Reviews

Song for the blue ocean: encounters along the world's coasts and beneath the seas. Safina, C. 1998. New York: Henry Holt & Company. 458 pp. (hard cover). ISBN 0-8050-4671-2. US$ 30.00.

There is only a cursory mention of marine birds in Carl Safina's *Song for the blue ocean*; nonetheless it is a book with which all marine ornithologists should be familiar. It tells three stories of fish, fishing, and people involved: bluefin tuna in the Northwest Atlantic, salmon in the Northeast Pacific, and the coral reef-dependent fishes of the tropical western Pacific. Richly detailed, it covers the politics, science, and economics that have led to the depletion of the fisheries and the destruction of habitat.

Carl Safina, a MacArthur Fellow, heads the Living Oceans Program at the National Audubon Society. He weaves a complex story that includes the natural history of the animals, the ways in which humans have altered habitats, advances in fishing technology, the role of international commerce, and the livelihood of the fishers and those who are working to reverse the declines.

The book begins with an examination of the bluefin tuna fishery in the Gulf of Maine. The International Commission for the Conservation of Atlantic Tuna's scientific reports indicate that tuna breeding populations in the western Atlantic have declined 90% since 1970. But with each fish fetching up to US$ 83 500 on the international market the pressure to continue fishing is immense and science is all but ignored. Safina shows how this financial incentive, combined with the modern technology of this fishery, is a loosing combination for the tuna.

The second story focuses on the complex factors that have resulted in the decline and extinction of numerous salmon populations. Safina chronicles the tale of their destruction, touching on virtually every aspect of the economy in the Pacific Northwest: the power-producing dams that interfere with migration, logging that alters the spawning streams, over-fishing, and agriculture that competes with river water needs. He also writes about efforts to restore the fish populations and conserve their habitat.

In the Indo-Pacific, where marine diversity is at its height, Safina takes his reader to the coral reefs of Palau where he describes the beauty of reef fishes. Once there he chronicles the increasing threats to the region's reefs, one of the most insidious being the use of cyanide to capture live fish for Asian restaurants or the worldwide aquarium trade. The story continues with descriptions of over-fishing on spawning grounds and the destructive methods of fishing with dynamite.

Song for the blue ocean is a well-researched book that advocates a marine conservation ethic. It delivers far more than a legion of facts and instills a sense of wonder in our oceans. The book ends with a brief epilogue in which Safina asks: which it will be, degradation or recovery, scarcity or plenty, compassion or greed, love or fear, ahead to better times or to worse? As marine ornithologists we should ask ourselves the same questions of situations we know in the avian world.

Jan Hodder,
Oregon Institute of Marine Biology, University of Oregon,
Charleston, Oregon, USA
(jhodder@oimb.uoregon.edu)

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Seabirds of the Russian Far East. Kondratyev, A.P., Litvinenko, N.M. & Kaiser, G.W. (Eds). 2000. Special Publication, Canadian Wildlife Service, Ottawa. 141 pp., 25 figures, 28 tables, species range maps, and geographic locator maps (paper). ISBN 0-662-28997-8. No price given.

The bookshelves of North American students of Pacific seabirds have long held a small collection of translated works by Russian colleagues, notably V.P. Shuntov's *Seabirds and the biological structure of the ocean* (1972) and two volumes of assorted papers edited by N.M. Litvinenko, *Seabirds of the Far East* (1986) and *Distribution and biology of seabirds of the Far East* (1987). Two compilations of species accounts, now somewhat dated, have also been rendered for the linguistically-challenged among us: G.P. Dement'ev and N.A. Gladkov's *Birds of the Soviet Union* (1951–1952) and *Birds of the Chukchi Peninsula and Wrangel Island* by L.A. Portenko (1972–1973). Outside of the Pacific, the 1957 monograph by L.O. Belopol'skii, *Ecology of sea colony birds of the Barents Sea,* has long been a standard reference and completes the list of significant translated works by Russian authors. The present volume is the first of its kind to appear originally in English. It has the 'look and feel' of scientific reporting to which we in North America are accustomed, and thereby garners points for style, maybe even credibility (however unfairly), in comparison with the earlier works.

As barriers to scientific exchange between Russia and North America dissolved in the early 1990s, it became apparent that seabird researchers in Russia were eager to share their knowledge. This particular project had its inception at a joint meeting of the northern and eastern branches of the American Association for the Advancement of Science and Russian Academy of Sciences, respectively, in Vladivostok in 1994. Although it has had a long gestation period, and the final product is perhaps not as comprehensive as originally conceived, the wait has been worthwhile. We now have an up-to-date synopsis of seabird information for the Russian Pacific region that will likely serve as our first and primary point of access for years to come.

Seabirds of the Russian Far East comprises six chapters, one of which (Chapter 5, by Y.B. Artyukhin and V.N. Burkanov) is a report, in conventional introduction-methods-results-discussion format, of a five-year investigation (1993–1997) of seabird bycatch in Japanese driftnet-fisheries operating in Russian waters. The remaining chapters are review papers that reference Russian seabird literature extensively, including translated study titles. The book is an important resource for that reason alone. In Chapter 1, Kondratyev, Y.V. Shibaev and V.P. Shuntov recount the history of seabird investigations in the Russian Far East, from the contributions of early explorer-naturalists such as Pallas, Steller, Wrangel and others, through the roster of recent and ongoing efforts in seabird monitoring and research in the region. Shuntov offers two chapters on the pelagic biology of seabirds, the first (Chapter 2) being a discussion of physical and biological oceanographic features that define marine habitats for birds in the RFE. Chapter 4 is an analysis of the distribution and abundance of birds over the ocean, which to a considerable degree equates to a summary of Shuntov's own extensive contributions in this area. Chapter 3 is a highly readable account of breeding seabird distribution and abundance prepared by Kondratyev, Litvinenko, Shibaev, P.S. Vyatkin & L.F. Kondratyeva. The chapter contains the gist of a colony catalogue, offering a distribution map for each of 40 breeding species and tables of seabird population numbers in subregions of the Russian Far East. Readers will also find in Chapter 3 a summary of knowledge on topics ranging from nesting habitat and breeding biology to seabird diets and conservation issues. In the book's closing chapter, Kondratyev, Vyatkin & Shibaev expand the discussion of seabird conservation, highlighting an all-too-familiar list of current threats that includes oil and gas developments, introduced predators, and conflicts with commercial fisheries. The authors explain and depict the existing system of nature reserves in Russia and make the case for increased cooperation in the protection of natural areas of international significance. Although not appearing as an author of any individual paper, co-editor G.W. Kaiser undoubtedly deserves great credit for ensuring the polished presentation of all this material in English.

I underlined extensively and made note of a few key references in Chapter 3, and especially Chapter 2, where we find level-headed and insightful interpretations of climate change, oceanic regime shifts, long-term cycles, and seabird responses to such phenomena. One surmises that some of our Russian colleagues have been thinking creatively about these trendy topics for at least as long as such issues have held sway in the Eastern and Central Pacific. Depending on one's special interests, there are many tidbits also to be found in the pages of *Seabirds of the Russian Far East*. For instance, I noted (page 97) that N.B. Konyukhov reported Spectacled Eiders *Somateria fischeri* wintering in a polynya off the south-east coast of Chukotka in 1990, when the winter haunts of this species were still a mystery to North Americans. On pages 45 and 71 we learn that populations of Pelagic and Red-faced Cormorants *Phalacrocorax pelagicus* and *P. urile* are severely depressed throughout the Russian Far East, information that expands and corroborates what appears to be happening in Alaska.

I did find some discrepancies in the information presented, the most unfortunate being a lack of agreement between seabird population totals reported for portions of the RFE by Kondratyev *et al.* (Chapter 3) and Shuntov (Chapter 4). For example, the total of breeding seabirds in the Komandorskiye (Commander) Islands is variously reported as 0.9 million (Kondratyev *et al.*) and 1.2 million (Shuntov). For the Kuril Islands, the competing figures are 1.6 million (Kondratyev *et al.*) and 4.5 million (Shuntov), and for Eastern Kamchatka, we must choose between 1.4 million (Kondratyev *et al.*) and 140 000 birds (Shuntov). The latter instance appears to be a simple case of decimal shifting between the two accounts. One wishes the editors had discovered and resolved these differences before publication, as this work should be the primary reference for such basic information. I was also perplexed by the seemingly low densities of birds at sea reported by Shuntov in Chapter 4. In Alaska, we have an estimated 40–50 million breeding seabirds, and over-water densities (unweighted averages across all marine habitats and seasons) are on the order of 45 to 85 birds/km^2 in the Gulf of Alaska and the Bering Sea respectively (Gould *et al*. 1982). Kondratyev *et al*. report a total of 24 million seabirds breeding in the Russian Far East, yet Shuntov's over-water densities average only about 7 birds/km^2. It seems unlikely that migrant shearwaters *Puffinus* spp. account for this difference, as these species are abundant in both regions in summer. Are there major differences in methodology between shipboard surveys conducted in Russia and Alaska?

In their introduction to *Seabirds of the Russian Far East*, the editors state that 'Only a handful of scientists have studied the seabirds of the Russian Far East, but most appear as authors of one chapter or another of this book'. This may be somewhat overstated, judging from the additional names and titles that appear in the several lists of references, but undoubtedly it is true that seabird biology in the Russian Far East is in a relative state of infancy. The situation can be appreciated from the number of citations that take the general form: *Birds of the . . .* (fill in the blank with a geographic locality or region). Whereas general avifaunal surveys have been completed throughout the Russian Far East, there is still but a modicum of systematic, long-term monitoring or what we in North America would call 'big R' research going on, at least nothing in proportion to the geographic extent of the region and the global significance of its seabird populations. Thus, I cannot really concur with Hugh Boyd's assessment in his forwarding remarks that 'what we in North America may previously have thought of as the least-known circumpolar region is now the best-documented for seabirds'. Nonetheless, *Seabirds of the Russian Far East* succeeds admirably in its stated goal of summarizing available information on the scale and character of seabird communities in the Russian Far East. The editors and their sponsors in the Canadian Wildlife Service are to be commended for their commitment in seeing this project through to completion.

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Scott A. Hatch,
Alaska Science Center, U.S. Geological Survey,
1011 East Tudor Road, Anchorage
Alaska 99503, USA
(scott_hatch@usgs.gov)

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Birds of the Seychelles. Skerret, A., Bullock, I. & Disley, T. 2001. London: Christopher Helm. Almost 1000 colour illustrations of *c*. 250 spp. on 53 colour plates, line drawings in text (soft cover). ISBN 0-7136-3973-3. UK£ 25.00.

Yet another in the excellent series of Helm Field Guides, this book is the definitive guide to the birds of the Seychelles. The format follows that of other Helm guides in giving a thorough treatment to races and subspecies recorded or likely to be found in the region. The book starts with general information, then come colour plates, species accounts, bibliography and index sections. Each plate is accompanied by a brief description of the labelled drawings on the facing page. Several plates include contextual backgrounds of typical or interesting habitats, nests, displays or interesting postures. Each species is cross-referenced to the main text in the latter portion of the book. It is here that the book really stands out. Each account, irrespective of the species' status in the Seychelles, has a detailed description, including information on races, morphs, chicks, juveniles and immatures. There is authoritative text on biology, distribution and, where applicable, conservation issues, similar species and references. Black and white paintings and line drawings are interspersed throughout the text to aid with tricky identifications.

The authors' professed audience is the 'serious observer', although the book remains accessible to researchers and casual birdwatchers alike. To this end it is most useful, having details of both races and subspecies included, a feature often frustratingly absent from the average field guide. This facilitates more precise identification in the field, something of research interest as well as of great value to twitchers on the hunt for subspecies ticks.

With a volume of information one would usually expect to find in a handbook, this is considerably more than a field guide. Fortunately, the species list for the Seychelles stands at around 250 species, so the detailed information does not make the book unduly cumbersome. There are useful features one expects from modern field guides, such as an overview of the book, details of climate and geology, and perhaps most importantly, a description of good birdwatching sites and a complete checklist – although a quick-reference guide would have been welcomed. The lack of distribution maps is somewhat compensated for by detailed range descriptions. Another minor omission is in the Status section of vagrants, which could be improved with more details on the number or regularity of vagrant records.

If *Birds of Seychelles* has one general shortcoming, it is in the colour plates. It may be that the artist has drawn from museum skins of specimens collected outside the region, or failed to check on bare-part coloration. Regardless, the inaccuracies detract from the book's otherwise impressive standard. The market for field guides is relatively saturated, and competition is concomitantly intense. *Birds of the Indian Ocean islands* by I. Sinclair and O. Langrand (1998, Struik Publishers, Cape Town) has effectively cornered the market for bird guides to the region. *Seabirds: an identification guide* by P. Harrison (1983, Croom Helm, Beckham, Kent) has yet to be improved upon for seabirds. To allow inaccuracies is to play into the hands of competitors.

My familiarity with resident and many vagrant birds of the Seychelles leaves me a little disappointed with the quality of some illustrations. Many pictures fail to capture the 'jizz' of the birds. Specific inaccuracies are a further disappointment; I confine my discussion to seabirds. For example, the breeding Brown Booby *Sula leucogaster* (3c, plate 7) is given a nondescript, greyish face and almost mustard-yellow bill and legs. However, breeding Brown Boobies on Cosmoledo Atoll have, as their alternative common name of Blue-faced Booby (which incidentally is not mentioned) suggests, a bright blue face, paler bill and legs, and a far richer, chocolate brown plumage than that depicted in the plate. Immature tropicbirds are decidedly tricky to separate in the field. The illustration of the immature Red-tailed Tropicbird *Phaethon rubricauda* (2a, plate 6) has omitted some important features. Neither illustration nor text makes mention of fledglings having a black bill, which only later becomes yellow as depicted and described. Perhaps more critically, the depicted wing-pattern is also incorrect. The illustration shows plain white upper coverts and primaries (except for black shafts), whereas immatures have prominent black markings on the tips of the primary coverts and of the primaries. The crown is depicted as pure white, where immatures have black barring or speckling. The text is consistent with the illustrations, and is thus also incorrect. A final example is the Antarctic Skua *Catharacta antarctica*. The illustrated adults showing undersides (4a & c, plate 28) lack the pale streaking or scalloped edges to the throat, breast and upper belly feathers conspicuous in the field, so these 'adult' birds appear more like juveniles. Pedantic perhaps, but if one is a 'serious observer', using a book for fine-scale identifications and attention to detail, accuracy of illustrations is absolutely critical. There are some beautiful illustrations too, such as the line drawing of Bridled *Sterna anaethetus* and Sooty *S. fuscata* Terns on the title page and colour plate 33.

The text is impeccable for the most part, but there are a few irksome points. The Southern Giant Petrel *Macronectes giganteus* account offers some suspect distinctions between Southern and Northern *M. halli* Giant Petrels. The plumage descriptions are inconsistent, initially stating adult Northern Giant Petrels to be 'all-dark brown'. Two sentences later, their heads are described as being 'pale grey or white'. Moreover, it is doubtful whether any characters other than bill colour can be used to separate these species in the field, especially given that both species' plumages are highly variable and overlap completely across their global distribution. The text treatment of the Antarctic Skua is at odds with the illustrations, and both are inaccurate. Neither makes any mention of the extensive pale markings on the undersides, especially noticeable in *C. a. lonnbergi*, correctly identified as the subspecies most likely to be found in Seychelles waters. This is a failing that could easily lead inexperienced observers to misidentify Subantarctic Skuas as South Polar Skuas *C. maccormicki*. The inaccuracy is repeated in the section 'Similar Species' of the South Polar Skua, where it is described as being uniformly dark. Further, there is no mention of its other, more widely-used common name, the Subantarctic Skua.

That said, the pride of place *Birds of Seychelles* occupies on any bookshelf would make me think twice before taking it into the field. It is a very handy reference that is packed with useful information, albeit a trifle under-referenced. For birdwatchers specifically interested in Seychelles, this is now the definitive book.

Ross M. Wanless,
Percy FitzPatrick Institute of African Ornithology,
University of Cape Town, Rondebosch 7701, South Africa
(rwanless@botzoo.uct.ac.za)

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Birds, mammals & reptiles of the Galápagos Islands. An identification guide. Swash, A. & Still, R. 2000. Mountfield & Old Basing: Pica Press & Wildguides. 168 pp. 53 photographic plates plus species photos and distribution maps, all in colour (soft cover). ISBN 1-873403-82-8. No price given.

Galápagos diary. A complete guide to the archipelago's birdlife. Heinzel, H. & Hall, B. 2000. London: Christopher Helm. 272 pp. many colour photographs, illustrations and maps (soft cover). ISBN 0-7136-5434-1. UK£ 16.99.

Swash & Still is a conventional field guide, utilizing photos, rather than paintings, to illustrate the animals. It is small and light enough to carry around easily. The cover blurb claims it is 'the first comprehensive guide to the birds, mammals and reptiles . . . covering every living species recorded'. This is only partially true: alien mammals are not included, (I could not find feral goat in the index), although the feral pigeon is given coverage. I have not (yet) been to the Galapágos, but I imagine this guide would work well for the interested visitor. Heinzel & Hall is unusual in that it is a copiously illustrated travelogue of the authors' visit. I would not use it as a field guide, since it is not set out like one and is a little heavy to lug about, but its discursive text and annotated sketches of birds would make pleasant evening reading on one's own cruise around the islands. Both books will be of interest to the marine ornithologist, especially to those who work with Pacific seabirds, or are lucky enough to visit the Galapágos.

John Cooper,
Avian Demography Unit, University of Cape Town,
Rondebosch 7701, South Africa
(jcooper@botzoo.uct.ac.za)

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Isles of refuge: wildlife and history of the Northwestern Hawaiian Islands. Rauzon, M.J. 2001. Honolulu: University of Hawaii Press. 171 illustrations, including 96 colour plates. ISBN 0-8248-2209-9 and 0-8248-2330-3. US$ 60.00 (cloth); US$ 29.95 (paper).

Isles of refuge is not primarily a compendium of the ecology and conservation issues facing the wild creatures in the remote necklace of volcanic sea stacks, glorified sand spits and coral atolls that is the Northwestern Hawaiian Islands. Rather, it is a magnificently told adventure tale with both historical and personal perspectives, packed with insights. It focuses on people and their travails in these islands – both physical and mental – whether they arrived there by shipwreck, to exploit natural resources, to serve in the military, or as biologists. Because the narrative takes place within a setting of seabirds, marine mammals and other wildlife in a region that few will experience firsthand, it will entertain and stimulate seabird biologists and nature enthusiasts worldwide. *Isles of refuge* fills an ecological niche among letters. In telling an entertaining yarn about the interactions of humans and wildlife, the author 'translates' and synthesizes knowledge about these islands and their creatures that is buried in aging historical accounts and dry scientific journals.

In the *Green hills of Africa*, Ernest Hemingway wrote that his various hardships in the wild lands of Kenya and Tanzania – monsoon rains, mud that smothers movement, diarrhoea – were the dues he had to pay to make his adventures real. Mark pulls no punches about the dues that the Northwestern Hawaiian Islands extract to make the experience less than glamorous. Some will prefer this armchair account to the genuine article: pesky flies that seem the size of small bats; ticks whose appetites leave itchy skin pustules (and perhaps transmit rare diseases); voracious rodents that jump on meal plates or camp beds; gusting sand storms; the enervating numbness that results from days of unfriendly pounding seas; enormous exploding eggs that scatter goo and noxious odours; 'eau de guano'

water seepages. There are also whimsical episodes – encountering plastic flotsam on the beach such as tiny toy tyrannosaurs, bears, buffaloes, bizarre superheroes, grotesque insects.

The book contains an introduction and 22 chapters. Although its organization is essentially geographical, beginning with Nihoa Island (the closest to the main Hawaiian Islands) and moving north-west via each island or atoll to Kure, the book intersperses at appropriate junctures chapters on such topics as monk seals, green turtles, albatrosses and feeding ecology. The chapters on Nihoa describe the hardships of a late winter mission to study breeding of Tristram's or Sooty Storm Petrels *Oceanodroma tristrami*, Bulwer's Petrels *Bulweria bulwerii* and Blue-grey Noddies *Procelsterna caerulea* and the wonders of this distinctive pinnacle island. 'The Weed War and the Cold War' provides new information about the seamy underbelly of the Smithsonian Institution's Pacific Ocean Biological Survey Program in the 1960s, including germ warfare studies. The volume is a joy to read and handsomely presented. Each chapter begins with a Hawaiian epigram that nicely introduces its subject. The glorious line drawings and photographs (both by the author and from archives) enrich the account. In particular, the shot of Laysan Ducks *Anas laysanensis* chasing flies is superb and the views from the now defunct Kure LORAN tower are unique. The text is accurate, and I could find no errors of consequence.

One overarching message of *Isles of refuge* is the resilience of flora and fauna in a fragile ecosystem. Well-intentioned biologists collapse petrel and shearwater burrows when traversing Laysan Island and can unwittingly spread seeds of invasive plants such as sand burrs. Alien rabbits turned Laysan and Lisianski into deserts, virtually denuding them of the vegetation upon which so many species depend. Yet given suitable protection most species (alas, not Laysan Honeycreepers , the last three of which perished in a sand storm) have rebounded admirably. In this regard, are the occasional population 'declines' of Laysan Ducks, Hawaiian Monk Seals *Monachus schauinslandi* and Black-footed Albatross *Phoebastria nigripes* merely fluctuations or truly reasons for concern? The imprecision of most seabird population estimates renders short-term data suspect, and long-term seabird population trajectories here are optimistic. In the hope of adding to our historical baseline we grasp for insights from snippets in nineteenth century ship logs out of all proportion to the writer's intent or expertise in recording accurate observations.

Isles of refuge stimulates fundamental questions about goals for an intensively managed sub-tropical preserve. The role of humans in the destruction of the Hawaii ecosystem has debunked any notion that the first humans here were ecological 'noble savages' or that these islands are pristine. For 25 years Honolulu biologists and managers have been paralyzed debating whether they would be 'playing God' by introducing Nihoa Millerbirds *Acrocephalus familiaris kingi* and palms to Laysan to replace similar extinct species without recognizing that inaction is also 'playing God' passively. The U.S. Coast Guard extirpated Polynesian Rats *Rattus exulans* on Kure (laudably in my view) when it decommissioned the LORAN base in the mid-1990s. But we don't know how those rats arrived there, possibly 'naturally' or on a Polynesian outrigger. One refuge biologist has suggested cleansing Midway of introduced ironwood trees, which would sacrifice the largest White Tern *Gygis alba* and Black Noddy *Anous [tenuirostris] minutus* colonies in the world on the altar of restoring a 'pristine ecosystem'. Such policies, taken to their logical conclusion, would reduce Midway to an enormous sand pile virtually devoid of wildlife and destroy the precious nesting habitat of hundreds of thousands of albatrosses. Oceanic seabird breeding islands worldwide are severely wounded, and I believe we should optimize wildlife populations, not abstractions. And who makes such decisions? Some scientists believe that because they can provide insights into biological processes they should be entitled to make all policy decisions, a view that is at odds with democratic principles.

Government agencies and individual wildlife managers have had huge effects on these islands. U.S. Fish & Wildlife Service (FWS) refuge manager Eugene Kridler deserves heroic recognition, serving as a one-man operation and junk-yard dog for years while achieving more protection than today's platoons of bureaucrats. *Isles of refuge* recognizes Karl Kenyon for accomplishing much of the early research in less than favourable conditions. By contrast, George Locey, Hawaii Board of Agriculture and Forestry, is a goat. He blocked the return of Laysan Rails to their native island from Midway in 1941, sealing their extinction when Black Rats *R. rattus* invaded Midway on Navy ships the next year. Perhaps his folly should be commemorated at the Laysan diorama in the Denver Natural History Museum where diminutive stuffed rails are a remembrance of this intriguing creature.

Much of the source material for *Isles of refuge* is familiar, but I was pleased to learn of such recent publications as Miklos D.F. Udvardy's translation from the German of Schauinsland's 1899 classic account of three months on Laysan. For me, *Isles of refuge* is a nostalgic return to remote island field work in Hawaii and Alaska. It evoked suppressed memories: snorkelling with Mark Rauzon at Laysan and being scared out of the water by a swimming monk seal that seemed to be an attacking Tiger Shark; stalled aboard a small boat in Pearl & Hermes Reef and agonizing whether the *Townsend Cromwell* would find us if we drifted out of the atoll; the terror of being slammed by high surf into sharp coral and rock when swimming from Moku Manu, Kaneohe Bay, after a seabird census (the inflatable dinghy operator later confessed he thought I was going to perish).

Isles of refuge is an outstanding panorama of these islands, which I heartily recommend. It is a pity that no seabird biologist of our generation seems eager to write a similar book about Alaska.

Craig S. Harrison,
Vice Chair for Conservation, Pacific Seabird Group,
4953 Sonoma Mountain Road, Santa Rosa,
California 99504, USA
(charrison@erols.com)

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