

From the Editor

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From the Editor

I was born and raised in Iowa, which is about as far from the ocean as one can get in North America. On the other hand, because my home town was situated on the drift plain from fairly recent glaciation, I became very comfortable living with ocean-scale flatness covered with corn and beans as far as the eyes could see. Later in life, when I started studying habitat fragmentation in the Midwest, it was easy to adopt the analogy of “islands of habitat” in a “sea” of agriculture.

Although it seems easy to think of the ocean as a flat, uniform habitat (as we might for the vast corn-growing region of the Midwest), my ecological training and life experiences told me otherwise. Dissertation work in the West Indies took me throughout the Caribbean, where the water always seemed warm, even in winter when the locals felt it was much too cold for swimming. During a project in the Galápagos Islands, I learned what a cold ocean feels like, even when exposed to the equatorial sun.

So this Iowa boy quickly figured out that the ocean is a very heterogeneous habitat, with places where the surface waters vary between cold and warm and places where currents stir nutrients to the surface (and places where they don't). Of course, through the powers of flight, birds have evolved ways to take advantage of the resources found on the ocean, even when the distances involved and the navigational abilities required seem overwhelming. Most of these true seabirds spend the bulk of the year far from any shoreline, though recent work suggests that these movements are anything but “wandering,” as some of the common names of these birds might suggest. The one great constraint that they all face is that they must return to land to nest, and islands that provide safe nesting sites are quite limited in comparison with the vastness of potential foraging areas.

To those of us who still believe in community ecology and its associated concepts of assembly rules and ecological isolating mechanisms, this truly oceanic avifauna is a vast unknown. Combine the occurrence of dozens of seabird species ranging in size from sparrow-sized storm-petrels to enormous albatrosses with an ocean that offers habitats differing in the amounts and types of food available, and numerous classic ecological questions jump to mind. Do similar-sized species divide this ocean into pieces? Do coexisting species differ by size or diet in some regular fashion? Can we explain the number of coexisting seabird species in different locations by looking at oceanic productivity in those sites? How does the diversity of the vast Pacific Ocean avifauna compare to that of smaller oceans across the globe? Does the fact that these species must go to land to breed affect any orderly patterns that may occur during the nonbreeding season? Alternatively, given that these species can travel thousands of miles across the ocean, is it just a confusing mixture of birds across the ocean, as species ignore what we see as ocean structure and truly wander around? One could go on and on with possibilities to explore and hypotheses to test.

This monograph starts to answer some of these questions by looking at distributional patterns in the storm-petrels of the eastern Pacific. These are the tiniest of seabirds, ranging from sparrows to robins in size despite living on the open ocean, and they are surprisingly diverse in this region. The authors have spent incredible amounts of time identifying seabirds while crossing the ocean; much of the monograph is the first documentation of the at-sea ranges of many of these birds and the first descriptions of much of their nonbreeding ecology. After describing so much new material about each of these species, the authors synthesize their results by looking for patterns of distribution and coexistence among this set of seabirds.

Of course, I think every reader should read every word of this monograph, and I am sure the authors agree. On the other hand, if your time is limited and you want to get the big picture of what is going on, you might skip through many of the species accounts after you have looked at one or two. By reading the introductory material, a species account or two, and the final synthetic material, you will get a great introduction to seabird community ecology. It might stimulate you to go back and read some more accounts, or perhaps it will encourage you to jump on a boat and cross the Pacific, counting seabirds along the way. This Iowa boy won't join you, because he gets seasick really easily.

John Faaborg



LARRY B. SPEAR, 1945–2006
(Photograph courtesy of S. N. G. Howell.)