably the best example is from Costa Rica, where a private nonprofit organization, the Instituto Nacional de Biodiversidad (INBio) was created in 1989. INBio has launched a national inventory of Costa Rica's rich biodiversity. To pay for this, INBio is proposing to broker naturally derived chemical substances to industry, particularly biotechnology. INBio has also been widely praised for its employment of paraprofessional taxonomists: people who are trained to identify species from their locality, thus giving local residents an economic stake in protecting ecosystems (WRI, IUCN, and UNEP 1992). In sum, the potential of a U.S. National Biological Survey could conceivably go well beyond merely documenting biological resources and their diversity.

There are, however, many concerns that have been raised about the effect a new agency would have on biological research focused on and based in protected areas. The concerns are particularly acute with respect to USNPS, whose science program is only now beginning to emerge from a long period of languor. Just last year, the National Research Council's Committee on Improving the Science and Technology Programs of the National Park Service recommended giving the agency's science program "substantial organizational and budgetary autonomy"—though it is apparent the Committee had in mind autonomy *within* the USNPS, not the creation of a whole new agency (National Research Council 1992). The mechanics of creating a separate agency raises a series of questions:

- Will the NBS increase or decrease USNPS direct access to scientific expertise for dealing with resource issues? Will the USNPS have to pay NBS to do the research?
- Will the current trend within USNPS—toward the use of research information in decision-making and the emphasis on resource management—be reversed if USNPS scientists are removed as internal advocates? Who would be left within USNPS to advocate research?
- Where will national parks and other protected areas fit into the NBS's priorities? Since parks and other protected areas are such a small part of the country's land base, and because there may be a perception that they are not as much at risk as multiple-use lands, how much attention will they receive in a national inventory?

- How will the NBS react to changing politics in the Secretary of the Interior's office? Could a future, less-supportive, Administration undermine long-term projects? Could such an Administration manipulate the results?
- Might a career ladder develop in which junior scientists cut their teeth in the USNPS, only to move on to the NBS to address national-level biological concerns?

It may be of interest to reflect on the historical precedent for these concerns (for which we rely on a March 18, 1993, memorandum by Richard West Sellars, a USNPS historian; for more background on the history of science in the agency, see Sellars' article in this issue).

On the first day of 1940, Secretary of the Interior Harold Ickes transferred the USNPS's wildlife biologists to the Bureau of Biological Survey, who were then assigned to an office devoted to national park concerns. The effect of this removal is not clear. The USNPS's science program was already in decline in the late 1930s following George Wright's death in 1936, and all of the agency's programs were weakened by the advent of World War II. Ickes' motivations for the reorganization were varied, but probably his main concern was to centralize all federal land-managing agencies within the Interior Department, which was to be renamed the Department of Conservation.

Later in 1940, the Bureau of Biological Survey—which itself had been transformed, over the years, from a wildlife survey into an agency devoted to game management and predator control—was merged into the agency which is now known as the USFWS. The USNPS biologists stayed within Fish and Wildlife until the mid-1940s, when they were repatriated to the Park Service. USNPS's biology programs did not begin to gain strength again until the 1960s.

So park-related science programs were not strengthened by being removed to another agency. Yet it is an open question whether the separation itself or World War II or some other factor was the reason. Moreover, science programs within the USNPS languished for years before beginning to garner increased support.

The next few months will be ones of momentous decision, and we hope you will consider the pros and cons of an NBS carefully as events unfold. It goes without saying that the Society will be watching things closely. A National Academy of Sciences committee has been created to offer advice on how to organize the NBS, and is expected to report in September. At some point in the process the Society may be asked to provide formal information or state an official position. To help us prepare, we'd like to hear what you think. One of the suggestions we've already received is that the Society recommend that a section of the NBS be entirely devoted to research and inventory in protected areas such as parks and wilderness areas. The organizational structure of the NBS likely will be decided within a matter of weeks. Please send your comments ASAP to the Society's Hancock office and we'll make sure that they reach the Board of Directors.

References

- National Research Council. 1992. *Science and the National Parks*. Washington: National Academy Press.
- WRI, IUCN [The World Conservation Union], and UNEP [United Nations Environment Programme]. 1992. *Global Biodiversity Strategy*. Washington: WRI, IUCN, and UNEP.