

Frank Gill halts in mid-sentence and points out his office window on a chilly January day. Across the fountains of Philadelphia's Logan Square is a dark form rapidly flapping above the Free Library of Philadelphia's imposing neoclassical limestone edifice.

"Oh, there's a Peregrine," he says, watching a falcon on pigeon patrol. "There's been a pair of them chasing a

The joint-publishing project of the American Ornithologists' Union (AOU) and the Academy of Natural Sciences in Philadelphia was begun in 1987. Two years later, Gill financially jump-started the project with grants from the U.S. Fish and Wildlife Service's Office of Migratory Bird Management and a challenge grant from the related National Fish and Wildlife Foundation.

One-Stop Shopping

Red-tailed Hawk."

Peregrine Falcon, Red-tailed Hawk, and Rock Dove—three species just beyond Gill's window. Three of the 720 breeding United States or Canadian species that the series *The Birds of North America: Life Histories for the 21st Century* expects to chronicle within the next 10 years.

Gill, the executive director *Birds of North America*, knows that Tom Cade and associates at the Peregrine Fund in Boise, Idaho, are still working on the Peregrine account. The article on the Red-tailed Hawk by Chuck Preston of



The McLean Contributionship and the Geraldine R. Dodge and Richardson foundations soon followed with critical funding for *Birds of North America*.

Got a question about avian life? *The Birds of North America*



Frank Gill of the Academy of Natural Sciences is executive director of the landmark series on North American birdlife.

the Denver Museum of Natural History should be out this spring. As for the pigeons cooing at his window ledge, Kansas University professor emeritus Richard F. Johnston's Rock Dove account is already on Gill's shelf.

Unveiled last year as a successor to Arthur Cleveland Bent's *Life Histories of North American Birds*, *Birds of North America* already has 48 species profiles in print, and nearly 300 professional ornithologists working on more.

There are a number of people who deserve credit for the successful launch of the project, but many involved point to Gill's efforts as key.

"Frank is known within the ornithological community, both nationally and internationally, as an excellent researcher, a good administrator and a dynamic personality as far as getting the job done is concerned," says Glen Woolfenden, distinguished research professor at the University of South

Florida, research associate at the Archbold Biological Station, and an AOU representative on the *Birds of North America* ornithological advisory committee.

"This project was moving along at a snail's pace until the AOU realized that it would never get done unless someone like Frank—with his broad knowledge of birds and ornithologists, who's adventurous in taking on new projects and could organize a team—took charge," says Woolfenden.

Gill, the curator and chairman of ornithology at the Academy of Natural Sciences, clearly relishes the project. He traces the lineage of the *Birds of North America* from Alexander Wilson's *American Ornithology* (1808-1813) to John James Audubon's *Birds of America* (1827-1838) and Bent's cherished standard. In fact, both Wilson and Audubon were Academy members. Like the *Birds of North America* series, they, too, sold their work through subscriptions. Then there was Bent, a successful Boston area businessman and amateur ornithologist whose passions included the Ospreys of Massachusetts—also the specialty of *Birds of North America* managing editor Alan F. Poole, who will profile the Osprey in a future account for the series.

Acknowledging a certain karma, Gill says, "I'm just beginning to appreciate all these links."

It was more than four score years ago, in 1910, that Bent launched his opus for the Smithsonian Institution.

rected by *Birds of North America* authors.

"It's folksy, charmingly written, but terribly outdated," says Gill. And far from hard science. Bent used such imprecise phrases as "... it seems to me..." when writing about the Barn Owl for his project.

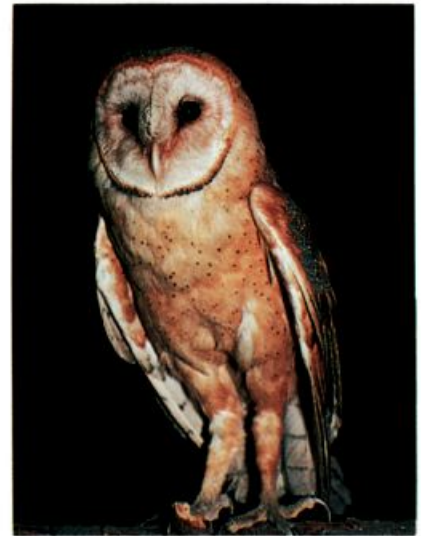
"As I have had very little experience with the Barn Owl, I quote the following," Bent wrote, trotting out a far-flung cadre of correspondents and citations that included: Major Charles Bendire of Arizona, Dr. B. W. Evermann of California, Dr. Charles W. Townsend of Charleston, South Carolina, and Mrs. Irene G. Wheelock.

"Joseph W. Lippincott gives his impressions of the weird notes of the Barn Owl..." wrote Bent.

As Gill says, it is a delightful read. But the sense of anecdotal randomness—who happened to correspond with Bent, what they happened to observe, and where—can undercut Bent's authority.

"It's still good information," adds Stettenheim, "but we're now asking questions not asked or dreamt of in his time, such as what do birds do in the non-breeding season? What we want now is not just the average egg measurement or clutch size, but the range and variation and some other numbers we can work with."

In a sense, the *Birds of North America* has recreated Bent's community of correspondents for each species—but on a much more professional level. Each



The Barn Owl was the topic of the first account published in the *Birds of North America* series.

is the source for up-to-date information. By Bruce E. Beans

The project, which would consume the rest of his life, resulted in a 21-volume series (last volume completed in 1968, 14 years after his death) which has been an essential ornithology reference of this century. And despite the interim since then, said *Birds of North America* associate editor Peter Stettenheim, "For some groups of birds, such as the song birds, there has really been nothing else as a first source of information."

To his credit, Bent has yet to be cor-

account is written or co-written by ornithologists who are among the top authorities on each species, and then peer reviewed by other experts.

For example, the Great Gray Owl account to be published this year was co-written by Evelyn Bull, of the U.S. Forest Service's Pacific Northwest Research Station in Oregon, and James Duncan of the Saskatchewan Conservation Data Centre.

"Duncan had lots of information on

molts I didn't have," says Bull, "and Kay McKeever (Owl Rehabilitation Research Foundation in Ontario) provided lots of information on parasites and birds in captivity." Bull, who researched the Great Gray Owl for five years in north-eastern Oregon, added her own knowledge of biology, diet, habitat requirements, juvenile dispersal, and adult movements.

For further comprehensiveness, the authors are encouraged to consider unpublished work, including their own.

"There are often unpublished nuggets worth mining," says Poole, the managing editor. "We're uncovering a lot of buried data."

For example, in response to a three-sentence newsletter request, AOU secretary Victoria McDonald received letters from 10 other ornithologists for the *Birds of North America* article she wrote this year on the Kentucky Warbler.

"Two people virtually turned over piles of very valuable data," says McDonald. "The generous outpouring attests to the true spirit of the scientific community."

Anticipation for the series had been growing for several years until the first volume was published. Many were curious: If it is not Bent, what exactly will *Birds of North America* be? And who will use these state-of-the-art volumes?

On first glance, the accounts are very readable science papers. In a standard format developed by Stettenheim, who marshalled the early stages of the

two-color maps and charts, sonograms, and pen-and-ink or pencil sketches presented in the kind of appealing graphic design that Bent would have a hard time recognizing.

Modeled after the individual species profiles published by the American Mammalogists' Society, the *Birds of North America* life histories are being published separately as the manuscripts become available. There is no initial taxonomic cohesiveness. The first set, for instance, included accounts of the Barn Owl, Piping Plover, King Rail, Indigo Bunting, Spruce Grouse, Semipalmated Sand-piper, Northern Mockingbird and Mexican Chickadee.

In other words, no beginning with loons and ending with finches for *Birds of North America*.

"That's what killed Ralph Palmer's *Hand-book of North American Birds* [now discontinued and out of print]," says Gill. "This way, authors don't have to wait for each other, and while it may seem disconcerting in some ways, it's fun if you don't know what you're going to get next."

"It's a little like the old Arm & Hammer Fuertes' bird cards," he says. "You want them all and feel good psychologically when you get near a completed set."

Slipcases for each 40-article volume are available, and Gill points out subscribers can organize the articles as they wish, be it alphabetical or taxonomically.

"Since they are published separately,



Scientists shared research for the account on the Great Gray Owl (above), to be published this year. Information on the Kentucky Warbler [opposite page] included valuable unpublished data.

The target audience includes ornithologists, government,

project for the AOU, each 12- to 32-page species account covers distinguishing characteristics, distribution, systematics, migration, habitat, food habits, sounds, behavior, breeding, demography and populations, conservation and management, appearance, and measurements. Each concludes with a bibliography of, in many cases, up to 100 references.

The life histories are augmented with four-color cover photographs,

we also have the flexibility to redo them five or six years from now if new information warrants it," Gill notes.

Besides research ornithologists, another target audience for *Birds of North America* includes federal, state, and local non-game programs and non-government conservation organizations.

"When the Exxon Valdez spill occurred, they needed information quickly on the important species up there," says Gill. "For example, there

was no place to turn to find out when Surfbirds, came through; how important the area was as a migratory stopover; how long they stayed, what they ate. It took a week or two to gather that information, because they didn't have a one-stop shopping source—that's what the *Birds of North America* is."

Gill's other primary audience: "The large number of intelligent, sophisticated, motivated birders who want to know something about the birds they've just seen."

Besides serving as a first authoritative reference, one of the goals of the series is to provide information to be used, in Gill's words, "for the conservation stewardship of the native birds of North America." Each account contains a section delineating the effects of human activity, and techniques that have been used to protect each bird.

"We know bluebird houses work, for example, so we give specific management recommendations, such as *how* birdhouses work," Gill says. "But in truth, we know very little to make such recommendations. One of our goals is to build up these sections, particularly for Endangered and Threatened species, as we go along."

Likewise—significant updating of Bent notwithstanding—one striking feature of the *Birds of North America* accounts is their straightforward acknowledgement of what is *not* known about each species. For example, consider entries in Brooke Meanley's

conservationists, and motivated birders.

account of the King Rail: "Migratory Behavior: Little known. Appear to migrate alone and at night.... Nutrition and Energetics: No information.... Life Span and Survivorship: Unknown."

"We want to set the agenda for future research," Gill says.

The authors themselves report that the series has led to new work. Carl Marti, a zoology professor at Weber State University in Utah, wrote the first species account for *Birds of North*

America, on the Barn Owl. Although he has studied the species for two decades, during the research and writing, Marti was stunned by the extreme variability of reproduction frequency and seasons, as well as clutch size. In his area, near the northern edge of their range, only five percent of Barn Owls mate twice a year, while some nest three times a year in parts of the southern United States, Malaysia, and Africa.

"No one really knows why, and I've been stimulated to do more work in this area," Marti says.

Gill hopes such gaps underscored by *Birds of North America* will also inspire amateurs.

"Margaret Morse Nice, a homemaker who studied Song Sparrows in her own backyard in Ohio, learned more about them than any ornithologist had ever learned," says Gill. "She compiled her painstakingly detailed observations in a two-volume work that is an encyclopedia of the Song Sparrow.

"Many people who watch birds see things that are not known, and one of the next steps in bird watching, beyond simply reporting seeing a bird at such-and-such a place, is to study a species, describe it, and have it published in *American Birds* or other journals."

During a recent visit to Philadelphia, Roger Tory Peterson concurred with Gill's vision.

"With only 9500 bird species and an estimated 25 million bird watchers," Peterson told him, "I've long thought it

would be nice to assign one species to each bird watcher and have that bird watcher study that species for life.

"In no time at all, we would know all we could possibly know about each bird," said Peterson.

What a rich legacy that would be for the *Birds of North America*. ♣

—Bruce E. Beans, of Bucks County, Pa., is writing a book on the Bald Eagle and the American public for the Macmillan Publishing Company.



The *Birds of North America* series is available at \$1875 for the complete charter purchase of all 18 volumes, or at \$175 for individual volumes with 40 species. To request more information, write: The Birds of North America, c/o The Academy of Natural Sciences, Subscriber Services, P.O. Box 687, Holmes, PA 19043 or call 1-800-345-8112. (Fax: 215-586-3232).