

SCIENCE

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Information for Contributors appears on pages 37–39 of the 7 January 1994 issue. Editorial correspondence, including requests for permission to reprint and reprint orders, should be sent to 1333 H Street, NW, Washington, DC 20005.

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LETTERS

Volunteers and the NBS

This winter, Congress will decide whether to prohibit the new National Biological Survey (NBS) from using data gathered by volunteers. Based on our experience with the National Audubon Society Christmas Bird Counts (CBC), we believe that volunteer data can and do provide important biological information. We strongly urge that they remain fully available for national resource management.

As reported in *Science* (News and Comment, 20 Aug., p. 976), the NBS will assemble the scientific functions of the Department of the Interior into a single agency to measure and monitor the biological state of the nation. Legislative mandate for the NBS awaits reconciliation of Senate and House bills. The House version includes an amendment that specifically forbids the NBS to use data gathered by volunteers. Author Representative Billy Tauzin (D-LA) argued that volunteers would likely have a special environmentalist agenda and will collect biased data. Representative Jack Fields (R-TX) added that “in essence we are creating an environment Gestapo that will go on people’s private property.”

Both arguments are spurious and insulting to the tens of thousands of volunteers who participate annually in the CBC (1), the longest continuous record (unbroken since 1901) of avian diversity and distribution in North America. CBC data have been used for hundreds of unbiased, scientific studies on a range of spatial and temporal scales that no other biological data for the continent permit (2). Comparison to data collected by U.S. Fish and Wildlife Service professionals has validated the accuracy of CBC data except for numbers of extremely gregarious species and incidence of extremely rare ones (3); contrary to the alleged environmentalist agenda, CBC data often underestimate the latter. Contrary to Fields’ Gestapo vision, our participation in CBCs has impressed us with the respect volunteers show for both private and public property. For example, on the Corvallis, Oregon, count for 1993, one team leader had obtained permission from farmers whose fields and ponds were visited, and even from the Department of Transportation to visit a state gravel pit.

Ironically, while Congress contemplates excluding volunteer participation from the

NBS, a growing number of efforts to characterize biological systems on the national level are heralding the benefits of volunteer data collection (Random Samples, 24 Dec., p. 1976). As the CBC and other programs have found, these benefits include not only the data but also individual pride in learning about and appreciating our national natural heritage.

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Research on Chemical Demilitarization

I write to describe unusual problems in the funding of an international study of how best to destroy chemical warfare agents (“poison gases”).

In 1991, the International Union of Pure and Applied Chemistry (IUPAC) set up a special Task Force on Scientific Aspects of the Destruction of Chemical Warfare Agents and designated me to chair it. The main objective of the task force is to identify research needed to guide the choice of methods to destroy the world’s enormous stockpiles of chemical warfare agents (reportedly 32,000 tons in the United States, 40,000 tons in Russia, and more than 100,000 tons at the bottom of the shallow Baltic Sea, as well as major caches elsewhere). The task force comprises 12 scientists who come from seven nations, some of them distinguished for fundamental research in relevant areas, others leaders in the chemical warfare units of military organizations.

But impoverished IUPAC provided no funding in 1991, and only \$2000 in 1993.