

BOOK REVIEWS

Isles of Refuge, by Mark J. Rauzon. 2001. University of Hawaii Press, Honolulu. 206 pp., 97 color and 46 black-and-white photos, 21 illustrations, 11 maps. Paperback, \$29.95. ISBN 0-8248-2330-3.

You are on a May pelagic trip off Bodega Bay. You reach the continental shelf, and suddenly the chummed-in fray is joined by one, two, 25, 50, perhaps even 500 incoming bombers: majestic, graceful Black-footed Albatrosses splay their feet and eagerly scatter the screeching gulls in search of a morsel of popcorn or suet. Some of them have bleached heads, some are in fresh plumage, some have begun their molt, others have tattered wings. A few wear metal or color bands around one or both legs. You wonder whence they have traveled that day or that week. As was discovered recently through satellite transmitters, the answer is quite astounding: the bleach-headed birds are tending chicks over 5000 km away in the northwestern Hawaiian Islands. They have ridden the winds on a quick grocery run to the California coast. You wonder what kind of place can produce such marvels of the sea.

Aptly named, *Isles of Refuge* takes you on a sun-drenched cruise through the atolls and pinnacles of the Black-footed Albatross and many other tropical seabirds. Although making up less than 0.1% of Hawaii's land area, the northwestern Hawaiian Islands span a distance of more than 1600 km, over twice that of the populated or "main" Hawaiian Islands. As the Pacific plate moves over Hawaii's volcanic hotspot, lands are created, eroded, submerged, maintained by surface-reaching coral, and finally extinguished as they reach "Darwin's Line" at 29° N. The northwestern islands consist of five remnant rocky volcano tops (e.g., Nihoa, Laysan, and Gardner Pinnacles) and six coral atolls (e.g., French Frigate Shoals, Midway, and Kure), the latter graced with shifting snow-white sands, sparse native vegetation, and impossibly blue lagoons. These remote islands have a rich and storied human history, culminating in their protection as national fish and wildlife refuges and Hawaii state refuges. But it is the stunning images and insights into the spectacular natural history of *Isles of Refuge* that will be of interest to the readers of *Western Birds*.

The book is divided into 22 chapters. Those on each of the island groups are interspersed with others covering the biology of keystone species (such as the "goonies," Monk Seal, and Green Sea Turtle), vertebrate and subtidal ecology, conservation concerns and initiatives, personal stories, and human campaigns. The last range the spectrum from a voyage of the native Hawaiian canoe *Hokule'a* to Nihoa in search of sacred Polynesian sites to the battle of Midway. Being a writer, photographer, and ornithologist, Rauzon shares with the reader a unique understanding and perspective of this important biological reserve. You learn how it is to be a biologist "stranded" for months at a time with little but the wind, waves, and seabirds to keep you company: "It was OK when the goonies talked to you, but when you understood what they said, it was time to leave." You gain an appreciation for the spiritual ways and poetic views of the *kamaaina*, or peoples of Hawaii. You contrast this with the bungling, shipwrecking, murderous, warring, and ecologically apocalyptic exploitations of the *haoles* and other foreign visitors of the nineteenth and early twentieth centuries. Most important, you see hope in recent efforts to study the resident species, eradicate alien flora and fauna, and restore the islands to their native constituents.

Beautifully written, entertaining, and with few miscues (fans of Pink Floyd will cringe at the reference to "Dark Side of the Sun"), I fully recommend *Isles of Refuge* to those with an interest in the seabirds and ecology of the tropical Pacific.

Peter Pyle