BANDERS AS AN ORNITHOLOGICAL RESOURCE

by Robert P. Yunick

Ornithology is a unique science. Perhaps more than any other natural or physical science, ornithology benefits from the participation of a vast group of amateur volunteers and practitioners. Geology has its rock hounds and astronomy its amateur stargazers, but ornithology has its legions of birders who gather an immense amount of data used for studying and monitoring avian populations. Events such as Christmas Bird Counts and Breeding Bird Surveys attract many professional and amateur volunteers and generate a database that is subsequently analyzed to further our understanding of avian ecology.

Amateur ornithologists contribute more than just population data from field observations. For example, over fifty years ago, a young artist, Roger Tory Peterson, turned his love for bird artistry into a series of field guides that would revolutionize the art of field identification of birds and other fauna and flora. Nearly ninety years ago, a New York physician, Jonathan Dwight, published a landmark treatise, recently reprinted, on passerine molt that remains an authoritative exposition on the subject.

Amateur birdbanders have also made substantial contributions to ornithology. Two renowned amateur birdbanders were Dr. Oliver Austin, Sr., a physician, and Margaret Morse Nice, a housewife. While banding is often conducted within a classic research framework, amateurs who bring a diverse collection of skills to their avocation have contributed in other unique ways, such as by developing new banding equipment.

But above all, there is one common attribute to amateur ornithologists: volunteerism. Amateurs volunteer considerable time, effort, and resources to their ornithological pursuits. For example, in 1955, Jim Baird, a professional biologist, started a volunteer network of coastal banding stations to coordinate the collection of passerine migration data. It was called "Operation Recovery." In its first season of existence, autumn 1955, about 1500 birds were banded.

Many banders, most of whom were amateurs, participated in Operation Recovery, giving of their weekends, vacation time, and family time to operate the stations. Operation Recovery stations became educational and public outreach centers for teaching improved banding techniques and identification skills.

By 1963, the annual total of birds banded under Operation Recovery exceeded 85,000, with nearly 32,000 banded at Island Beach, NJ. Island Beach and other coastal stations became autumn meccas for persons interested in banding. Under the initial direction of the late Elise Dickerson and Mabel Warburton, two housewives with an intense and dedicated interest in banding, many people came to Island Beach to learn and contribute. At least three current

professional ornithologists, Joe Jehl, Burt Murray, and Scott Wood, learned their banding skills at Island Beach.

In 1968, Operation Recovery tallied a peak of over 102,000 birds banded. In 1969, forty-six stations operated in eighteen states and two Canadian provinces.

Beyond the sheer numbers of birds banded, the improved understanding of autumn migration, and the upgrading of bander skills from the Operation Recovery program, there was some unanticipated fallout. One person who became involved in Operation Recovery was Kathleen Anderson, a professional biologist for the Encephalitis Field Station of the Massachusetts Department of Public Health. She enlisted weekend volunteers to run an Operation Recovery station in eastern Massachusetts. Among those she encountered were two extraordinary people from Petersham, MA: Rosalie Fiske, an amateur bander, and her husband, John Fiske. The Fiskes had recently moved from New York City where John had retired as Chairman of the Board at Fiduciary Trust Co. and where Rosalie had been a volunteer at the American Museum of Natural History.

When Kathleen's encephalitis project terminated in 1965 and she and other volunteers wanted to continue their Operation Recovery endeavors, they sought out a new banding location. Kathleen knew of a good spot known as the Ernst property in Manomet, MA. A conversation between Kathleen and Rosalie revealed that this particular Ernst was Rosalie's cousin. In 1966, 1967, and 1968, Ruth Ernst's property was an Operation Recovery station.

During the same time period, the Fiskes went to Scotland and visited the Fair Isle Bird Observatory, returning home with an idea for an east coast observatory in the United States. Through the Fiskes' efforts, Ruth Ernst deeded the property to a trust, and through John's financial background and business contacts in New York and Boston, funding was obtained and Manomet Bird Observatory (MBO) was born.

As the mist nets were being taken down at the conclusion of the 1968 Operation Recovery season, the Fiskes offered the directorship of MBO to Kathleen, and as Kathleen tells it, "I didn't pause long before agreeing that it sounded exciting and challenging and something I would like to do." On August 4, 1969, MBO officially opened with one salaried director and a flock of volunteers.

Much has happened at MBO since 1969. MBO has a staff of over fifty, a volunteer list of over 150, an annual budget of $1.6 million, and assets of $2.6 million. Its staff authored thirty-seven publications in 1989. From the small Operation Recovery base, MBO has expanded its program to include sixteen projects dealing with shorebird and landbird populations, tropical forests, colonial waterbirds, Ospreys, marine mammals, fisheries, Antarctic seabirds, field biology training which grants college credit, and environmental education.

When you visit MBO, overlooking Plymouth Bay, think of it as a monument to the collective efforts of extraordinary people, both professional and non-professional, who conceived, nurtured, and operated the facility. Ornithology is the richer for their efforts.

Another notable eastern ornithological landmark is the Cape May Bird Observatory (CMBO), organized in 1976 and operated by the New Jersey Audubon Society. CMBO is well-known for its hawk banding, hawk watch, and public demonstration programs. It began independently and very humbly in 1967 with Bill Clark, an amateur bander from Virginia. Bill was employed in the computer field and was a roadside raptor trapper. Knowing about the migrational fame of Cape May, he came for a week in 1967 and set up a bow net and a mist net at Higbee Beach near Cape May. Later that fall, he returned to set up a temporary blind in a lima bean field at Cape May. That field location is still used and is known as "North Blind." He banded 140 hawks in his first season. In 1968, he convinced other banders to join him in operating an expanded North Blind for six weeks, banding 248 birds.

By the close of the 1989 season at Cape May, a total of 74,591 diurnal raptors of fifteen species had been banded since 1967, with annual totals ranging from 3500 to 5600. In 1989, thirty-two banders and assistants operated five blinds and over 5000 people attended weekend demonstrations to see hawks and falcons in the hand and to learn about their importance. Since 1983, the public has participated in "Project Wind Seine" where one can "buy" a bird of prey and thereby help support the raptor project. For between $25 and $150, based on species, a certificate noting the species, age, sex, and date of banding is given to the contributor with the understanding that any recovery information on the bird will be shared with the contributor.

Bill Clark's involvement did not end with the founding and directing of the hawk watch and banding operation, which today may rank as the largest of both activities in the world. Several years ago, Bill wrote *Hawks*, part of the Peterson Field Guide Series and the only field guide devoted solely to raptors in North America. In a career change, he also founded and operates a raptor tour guide service, which takes clients all over the world in search of raptors.

For *Hawks*, Bill collaborated with artist Brian Wheeler, an amateur bander living in Colorado. Brian came to Cape May in 1980 to a blind that another bander and I were operating and asked permission to measure and photograph our birds for his life-size paintings. Brian's skills were very impressive and led to his collaboration with Bill on *Hawks*.

Two other amateur banders whose lives have been consumed by their avocational interest in raptor banding are Mary Forness of Cuba, NY, and Len Soucie of Millington, NJ. For twenty-two years, Mary worked as an accountant and housewife raising four children. Once the children were through college, Mary turned to banding and wildlife rehabilitation. At the urging of two western

New York banders, Dr. Stephen Eaton and Don Clark, she applied for a banding permit in the early 1970s. In 1973, she was one of only seven raptor "rehabbers" in the U.S. Also in 1973, she attended an Eastern Bird Banding Association meeting, met Bill Clark, and, in 1974, became the first woman assigned a blind at Cape May.

Among Mary's other ornithological accomplishments is the operation of the Hawk Hideaway Rehabilitation Center and the organization of the Cattaraugus Bird Club in western New York. In addition, she and her husband, John, organized the New York State Wildlife Rehabilitation Council in 1980. It has over 100 members out of the over 500 rehabbers in NY. Because of this effort, she was asked to be on the board of the National Wildlife Rehabilitators Association whose members are from the United States, Canada, Europe, and Turkey. For thirteen years, she captively bred Rough-legged Hawks. Starting with five birds from McGill University in Montreal, she developed a population of fifty-eight birds. She is the first person in the United States, and only the second one in North America, to accomplish captive breeding of Rough-legged Hawks. The birds were kept for molt, weight, and behavioral studies before being distributed in 1988 to other study centers.

Mary's extraordinary accomplishments all began with the desire to be a birdbander.

Len Soucie's story is an equally interesting saga of a person who became dedicated to an ornithological career with a unique contribution to ornithology. Len left school at age 14, went through an apprentice program between the ages of 15 and 18 to become a tool and diemaker and engraver, and then entered the army. After returning to civilian life, he became interested in birdwatching. He met Bob Wilson, a birdbander, who was looking for Screech Owls inside Wood Duck boxes in a New Jersey swamp. Len became Wilson's subpermittee, and in 1969, Len and Bob founded the Kittatinny Mountain Raptor Banding Station. A year later, Bob left the area, and Len became a master permittee still operating the station each September through December. Through the efforts of fourteen subpermittees, the Kittatinny Mountain Raptor Banding Station has gathered migration data on one-half million passing raptors, and has banded nearly 11,000 birds of fourteen species. They band about 500 to 700 birds per year and, in 1982, had the distinction of capturing and banding the first Gyrfalcon in New Jersey. Len still vividly remembers that experience.

In the late 1960s, Len took in an injured Red-tail, launching him on his rehabber avocation. In 1981, Len founded Raptor Trust, Inc. on his fifteen acre property. In 1989, Raptor Trust handled 2500 wild bird emergencies involving 130 species, with 500 emergencies involving raptors. Raptor Trust has three full-time year-round employees, three full-time summer employees, and a 1990 budget of $200,000.

In June 1990, a new Raptor Education Center will open at a cost of

$400,000, funds Len privately raised. It will have a classroom, office, library, and rest rooms and will be used for public education, especially for children.

Occasionally, Len works at his business, Eagle Engraving Company, which he founded thirty-five years ago. Using his skills as a machinist, he developed a leg gauge to determine band size for a bird's tarsus. He designed and made the gauge because he knew how difficult it was to remove an improperly sized band. He distributed the gauges to other banders, initially at no cost and later for a small fee. Recently, when the U.S. Fish and Wildlife Service (USFWS) sent George Jonkel to India to assist in the development of a national banding program, George called upon Len to make 50 leg gauges corresponding to Indian band sizes. His gauges are used worldwide.

Len Soucie is not the only bander who has used personal skills and spare time to design improved banding equipment. Chris Rose, an amateur birdbander and a teacher of industrial arts in a New Jersey school, developed, makes, and sells the Rose wing rule, which measures the wing chord. Roger MacDonald in Massachusetts developed, makes, and sells banding pliers for opening and locking butt-end bands. Joe Imbrogno, a Pennsylvania bander, is a trap maker, taking over the business from Walt Bigger, a bander and retired army officer.

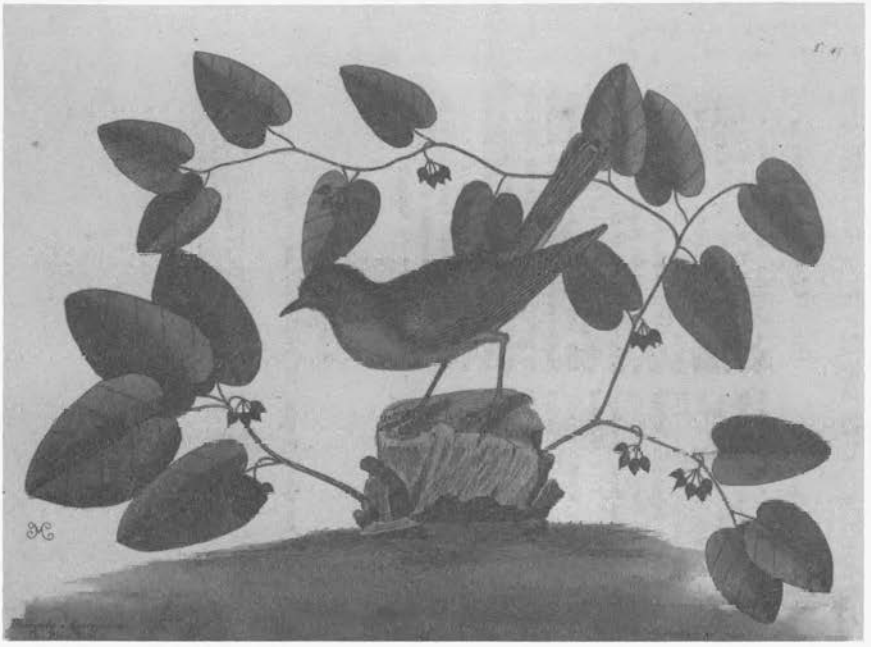
Other amateur banders have played an equally important role in making mist nets available to birdbanders and batbanders. For example, the late Eleanor Dater, a housewife from New Jersey, ran the mist net business for the Eastern Bird Banding Association for many years. She was also instrumental in moving the U.S. Congress to pass legislation signed by President Kennedy in October 1962 to exempt imported mist nets from customs duty.

Another bander who played a similar role for the Association of Field Ornithologists' predecessor organization, the Northeastern Bird Banding Association (NEBBA), was Alex Bergstrom, an insurance underwriter in Connecticut. As mist nets became more commonly used, Alex assumed responsibility in July 1956 for NEBBA's small mist net business previously run by Dr. Oliver Austin. For seventeen years until his untimely death in 1973 at age fifty-four, Alex greatly expanded the mist net business, earning substantial income for NEBBA. Alex also served from 1952-1971 as editor of NEBBA's growing publication, *Bird-Banding*, now known as the *Journal of Field Ornithology*. His generous efforts on behalf of NEBBA has been appropriately memorialized by the E. Alexander Bergstrom Research Fund which provides grants for amateur and student research in ornithology.

While Eleanor Dater and Alex Bergstrom represent two people who contributed their talents and efforts to help manage two birdbanding associations dedicated to education and research, other amateur banders have played similar roles. Betty Downs, a Vermont housewife, held the dual position of NEBBA treasurer and keeper and seller of *Bird-Banding* back issues for sixteen years. Jim Seamans was NEBBA president from 1973 to 1978 and lent considerable

financial experience to the management of NEBBA funds. The late John Kennard, a New Hampshire physician with an interest in avian longevity records, was NEBBA president from 1971 to 1973. The late Lawrence Chapman, an active Tree Swallow bander and professor of marine engineering at MIT, was NEBBA president from 1941 to 1948.

My remarks give a brief and geographically limited sampling of examples of amateur bander contributions to ornithology. While much of my information was gathered through personal acquaintance and recollection, I am confident that were one to survey the records of banders and banding associations, similar instances of substantial and unique contributions to the field of ornithology can be located. I suggest that the U.S. Fish and Wildlife Bird Banding Laboratory consider documenting these activities in order to justify, as it must frequently do, the funding required to maintain its program. Few of our public administrators recognize the national benefit to conservation, education, and research resulting from the government's direct investment in the banding program. Administrators need to know the extent to which matching funds from private pockets are benefiting the public.



Bluebird by Mark Catesby.
From M. Catesby. 1731. Natural History of Carolina, Florida, and the Bahama Islands. *Reprinted with permission from the Department of Rare Books and Manuscripts, Boston Public Library, Boston, MA. Photo by David Smith.*

Before concluding, let me return briefly to the more classical aspect of banding: gathering and using data. At the 1989 Eastern Bird Banding Association annual meeting, John Tautin, Chief of the Bird Banding Laboratory, talked about how the Laboratory is evaluating the banding program. As of January 1990, the program had 2460 U.S. master permit holders and 1644 subpermittees, or a total of 4104 banders. Canada had 296 master permittees and about 150 subpermittees, making the continent total about 4550, representing a sizable resource. These people are banding 1.1 million birds per year, 70% of which are nongame birds.

In January 1990, a conference held by the Bird Banding Laboratory and attended by representatives of organizations interested in birds and birdbanding was held in Washington, D.C. The purpose of the conference was to discuss the banding program and its objectives. While the Bird Banding Laboratory proceeds through this evaluation program, I urge that it take a serious look at how cooperative projects with professional guidance, such as the Breeding Bird Survey, Christmas Bird Count, and Operation Recovery, have demonstrated how volunteer resources can be harnessed for collective benefit. Operation Recovery gathered worthwhile data and resulted in improved banding skills through greater use of mist nets and greater familiarity with species previously not handled in large numbers. Many of these species have taken on new importance in connection with studies of tropical habitats and population impacts caused by habitat modification.

Programs similar to Operation Recovery and organized and directed by public agencies or private institutions can add to ornithology. Given the opportunity, amateur banders can and will participate in such studies. It is encouraging to see the subject of banding discussed openly today and by the U.S. Fish and Wildlife Service at its recent meeting. Planning the future of banding requires dialogue to help direct federal policies on banding activities.

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