Volunteers, Birds, and Conservation

Guest Editorial by Frank Gill

Conservation, a nonprofit enterprise, is by definition poor in dollars, but rich in talent, enthusiasm, and commitment. Despite perennial poverty, conservation organizations can claim success due to model economic performance. The secret? Special people called volunteers. Vols, as they are lovingly dubbed by some, provide motivated talent at an affordable price.

In an age of rising labor costs, Vols provide the best possible antidote to government personnel rules and unionized prohibitions of individual initiative. And what an antidote they are! Organizations like Hawk Mountain Sanctuary Association near Reading, Pennsylvania, have depended on volunteers since their inception. Last year, volunteers contibuted 13,393 person hours to HMSA's research, education, and conservation programs, more than five full-time staff positions.

Volunteerism thrives. Roughly two of every five Americans volunteer, averaging 4.7 hours per week, more than 8 million hours of unpaid work per week. Corporate America routinely encourages executives to contribute their time and expertise to essential community service. Church, human, and educational services rank as the top choices.

Beyond community service, few sciences are based as fully on the contributions of volunteers as is ornithology. The study and conservation of birds has only recently become the domain of university-trained, paid professionals, or "pointy headed academics," as some call us. The number of professionals is truly small, however, in relation to the long-standing and burgeoning participation of the birding community. Hundreds of thousands of volunteers contribute personal time to gathering valuable field data, and to the management of professional societies and bird clubs. To conservation initiatives, Vols also contribute their personal money—and lots of it.

More than well-financed advocacy, effective bird conservation programs must be based on scientific information. Management of the environment and stewardship of our natural resources can only be as wise as the information available at decision time. Information is the key to good science and adequate information requires armies of expert labor. Ornithology has those armies. The venerable Christmas Bird Count organized by the National Audubon Society boasted 43,000 participants in its 94th annual effort.

Volunteers provide the primary source of reliable information on the status and trends of wintering bird populations in North America. Mirroring those data are the results of the United States Fish and Wildlife Service's Breeding Bird Survey and the breeding bird atlases, which have been completed or are underway in most states and provinces in North America. BBS routes and cenuses of breeding bird atlas blocks are the province of skilled volunteers that

CERULEAN WARBLER

The Cerulean Warbler is an ethereal species. Few people ever view the male's azure back, which lends the bird its name, because this warbler haunts the treetops. Even in migration it seldom nears the ground. The Cerulean relies on large tracts of large trees, preferring to nest in forests of at least 600 acres with a high, closed canopy of live trees over 12 inches in diameter at breast height. It thrives most in old-growth floodplain forests of Appalachia and the Mississippi valley.

Each year, warblers returning from their South American wintering grounds have an increasingly difficult time finding forests that fit their requirements. Woodlands managed for timber production seldom grow old enough to provide good habitat; even areas of old, large trees grow increasingly fragmented. Because of the inaccessibility of their nests, the breeding biology of Ceruleans is not well understood, but it is feared that they are frequent hosts to eggs and young of the parasitic Brown-headed Cowbird.

In South America the warbler is also fussy in its habitat requirements. It winters only in a narrow band of humid evergreen forest, between 2000 and 4500 feet in elevation, on the east slope of the Andes, an area that has come under great pressure. The timber is valuable. A relatively temperate climate also makes the area conducive to growing coffee, cacao, coca, rice, and other crops. The conversion of large tracts to agriculture has left pockets of undisturbed forest only in a few preserves and remote regions.

The Cerulean forages in mixed-species flocks in these forests. It is not known how species in such flocks rely on one another, but a reduction in the numbers of one—a year-round resident tanager, for example—might have ripple effects on the rest.

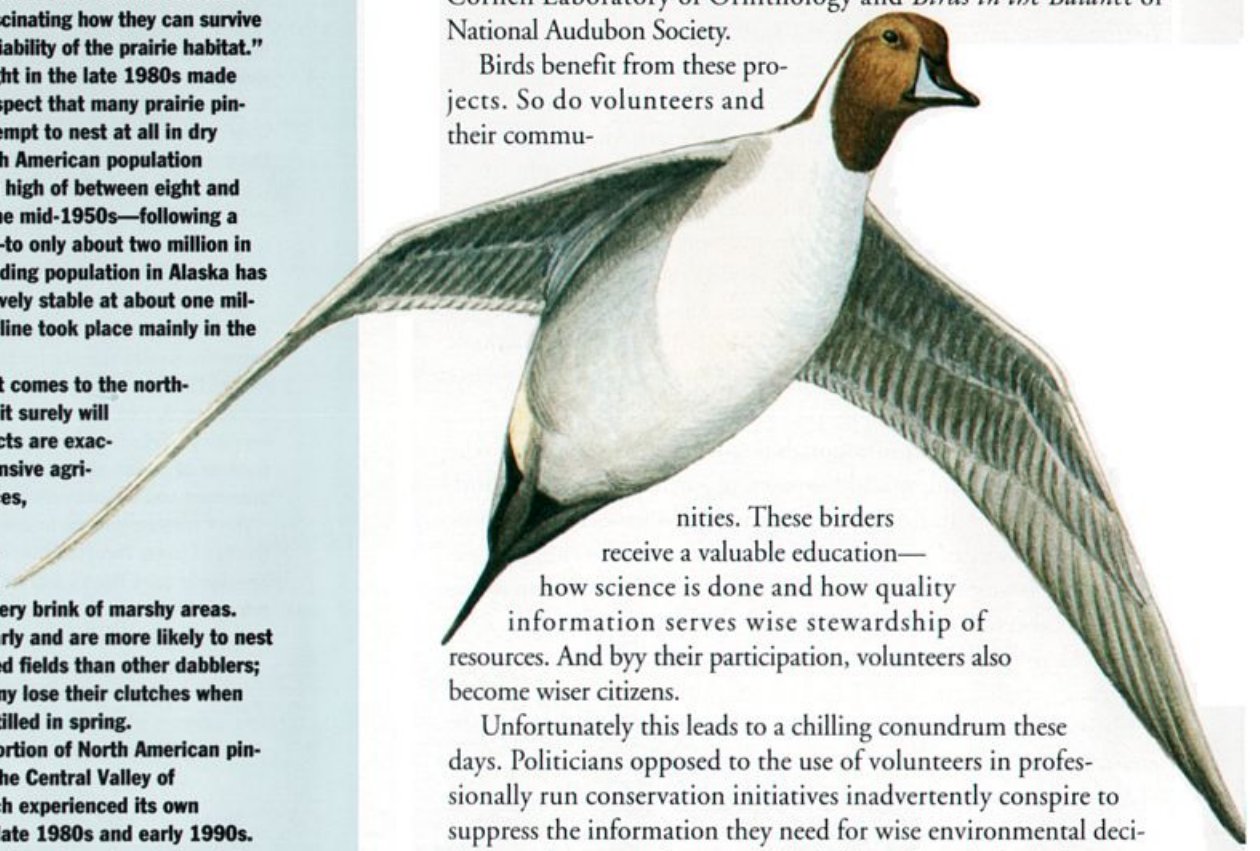
These pressures led two groups of ornithologists to rank the Cerulean Warbler as the single most imperiled widespread neotropical migrant in the Northeast and Midwest in 1992. Though the species' breeding range has been increasing in the Northeast as forests mature there, the overall population has declined by as much as 50 percent since the 1960s. "Large expansions at low density may not offset the substantial declines in the center of the range," says Paul Hamel, an ornithologist with the United States Forest Service. "If the declines are most pronounced in the center of the range, then I am concerned that the future is questionable for the species."

undertake tasks of Herculean dimensions. In Pennsylvania's Breeding Bird Atlas, conducted from 1983 to 1989, 2050 birders contributed over 83,000 hours to survey 4928 blocks generating 318,660 records of breeding birds. Had everyone been paid $5 an hour, the cost would have increased by at least $415,000.

Volunteerism remains the most cost-effective route to science-based conservation. Management requirements are modest, only clear definition of goals and sustaining encouragement. The participants are usually motivated, well-educated, and well-trained. Volunteers spend money and sacrifice precious time for the welfare of avian citizens.

And they demand to do more, not less, once the job is done. Responding to the insatiable appetites of volunteers are programs of the Partners in Flight initiative, such as Project Tanager of the Cornell Laboratory of Ornithology and *Birds in the Balance* of National Audubon Society.

Birds benefit from these projects. So do volunteers and their communities. These birders receive a valuable education—how science is done and how quality information serves wise stewardship of resources. And byy their participation, volunteers also become wiser citizens.



Unfortunately this leads to a chilling conundrum these days. Politicians opposed to the use of volunteers in professionally run conservation initiatives inadvertently conspire to suppress the information they need for wise environmental decisions and, worse, foster a politically safe, relatively ignorant electorate.

Birding with a purpose is now "in," and the opportunities to donate time and expertise to bird conservation projects are increasing. Here are four ways everyone can helpthe birds:

1. Organize or join a local bird club.

2. Support national and international conservation organizations, listed in the National Wildlife Federation's *Conservation Directory.*

4. Enhance your property with plants and cover that attract and sustain birds in all all seasons.

5. Identify local habitats that are important for birds, either migrants or residents, and help protect them by influencing local landscape decisions through generous, informed volunteerism.

Frank Gill is the author of Ornithology *and executive director of* Birds of North America.

NORTHERN PINTAIL

The Northern Pintail breeds in difficult habitats throughout its circumpolar distribution. In one of its strongholds, the northern tundra, Arctic foxes and harsh spring weather destroy many nests. Farther south, in the prairie pothole region of the northern United States and southern Canada, as many as eight of every ten years are too dry to create ample numbers of the shallow, ephemeral wetlands this dabbler prefers.

In response, pintails have evolved a great adaptability. If one breeding area dries up, they may travel many miles to another. "They have a remarkable, dynamic ability to go somewhere different every year," says Jane Austin of the United States Fish and Wildlife Service's Northern Prairie Wildlife Research Center. "It's fascinating how they can survive the extreme variability of the prairie habitat."

Serious drought in the late 1980s made researchers suspect that many prairie pintails do not attempt to nest at all in dry years. The North American population dropped from a high of between eight and ten million in the mid-1950s—following a few wet years—to only about two million in 1992. The breeding population in Alaska has remained relatively stable at about one million, so the decline took place mainly in the prairie region.

When drought comes to the northern plains—as it surely will again—its effects are exacerbated by intensive agricultural practices, especially in Canada, where fields are often plowed to the very brink of marshy areas. Pintails nest early and are more likely to nest in open, cropped fields than other dabblers; as a result, many lose their clutches when fields are first tilled in spring.

A major proportion of North American pintails winter in the Central Valley of California, which experienced its own drought in the late 1980s and early 1990s. Irrigation agriculture there has decimated wetlands, and contaminated some of what remains with toxic chemicals. One hopeful note: Flooding of rice fields after harvest has recently helped expand the acreage of waterfowl habitat, reducing the threat of disease on crowded marshes. It will take continued careful management if not only the elegant Northern Pintail, but numerous other species, are to thrive.