Samples, 21 Apr., p. 371) is interesting and may indeed represent a unique case of predator-induced hatching. However, the further statement attributed to Gordon Orians that this may be the first case of hatching behavior "that might improve survival" is incorrect. The grunion, an atherinid (silverside) fish of California and Baja California, buries its eggs in the sand just following the peak of a high tide series. The eggs remain in the damp sand above the water line and are excavated 2 weeks later by the next ascending tide series. The embryos are ready to hatch in 1 week, but do not do so until dug out and tumbled by the waves. In fact, grunion eggs will not hatch unless agitated (*2*). The immediate and synchronous hatching of the mobile larvae as soon as they are freed of the sand has obvious survival value in terms of predator avoidance and possibly predator satiation.

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National Biological Service

In a Random Samples item (20 Jan., p. 335), it is stated that the National Biological Service (NBS), as envisioned by Secretary Bruce Babbitt "would . . . inventory every animal and plant species in the United States." This statement is at the heart of considerable confusion and erroneous perceptions concerning the NBS mission, which is to help provide the scientific understanding and technology needed to support the sound management and conservation of our nation's biological resources. Its primary role is to meet biological research needs of other bureaus in the Department of the Interior and provide information for other federal agencies, states, tribes, and private institutions and other users.

While survey functions are important to the NBS, they are not primary. Many national wildlife refuges, national parks, and other lands managed by the Department of the Interior still lack comprehensive biotic surveys of even the common plants and terrestrial vertebrates. Whatever the merits of an inventory of every plant and animal species in the United States, the NBS was not designed to attempt such a program.

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Radioactive Waste Storage

As chairman of Californians for Ward Valley, a broad coalition of individuals and organizations in the scientific, health care, business, and academic communities, I am concerned about the continuing attacks on the National Academy of Sciences (NAS) by the opposition to Ward Valley, as outlined in a recent article (News & Comment, 21 Apr., p. 358).

The kinds of erroneous and emotional charges leveled against the NAS by Senator Barbara Boxer (D–CA) and opposition groups led by the Committee to Bridge the Gap (CBG) are designed to achieve political goals by attempting to undermine the credibility and scientific integrity of the NAS.

It is important to recognize that the opposition is intent on stopping society's use of radioactive material. They do not seek to ensure a safely operated project, but rather to stop the facility altogether. Because of the delays in gaining approval of the Ward Valley facility, low-level radioactive waste is

currently being stored temporarily in more than 800 sites, primarily in urban areas, across California. Each month, California's hospitals, universities, biomedical companies, industrial manufacturers, and electric utilities produce more than 10,000 cubic feet of low-level radioactive waste for which a single, permanent remote site is urgently needed.

The U.S. scientific community should be aware that Ward Valley opponents will go to any lengths to defeat this project, even if it means attacking the credibility of one of this country's oldest and most respected institutions. For those who care about supporting the independence and integrity of the NAS—regardless of the outcome of this study—this is a time to stand and be counted.

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Songbird Ecosystem Function and Conservation

Scott K. Robinson *et al.* (Reports, 31 Mar., p. 1987) recently demonstrated that reproductive success of songbird species in the midwestern United States is positively correlated with the area of the nesting habitat. In light of these results, they advocate preservation and reestablishment of "macrosite" habitats as critical to long-term conservation of songbirds. Their work provides the strongest evidence now available that fragmentation of nesting habitat in temperate regions contributes to declines observed in the populations of numerous songbird species. Robert A. Askins (Perspective, 31 Mar., p. 1956) notes that declines in the populations of songbirds could have negative ecosystem-wide consequences because songbird predation can dampen population eruptions of leaf-damaging insects. We concur with this perspective, but we also emphasize that the ecosystem impacts of songbirds may be more profound than that suggested by Askins. We recently demonstrated (*1*) that songbird predation on leaf-damaging insects enhances biomass production of saplings of economically important tree species, even at endemic population levels of these insects. Our findings, contrary to some previously held views (*2*) of trophic interactions of terrestrial ecosystems, are similar to those reported recently in which wolf predation on moose was shown to positively affect biomass production in trees of boreal forest (*3*). Our results from temperate deciduous forests, together with those from boreal forests, indicate the importance of cascading trophic interactions on terrestrial ecosystem function and processes, and lead us to echo the poetic verse of Aldo Leopold (*4*), "To save every cog and wheel is the first precaution of intelligent tinkering." Macrosite establishment may not be the only management strategy necessary to conserve songbird species, but it is an urgent one.

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