

The Scientific Roots of Partners in Flight

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Identifying the beginning of any phenomena is tricky because the threads running back in time slowly shift and change, and facts become ever rarer and fuzzier. I think the roots of Partners in Flight (PIF) began at a symposium held in April 1966 at the Smithsonian Institution – *The Avifauna of Northern Latin America* (Buechner and Buechner 1970). The organizer was William Vogt, author of the best-selling *Road to Survival* (Vogt 1948), which addressed the problem of human over population. It is noteworthy that Roger Tory Peterson, in his seminal “*A Field Guide to the Birds*,” dedicated his book to the ornithologist Clarence E. Allen and to William Vogt (Peterson 1934). Vogt has received almost no credit over the years for his early appreciation of, and fears about, human impacts on natural systems.

There were 41 attendees at the Smithsonian for that symposium – mostly world-renowned ornithologists and ecologists – and 14 papers were presented (Buechner and Buechner 1970). S. Dillon Ripley, Secretary of the Smithsonian Institution, says in his preface to the proceedings, “Controlling factors on the winter ranges, about which we have little knowledge at the present time, may be as important, if not more so, in inhibiting the population growth of these species of birds as any of the factors known to us on the summer ranges, such as the destruction of initial habitats, vast changes in secondary habitats, and intensive spraying of insecticides. Our concerns with migratory species on their north temperate ranges perhaps tend to cloud the total issue because, obviously, the birds spend a good part of their time in habitats alien to us about which we know relatively little from a biological point of view. The results of this conference help us to envision the changes occurring in Latin American habitats and to prepare our thoughts and considerations for the future.” (Ripley 1970, p.1).

Hopefully, Ripley would be pleased to know PIF conferences in 1992, 1995, 2002, 2008, 2013, and 2017 had hundreds of participants and hundreds of papers. That is in addition to numerous symposia organized by PIF during conferences of scientific societies. Yet I hasten to add that the Secretary might also be a bit dismayed to know that we have still not precisely identified “....controlling factors on the winter ranges....” or controlling factors elsewhere. Our understanding of threats and our ability to quantify them has increased dramatically. But in many ways, we have the same problems.

Marston Bates wrote, “Everywhere we have the processes of urbanization and industrialization and the overwhelming problem of rapid population growth with its pressures on the world around us.” (Bates 1970, p.7). Fifty years later we can say exactly the same thing.

In 1966 at the Smithsonian, Vogt avowed what many knew from local anecdotes, that “Many bird watchers have noted an apparent shrinkage in numbers of a variety of more familiar species...” (Vogt 1970, p.8). This observation preceded John Terborgh’s, “Where Have All the Birds Gone?” (Terborgh 1989) by 23 years. Terborgh could enrich Vogt’s concept using data that were then available and were presaged in a paper that provided the foundation for landbird monitoring. Aldrich and Robbins (1970) wrote, “We feel certain that great changes in abundance of birds have taken place in the past as a result of environmental changes, but until recently we have had very little documentary evidence of the magnitude of these changes.” “The Bureau of Sport Fisheries and Wildlife is presently embarking on an extensive program to detect and measure changes in abundance of almost all species of North American birds. This **breeding bird survey** was tested in the states of Maryland and Delaware in the summer of 1965...” [emphasis added].

For decades afterwards, Chan Robbins was a tangible link for many of us to this historical symposium, and it's satisfying to know that he lived to see the nearly unfathomable dividends that the Breeding Bird Survey (BBS) data paid. BBS is the foundation of PIF species vulnerability assessments (<https://partnersinflight.org/what-we-do/science/databases/>). State of the Birds reports, strategic conservation at various geographic scales, countless publications in the primary ornithological literature as well as sponsored sessions at numerous science symposia.

Speaking to the overriding interest in conserving habitat in the Neotropics, Holdridge (1970, p.29) wrote, "The most interesting problem at the moment is how to establish and maintain such reserves." Monroe (1970, p.41) concurred with, "Let me emphasize again, however, that the major problem of the immediate future lies in the area of habitat preservation." Eisenmann (1970, p.54) added, "I believe it is highly desirable that all the Latin American countries presently set aside substantial areas as national and provincial parks and nature reserves." Thus, the idea at that time was to figure out how to preserve habitats in Latin America, following the American model of parks.

Since 1966, reserves have gone in and out of style as the debate between protecting habitat and managing habitat has ebbed and flowed. Conservation biologists have put more emphasis on the need to take conservation action across the landscape, having realized some time ago that reserves alone aren't enough. Cooperative approaches with the deep involvement of local people have proven more successful. Yet it was these ornithologists and ecologists who got it started.

Holdridge (1970, p.30) observed that, "Somehow all people must be induced, even if through indirect channels at present, to maintain a significant portion of their rich natural heritage for future generations to know at first hand and to enjoy. To do this we have to do more

than continue to say some nice words for conservation or create parks on paper.” This highlighted the role for social sciences, which today live under the heading of “human dimensions.”

Howell (1970, p.61) had a specific suggestion, one which Rare, El Grupo Ceruleo, and other partnerships have employed effectively in the Caribbean and in Latin America, “... when there is something or someone for whom national pride can be aroused, a great deal of popular and powerful support can be developed.” Iconic birds have played an important role here.

The Smithsonian Institution organized another symposium on the topic, which was held in October 1977 (Keast and Morton 1980). S. Dillon Ripley wrote in the forward (p.13), “...I take especial satisfaction that ecologists of all persuasions are alert to the threat presented to their field of research by the violent and steady degradation of avian habitats.” “As forests dwindle and disappear from the terrestrial tropics, the relative balance of bird species shifts and crucially changes in the temperate zones as well.” Again, the focus was on the conservation of tropical habitats.

While ornithologists interested in neotropical migrants were honing their research and increasing their numbers, a group of colleagues were preparing to take the idea of partnerships for bird conservation to a new level. In 1986, the North American Waterfowl Management Plan (NAWMP) was released. Only a few years later, in 1989, the North American Wetlands Conservation Act was passed which provided a funding mechanism to turn the needs for wetlands and waterfowl habitat into reality on the ground. Every bird conservation initiative that followed, modeled itself to a large degree on NAWMP. This commonality of purpose in bird conservation, strategies, and practice lead Gary Myers, then head of the Tennessee Wildlife Resources Agency, to famously exclaim, “Birds are just like ducks!”

The next precursor of PIF occurred at Manomet Bird Observatory (now Manomet Conservation Science) in a symposium, *The Ecology and Conservation of Neotropical Migrant Landbirds*, held in December 1989. This symposium (Hagan and Johnston 1992) had 65 papers and posters and 300 attendees. Most notable was the degree to which ornithologists had conducted research on the species and issues raised at the Smithsonian symposia in 1966 and 1977. Many more details about the biology and ecology of these species had been discovered, providing more specific ideas about how, when, and where conservation actions might be conducted. I suspect William Vogt would have been pleased with the progress on bird conservation but perhaps not pleased to see that the human population problem was still largely off the table.

In addition to the critical research designs and hard-won data in those papers, were the remarks in the preface by then U.S. Congressman Gerry E. Studds (Hagan and Johnston 1992, p. vii), remarks that would resonate with anyone, if we could make them aware, "...these species have an almost mystical power to captivate the human imagination. These small brightly colored creatures full of song, and only a few grams in weight, are able to make annual trips of unimaginable complexity and rigor, only to return each year, often to the same tree or bush. How do they do it? It is a sad fact that we are systematically destroying these homes to which they return. We are slow to realize that it is our home as well."

The last big contribution to PIF before its creation in 1990 was the publication of John Terborgh's book, *"Where have all the birds gone?"* in 1989. This science-based, but very readable book, helped popularize the problem of widespread declining bird populations that had been laid out in more detail in the previous symposia.

It was 24 years between that first Smithsonian symposium (1966) and the creation of PIF (1990), and it's been 30 years since the creation of PIF. I can safely say the progress over the second period has been much greater than the progress over the first. There is no doubt in my mind that PIF, through its wide net of scientists, activists, birders, and other conservationists, has made enormous, even spectacular, gains in understanding the biology and ecology of birds, in building partnerships, in producing state-of-the-art vulnerability assessments and strategic plans, and in getting the word out. But it's clear that many of the problems facing birds are very much the same. Over the next 24-30 years, we will need to make much, much more progress. We need to figure out how to get public support, public policy, and funding to catch up with the leading edge of science, so well launched in 1966.

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