

AN OVERVIEW OF FIELD GUIDES TO NEOTROPICAL BIRDS WITH REMARKS ON THEIR ROLE IN THE DEVELOPMENT OF NEOTROPICAL ORNITHOLOGY

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Resumen. Una herramienta básica y fundamental para ornitólogos modernos, que sean profesionales o aficionados, que trabajan en el terreno en la Región Neotropical, es una buena guía de campo para las aves del país o de la zona que estudien. Durante muchos años, dado la larga historia del desarrollo de la ornitología en la Región Neotropical, desde los trabajos históricos de los naturalistas-viajeros, como Charles Darwin, Alexander von Humboldt, Johann Natterer, Alcide d'Orbigny, y otros, en los años 1815–1850, el ornitólogo estudiando la avifauna neotropical no tenía libros del tipo que llamamos hoy "Guía de campo de las aves de . . .". Aproximadamente un siglo después de estos pioneros, en los años 1940, todavía no había casi nada de este tipo en la literatura de ornitología neotropical. Solamente en la década de los años 1950 empezó la publicación de verdaderas guías, realmente utilizables en el campo. Sin embargo, estos libros, aunque prácticos en el terreno por su tamaño pequeño y su peso ligero, así que pusieron estar puestos en un bolsillo o una mochila, generalmente tenían el defecto mayor de no poseer ilustraciones de todas, ni siquiera de la mayoría, de las especies de la zona descrita. Además, el texto de estos primeros esfuerzos era poco útil en el terreno, pues las descripciones de las especies eran hechas más bien sobre una base museológica, de pieles, y no incluyeran las marcas sobresalientes de las especies en el terreno ("field marks" en Inglés), tales que el observador de aves de campo realmente las puso notar. Hoy, a fines del siglo veinte, apenas 40 años después de la publicación de las primeras guías de campo para las aves de la Región Neotropical, la situación ha cambiado de manera tan drástica que el mercado del libro está casi saturado de tales guías de campo, y varios libros nuevos se publican cada año. Además, está claro que hoy en día las guías de campo para las aves neotropicales no sirven únicamente para ayudar la identificación de especies en el terreno. Esta parte de la literatura ornitológica neotropical parece a primera vista especializada, pero en realidad refleja el enorme y rápido desarrollo general de los conocimientos ornitológicos en la Región Neotropical en las últimas dos décadas, no solamente en términos de un mejoramiento en técnicas de identificación de campo, pero, y más importante aún, en términos de temas como distribución geográfica, variación geográfica, conceptos de especies y especiación, conducta (especialmente vocalizaciones), y biología reproductiva. Más aún, estas guías son de importancia capital para las personas dedicadas a la conservación de las aves. Para ayudar los numerosos ornitólogos interesados a las aves de la Región Neotropical, se presenta en este ensayo una revisión de muchas de las guías de campo disponibles para las aves neotropicales. En la primera parte del ensayo, las guías son descritas brevemente pero de manera crítica en cuanto a texto y ilustraciones, siguiendo un orden regional (México y América Central; América del Sur, incluyendo Trinidad, Tobago, las Antillas holandesas, Islas Malvinas, Georgia del Sur y Península Antártica; Islas del Caribe; Islas Galápagos). En la segunda parte se comparan varias guías y se mencionan las obras que el autor considera de las mejores disponibles a fines de los años 1990. Finalmente, para completar esta presentación, se mencionan algunas guías en preparación.

Resumo. Uma das ferramentas básicas e fundamentais de ornitólogos modernos, profissionais ou aficionados, que trabalham no campo na Região Neotropical, é um guia de campo das aves do país ou da área que estudam. Durante muitos anos, dada a longa história do desenvolvimento da ornitologia neotropical desde o trabalho dos naturalistas-viajantes, tal como Charles Darwin, Alexander von Humboldt, Johann Natterer, Alcide d'Orbigny, e outros, durante os anos 1815–1850, os ornitólogos não tinham livros semelhantes como aos que hoje chamamos de "Guia de campo das aves do . . .". Aproximadamente um século mais tarde, nos anos 1940, quase não havia algo semelhante na literatura da ornitologia neotropical. Somente na década do ano 1950 começou a publicação de verdadeiros guias do campo, livros que realmente possam ser usados no campo. De qualquer modo, esses livros, ainda que práticos no campo, devido ao pequeno tamanho e leves, poderiam ser como colocados no bolso ou na mochila, geralmente tinham a desvantagem de não ter ilustrações de todas, ou ainda a maioria, das espécies da área tratada no guia. Adicionalmente, o texto dessas primeiras tentativas não foi muito útil no campo, porque as descrições das espécies estavam baseadas mais em espécimens de museu que em "marcas de campo" ("field marks") que atualmente podem ser detectadas pelo ornitólogo no campo. Hoje, no fim do século 20, apenas quarenta anos depois da publicação dos primeiros verdadeiros guias de campo para as aves neotropicais, a situação mudou tão dramaticamente que o mercado está quase saturado com guias de campo e novos guias publicam-se a cada ano. É evidente que hoje, guias de campo para as aves neotropicais, não são usados somente para identificação no campo. Este setor

da literatura sobre a ornitologia neotropical pôde parecer a primeira vista como uma área especializada, mas em realidade reflete o enorme e rápido desenvolvimento geral do conhecimento dos ornitólogos, na Região Neotropical, durante as últimas duas décadas, não somente em função de técnicas de identificação no campo, mas também, e mais importante ainda, em função de temas como distribuição geográfica, variação geográfica, conceitos de espécies e especiação, comportamento (especialmente vocalizações), e biologia reprodutiva. Adicionalmente, esses guias são de importância decisiva para as pessoas que trabalham na conservação das aves na Região Neotropical. Para ajudar os ornitólogos interessados nas aves da Região Neotropical orientar-se nesse labirinto de livros, esse ensaio dá uma resenha dos muitos dos guias de campo dessa região. Na primeira parte do artigo, nos guias descrevem-se de forma sucinta mas crítica (texto e ilustrações), segundo uma seqüência regional (México e América Central; América do Sul, incluindo Trinidad, Tobago, as Antilhas holandesas, Ilhas Falkland [ou Malvinas], Georgia do Sul e Península Antártica; Antilhas; Ilhas Galápagos). Na segunda parte do ensaio, comparam-se guias de campo, especialmente os guias considerados pelo autor como os melhores disponíveis no fim dos anos 1990. Finalmente, para completar essa apresentação, alguns guias em preparação são mencionados.

Abstract. One of the basic and fundamental tools of modern ornithologists, whether professional or amateur, who work in the field in the Neotropical Region, is a field guide to the birds of the country or area they study. For many years, given the long history of the development of Neotropical ornithology since the pioneering work of naturalist-travelers like Charles Darwin, Alexander von Humboldt, Johann Natterer, Alcide d'Orbigny, and others in the 1815s–1850s, the worker did not have books of the kind that we call nowadays "Field guide to the birds of . . ." About a century later, in the 1940s, there was still almost nothing of this kind in the Neotropical ornithological literature. It is only in the decade of the 1950s that true field guides started to be published, books that were indeed usable in the field. However, these books, although practical in the field because small in size and light in weight, so that they could easily be slipped into a pocket or a backpack, generally had the major drawback of not having illustrations of all, or even of the majority, of the species of the area they covered. In addition, the text of these first efforts was not very useful in the field, because the species descriptions were based more on museum skins than on the "field marks" that are actually detectable by the field ornithologist. Today, at the end of the 20th century, a mere forty years or so after the publication of the first true field guides to Neotropical birds, the situation has changed so dramatically that the market is getting nearly saturated with field guides, and several new ones come out every year. It is clear that, today, field guides to Neotropical birds are not used only for field identification. This sector of the Neotropical ornithological literature appears at first sight to be specialized, but in reality it reflects the enormous and rapid general development of ornithological knowledge in the Neotropical Region during the last two decades, not only in terms of improvements in field identification techniques, but also, and more importantly, in terms of such topics as geographical distribution, geographical variation, concepts of species and speciation, behavior (especially vocalizations), and reproductive biology. In addition, these guides are of crucial importance for individuals who work in avian conservation in the Neotropical Region. In order to help ornithologists interested in the birds of the Neotropical Region work their way through this maze of books, this essay reviews the field guides of birds of the area. In the first part of the paper, the field guides are described succinctly but critically insofar as text and illustrations go, according to a regional sequence (México and Central America; South America including Trinidad, Tobago, the Dutch Antilles, the Falkland Islands, South Georgia, and the Antarctic Peninsula; West Indies; Galápagos Islands). In the second part a comparison between field guides is made, especially the ones considered by the author to be among the best available in the late 1990s. Finally, to complete this presentation, several field guides that are in various stages of preparation are mentioned. *Accepted 23 December 1997.*

Key words: Neotropical Region, history of Neotropical ornithology, field guides, book review.

INTRODUCTION

A century and a half ago, in the early days of exploration of the ornithological riches of the Neotropical Region, travelers could surely not have dreamt that one day their counterparts would have in their jacket pocket such an extraordinarily useful, nay indispensable, tool as the field guides we have today, and that we take so much for granted. Famous explorer-naturalists like Félix de Azara (1802–1805), Charles Darwin (1842), Alcide d'Orbigny (1847; see Berlioz 1933), Alexander von Humboldt (Sick 1993: 30), Johann Natterer (see Pezeln 1870, Rokitansky 1957, Sick 1993: 32–33), Johann Baptist von

Spix (von Spix & von Martius 1823–1831; see Sick 1993: 32–33), Johann Jacob von Tschudi (1844–1846), and many others (see, e.g., Pinto 1979 for a review of early ornithological travelers in Brazil), all collected the birds they met, most of which belonged to new and as yet unknown species. These were duly described later and these descriptions were synthesized in early faunal lists for entire countries (such as Philippi 1868 for Chile; Taczanowski 1884a, 1884b, 1886 for Perú; Goeldi 1894 and von Ihering & von Ihering 1907 for Brazil; Carriker 1910 for Costa Rica; Dabene 1910 for Argentina; Chapman 1917 for Colombia) or for major regions (e.g., Crawshaw

1907 for Tierra del Fuego; Snethlage 1914 for Amazonia; Cherrie 1916 for the Orinoco; Swarth 1931 for the Galápagos). These early faunal lists formed the basis of the modern inventory of the entire fauna of nearly 4000 species now known in the Neotropical Region (American Ornithologists' Union 1983, Eisenmann 1955, Meyer de Schauensee 1966). Having the benefit of these early collections and descriptions, later explorers would be able to study them before embarking on their own travels and undoubtedly made notes designed to help them identify in the field, at least in preliminary fashion, the various species they would encounter.

In the latter part of the 19th Century and the first half of the 20th, many field ornithologists working in the Neotropical Region collected large series of each species of bird, thus adding immeasurably to the data base on individual, sexual, age, and geographic variation, besides enabling the description of new species. Among the many famous collectors whose incredibly well prepared collections enriched our knowledge of Neotropical birds by quantum leaps, such names as Rollo Howard Beck, W. W. Brown, Melbourne A. Carriker, Jr., George K. Cherrie, Emil Kaempfer, C. C. Lamb, William B. Richardson, Kjell von Sneidern, and C. F. Underwood, immediately come to mind. The importance of the work of these and other first rate collectors remains a neglected aspect of the history of Neotropical ornithology, although the rightly eulogistic descriptions of some of Beck's work by Murphy (1936: 2–25) and Pitelka (1986) and of Carriker's ornithological explorations in Bolivia by Wiedenfeld (1997) are a good start.

The description of new species in the Neotropics still goes on, witness the description of about 20 per year in the period 1981–1990 (Vuilleumier *et al.* 1992), and an equal if not higher rate in the period 1991–1995 (Vuilleumier & LeCroy, in preparation). But one must not forget that some of the best Neotropical ornithologists of the first half of our century, like Frank M. Chapman, were not only collectors and alpha taxonomists, but were also very keen field observers. Even though they collected much museum material, these men were able to identify many species by sight and sound. They did use

the shotgun to obtain voucher specimens, unlike modern-day birders, but, just like them, they also used binoculars (see, e.g., Chapman 1929, 1938). In substantial contrast to modern birders, however, what they could not use, because they did not have them, was field guides.

In the discussion of this review I will start to explore the relationship between the maturation of ornithology in the Neotropics and the increasing number of field guides. Suffice it to state here that among the very first field guides for any part of the vast Neotropical Region, seven (five in English and two in Spanish, published as early as 1928 but mostly in the two decades from 1947 to 1964), were clearly highly successful efforts that opened the road for all further attempts (at least when viewed with the hindsight provided by retrospection). These landmark volumes are, in chronological order of publication, (1) Bertha Sturgis's *Field Book of Birds of the Panama Canal Zone* (1928), (2) James Bond's *Birds of the West Indies* (first published in 1936 and followed by several later editions, starting in 1947), (3) Emmet Blake's *Birds of Mexico* (1953), (4) Claës Olrog's *Las Aves Argentinas, una Guía de Campo* (1959), (5) G. A. C. Herklots's *The Birds of Trinidad and Tobago* (1961), (6) Maria Koepcke's *Las Aves del Departamento de Lima* (1964; and in 1970 in an English translation by Erma J. Fisk as *The Birds of the Department of Lima, Peru*), and (7) Meyer de Schauensee's *The Birds of Colombia and Adjacent Areas of South and Central America* (1964).

These seven books represent just about the full range of field guides available to a field worker starting a career in Neotropical ornithology in the early 1960s, as was my case. In the mid- to late 1990s, only about 30 to 35 years later, the situation is totally different for a newcomer to this area and its avifauna, who has the luxury of being able to choose among a diverse array of excellent books to bring along to assist in the field identification of Neotropical birds. The extent and speed of this remarkable evolution cannot be stressed strongly enough. There is clearly an ever increasing market for field guides to Neotropical birds, obviously tied up with, in other words reflecting as well as spurring, the tremendous development of Neotropical ornithology and the phenomenal growth of the eco- and ornitho-tourism industry.

Incidentally, I do not believe that either enough praise has been lavished on the seven aforementioned books or that their authors have been adequately acknowledged for their pioneering contribution to the development of ornithology in the Neotropics. However, a few positive statements were written in reviews published shortly after these early field guides appeared. Thus Miller (1953), in his review of Blake's *Birds of Mexico*, wrote that "This is the first true field guide to the birds of México and as such is of distinct importance and usefulness at this juncture in the development of ornithology of that country." At about the same time Warner (1954) stated that Blake's *Birds of Mexico* was "a milestone of ornithological achievement." Eisenmann (1960) wrote a very positive review of Olrog's *Las Aves Argentinas, Una Guía de Campo* and later (Eisenmann 1965) a glowing review of Koepcke's (1964) *Las Aves del Departamento de Lima*. Of Meyer de Schauensee's (1964) *The Birds of Colombia . . .*, Austin (1964) wrote: "This book goes far toward filling one of the great voids in ornithological literature, that of usable guides to the birds of tropical South America," Blake (1965) that it was "an important landmark in the literature of Neotropical birds," and Paynter (1964) that "This book marks an important step in the development of Neotropical ornithology, for it is the first popular guide, written in English, for any region in continental South America."

Some words of praise have come much more recently. For example, Roig (1991), in a prologue to Olrog's posthumously published field guide to the birds of Mendoza, San Juan, San Luis, and La Rioja (Olrog & Pescetti 1991), wrote affectionately about Olrog's 1959 field guide: "En nuestro país la ignorancia que cubría la ornitología a nivel popular fue resuelto en 1959 por el Dr. Claes Olrog, con la aparición de su manual 'Las Aves Argentinas, Una Guía de Campo'. Toda una generación de amantes de las aves pudo comenzar entonces a interpretar nuestro mundo alado, con esta obra genial." (In our country the ignorance that shrouded ornithology at a popular level was lifted in 1959 by Dr. Olrog, with the publication of his manual 'Las Aves Argentinas, Una Guía de Campo.' With this genial work an entire generation of bird lovers could thus start to interpret our winged world.) Similarly, a brief

homage was paid to Blake's Mexican guide by Howell & Webb (1995: 45–46): "One publication in particular perhaps spurred this growing interest [in Mexican birds by North American ornithologists]. What readers may have failed to note is that the work described thus far [prior to Blake's guide] was undertaken *without* the aid of field guides. The first bird guide for anywhere in the region [of Mexico and northern Central America] was Emmet R. Blake's *Birds of Mexico* (1953). This pioneering work is primarily a manual for in-hand identification which, as recently as the 1960s, was how most identifications were made."

Whereas Howell & Webb (1995) are correct that Blake's book had a tremendous impact on field ornithology in México, I believe that they miss the mark somewhat when they state or imply that few ornithologists prior to the 1960s identified birds otherwise than "in-hand" (in other words through collection of specimens). As Howell and Webb's own field work in Middle America did not begin until 1981 (Howell & Webb 1995: 47), 20 years later, they may not be able to fully appreciate to what extent field identification was practiced many years earlier. My own work in the Neotropical Region, for example, did in fact begin about 20 years prior to theirs. I did use a shotgun to collect birds, but this activity was not carried out primarily — or only — in order to identify species. Thus I started field work in 1962 in México, where I used Blake (1953) extensively, continued in Ecuador in 1964, where the then just-published Meyer de Schauensee (1964) was my constant companion, and worked in Argentina and Perú in 1965, where Olrog (1959) and Koepcke (1964), respectively, were my daily vade-mecum. I collected small numbers of birds in all these countries in order to study specific biological problems. It is quite likely that young workers nowadays have difficulties imagining what field work was like in the Neotropics before excellent field guides became widely available.

As a museum and field ornithologist who has roamed the Neotropical Region for the past 35 years, my career has therefore spanned the period from some of the early and somewhat primitive field guides to the most recent and quite sophisticated ones covering one part or another of this area in the late 1990s. I have lived through, and

experienced fully, this fascinating and frustrating transition.

This period of change has been fascinating because it has been instructive to witness at first hand how field guides, and especially perhaps their illustrations, developed in about three decades, from crude or relatively crude, to outstanding. This important evolution reflects, in part, the geometric increase in numbers of ornithologists (professional and amateurs alike; from the northern hemisphere as well as from Latin America) studying Neotropical birds. Thus, new ornithological societies have been founded. *The Neotropical Ornithological Society* (NOS) was founded in 1987 and has published *Ornithología Neotropical*, its International Journal of Neotropical Ornithology, since 1990. The *Neotropical Bird Club* (NBC) was founded in 1993, and has published its journal, *Cotinga*, since 1994. Whereas NOS is a scientific society that publishes a refereed scientific journal, the NBC is a society catering mostly to amateurs and its journal is thus similar to other birding journals elsewhere.

The recent growth of Neotropical ornithology is also shown by the creation of numerous local and national ornithological societies, and the publication of refereed national or regional journals, such as *The Euphonia* in México, *Ornithología Caribeña* in the West Indies, *Ararajuba* in Brazil, or *Boletín Chileno de Ornitología* in Chile, to cite only four examples from one end of the Neotropical Region to the other. The increasing ornithological activity in the Neotropical Region is made possible to a large extent by the greatly enlarged network of roads and air routes, which allows ornithologists to visit remote corners of the Neotropics with ease and comfort, and also relatively cheaply. Many modern Neotropical ornithologists, whether amateurs or professionals, can thus now reach regions that, in the not too distant past, could only be approached through complicated and expensive expeditions. One example will suffice. In the late 1940s, Helmut Sick (1961) explored the upper Xingu area of Central Brazil on foot and by boat. This area was then virtually unknown and largely unreachable except with a full-fledged expedition like the one Sick joined. Today, this same area can be reached by a combination of plane and road, only about 24 hours

after leaving New York City's John F. Kennedy Airport. The direct result of this development, of course, is that our knowledge of Neotropical birds has increased dramatically in recent years.

The growth of Neotropical ornithology evidenced in the numerous field guides also reflects a substantial transformation in the way we identify birds in the field (in the Neotropics and elsewhere as well). Indeed, the refinements of field identification techniques have become almost an obsession among some ornithologists, especially amateurs, for many of whom it has become an end in itself. With improved skills in field identification, these birders pursue with passion their goal of "listing" or "ticking" as many species as possible (especially rare ones) for their life lists. In the Neotropics, this craze for field identification, listing, and search for rarities comes especially perhaps from avid birders in the United States and European countries like the United Kingdom, the Netherlands, and Denmark.

The recent development of this intense focus on identification and listing is shown most clearly in events like the founding of the Neotropical Bird Club, with its seat, ironically enough, in the United Kingdom rather than in the Neotropics. The Club's journal, *Cotinga*, has included numerous articles dealing with identification and records of rare species. The identification-listing obsession is also reflected by the recent publication of a 431-page book devoted to descriptions of places in South America that birders can visit with relative ease and where they will find species, particularly rarities (endangered species are mentioned especially often) and local or country endemics, to add to their life lists (Wheatley 1995; amazingly published in the United States by Princeton University Press, normally a producer of scholarly texts; the rather critical review of this birder's book by another birder [Hornbuckle 1995] should also be read to realize the extent of the listing-traveling craze). As a consequence of the trends just noted, a growing, relatively well-off, and increasingly sophisticated birdwatching population, which constitutes a powerful consuming force, demands field guides with ever more precise information on identification and ever more sophisticated illustrations.

Although it is a wonderful trend, the change from few to many and from poor to very good field guides has nevertheless been frustrating for me, as well as for other ornithologists, because the coverage of the Neotropics by field guides is uneven. Whereas some areas or countries have been covered by one or more field guides, other areas or countries, including large ones with rich avifaunas, like Bolivia, Ecuador, or Perú, are not covered by any field guide yet. For me the frustration has come from the fact that some of the areas not, or less well, covered by field guides have been places I myself wanted to go to, and did visit, for research purposes. Prior to several expeditions, therefore, I have had to prepare my own "field guide," including notes on potential field marks and sketches drawn from museum skins, especially for groups of birds that are difficult to identify in the field.

Although I had reviewed several field guides previously (Vuilleumier 1966, 1967, 1987, 1992), I had not thought about field guides to Neotropical birds in a general way until recently, when I started writing and illustrating my own *Field Guide to the Birds of Patagonia, including the Falklands, South Georgia, and West Antarctica*. As I embarked on this project, I examined critically, and took copious notes about, all the field guides on my library shelves and those of the library of the Department of Ornithology at the American Museum of Natural History (AMNH). The distillation of this exercise is what is presented in this review.

In this paper I therefore discuss critically a number of field guides to birds of the Neotropical Region. The term "Neotropical Region" (see also Vuilleumier 1993) is taken here very broadly, to include not only México and Central America, South America (including Trinidad and Tobago, as well as Aruba, Bonaire, and Curaçao), the West Indies, the Galápagos Islands, and the Falkland (Malvinas) Islands, but also South Georgia and the Antarctic Peninsula.

In the main part of the essay I present a series of mini-reviews of these field guides, arranged under four broad geographic areas: (1) México and Central America; (2) South America [including Trinidad, Tobago, the Dutch West Indies, the Falkland (Malvinas) Islands, South Georgia, and the Antarctic Peninsula]; (3) the West Indies; and (4) the Galápagos Islands. Full bibliographic

references are given for readers who might need to have this information. I also cite some book reviews published by others shortly after the appearance of these field guides; the reader might wish to consult these reviews to obtain an idea of how these field guides were originally received. However, please note that I have not made an attempt to compile a complete bibliography of reviews of the field guides presented in this essay. In the discussion I give a more general analysis of field guides to Neotropical birds, especially those I personally consider to be among the better ones.

I ask the reader to remember that, although I present many field guides in this piece, I have not attempted an exhaustive review meant to cover all the guides to Neotropical birds that have been published or that are currently available on the market. For the most part I review the guides that I know, and especially those that I have used in the field. I apologize to authors I have thus inadvertently omitted.

My qualifications to write such a review are fivefold. First, I have worked and published on Neotropical birds for 35 years and can claim some reasonable knowledge of this avifauna. Second, my travels have taken me from México in the north to the Cape Horn and Diego Ramírez Archipelagos in the south, as well as to the West Indies, the Galápagos, the Falklands, and the Antarctic Peninsula. Hence I have personally used or sampled many field guides. Third I am interested in, although not obsessed by, problems of field identification. Fourth I am preparing a field guide of my own, as already mentioned. And fifth, I must state that from my vantage point as a curator of ornithology at the AMNH for the last 24 years, I have had the good fortune to be, as it were, right in the middle of the explosive development of Neotropical field guides. The AMNH collections of Neotropical birds are literally second to none, being especially rich in historical material, and having representative series of specimens from virtually all Neotropical species from all parts of their range. Consequently, any field guide author or illustrator worth his or her salt has spent time in New York City looking at AMNH skins or drawing them. I have thus had, as temporary companions, sometimes for considerable periods of time or during repeated visits, people like

Jorge Rodríguez Mata from Argentina, Balthazar Dubs from Switzerland, Steve Howell, Sophie Webb, John O'Neill, Robert Ridgely, and Guy Tudor from the United States, and Jon Fjeldså from Denmark, to mention only a few authors or artists. For the Neotropics, as for other regions of the world, the AMNH collections have proven to be the *sine qua non* resource for field guide preparators (see Vuilleumier 1995b).

GEOGRAPHICAL ACCOUNTS

1. MEXICO AND CENTRAL AMERICA

Alvarez del Toro, M. 1971. *Las aves de Chiapas*. Tuxtla Gutiérrez, Gobierno del Estado de Chiapas, 270 pages. This classic and now out-of-print work, which, measuring 21.5 x 29 cm, is larger than most field guides, nevertheless has a field guide style text and color illustrations executed by the author. Alvarez del Toro was an acknowledged authority on the birds of México, and especially of Chiapas.

Blake, E. R. 1953. *Birds of Mexico. A guide for field identification*. Chicago, the University of Chicago Press, 644 pages. (Third impression 1959.) Blake's field guide was reviewed by Miller (1953), Storer (1953), Sutton (1953), and Warner (1954). Sutton (1953), who probably knew Mexican birds in the field as well as anybody else did at that time, wrote that "There is great satisfaction in having in hand, *at last* [italics mine] a good book on Mexican birds, complete yet of convenient size for the field." Blake's book is a classic. In his preface, Blake wrote (p. vii): "Ornithologists have long been aware of the need for a comprehensive Mexican bird guide. . . . This handbook is designed to meet that fundamental need for identification. Its purpose will have been wholly realized if it also stimulates a wider interest in Mexican birds." Indeed it has, Emmet! Without your book, I would have been lost during my first field trips to México, back in 1962. But more importantly, these first forays of mine into the Neotropical Region, with your "handbook" as a guide, truly stimulated me to learn more about this great avifauna. I am sure that many other Neotropical ornithologists are similarly in your debt. Blake's pioneer effort is in many ways a hybrid between a field guide and

a manual. It has only one color plate and a small number of line drawings (by Douglas E. Tibbits), the text includes keys that are more appropriate for museum than field identification, and the species descriptions do not really stress field marks. Yet this thick, although compact, sturdily bound, and easily packable field book has been a precursor to many other field guides to birds of the Neotropical Region. Authors who followed Blake used his book, in part to keep what was good in it, and in part to improve upon what was not so good — for a field guide.

Davis, L. I. 1972. *A field guide to the birds of Mexico and Central America*. Austin, University of Texas Press, 282 pages. This field guide, which was published simultaneously with the Edwards (1972) and the Peterson & Chalif (1973) volumes discussed below, covers not only México, but all of Central America as well. In this geographical sense it is therefore more broadly useful than these two other guides. The color plates by F. B. Bennett, Jr. are excellent, but unfortunately the reproduction did not do them justice. I understand that Davis was to have been a third co-author with Peterson and Chalif, but that this collaboration did not materialize, so that two different books were produced and published at the same time. Clearly the three volumes by Davis (1972), Edwards (1972), and Peterson & Chalif (1973) superseded the pioneer guide by Blake (1953) published two decades previously. These three newer books not only have a rich color iconography, carefully designed to help the field worker, but their texts are also clearly written from the point of view of field identification.

Edwards, E. P. 1972. *A field guide to the birds of Mexico*. Published by the author, Sweet Briar, Virginia, 300 pages. Quite a good and useful book, and equal to both of the other Mexican guides published about 20 years after Blake's (1953) volume, Edward's field guide is slightly larger than its competitors. The text for each species is quite succinct, yet gives a lot of detail. Although they are in English, the species accounts do include also a brief description in Spanish, a useful feature. I find that the color plates, by Murrell Butler, E. P. Edwards, J. P. O'Neill, and Douglass Pratt, which depict many

species in the same or very similar positions, are not only attractive but also very effective in the field. Edwards published a "1978 appendix for a field guide to the birds of Mexico (79 pages), including new information on Mexican birds since the guide was published in 1972, a list of Costa Rican birds not found from México to Nicaragua, a distributional checklist of the birds of Middle America, and an index that covers both the 1972 guide and the 1978 "appendix."

Edwards, E. P. 1989. *A field guide to the birds of Mexico*. Second edition. Published and distributed by the author, Box AQ, Sweet Briar, Virginia 24595, 118 pages. The very concise text and attractive plates of most birds by Edward M. Butler and of parrots by John P. O'Neill contribute to make this second edition of Edwards' little guide a useful volume. A main drawback of Edwards's (1989) guide is the lack of distribution maps. Even though the three books by Davis (1972), Edwards (1972, 1989), and Peterson & Chalif (1973) have now been clearly superseded by the latest Mexican field guide by Howell & Webb (1995) (see below), the earlier volumes still have a role to play. For one thing, the illustrations of the various guides complement each other in several ways; for another, the texts allow the user to obtain a broader perspective than any single book could furnish him or her; finally, the earlier guides are smaller and lighter in weight than the huge tome by Howell & Webb (1995). If I travel to México in a vehicle I will take all four guides along with me, but if I have to travel superlight I may pack only one, perhaps either Edwards (1989) or Peterson & Chalif (1973).

Howell, S. N. G., & S. Webb. 1995. *A guide to the birds of Mexico and northern Central America*. New York, Oxford University Press, 851 pages. This book was reviewed from a birder's point of view by Morris & Buffa (1996) and, in order to help birders, Salzmann (1997) reconciled some of Howell & Webb's (1995) taxonomic decisions with those published earlier in the American Ornithologists' Union (1983) Check-list. This hefty volume, measuring a respectable 15.5 x 22.5 x 4.5 cm, does not fit into any jacket pocket, but can be slipped into a backpack. At 1.7 kg (hardbound copy), I believe that this book is the heaviest of the current generation of Neotropical

field guides. As I have witnessed some of the gestation phases of this book, I can attest that its text, plates, and maps are based on years of careful fieldwork all over México and of painstaking museum work. The result of this immense labor is not just a very fine field guide, but also a manual to the birds of México and northern Central America. This extraordinary achievement is not likely to be improved in the near future. After all, it took about 20 years from Blake's (1953) pioneer effort to the three guides by Davis (1972), Edwards (1972), and Peterson & Chalif (1973), and another 23 odd years until Howell & Webb's (1995) tome. This wonderful book treats about 1070 species, only about 100 more than Blake did 42 years ago, but a *major* difference between the two handbooks is that whereas Blake's (1953) guide only illustrated about 330 species (34%), all but about 100 species out of 1070 (about 90%) are depicted, and most in color, in Howell & Webb's (1995) volume. I do regret, however, that, for whatever reasons, the author and illustrator felt obliged not to illustrate some species, including mostly North American species distributed north of Mexico, like some pelagic birds, herons, and gulls. They stated: "Several guides cover North American birds [i.e., north of the México-USA border] and we have opted to devote plate space to Middle American species" (Howell & Webb 1995: 78). Indeed, several excellent field guides do just this, but what a pity: as a result of this decision Mexican ornithologists will have to carry along North American field guides in addition to "theirs." Ironically, reviewers of Blake's (1953) book like Sutton (1953) and Warner (1954) had regretted the illustration of too many non-Mexican birds in his field guide! It is hard to please everybody, but note that in either instance, it is the Mexican ornithologists who lose. In the 1950s, they had too few Mexican species in the one guide available; in the late 1990s, they have too few North American species in the best guide available. Another major difference between Blake and Howell & Webb, and one that is valid also for the three guides from the early 1970s, is that none of the four earlier guides had distribution maps. The maps in Howell & Webb are excellent. The introductory sections, on biogeography, climate, habitats, history of ornithology in México, and

conservation, are very good. I especially appreciated the authors' remarks about taxonomy (page 63), a point not always well understood, and even less dealt with, by authors of field guides. "The taxonomist is a biologist trained in the principles of evolutionary biology. He/she should evaluate all factors relating to speciation for a given case and decide as best possible." And further: "... recently, biochemical techniques (such as DNA-DNA hybridization) have been used in an attempt to determine more precisely taxonomic relationships. While we recognize that biochemistry can, and should, contribute another facet to understanding taxonomic relationships, such techniques are still in their infancy and most results have yet to be widely accepted." Howell & Webb (1995: 6061) discuss with great clarity the vexing problem of species and species limits, a topic of interest to both taxonomists (= trained evolutionary biologists) and to birders (= persons who are, or are not, biologists and who simply try to correctly identify the units they see or hear in nature and to allocate them to what field guides call "species"). What Howell & Webb (1995: 61–62) wrote is worth quoting here. "For many professionals, as well as amateur, ornithologists and birders, the question of what constitutes a species, and why, is often puzzling. We follow the biological species concept (BSC) Some biologists have proposed alternatives to the BSC which, like any definition, will have some problems. The main challenge to the BSC is the phylogenetic species concept (PSC) which defines a 'species' as 'the smallest diagnosable cluster of individual organisms in which there is a parental pattern of ancestry and descent' (Cracraft 1981), and in which subspecies are *taxa non grata* [italics theirs]. The PSC often relies on trivial differences in morphology or plumage and overlooks important biological information; such an approach seems to derive from the inability of persons to understand a complex natural world rather than the inability of birds to conform to our attempts at classification. We believe that a species is a biological entity, that the BSC is as good as any definition, and that subspecies are an important part of avian taxonomy." On page 63, Howell & Webb (1995) wrote: "It must be recognized that speciation is a dynamic evolutionary process. A population does not attain specific status overnight. Draw-

ing lines to indicate that certain birds form a species rather than subspecies is a purely human designation. It is the birds themselves that decide the reproductive isolation." The pithy pages that Howell & Webb (1995: 61–64) wrote on taxonomy, including the species problem, subspecies, genera, and speciation, and on how to solve practical borderline problems, I found to be a model of the kind, that should be mandatory reading not only for all birders but also for some professional ornithologists. But, of course, Howell & Webb's (1995) field guide is much more than some carefully thought-out and well-written introductory sections. Its superb, extremely well-prepared species accounts, its very clear range maps, and its magnificent plates, which are beautifully reproduced, all converge toward making this book an exceptional volume, one that I might well place, together with Hilty & Brown's (1986) field guide to Colombian birds, Ridgely & Gwynne's (1989) on Panamanian birds, and Stiles *et al.* (1989) on Costa Rican birds, at the apex of the Neotropical field guide-handbook market. Congratulations, Sophie and Steve!

Land, H. 1970. *Birds of Guatemala*. Wynnewood, Pennsylvania, Livingston Publishing Company, 381 pages. Two years before the Davis (1972), Edwards (1972) and Peterson & Chalif (1973) guides appeared, the late Hugh Land managed to write the text of, and to illustrate many plates in, this very nice volume on Guatemalan birds. The other plates are due to H. Wayne Trimm. The preparatory work for this guide was extensive exploration of the Guatemalan avifauna by Land and his students throughout the country. It is unfortunate that Hugh died before the work was completed: he never saw it in print. This field guide is quite good: the text is well crafted and the range maps are useful, clearly reflecting deep personal knowledge of this country and its avifauna. The illustrations are good, but unfortunately there are too few of them, and many species are not depicted. This work was published originally for the (alas now defunct!) Pan-American Section of the International Committee for Bird Preservation (the former ICBP). The late William H. Phelps, then Chairman of the section, wrote the Foreword.

MacKinnon, B. 1989. *100 common birds of the Yucatan Peninsula*. Amigos de Sian Ka'an a. c., Cancún, México, 220 pages. MacKinnon, a resident of Yucatán, who recently published a useful annotated bibliography of Yucatán ornithology (MacKinnon 1993), had earlier produced a very attractive pocket-sized guide to the most common species likely to be met with in the Yucatán Peninsula. Each species is described and illustrated with color photographs on two facing pages, a format that is easy to use. One of the major goals of this little book is to attract attention to the birds of this area, and especially to the Sian Ka'an Reserve, for which MacKinnon herself has fought long and hard.

Méndez, E. 1979. *Las aves de caza de Panamá*. Panamá, privately published by the author, 290 pages. Dedicated to Alexander Wetmore, this volume treats game birds (tinamous, ducks, cracids, quail, and pigeons and doves). Each species account includes an attractive line drawing by the author that can help in field identification, the common names used in different Latin American countries, a description, information on status and distribution in Panamá, and notes (on topics such as geographic variation and subspecies). If it is still in print, this book should be helpful for its intended audience of hunters and sportsmen.

Peterson, R. T., & E. Chalif. 1973. *A field guide to Mexican birds. Field marks of all species found in Mexico, Guatemala, Belize (British Honduras), El Salvador*. Boston, Houghton Mifflin Company, 298 pages. This is a great book, in the tradition of the well-known other field guides by the late Roger Tory Peterson. One drawback of the Mexican volume is that, to use the authors' own words (p. xvii): "most species that are widespread in North America are not illustrated, nor are they treated fully in the text." Also, unfortunately, the book includes no range maps. This, of course, meant that some years ago the fieldworker had to pack along, not only the Peterson & Chalif book, but also one or more field guides to North American birds to have complete pictorial coverage. When this book is used in an area of México with very few North American species it is extremely useful, as I found out in 1983. Of course, the Peterson & Chalif (1973) is probably obsolete in view of the Howell &

Webb (1995) tome, but there are still occasions when I will take the first guide, and perhaps not the second, for example whenever I will need to travel extremely light.

Peterson, R. T., & E. L. Chalif. 1989. *Aves de México*. México, Editorial Diana, 473 pages. This book, which I have not seen, is the Spanish translation of Peterson & Chalif (1973) by Mario Ramos and María Isabel Castillo.

Rand, A. L., & M. A. Traylor. 1954. *Manual de las aves de El Salvador*. El Salvador, Universidad de El Salvador, 308 pages. The authors tell us in the introduction that the preparation of their guide was made easier by the monumental and authoritative checklist of the birds of El Salvador by Dickey & Van Rossem (1938). Even though it is not called a field guide, this book has proven to be very helpful in the field in the past, especially of course in El Salvador, but in adjacent areas as well, to a large extent because it was published in Spanish and thus available in the language used in that and neighboring countries. The species entries include description of adults and chicks, similar species, distribution, breeding, and general natural history. The black and white illustrations, by Douglas E. Tibbits, are the same as those in Blake (1953), reproduced by permission of the University of Chicago Press. This useful book, now very hard to find, seems to be one of the few guide-type work that was written in Spanish by North American ornithologists.

Ridgely, R. S. 1976. *A guide to the birds of Panama*. Princeton University Press, Princeton, 394 pages. The first edition of this wonderful guide, illustrated by John A. Gwynne, Jr., benefited not only from Ridgely's vast field experience in Panamá, but also, and I do not mean here to diminish in the least Ridgely's phenomenal labor, from the generous help he received from the late Eugene Eisenmann of the American Museum of Natural History, who knew Panamá's avifauna extremely well, and who could easily have been a co-author (as he also could have been a co-author of Meyer de Schauensee's 1966 list of South American birds, as I pointed out earlier: Vuilleumier 1995a). At the time of its publication, Ridgely's guide to the birds of Panamá was probably the best available for any rich tropical American avifauna.

Ridgely, R. S., & J. A. Gwynne, Jr. 1989. *A guide to the birds of Panama, with Costa Rica, Nicaragua, and Honduras*. Second edition. Princeton, Princeton University Press, 534 pages. Ridgely's 1976 volume on the birds of Panamá has been so extensively modified — and improved — in this second edition that the latter should be considered a new book altogether. It is truly an excellent field guide, the field guide for southern Central America, just as Howell & Webb's (1995) new book is the field guide for México and northern Central America, and Stiles *et al.*'s (1989) Costa Rican book is the field guide for middle Central America. Besides field marks and the usual range descriptions (but unfortunately without range maps), the text of Ridgely & Gwynne (1989) manages to pack an incredible amount of information. As for other field guides, I regret that some species were not painted and included in the beautiful color plates. Would their addition (which clearly would have cost time and effort on the part of the artist) have made the dollar cost of the book so much higher? I doubt it. But the inclusion of all species would certainly have made the book much more useful. In spite of this criticism, make no mistake about it, the so-called second edition of *A guide to the birds of Panama* is right up there among the very best of the current crop of Neotropical field guides.

Smith, F. B. 1966. *The birds of Tikal*. Garden City, New York, Natural History Press, 350 pages. As I have already reviewed this book in detail (Vuilleumier 1967) all that needs to be said here is that this is an excellent pocket-sized guide, unfortunately including illustrations to only a few of the species of this area, which receives so many visitors each year.

Stiles, F. G., Skutch, A., & D. Gardner. 1989. *A guide to the birds of Costa Rica*. Ithaca, New York, Comstock Publishing Associates (a division of Cornell University Press), 511 pages. This thick book is a very good field guide indeed, that includes, in addition to excellent identification material, much information about habits and nesting that is not usually included in field guides. Given the great familiarity of the authors with the breeding biology and the ecology of Costa Rican birds, this feature is invaluable.

Gardner's illustrations are very attractive. I regret the lack of distribution maps, but perhaps the only real drawback of this book, which it shares with other recent Neotropical tomes (e.g., Howell & Webb 1995, Hilty & Brown 1986), is its size and weight (1.1 kg), which make it impossible to carry in one's jacket pocket. This remarkable book, together with those by Howell & Webb (1995) and Ridgely & Gwynne (1989), give ornithologists working in the area from México to the Colombian border first class tools that will be hard to improve upon in the future.

Sturgis, B. B. 1928. *Field book of birds of the Panama Canal Zone*. G. P. Putnam's Sons, New York, 466 pages. This pocket-sized book (11 x 17.5 cm), which incidentally cost \$3.50 in 1928 dollars, was the pioneering field guide to birds of an extremely rich Neotropical avifauna. Frank M. Chapman wrote the foreword. The guide included six color and two black-and-white plates by the well-known bird artist and naturalist Francis Lee Jacques (1887–1969; Luce & Andrews 1982) and line drawings in the text by Rudyerd Boulton. Sturgis's book is now a collector's item that remains on bookshelves and rarely, if ever, sees field use. But in its time, this was a very useful field book. Reviews include those by Stephens (1928) and Stone (1929). As Stone (1929) perceptively remarked: "This is probably the first handbook, at least in English, of the birds of any part of the Neotropical region and is particularly welcome at this time when so many persons are visiting the [Panama Canal] Zone and quite a number studying at the Barro Colorado Zoological Station." It is interesting to note, and probably historically significant, that for this pioneering Neotropical guide, as for so many subsequent ones (to Neotropical and other birds), the specimens in the rich collections of the American Museum of Natural History in New York formed the main basis for the species descriptions. It is also worth pointing out that another book in the series of Putnam's Field Books, in which Sturgis's guide appeared, includes the well-known and equally classic *Birds of the Ocean* by W. B. Alexander (1928).

Thurber, W. A. 1978. *Cien aves de El Salvador*. El Salvador, Ministerio de Educación, unpaginated. This rather large book (25 x 23.5 cm) illustrates with photographs (of the birds and

also, for some species, of nests and eggs) and includes a very brief Spanish and English description of 100 species of El Salvador birds. Some species accounts include also a distribution map. I don't know how successful this book was in El Salvador. It is certainly attractively produced, but could not be used as a field guide, partly because of its size but, mostly, because it treats so few species. The manual by Rand & Traylor (1954) is much more useful in this regard.

2. SOUTH AMERICA (INCLUDING TRINIDAD, TOBAGO, THE DUTCH WEST INDIES, THE FALKLANDS [MALVINAS], SOUTH GEORGIA, AND THE ANTARCTIC PENINSULA)

Antas, P. de Tarso Z., & R. B. Cavalcanti. 1988. *Aves comuns do planalto central*. Brasília, Editora da Universidade de Brasília, 238 pages. The fact that I have not seen this book, which was illustrated by Maria Cândida V. Cruz, shows how difficult it is for ornithologists who reside outside the Neotropics to obtain, or even to be able to examine copies of, books published in Latin America.

Araya M., B., Millie H., G., & M. Bernal M. 1986. *Guía de campo de las aves de Chile*. Santiago, Chile, Editorial Universitaria, 389 pages. (The fifth, slightly revised edition, 1992, has a few color plates not present in the earlier ones.) This sturdy, soft bound, pocket-sized, and Chilean-made field guide to all the species of birds on the Chilean list was written by Braulio Araya and the late Guillermo Millie, and illustrated by Mariano Bernal. This field guide has had a phenomenal success in Chile, where birds and bird-watching have recently grown in popularity, as witnessed by the fact that the first edition of 3000 copies was soon out of print, and by the publication of the journal *Boletín Chileno de Ornitología* since 1994. The text of the *Guía* is sparse, giving only a basic description of each species and of its range. The latter is unfortunately hardly better than what had been published years ago by Philippi (1964) in his classic checklist. The illustrations are conveniently placed on the page facing across from the species accounts, thus greatly facilitating consultation of the book. The illustrations, all black-and-white line

drawings, recall those of the late Maria Koepcke in her guide to the birds of Lima. Bernal's plates, however, are inferior to Koepcke's. Most of them are adequate for field identification, but some are definitely not that useful, whereas others still are useless (e.g., some seabirds, pipits). Three or four species are usually described and illustrated on each facing double page, but too many pages have only one or two species, thus leaving unnecessary blank spaces. The book could thus have been condensed and been produced in an even smaller and more useful field format, or else the species accounts could have been expanded slightly — and improved —, or else again, distribution maps could have filled the empty spaces in a most useful manner. In spite of these criticisms, I carry Araya *et al.* (1986) every time I go to Chile.

Araya, B., Chester, S., & M. Bernal. 1993. *The birds of Chile: a field guide*. Santiago, Latour, 400 pages. This is a soft-cover English translation by Sharon Chester of the Araya *et al.* (1986) field guide in Spanish. Although the English version is compact, like its Spanish predecessor, it is slightly larger (about 21 x 13 versus 18 x 11.5 cm), and hence less easy to slip into a jacket pocket. The line drawings by Bernal appear to be exactly the same ones as in the Spanish editions, but they have been enlarged in reproduction, and are consequently more useful although they have lost, in the enlargement, some of their sharpness. The range descriptions have been slightly improved over the Spanish editions, and been brought up to date, but no maps have been included. One unfortunate feature of the English language version is the paper, which, instead of being thick and glossy white as previously, is thinner, gray and slightly marbled, thus diminishing the sharpness of the figures. One welcome addition is the inclusion of a map of Chile with the names of the different political subdivisions of the country, as well as many localities.

Belton, W. E. 1982. *Aves silvestres do Rio Grande do Sul*. Porto Alegre, Fundação Zoobotânica do Rio Grande do Sul. A guide to the most common birds of the southernmost state in Brazil, which Belton explored fully during his long sojourns there (Belton 1984, 1985, 1994). See below for a fuller description of the second edition.

Belton, W. E. 1986. *Aves silvestres do Rio Grande do Sul*. Second edition. Porto Alegre, Fundação Zoobotânica do Rio Grande do Sul, 169 pages. This book is illustrated with photographs by John S. Dunning. Species accounts and photographs are usually on facing pages, a convenient feature. As only the most common species of the State of Rio Grande do Sul are included, this makes for a limited use, but this book nevertheless should be excellent for beginners in southern Brazil. The book's small size (11 x 15.5 cm) makes it ideal for slipping into a shirt pocket.

Canevari, M., Canevari, P., Carrizo, G. R., Harris, G., Rodríguez Mata, J., & R. J. Straneck. 1991. *Nueva guía de las aves argentinas*. Buenos Aires, Fundación Acindar, Vol. 1, 411 pages, Vol. 2, 497 pages. This attractive and ambitious two-volume work includes the description, range maps, and illustrations of Argentine birds, and clearly supersedes the older Olrog (1959, 1984) volumes. Its only competitor consists of the five volumes by de la Peña (1988–1994). Both the Canevari *et al.* and the de la Peña sets of guides are excellent and represent a tremendous improvement over Olrog's earlier guides, having much more information, infinitely better illustrations, and better range maps. Of the two sets, the Canevari *et al.* work is clearly superior, in that the main author (Straneck) and artist (Rodríguez Mata) have unsurpassed *field* knowledge of Argentine birds, which shows throughout. A great drawback of both sets is their publication in two and five volumes, respectively, which make for clumsy field use. An even greater drawback, however, is that these sets are virtually inaccessible. It is next to impossible to obtain these volumes outside of Argentina, and it is very difficult to do so even in Argentina. To give one example, the one copy of Canevari *et al.* (1991) that the AMNH library was able to purchase arrived defective, and cost a small fortune. The Canevari *et al.* volumes have had a rather sad history. Their main ornithological author, Straneck, and main illustrator, Rodríguez Mata, two of the best Argentine ornithologists and bird artists of their generation, respectively, devoted years of their lives to this project and distilled the essence of their enormous combined knowledge of Argentine birds into this book.

However, Fundación Acindar, which sponsored the project, not only did not put these peoples' names on the masthead as they should have, but only published a very small number of copies, of which many were given away to stockholders and other individuals with a minimal interest in birds. Straneck and Rodríguez Mata ended up with only one complimentary copy each. I have recently been told by Jorge Rodríguez Mata that Acindar was trying to have the work reprinted (in Chile), but that the first print-run was severely defective, so that the job needed to be done over.

Chester, S. R. 1993. *Antarctic birds and seals*. San Mateo, California, Wandering Albatross, 80 pages. This attractive little book illustrates with photographs and describes the species of birds and of mammals found in the Antarctic, including South Georgia. The avian species accounts (pages 7–60) occupy from half-a-page to two pages, and include information on identification, breeding, relative abundance, and distribution. For each species are given, besides the English name, the scientific name, an alternative English name, and the French, Spanish, and German names, a useful features when on board a cruise ship with passengers from various parts of the world. The Antarctic tourist, armed with Chester's (1993) little volume, together with the book by Soper (1994), and especially the excellent field guide by Watson (1975) (see below), should be well equipped to identify birds south of Drake Passage.

Clark, R. 1986. *Aves de Tierra del Fuego y Cabo de Hornos: guía de campo*. Buenos Aires, Literature of South America (L.O.L.A.), 294 pages. Soft-bound and compact in size, this field guide is handy in the southernmost archipelagos of South America (Tierra del Fuego archipelago and Cape Horn or Wollaston archipelago), although its author clearly has had more field experience in the Argentine than the Chilean sector of this topographically complex region. As in the Araya *et al.* (1986, 1993) guides for Chile described above, text and illustrations are conveniently placed on opposite pages. The text is better than that in the Araya *et al.* books from the viewpoint of field identification, but the illustrations, all in black-and-white, are uneven. Fortunately, given the relatively small number of

species in the Fuegian and Cape Horn region, identification is not too much of a problem for most species. A vegetation map (unfortunately without the vegetation of the adjacent mainland) and a field check-list are inserted at the end of the book.

Daskam, T., & J. Rottmann. 1984. *Aves de Chile*. Santiago, Colección Apuntes, Publicaciones Lo Castillo S. A., 56 pages. This thin volume, measuring 19.5 x 28.0 cm, contains the description and photographs of 110 species of common Chilean birds one is likely to meet, mostly in the central zone. Birds are not arranged in systematic order, but in a sort of ecological sequence (birds of the seacoast, birds of the city, migratory birds, high mountain birds, hill birds, birds found in agricultural environments, nocturnally active species, Chilean parrots, raptors, freshwater birds, wild ducks, and wild geese). All the species discussed in the book are listed in alphabetical order of their common Spanish names (Chilean usage!) on pages 49-56. For each species, abbreviated data are given about their classification, size, distribution within Chile, nest, and eggs. This attractive book is of little use for the serious amateur or professional, but can help those, especially perhaps school children, who are generally interested in birds to develop a deeper knowledge in the Chilean avifauna.

De la Peña, M. R. 1988, 1989, 1992a, 1992b, 1994. *Guía de aves argentinas*. Buenos Aires, Literature of Latin America (L.O.L.A.). The available volumes of this series are, respectively, Volume V (1988, first edition, Dendrocolaptidae through Tyrannidae, 117 pages), Volume VI (1989, first edition, Rhinocryptidae through Corvidae, 125 pages), Volume I (1992a, second edition, Rheiformes through Anseriformes, 139 pages), Volume II (1992b, second edition, Falconiformes through Charadriiformes, 180 pages), and Volume III (1994, second edition, Columbigiformes through Piciformes, 142 pages). The present set of five volumes thus includes three volumes of the second, revised edition (1992a, 1992b, 1994), and two volumes from the first edition (1988, 1989). I am told that Volumes V (1988) and VI (1989) of the first edition are being revised. These volumes constitute a most welcome addition to Argentine ornithology. The set

of five volumes measures about 22 x 15 x 5 cm if library-bound together into a single volume. Thus the set is rather too large for a pocket, but it will fit into a backpack. The text of this field guide contains rather detailed descriptions of each species, information on behavior, including voice, nests and eggs (topics in which de la Peña is especially interested), and a brief section on field identification. The last is too concise, whereas the general descriptions are too "museum-based" to be of much real use in field identification. However, this defect is made up by the color plates, drawn by Helga Kruger and Luis Huber (some also by Aldo Chiappe in the first edition), and including both birds and eggs. Huber's plates are very attractive, and clearly show that the artist knows his birds in the field, although he is better at depicting some birds than others. Kruger's plates, although attractive also, are less good from a field guide point of view and show more stylized, less life-like birds. In addition to the color plates, the book's illustrations contains black-and-white photographs of nests and eggs, and, for some species, excellent line drawings of their nest and habitat. De la Peña's books compete with Canevari *et al.*'s (1991) volumes, yet, given the differences in format and in the style of the illustrations between the two sets of guides, they complement each other. Neither the Canevari *et al.* books nor the de la Peña ones can compete, as a field guide, with the compact volume by Narosky & Yzurietta (1987, 1989). The latter has poorer plates but a better text for field identification, and its small format makes it convenient in the field. Interestingly, I found that one of the authors of Canevari *et al.* uses Narosky & Yzurietta in the field.

Dubs, B. 1992. *Birds of southwestern Brazil: catalogue and guide to the birds of the Pantanal of Mato Grosso and its border areas*. Küsnacht, Switzerland, Betrona-Verlag, 164 pages. For an excellent, yet critical review of this volume, see Bates (1993). This book, in some ways a successor to Dubs's own (1983) earlier, German language book, is not pocket-sized, yet is small enough to be carried in a small backpack, and is very sturdy under heavy-duty field use. It is, as its name indicates, both a catalogue (and check-list) and a guide to the rich avifauna (nearly 700 species) of the Pantanal area of Brazil and

adjacent Bolivia and Paraguay. By covering the avifauna of a huge area of South America that, until then, had not been included in other guides, this rather unique volume fills an important geographical, ecological, and avifaunistic gap in the South American field guide market.

The book has several good features, including the description of habitats in the Pantanal area, brief but compact entries for each species, and many color illustrations. From the point of view of the field worker, however, drawbacks are several and serious. They include the lack of any information on vocalizations, the absence of illustrations of raptors in flight, and the lack of illustrations of numerous species and even higher taxa (e.g., no Caprimulgidae, no Apodidae, many Trochilidae, many Tyrannidae). The species descriptions are much more museum-based than field-oriented, and those species that are illustrated are represented in an overly simplified position. Although I did not find them very useful in the field, I nevertheless find the no-frills color plates to be attractive. I was privileged to see the author-illustrator at work during the many days he spent at AMNH preparing his book, and to have a look at the original artwork before reproduction. As is so often the case, the originals are much better than the reproductions. One problem with such stylized renditions is that species that are difficult to identify, such as flycatchers, antbirds, and furnariids, probably cannot be told apart safely in the field. Because of the problems with this book, the field worker in the Pantanal and adjacent areas of southwestern Brazil will therefore, either need to use additional books, or else wait until he/she reaches a museum with adequate skin collections that will permit to match field descriptions with museum specimens. These criticisms aside, Dubs's guide is a pioneering venture and has presently no competition. Perhaps he will prepare an improved second edition.

Dunning, J. S. 1982. *South American land birds. A photographic aid to identification*. Newtown Square, Pennsylvania, Harrowood Books, 364 pages. This book, written in collaboration with Robert S. Ridgely, is an innovative and ambitious guide that has met with relatively little success as a guide to be used in the field, although (see below) it has gone through a second edition, and

so has evidently met with success on a commercial front, if not with field birders. In other words, I have not seen many birders using Dunning in South America. The text entries for each species are extremely brief and accompanied by a distribution map.

Dunning, J. S. 1987. *South American birds. A photographic aid to identification*. Newtown Square, Pennsylvania, Harrowood Books, 351 pages. This book, written with the collaboration of Robert S. Ridgely, who, we are told, "helped greatly by doing the maps," represents a unique and extraordinary effort on the part of its author (who died of cancer on 31 December 1987 at age 81, we are told by Paul Harris, his publisher, in a brief memorial introduction), and is unusual as a field guide in that it uses photographs instead of paintings or drawings. In my opinion this guide, or "aid to identification," as it is subtitled, is not as effective as others because it is usually more difficult to use photographs than paintings or drawings in a field guide. It has often been said by others that the artist can "distill" what we now call the species' "jizz" in a single painting in ways that only several photographs can. However, when used together with other, country-wide or regional guides, this volume can greatly help field workers, as it does include about 2700 species, and as about 1200 species are illustrated by color photographs. This book was reviewed by Webster (1992), who was clearly of two minds about it: "Every time I pick up this book, I find something to complain about, and I find many things because I pick up the book often. I pick up the book often because it is very useful." I am not certain that I agree with Webster's remark that the book is very useful. At least it seems that I don't use it as often as Webster does.

Escalante, R. 1970. *Aves marinas del Río de la Plata y aguas vecinas del Océano Atlántico*. Montevideo, Barreiro y Ramos S. A., 200 pages. Although not of field guide size (18.5 x 27 cm), this is a useful book for identifying the many species of seabirds that occur in the area it covers, written by a well-known specialist of marine birds. The field guide style, black and white illustrations by Victor García Espiel are effective for field identification. The species accounts include

not only information about identification but also about breeding biology, geographical distribution, and notes on museum specimens. In addition, the book includes keys, which are very useful for the identification in the hand of beach stranded species belonging to such difficult groups as *Stercorarius* or *Pachyptila*.

French, R. 1973. *A guide to the birds of Trinidad and Tobago*. Wynnewood, Pennsylvania, Livingston Publishing Company, 470 pages. Although geographically considered West Indian, these two islands have basically a South American avifauna, being so near the Venezuelan coast. This guide is illustrated by attractive color plates by John P. O'Neill and by several portraits by Don R. Eckelberry. Additional illustrations include black-and-white portraits, in the text, by O'Neill. Not all species are depicted, which is a pity. The text is very complete, however, and includes much more information than merely descriptions of the birds and their range, for example data on size and body mass, food, nesting, and behavior.

French, R. 1991. *A guide to the birds of Trinidad and Tobago*. Second edition. Ithaca, Comstock Publishing Associates (a Division of Cornell University Press), 426 pages. This new edition includes many improvements over the first one, and clearly this is the book that field workers must take along with them when they visit Trinidad and Tobago, and neighboring areas of Venezuela as well. Murphy's (1992) review of this second edition describes in detail the new information it contains. However, the same drawback that I noted above for the first edition, the small number of plates, remains a criticism, even though a new plate by John O'Neill was included in the second edition. Thus, unfortunately, the iconography of Trinidad and Tobago birds in field guides remains incomplete.

Fjeldsø, J., & N. Krabbe. 1990. *Birds of the high Andes. A manual to the birds of the temperate zone of the Andes and Patagonia, South America*. Apollo Books, Svendborg, and Zoological Museum, University of Copenhagen, 876 pages. I have published a detailed review of this important volume (Vuilleumier 1992), and need not repeat my views here, except to state that this massive book represents a turning point in our under-

standing of the Andean-Patagonian avifauna and in the development of South American ornithology in general. Even though the book has some flaws (some of which were listed by Vuilleumier 1992), it represents an achievement of considerable significance and all Neotropical ornithologists are clearly indebted to the authors-illustrator for this splendid synthesis. As a field guide, of course, this book presents two major defects, first its huge size and weight, and second the fact that it is bound flimsily and printed in very thin and relatively brittle paper. I have two copies, and the one I take in the field is kept in a zippered leather pouch . . .

Frisch, J. D. 1981. *Aves brasileiras*. Vol. I. São Paulo, Dalgas-Ecoltec Ecologia Técnica e Comércio Ltda., 353 pages. This book is a brave first attempt at a field guide to the birds of Brazil. This 16 x 23.5 cm volume contains an introductory section on classification and, after the species accounts, other sections on bird watching (including a very good discussion of binoculars, photographic equipment, photography, and tape recording [the author was an engineer and produced several records of Brazilian bird voices]). The bulk of the book (pages 32–271) consists of double pages with "text" on the left and 120 color plates on the right. The text is actually little more than a legend to the figure opposite. The color plates are by Svend Frisch, who was the author's father. These plates, which vary in quality from rather crude to moderately good, are generally useful as an aid for field identification. Although the iconography is rich, some groups of birds are not illustrated because Svend Frisch died before the end of the project. An addendum was published in 1982, which is really an English translation of the introductory section.

Frisch, S., & J. D. Frisch. 1964. *Aves brasileiras*. São Paulo, Irmãos Vitale S/A, 245 pages (plus unpaginated indexes). This volume can be considered as a precursor to the Frisch (1981) guide. It treats only a small number of species of Brazilian birds and has a small number of rather crude color plates. The quality of the plates is much superior in Frisch (1981). The text is readable, and so the book would have been a good first introduction to Brazilian birds for a non-

specialist audience, in Brazil and elsewhere, because, whereas the first part of the text is in Portuguese, pages 173–245 are in English.

Garay N., G., & O. Guineo N. 1991. *Conociendo Torres del Paine. A view of Torres del Paine*. Punta Arenas, Instituto Don Bosco, 110 pages. Written and illustrated by a husband and wife team (she is the ornithologist and he is a park ranger and naturalist) this bilingual — Spanish and English — book is a general guide to the Torres del Paine National Park in Magallanes, southern Chile, one of the most visited national parks in South America. Forty of the most representative bird species are described and illustrated with color photographs on pages 50–91. The species are arranged in habitat categories (lakes and lagoons, shores of lakes and rivers, marshy meadows, steppe, matorral and parkland, and forest and woodland); an additional category includes Falconiformes. Each species is illustrated by a color photograph that is quite sufficient for identification. Unfortunately, the species depicted and described on page 76 is misidentified: it is not *Mimus patagonicus*, as stated, but *Anthus correndera*. And the finch illustrated and described on page 75, as belonging to *Phrygilus gayi*, looks to me more like a hybrid *patagonicus x gayi* than either a pure *patagonicus* or a pure *gayi*.

Garay N., G., & O. Guineo N. 1993. *Conociendo la fauna de Torres del Paine. The fauna of Torres del Paine*. Punta Arenas, Instituto Don Bosco, 144 pages. This book, the second guide to the Torres del Paine fauna by the Gladys Garay–Oscar Guineo team, focuses especially on the mammals and the birds. The latter are treated on pages 40–136. In the present volume a total of 96 species are discussed, more than double the number in their 1991 book. As in the earlier volume, the species are arranged in habitat categories, plus Falconiformes. Again, unfortunately, some errors have crept in and were not discovered until after the book was printed. They include *Asthenes pyrrholeuca*, erroneously attributed (pages 90–91) to *A. modesta*, a juvenile *Circus cinereus* (page 132) identified as a *Falco peregrinus*, and a juvenile *Geranoaetus melanoleucus* identified as a *Buteo ventralis* (page 135). *Mimus patagonicus* (pages 86 and 87) and *Anthus correndera* (pages 84–85) are correctly identified this time. The same photo as in the first guide of a possible

Phrygilus gayi x patagonicus is published in this second volume, but a photograph of a beautiful and characteristic male *patagonicus* is included (page 108). I strongly recommend to the authors, who are both friends, that in their third field guide to the fauna of the Torres del Paine National Park, they arrange the species in systematic (not ecologic) sequence, and that they ask an ornithologist familiar with the avifauna to check the identifications and the texts.

Ginés, H., & R. Aveledo H. 1958. *Aves de caza de Venezuela*. Caracas, Editorial Sucre, C. A., Sociedad de Ciencias Naturales La Salle, Monogr. 4, 236 pages. This book is a guide to the game birds of Venezuela, written by Brother Ginés, who was curator of the La Salle collection, and by Ramón Aveledo, the former curator of the Phelps Collection in Caracas, who was long involved in problems of conservation in Venezuela. The groups included are tinamous, ducks, galliforms, charadriiforms, and pigeons and doves. The species accounts are uneven in length and coverage, and usually include information on range, behavior, and breeding biology, as well as good distribution maps. The attractive color plates are by A. Almeida. This is a useful book for its intended audience of hunters.

Gore, M. E. J., & A. R. M. Gepp. 1978. *Las aves del Uruguay*. Montevideo, Mosca Hermanos S. A., 283 pages. At the time it was published, this book, illustrated with color and black-and-white photographs, was the only guide to field identification of Uruguayan birds, although its size (17.5 x 24 cm) did not allow one to easily slip it into a jacket pocket. Although it has been superseded as a field guide by the more recent book (originally in Spanish, and now in an English edition as well) by Narosky & Yzurieta (1987, 1987), which covers not only Argentina, the home country of its two authors, but neighboring Uruguay (officially known as the República Oriental del Uruguay), the Gore & Gepp (1978) volume is still very useful in the field, as I was able to verify during a recent trip to Uruguay. Unfortunately, the Gore & Gepp (1979) volume is out of print, and only rarely available nowadays in second-hand bookstores of Montevideo (Joy Gepp, pers. comm.). Actually, a good field guide to Uruguayan birds by Uruguayan ornithologists is sorely needed: the species accounts

in Gore & Gepp (1978) are somewhat out of date, and the Uruguay information in the Narosky & Yzurieta (1987, 1989) field guide is little more than a mention that a given species occurs in Uruguay.

Grantsau, R. 1988. *Die Kolibris Brasiliens*. Rio de Janeiro, Expressão e Cultura, 232 pages. (Second edition 1989.) In his preface, the author states: "This book is a key to the identification [Bestimmungsschlüssel] of the hummingbirds of Brazil. It is the first [book] that contains all the known forms of Brazilian [hummingbirds depicted] on color plates." The book (measuring 19 x 27 cm) treats 38 genera and 86 species of hummingbirds. After introductory sections that discuss taxonomic matters, general distribution patterns, and include a key to the genera, pages 21–126 are devoted to species accounts including description, distribution, nest (illustrated with a number of line drawings), habitat, and pages 127–202 to 37 color plates of adult birds and one plate showing two nestlings. The book ends with a series of 14 distribution maps, a list of hybrids and taxa of uncertain status, indexes of scientific and common names (German, Portuguese, and English), and a list of references. All in all, this attractive book cannot be called a field guide, yet it could conceivably be used in the field. Because it is written in German I doubt that many Brazilian ornithologists will be able to consult the text, although the plates are helpful. The publication of this book was made possible with the support of Mercedes Benz do Brasil, the CEO of which wrote the preface.

Herklots, G. A. C. 1961. *The birds of Trinidad and Tobago*. London, Collins, London, 287 pages. Until the publication of the volume by ffrench (1973, 1991) Herklots's book was *the* field guide for Trinidad and Tobago. (The author had previously written a book on the birds of Hong Kong, another pioneering publication!) In the somewhat harsh words uttered by Herklots's successor ffrench (1973: 3), the Trinidad and Tobago volume included the following defects: "The very full descriptions of species . . . has not always made the work adequate as a field guide, while the illustrations, though admirable in themselves, do not measure up to the high standards of modern professional artists. I have found Herklots' remarks on distribution and

status to be somewhat limited. Nevertheless, the book has filled a real need, and many visitors to our islands have found it indispensable." One should not forget that Herklots's was a pioneer venture in the realm of Neotropical field guides. The book has 16 color plates by the author and 4 black and white illustrations by J. M. Abbott. Looking at the text again, I find that there are many valuable pieces of information in it. The appearance of ffrench (1973, 1991) should not make one ignore its distinguished predecessor.

Hilty, S. L., & W. L. Brown. 1986. *A guide to the birds of Colombia*. Princeton, Princeton University Press, 836 pages. This is a wonderful book indeed and it seems hardly possible that it was published over 10 years ago already. The magnificent plates are by Guy Tudor, and additional illustrations by H. Wayne Trimm, J. Gwynne, L. McQueen, J. Yzarray, P. Prall, and M. Kleinbaum. This book, even though titled as a "guide," is, in fact, more than a field guide, both because of its size and bulk (it weighs 1.5 kg) and of the vast amount of information packed within its 836 pages. The text is outstanding, the illustrations are spectacular, especially Tudor's plates, and the range maps, even though small, are very good. This wonderful book has been reviewed by Bleiweiss (1987) and Vuilleumier (1987), who should be consulted for fuller details. When first published, the Hilty & Brown set new standards for Neotropical field guides. It is perhaps the best field guide cum handbook for any South American country on the market today, although see my comments about Narosky & Yzurieta (1987, 1989) later in this paper.

Höfling, E., & H. F. de A. Camargo. 1993. *Aves no campus da cidade universitária Armando de Salles Oliveira*. São Paulo, Instituto de Biociências da Universidade de São Paulo, 126 pages. This small field guide describes and illustrates 134 species found on a university campus near the metropolis of São Paulo in southern Brazil. With text on the left page and plate on the right the book is easy to consult. The plates, by Federico Lencioni Neto, can be considered adequate but not outstanding for field identification. This practical little book is a good introduction to the common birds of southern Brazil, and should stimulate students who might wonder what birds they see between classes.

Höfling, E., Camargo, H. F. de A., & V. L. Imperatriz-Fonseca. 1986. *Aves da Mantiqueira. Birds of Mantiqueira*. São Paulo, ICI Brasil S. A., 86 pages. Large (24 x 30 cm), bilingual (with Portuguese and English texts on two columns per page), with portrait type plates, this book is not a field guide, but a general introduction to 40 of the many species of birds that occur in the Serra da Mantiqueira. I don't quite see who might use this book. The plate on page 55 is interesting, in that it shows an adult and a short-tailed juvenile-plumaged *Lepidocolaptes fuscus*, the latter looking much like *Aphrastura spinicauda* of southern Chile and Argentina.

Koepcke, M. 1964. *Las aves del Departamento de Lima*. Lima, Gráfica Morsom, 128 pages. A marvel of concision, detail, and usefulness, this thin (less than one cm), hardbound, pocket-sized field guide was written and illustrated by the late Maria Koepcke (for a glowing review of the book, see Eisenmann 1965; for an appreciation of Koepcke and her work, see Vuilleumier 1995a). As a combination museum scientist, field observer, and artist Maria had few peers, and this book shows all these talents. The species accounts are extremely compact, and accompanied by neat black-and-white line drawings. Six species were treated per double page. This compactness in no way detracts from the field worthiness of the book. Maria Koepcke knew her birds, and this guide, as a memorial to herself, shows it clearly. Although politically restricted to the Department of Lima, Perú, the guide is useful in surrounding areas, including coastal deserts, western Andean foothills, and high Andes to the north, west, and south of the study area. When I traveled to northwestern Perú in 1965, an area that contains species not described and illustrated in this guide, including both widespread and endemic taxa, I added these extralimitals in pencil in the margins, thus easily amplifying the geographical range of the guide.

Koepcke, M. 1970. *The birds of the Department of Lima, Peru*. Wynnewood, Pennsylvania, Livingston Publishing Company, 144 pages. This is the English translation, by Erma J. Fisk, of Koepcke's 1964 Spanish language book. The English edition is revised and enlarged, and includes more species, especially from the high Andes, in the body of the text, as well as six

additional and rare species in an appendix, thus making the guide even more useful beyond the Lima area. Hard-bound, like the original edition, this slim volume holds up well under field use. It is slightly larger than the original, and the typeface is bigger. The figures, however, are reproduced at the same size, but are not as sharp as in the original edition.

Meyer de Schauensee, R. 1964. *The birds of Colombia and adjacent areas of South and Central America*. Narberth, Pennsylvania, Livingston Publishing Company, 427 pages. This is a classic book, in that it was the first to attempt to give field descriptions of all species in species-rich Colombia. At that time, when such books were non-existent, Meyer de Schauensee's attempt was quite daring (see the reviews by Austin 1964, Blake 1965, and Paynter 1964). I used this book the year it was published during a long field trip to neighboring Ecuador, and admit to having been frustrated in my field identifications on several occasions. Even though Meyer de Schauensee had done a lot of field work himself, he was not a field birder in the sense we understand the term today, and so his species descriptions, based on museum skins, often failed to convey the feel and jizz of the species in the field. It was far better to have this book along, however, than none at all. Nowadays, Meyer de Schauensee (1964) has been totally superseded by Hilty & Brown (1986), published only 22 years later: what a stupendous evolution!

Meyer de Schauensee, R. 1970. *A guide to the birds of South America*. Wynnewood, Pennsylvania, Livingston Publishing Company, 470 pages. Following quickly in the wake of his Colombian guide (1964) and his technical checklist of South American birds (Meyer de Schauensee 1966; a monumental achievement written with the extensive collaboration of Eugene Eisenmann of the AMNH; see Vuilleumier 1995a), Rudy de Schauensee produced a guide to the birds of the entire continent (1970), another very bold move indeed. In style much like the earlier Colombian effort, the new book was extremely useful, yet had the same defects, namely not enough illustrations and museum-based, not field descriptions. In order to give some measure of how advanced this 1970 South American

guide was, it is interesting to note that in spite of all the progress in Neotropical ornithology in general and South American ornithology in particular, as of 1997 no single-volume book has been produced that supersedes Meyer de Schauensee (1970). Only one of Olrog's planned two-volume pocket-guide appeared (Volume I, penguins to woodpeckers, 1968), and only two of Ridgely & Tudor's planned four-volume massive work (1989, 1994) have been published. The only one-volume book covering South American birds (but not all species, unlike Meyer de Schauensee 1970), is Dunning (1978, 1987), which is not as authoritative, and which therefore cannot truly be compared with Meyer de Schauensee's.

Meyer de Schauensee, R. 1982. *A guide to the birds of South America*. Revised edition. Intercollegiate Press Inc., 498 pages. This revised edition differs chiefly from the original 1970 one in having a series of addenda (pages 429–435) and an appendix (pages 436–462) prepared by Meyer de Schauensee and Andrew L. Mack, giving details on taxonomy, geographical range, and other information, including new species described since the book was first published. Altogether an extremely valuable piece of work, I still turn to this book time and again, and always have a copy close at hand near my work table.

Meyer de Schauensee, R., & W. H. Phelps, Jr. 1978. *A guide to the birds of Venezuela*. Princeton, Princeton University Press, 424 pages. This book, yet another product from the pen of the indefatigable late Rodolphe Meyer de Schauensee, this time in co-authorship with his equally indefatigable late friend William H. Phelps, Jr., is the English version of Phelps & Meyer de Schauensee (1979), which it preceded by about a year. The text is similar in design to the other guides that Meyer de Schauensee wrote, and, also like the other ones, largely based on museum specimens rather than on field notes. However, a major difference between the Venezuelan field guide and the others is the set of superb plates by Guy Tudor and their facing page text, which are a mini field guide in themselves. Altogether, the trio of authors and illustrator produced quite a remarkable book that I have found extremely useful in Venezuela. In a balanced review of this book O'Neill (1979) wrote that in the late 1970s

"The best book available on any area in the Neotropics is Ridgely's on the birds of Panama, but 'The Birds of Venezuela' is certainly the best one available for a South American country." Twenty years later, in the late 1990s, the field guide situation has changed so much that several excellent books would compete for the titles of "best book available in the Neotropics" or "best book for a South American country." I would be interested to know what John O'Neill would write today!

Narosky, T. 1978. *Aves argentinas. Guía para el reconocimiento de la avifauna bonaerense. Field guide to the birds of Buenos Aires Province*. Buenos Aires, Asociación Ornitológica del Plata, 128 pages plus unpaginated index. This bilingual Spanish and English guide to the avifauna of the Province of Buenos Aires is the precursor to Narosky and Yzurieta's subsequent field guides to the birds of Argentina and Uruguay (see below). It was clearly written as a first step toward a field guide that would include, not only the 300 odd species of the Province of Buenos Aires, but the nearly 1000 found in the whole of Argentina. The author and his illustrator (Darío Yzurieta) acknowledged their debt to the field guides by Olrog (1959) and especially the one by Koepcke (1964) on the birds of Lima, which clearly inspired them in their own endeavor: "It was sufficient to see the instructive drawings in black and white, and the concise text [of Koepcke 1964], to incite one to make a similar attempt for the province of Buenos Aires." Unfortunately, although Darío Yzurieta was an excellent field ornithologist, he was not as good an artist, and his black and white drawings do not match the quality of those by Koepcke (1964). Nevertheless, this very useful guide went far beyond Olrog's (1959) pioneer but crude effort.

Narosky, T., & D. Yzurieta. 1987. *Guía para la identificación de las aves de Argentina y Uruguay*. Buenos Aires, Vazquez Mazzini Editores, 345 pages. This is a well designed, practical, pocket-sized field guide to the birds of Argentina and Uruguay, written and illustrated by two of the best field ornithologists in Argentina. They modelled their guide in part after Koepcke's *Las Aves del Departamento de Lima*, and considerably extended the senior author's earlier guide to

the avifauna of Buenos Aires Province (Narosky 1978), which was also illustrated by Yzurieta. I found this guide to be very convenient in the field. It has excellent, concise and very carefully crafted text, useful range maps, and adequate illustrations for most species, although the poor quality of reproduction is a serious drawback when attempting to identify a number of difficult species. I must note here that the color reproduction of the plates in the first Spanish edition was greatly superior to that in subsequent editions, where colors are generally much too dark and muddy, when compared with the first edition. Jorge Rodríguez Mata, who saw the original paintings upon which the plates were based, told me that they were even better and very fresh. A feature to be applauded is that all species are illustrated and their ranges mapped. I have had the opportunity to use this guide repeatedly in Argentina in recent years and have come to appreciate the extraordinary extent of the field knowledge of its authors, reflected in the succinct species descriptions, especially their voice. Again and again, the descriptions underline just the feature that helps the worker in field identification. In my opinion, this book, in spite of illustrations that are markedly inferior in quality to those in other Neotropical field guides, is the best true pocket field guide on the Neotropical market today. This book and its English version (see below) are a contribution from the Asociación Ornitológica del Plata in Argentina. I should say that whereas the book is relatively easy to purchase in Argentina, this is far from true outside of that country, which is a great pity. The prospect of newer editions with fresh plates is unfortunately not forthcoming. Co-author and illustrator Darío Yzurieta, who perhaps knew the Argentine avifauna as well, if not better, than anyone else in that country, and who was responsible for most of the crucial field notes that make the guide such a useful field tool, sadly died a few years ago, of Chagas disease.

Narosky, T., & D. Yzurieta. 1989. *Birds of Argentina & Uruguay, a field guide*. Buenos Aires, Vazquez Mazzini Editores, 337 pages. William Belton wrote the Foreword to the very useful English edition. It is not easy to discover who translated this book into English, so I will mention here that this difficult task was per-

formed by Maurice Earnshaw, with help from William Belton. Even though the English version will be useful to many more readers than the Spanish one, I personally prefer the latter for the freshness of its species accounts. Unfortunately, as in the later Spanish editions, the color reproduction of the plates is poor and quite uneven in the English edition.

Nores, M., & D. Yzurieta. 1980. *Aves de ambientes acuáticos de Córdoba y centro de Argentina*. Córdoba, Secretaría de Estado de Agricultura y Ganadería, 236 pages. This guide treats not only "classic" waterbirds like herons, ducks, gulls, or rails, but also a number of others, especially Passeriformes, that inhabit aquatic vegetation. In Argentina, where marshes are extensive and marshy vegetation types harbor a rich and diverse avifauna, these less traditional waterbirds include species of Tyrannidae, Furnariidae, Icteridae, and others. Birds frequenting streamsides away from marshes, like some species of *Cinclodes*, are also included. This guide is easy to consult. Each species account occupies a single page, and the plates, although scattered throughout the text, are easier to "reach" than in some other guides. The text, for which Nores is chiefly responsible, is generally excellent and informative but the color plates, by Yzurieta, although on the whole attractive, are not as good as the text. These plates have a dated or old-fashioned look to them. As bird art I like them, but as field guide illustrations they are insufficient by modern-day standards. In spite of this problem, and of the fact that the geographical focus of the book is relatively narrow, this volume is useful for field work, in part because so many of the species of waterbirds included therein have such wide distributional ranges that they transcend the Province of Córdoba or even central Argentina. Used together with other field guides this book will give much additional information.

Novelli, R. 1997. *Aves marinhas costeiras do Brasil: identificação e biologia*. Ivo Manica, Cinco Continentes Editora, Porto Alegre. 90 pages. Recently published in Rio Grande do Sul, the Brazilian state with the most impressive records of seabirds, this booklet summarizes information about the status of species of Sulidae, Fregatidae, Haematopodidae, Charadriidae, Scolopacidae,

Recurvirostridae, Chionididae, and Laridae. The color photographs, of unequal quality, illustrate all the species described, and, for several of them, various plumages. The introduction gives useful information about molt terminology. The species descriptions are museum-based, and give no or very little information about field identification. Not all species recorded in Rio Grande do Sul are cited. For instance, the two records of *Limnodromus griseus* reported by Belton (1994) are not given. In spite of these criticisms, this booklet should be helpful to beginners who watch sea- and shorebirds along the coasts of Brazil, and especially those of Rio Grande do Sul.

Oliva, G. 1993. *Aves patagónicas, Santa Cruz, Argentina*. Río Gallegos, Universidad Federal de la Patagonia Austral, 85 pages. This odd-sized volume, measuring 22 x 30 cm, gives an overview of the species of birds known from Santa Cruz Province, Argentina. Each species is depicted by a black-and-white sketch. By modern standards these illustrations are poor. Venegas's (1994) recent book on the birds of Magallanes, to the south of Santa Cruz, and with a similar set of species, is far superior to Oliva's, but has the defect of illustrating only some of the species.

Olrog, C. C. 1959. *Las aves argentinas, una guía de campo*. Tucumán, Instituto "Miguel Lillo," 343 pages. Written and illustrated by Claës Olrog, this hard bound, pocket-sized, and sturdy little book (which resisted hard use during several months of field work in 1965) represents a truly remarkable pioneering effort. As Tito Narosky (1995), himself a field guide author, described it, in the Argentina of the late 1950s—early 1960s, there was "Sólo una luz: la guía de Olrog de 1959 que en un esfuerzo pionero intentaba ayudar a profanos a la identificación de las casi mil aves argentinas" ("Only one light: Olrog's guide of 1959, which in a pioneer effort attempted to help the uninitiated to identify the nearly one thousand Argentine birds"). Olrog's book must have been one of the first, if not the first, pocket-sized field guides to birds of any area within the Neotropical Region written in Spanish by a Neotropical ornithologist and published in Latin America (see Vuilleumier 1995a for an appreciation of Olrog and his work). The concise text gives information on

field identification and distribution (with maps) of over 900 species. The color plates, crude by today's standards or, at the time of publication, by European and North American standards, were nevertheless all one had for Argentina in the late 1950s—early 1960s. Eisenmann (1960) diplomatically wrote that "Dr. Olrog is an ornithologist, not an artist, and his schematic drawings are amateurish; in some instances the poor color reproduction may prove misleading. But the book is unique in its field, and the price is extremely modest" (it was 150 Argentine pesos, or US\$1.70 at the time). In the early 1960s, this book was available in almost any bookstore anywhere in Argentina, and had a great success. To quote Eisenmann (1960) again: "The guide will contribute to increasing popular interest in Argentine birds both within and without the country. The author and the Instituto "Miguel Lillo" thus deserve the gratitude of conservationists and bird students for making this work available at a price that all can afford." The availability and low price indeed were important factors in the popularity of this book, which contributed in no small measure to the growth of field-oriented ornithology in Argentina. Its significance in the development of Argentine ornithology therefore must not be underestimated. Even today, with Narosky & Yzurieta's much better guide widely available in Argentina, many Argentine students carry along Olrog's guide in the field, no longer the first guide of 1959, but its subsequent 1984 version (see below).

Olrog, C. C. 1968a. *Las aves sudamericanas, una guía de campo*. Tomo primero, pinguinos-pájaros carpinteros. Tucumán, Fundación-Instituto "Miguel Lillo," 506 pages. Also written and illustrated by Olrog and published by the Instituto Miguel Lillo in Tucumán, and following closely the format of the 1959 guide to Argentine birds, this volume covers 1265 species of South American non-passerine birds. Volume 2, covering the passerines, was never published. Unlike the 1959 volume, in which the plates were interspersed throughout the book, in this one the plates are placed all together at the end of the volume. The text is similar to the 1959 guide, and continent-wide distribution maps are included. While praising the maps as "one of the more useful

features [that] not only will help the student in the field, but also will serve as a quick reference for the researcher," O'Neill (1971), as one would expect since he is an artist, commented critically at length on Olrog's artwork, yet ended his remarks saying that "Although poor as compared to those being prepared by many present-day illustrators, the pictures as a whole are still useful and definitely add to the book." For a long time this book has been indispensable because it was the only one of its kind, and this in spite of the lack of detail of the color plates. Only after the publication of volumes 3 and 4 of Ridgely and Tudor's new book will this older, much less ambitious effort be totally superseded.

Olrog, C. C. 1968b. *Guía del cazador de las aves de caza argentinas. Sportsman's guide to the Argentine game-birds*. Buenos Aires, Guillermo Kraft Limitada, unpaginated, 20 plates. This bilingual Spanish-English little guide describes and illustrates "all the principal game-birds of Argentina, being [sic] 15 tinamous or "partridges", 36 swans, geese and ducks, 8 guans, chachalacas and wood-quails, 9 plovers and snipes, 4 seed-snipes and 12 pigeons and dove, [in all] 84 species." At the time it was published this booklet cost 700 Argentine pesos or US\$2.00. Even though the illustrations, like those in the other guides illustrated by Olrog, are crude, they depict each species in its habitat, and I find them surprisingly effective.

Olrog, C. C. 1984. *Las aves argentinas, "una nueva guía de campo"*. Buenos Aires, Administración de Parques Nacionales, 352 pages. A totally revised version of the 1959 guide, this book presents all species of Argentine birds with text and plates on facing double pages, a very convenient format. The maps include not only the Argentine distribution of the species, but also other parts of South America if they occur beyond Argentina's borders. Although better than the plates in the 1959 edition, these are still far short of the mark as far as artistic merit goes, and hence their value for field identification is reduced, especially for difficult groups. Olrog's two field guides to Argentina's birds (1959, 1984) have now been superseded by the newer guides by Narosky & Yzurieta (1987, 1989). However, it is important to remind the reader that Olrog's 1984 field guide (handsomely produced in Spain)

was published in Buenos Aires by the Administración de Parques Nacionales, and was meant to educate the general public of Argentina about the significance of birds and of national parks in that country. These parks are mapped on page 8. The front cover plates of the book illustrate some of the species in danger of extinction in Argentina and the woodpeckers of the spine are of an endemic species. This book was widely available in Argentina as of 1996 and is apparently still in print.

Olrog, C. C., & E. A. Pescetti. 1991. *Las aves del Gran Cuyo: Mendoza, San Juan, San Luis, y La Rioja*. Mendoza, Centro Regional de Investigaciones Científicas y Tecnológicas, and Gobierno de la Provincia de Mendoza, 160 pages. A posthumous book by the late Claës Olrog, brought out by Elba Pescetti, describing and illustrating 367 species of birds from these four provinces in west-central Argentina. The very brief text manages to give field marks, distribution, and habitat information, supplemented by adequate range maps. Unfortunately, the black-and-white illustrations, by Olrog, are crude, like his earlier ones, and again, not of the standard one expects in modern field guides. Measuring about 25 x 17.5 cm this volume does not fit into a jacket pocket. Nevertheless, this book is useful to someone working in the Gran Cuyo area, as a check-list and basic introduction to this area's diverse avifauna.

Ortiz Crespo, F., & J. M. Carrión. 1991. *Introducción a las aves del Ecuador*. Quito, Fundación Ecuatoriana para la Conservación y el Desarrollo Sostenible, 241 pages. Appropriately dedicated to Professor Gustavo Orcés V., who can be rightly called the father of modern ornithology in Ecuador, and who inspired the author and illustrator in their own work on the birds of Ecuador, this little book is an excellent introduction to the most common Ecuadorian birds, and as such it should be very helpful to beginners in that country. The 28 plates, executed by J. M. Carrión, are adequate. They depict 306 species, a small fraction of Ecuador's stupendous list of over 1500 species. The introduction gives a brief history of ornithology in Ecuador, notes about the biogeography and biodiversity of Ecuadorian birds, and a list of interesting field sites. The bulk of the book is devoted to a description of the birds

illustrated in the plates. The text is easy to read and is enlivened with line drawings by J. M. Carrión, a feature that should be a plus for the students for whom this book is clearly intended. Indeed, the author tells us in the preface that a draft manuscript of the book was used by students in an ornithology class.

Phelps, Jr., W. H., & R. Meyer de Schauensee. 1979. *Una guía de las aves de Venezuela*. Caracas, Gráficas Armitano, C. A., 484 pages. This book is the Spanish language version of Meyer de Schauensee & Phelps (1978), the text of which was prepared entirely by Billy Phelps, who labored at record speed and with amazing efficiency, given his other tasks (see Vuilleumier 1990), to bring it out only one year after the original English edition came out. I was in Venezuela at the time Billy was working on the Spanish text and remember how I admired the way he worked on the book. The Spanish edition was extremely successful in Venezuela and greatly contributed to an increased awareness of birds in the general public of that country. The color plates, most of them painted by Guy Tudor, but with a sprinkling of others by Wayne Trimm, John Gwynne, and Kathleen D. Phelps (Billy's widow), are in the center of the book, as in the English version, quod vide for more analysis.

Ridgely, R. S., & G. Tudor. 1989. *The birds of South America. Volume I: The oscine passerines*. Austin, University of Texas Press, 516 pages. Although this book, the first of a planned set of four volumes, is not a field guide (to mention only size, bulk, and weight!), the style of the text and of the color plates are such that one has the feeling of holding a giant field guide in one's hand. A good but critical review was published by Webster (1991), whose thoughts echo my own, namely that more species should have been illustrated, that "simple line drawings of birds can greatly help" (this volume has none), and that "I would happily abandon the spacious style of this work in favor of a more portable, less expansive, and thereby less expensive format." In other words, cut the large and wasteful blank spaces, include more plates with more species on them (and so what if they are more crowded), and make the book less of a coffee-table book and more a pocket- or backpack-sized work for use in the field. These things being said, how-

ever, this is an extraordinary achievement, for which I congratulate author and illustrator.

Ridgely, R. S., & G. Tudor. 1994. *The birds of South America. Volume II: The suboscine passerines*. Austin, University of Texas Press, 814 pages. This excellent book is, like volume one, somewhat of a hybrid between a field guide and a manual. Again, I regret that not more species are illustrated, a feature that would have made this second volume even more helpful. But as it is, this work, once completed, may become the standard field treatise on South American birds, first, because of the quality of the illustrations by Guy Tudor and second, because the text clearly reflects the unequalled field experience, throughout the South American continent, of both author and illustrator. Volume two was reviewed in a thoughtful piece by Rosenberg (1995).

Rodriguez M., J. V. 1982. *Aves del Parque Nacional Natural Los Katios, Chocó, Colombia*. Bogotá, INDERENA, 328 pages. This thick volume, about 25 x 17 x 2 cm, and weighing about 1 kg, is a field guide to the birds of part of the Chocó, a very diverse area of western Colombia. The color plates, field guide style, are by C. J. Rodriguez, and the black-and-white illustrations by M. N. Diaz and C. Landazabal. Only some of the many species recorded from this park are illustrated on the color plates. Interestingly, these plates not only depict native species but also many migrants from North America, a welcome feature. The quality of the plates is rather poor, and their reproduction leaves much to be desired. Although Colombians will use this guide because it is in Spanish, birders in Colombia will undoubtedly prefer the much better, more complete, and beautifully illustrated volume by Hilty & Brown (1986).

Snyder, D. E. 1966. *The birds of Guyana* (formerly British Guiana). Salem, Massachusetts, Peabody Museum, 308 pages. This pocket-sized guide is a useful first effort, but its most unfortunate feature is the lack of illustrations. I have already published a critical review (Vuilleumier 1966) and refer the reader to it for more details.

Soper, T. 1994. *Antarctica: a guide to the wild-life*. Chalfont St Peter, England, 144 pages. (Published in the USA by The Globe Pequot

Press Inc, Old Saybrook, CT.) After an introduction to the Antarctic continent and its environments and a brief summary of discovery and exploration, this sturdily bound and attractively produced guide describes terrestrial plants and insects (2 pages), marine invertebrates (3 pages), fish (2 pages), birds (pages 28–101), and mammals (pages 102–132) found in the Antarctic, including South Georgia. The species accounts are pleasant to read, and include details about distribution, breeding, and molt. A distribution map accompanies most accounts. The beautiful illustrations were executed by Dafila Scott, daughter of the late ornithologist and artist Sir Peter Scott, and granddaughter of Captain Robert Falcon Scott. They are not field guide style paintings, but rather vignettes showing each species in its environment, and giving the user of the guide an excellent sense of where these birds are found, and not only what they look like. Some of these portraits I found stunning, as for example the Royal Albatross *Diomedea epomophora*, which seems to reach the upper end of its great flight arc, before plunging back down again, or the winter plumaged Arctic Tern *Sterna paradisaea* on its ice floe. I should add that I found the mammal portraits no less attractive than those of birds.

Strange, I. J. 1992. *A field guide to the wildlife of the Falkland Islands and South Georgia*. London, HarperCollins, 188 pages. This easily packable field guide treats the birds, mammals, flowers, insects, and other wildlife of this region. Ian Strange, long-term resident, active conservationist, keen naturalist, and prolific book author, is also an accomplished photographer and artist, and he not only wrote the text but painted the plates of this attractive field guide. The text gives a wealth of information about the general ecology of this fascinating area. No one traveling there should go without this guide.

Tostain, O., Dujardin, J.-L., Erard, C., & J.-M. Thiollay. 1992. *Oiseaux de Guyane*. Brunoy, Société d'Etudes Ornithologiques, 222 pages. Even though this book is not a field guide, it is worth mentioning here because, first of all, it is an important work in its own right, and also because it is one of the very few books in French on Neotropical birds and it fills an important gap in the ornithological literature on South

American birds. This book is basically an annotated checklist of the birds of Guyana, richly illustrated with photographs of habitats and birds, range maps, attractive paintings of a number of bird species (by Serge Nicolle), and useful diagrams of breeding phenology. It has a very complete bibliography. In many ways this book is the prelude to a field guide. Perhaps the authors, who among them have an unequalled knowledge of the avifauna of Guyane, will contemplate writing such a field guide. Guyane is an area that has virtually no coverage, except, indirectly, through the Venezuelan field guide of Meyer de Schauensee & Phelps (1978; see also Phelps & Meyer de Schauensee 1979). At present, a field worker in Guyane should use both Meyer de Schauensee & Phelps (1978) for the color plates and Tostain *et al.* (1992) for other information. Tostain *et al.* (1992) was reviewed by Cuisin (1992).

Venegas C., C. 1986. *Aves de Patagonia y Tierra del Fuego Chileno-Argentina*. Punta Arenas, Ediciones de la Universidad de Magallanes, 79 pages. An abbreviated version of Venegas & Jory (1979), including the rather crude black-and-white illustrations but not the text of this earlier, more authoritative work, but including instead species lists for neighboring areas, thus making the work useful for all of Patagonia and the Tierra del Fuego and Cape Horn Archipelagos.

Venegas C., C. 1994. *Aves de Magallanes*. Punta Arenas, Ediciones de la Universidad de Magallanes, 158 pages. A slim, handsomely produced volume with beautiful illustrations, describing 112 species among the most common of the area of southern Fuego-Patagonia, this book can be used in southernmost Chile and adjacent Argentina as an introduction to this very interesting avifauna. Brief but well-written text and attractive color plates by Ricardo Matus N. make this a very useful companion volume to Venegas & Jory (1979) and Venegas (1986). It is, however, too bad that all species recorded from Magallanes were not included. This would have added immensely to the value of the book as a field guide to the avifauna of extreme southern South America.

Venegas C., C., & J. Jory H. 1979. *Guía de campo para las aves de Magallanes*. Punta Arenas,

Instituto de la Patagonia, 253 pages. A very useful guide for Chilean Fuego-Patagonia, in other words the Tierra del Fuego and Cape Horn Archipelagos, and adjacent parts of the mainland north of the Strait of Magellan, in extreme southern South America. It is good to see this book in Spanish, whose senior author is a resident of the area and has first hand field experience of its birds. The text is authoritative, concise and helpful, but unfortunately the same cannot be said of the black-and-white illustrations, which are not of the standard one now expects for field guides.

Voous, K. H. 1955. *De Vogels van de Nederlandse Antillen (Birds of the Netherlands Antilles)*. Curaçao, "Natuurwetenschappelijke Werkgroep Nederlandse Antillen," 205 pages. This excellent pocket-sized book, with good color and black-and-white plates by H. J. Slijper, covers perhaps the smallest geographical area of any of the field guides analyzed in this review, except perhaps the Cayman Islands. The Netherlands Antilles, comprising the islands of Aruba, Bonaire (with Klein Bonaire), Curaçao (with Klein Curaçao), St. Maarten (in part), Saba, and St. Eustatius, have a total surface area of not more than 950 square kilometers. The text is in Dutch but the extensive English summaries throughout the entries make this book accessible to a wide audience. The attractive plates, most in color but some in black-and-white, have the charm and flavor of illustrations from times past, such as those, for example, in Witherby's Handbook of British Birds. An English edition also exists (Voous, K. H. 1957. *The birds of Aruba, Curaçao and Bonaire*. The Hague, Martinus Niehooff).

Voous, K. H. 1983a. *De Vogels van de Nederlandse Antillen. (Birds of the Netherlands Antilles)*. Curaçao, Van Dorp-Eddine. This second edition of Voous (1955) includes 252 species, compared with 147 in the first edition, with more detail on occurrence, food, and breeding habits. One black and white and 4 color plates are included in this edition, in addition to the original 22 plates by H. J. Slijper. Thus, 145 of 252 species are illustrated. As I wrote above, these illustrations have a "quaint" feeling about them, which I like, and which reminds me of the color plates found in several books on British birds published in the 1950s. The windward islands of St. Martin, Saba,

and St. Eustatius are treated separately, with 122 species covered.

Voous, K. H. 1983b. *Birds of the Netherlands Antilles*. Second edition. Utrecht, De Walburg Pers, 327 pages. This is the English translation of the second Dutch edition (Voous 1983a).

Watson, G. E. 1975. *Birds of the Antarctic and Sub-Antarctic*. Washington, D. C., American Geophysical Union, 350 pages. To put it simply, this small (19 x 12 x 2.5 cm), sturdily bound, and attractively produced book, is a gem. Including an extensive and very useful bibliography and an index, this volume contains an enormous amount of information on Antarctic and Subantarctic birds. It is a field guide, but it is far more than that, as it manages to include also a wealth of data on birds and their environments in this part of the world, technically not Neotropical, but which is now so often visited by birders who travel to Patagonia. This book has unfortunately two drawbacks, although in a way they are minor. The first one does not have to do with the book per se. Much more is known about the distribution and habits of Antarctic birds in the late 1990s than we knew in 1975, when the book appeared. The second defect is that the color plates, although attractive, have been reproduced on a small scale and are somewhat fuzzy, having lost sharpness during the reproduction process, thus clearly detracting from the excellent art work. I wish that George Watson would take the time to produce a revised edition of his classic work.

Woods, R. W. 1988. *Guide to birds of the Falkland Islands*. Oswestry, United Kingdom, Anthony Nelson, 256 pages. An excellent guide, slightly larger than pocket-sized, but easily slipped into a backpack, this book is rugged enough to stand up to the tough field conditions one encounters in the Falkland (Malvinas) Islands. Its precursors were Woods's own *The birds of the Falkland Islands* (1975) and *Falkland Island birds* (1982), both published by Anthony Nelson. The text of the 1988 book is excellent and gives a lot of information on all species. The color illustrations are attractive but as an aid in field identification only adequate, although the difficulties of field identification are less in the Falklands than in other areas. This is true insofar as landbirds

go; however, seabirds at sea around the islands are another matter. The more recent field guide to wildlife in the Falklands and South Georgia by Strange (1992) is in many ways both a supplement and a complement to the handsome volume by Woods (1988). A field worker or birder visiting the Falklands will want to have both in her or his backpack.

Woods, R. W., & A. Woods. *Atlas of breeding birds of the Falkland Islands*. Oswestry, Anthony Nelson, 190 pages. This book is an atlas of the distribution of the species of birds breeding in the Falkland Islands, not a field guide. Most species accounts are about two pages long, include a line drawing of the species treated (by Geoffrey McMillan), a map, and details of distribution and relative abundance. A total of 75 species are included, 65 with a map, and 10 without. I cite this atlas in this review because it updates Woods's (1988) field guide and could be used in the field together with it.

3. WEST INDIES

Benito-Espinal, E. 1990. *Oiseaux des Petites Antilles; birds of the West Indies*. Saint-Barthélemy, Editions du Latanier, 128 pages. Although Benito-Espinal's small, odd-sized book (11.5 x 21 cm) discusses the birds of the Lesser Antilles, his focus is on the birds of the French Antilles, especially Guadeloupe and its dependencies, and Martinique. French and English texts are found side by side, a useful feature. Each species is described with a photograph (or a painting in one case), with a description, map, and table of its distribution through the islands. Tables indicate the habitat preferences of each species. A check-list of birds of the Guadeloupe Archipelago and Martinique, and indexes of scientific, French, English, and local names are appended.

Bernal, F. 1989. *Birds of Jamaica*. Kingston, Jamaica, Heinemann Publishers (Caribbean) Ltd., 112 pages. Although this book is not a field guide I mention it here for the sake of greater completeness and also because it does contain plates of 48 Jamaican species, including the endemics (for a review see Brooks 1992a).

Biaggi, V. 1970. *Las aves de Puerto Rico*. San Juan, Editorial Universitario, Universidad de Puerto

Rico, 371 pages. This book, which is more a manual than a field guide, has plates and black and white drawings by Lucila Madruga de Piferer and Christine Boyce. Although much older, Danforth (1936) is much better as a field guide. Either book is, in any case, superseded nowadays by Raffaele (1989).

Bond, J. 1936. *Birds of the West Indies*. Philadelphia, Academy of natural Sciences, 456 pages. The original West Indian book by James Bond is *the* classic and standard guide for the West Indies. The first edition differs considerably from his later, and probably better-known, versions. This first edition treats subspecies, whereas later editions do not give those details. The book contains an index of local names and a systematic list of species. There is a color frontispiece of the Cuban Tody; other illustrations are in black and white. This first edition has a more extensive introduction, with comments on biogeography of the region, than do later versions. Also, it includes measurements and more detailed descriptions for some species than in later editions, and contains important data on the reproduction of West Indian birds.

Bond, J. 1947. *Field guide to birds of the West Indies*. New York, The Macmillan Company, 257 pages. This great book, a successor to Bond's earlier (1936) *Birds of the West Indies*, is truly a wonderful field guide. It was reviewed, *inter alia*, by Burleigh (1948), Peters (1948), and Zimmer (1948), who, among them, pointed out various features of the guide. The 1947 edition contains an updated taxonomy over the 1936 edition but it was pared down considerably in size from the original edition. Several new drawings by Earle Poole were added (210 in pen and ink, plus one painting of the Palmchat). Among the several editions that followed the 1947 one are Bond (1960; London, Collins, 256 pages; with four color plates by Don Eckelberry and an expanded preface, including general discussions on voice, habitat, nidification, range, conservation, and suggestions for excursions); Bond (1961; Boston, Houghton Mifflin, 256 pages; geographical coverage extended to include the southwestern Caribbean islands of Providencia and San Andrés); Bond (1980; Boston, Houghton Mifflin, 256 pages; new and completely reset edition containing the description of over 400 species, 94 of

which are portrayed in color); Bond (1985; Boston, Houghton Mifflin; 5th American edition). Mason (1960) discussed Bond's work in the West Indies, and the work of the artists Don Eckelberry and Earl Poole, and Smith (1971) reviewed the 1971 revised edition.

Bradley, P. E. 1985. *Birds of the Cayman Islands*. Georgetown, Cayman Islands, published by the author, distributed by Law Reports International, 245 pages. This first field guide to the birds of the Cayman Islands is beautifully produced. The introduction contains descriptions of the islands, and discussions on the origins and taxonomy of the breeding birds. Sections on non-breeding species, conservation, description of major habitats, and instructions on how to use the book follow. The main part of the book consists of field guide style descriptions of all the breeding species and of regular visitors. One appendix lists and briefly describes rare visitors; another presents birding tips; whereas a third describes techniques used in taking the photographs (by Yves-Jacques Rey-Millet) included in the book. A bibliography is included, as are also 7 maps showing the best birding spots in the islands.

Bradley, P. E. 1995. *Birds of the Cayman Islands*. Revised edition. Italy, Caerulea Press, 261 pages. The revised version of Bradley's (1985) book is substantially expanded, reflecting the increased activities of birders and the author's own work. Bradley's revised book was reviewed by Davis (1996) and Keith (1996).

Brudenell-Bruce, P. G. C. 1975. *The birds of New Providence and the Bahama Islands*. Lexington, Massachusetts, The Stephen Greene Press, 142 pages. (Also published in 1975 by Collins, London, under the same title, and by Taplinger Publishing Co., New York, under the title *The birds of the Bahamas: New Providence and the Bahamas Islands*; all 142 pages.) This compact, thin, light-weight little book, illustrated by Herman Heinzel (who is co-author and illustrator of the excellent field guides to birds of the western Palearctic; Heinzel *et al.* 1972, 1995), is very useful in the Bahamas. The text is a no frills presentation of each species, its appearance and habits. The plates, some in black-and-white and others in color, are good and show the birds in

field-like postures yet in field guide style, and include arrows pointing toward key field marks. Although scattered throughout the text, the plates are easy to get to, in part because the book is thin and in part because the paper quality makes leafing through the book an easy matter. Altogether a nice product. This guide was reviewed by Sprunt (1975).

Danforth, S. T. 1936. *Los pájaros de Puerto Rico*. New York, Rand McNally & Company, 198 pages. This now largely forgotten field guide to the birds of Puerto Rico, which was published the same year as Bond's (1936) original West Indian volume, can be considered a very early and pioneering precursor of Raffaele's (1983, 1989) much more sophisticated field guides. It has 10 color plates by Francis W. Home, which can only be called crude by today's standards, but which would have been helpful back in the mid-1930s. This book had the great merit of being in Spanish. The author dedicated it to "The present and future bird students of Puerto Rican ornithology."

Dod, A. Stockton de. 1978. *Aves de la República Dominicana*. Santo Domingo, Museo Nacional de Historia Natural, 322 pages. Although a very useful book, this is not truly a field guide. It includes 14 color plates illustrating a total of 84 species. The species accounts include line drawings, descriptions, maps, and information about habitat and breeding.

Dod, A. Stockton de. 1981. *Guía de campo para las aves de la República Dominicana*. Santo Domingo, Museo Nacional de Historia Natural, Editora Horizontes de América, 254 pages. This guide is a condensed version of Dod's earlier book (Dod 1978). Species accounts include a description, habitat, natural history, map and distribution, and status information. Each species is illustrated with a line drawing.

Downer, A., & R. Sutton. 1990. *Birds of Jamaica: a photographic field guide*. Cambridge, Cambridge University Press, 152 pages. This field guide is unusual in that it is illustrated by photographs (by Yves-Jacques Rey-Millet) instead of paintings. As Brooks (1992b) stated in his perceptive review, "Most of the photos range from excellent to spectacular. No other photographic

field-guide comes to mind that comes so close to complete coverage of its area through the exclusive work of a single photographer." The coverage is uneven but the text includes useful information about birdwatching in Jamaica. In the introductory section the authors discuss the origin of the Jamaican avifauna, its composition, endangered and extinct birds, migration, conservation, the history of ornithology in the country, and the famous Gosse Bird Club. Detailed species accounts form the body of the book. A critical review was published by Steadman (1992).

Evans, P. G. H. 1990. *Birds of the eastern Caribbean*. London, The Macmillan Press, Ltd, 162 pages. The coverage of this slim book includes the Virgin Islands and the Lesser Antilles. Photographs, not paintings, are used in the plates. As Steadman (1992) pointed out in his review, birds are unfortunately misidentified in five plates!

McCandless, J. B. 1958. *A field guide to the birds of Puerto Rico*. A supplement to Roger Tory Peterson's Field guide to the birds. San German, InterAmerican University Press, 68 pages. This introduction to the Puerto Rican avifauna covers 190 species as well as accidental, extinct, extirpated, and problematic species. Field marks are provided to the species occurring in Puerto Rico that are not covered in Peterson's guide. A useful addition to Peterson's guide.

Ortiz Rosas, P. 1981. *Guía del cazador. Aves de caza y especies protegidas*. San Juan, Puerto Rico, Departamento de Recursos Naturales, 119 pages. Ortiz Rosas presents detailed information on description, status, vocalizations, and distribution for 31 species of grebes, ducks, shorebirds, rails, pigeons, and parrots. Each species is illustrated by a photograph or painting showing, where appropriate, different plumages.

Pinchon, P. 1976. *Faune des Antilles françaises. Les Oiseaux*. Second edition. Fort-de-France, 324 pages. This book, published in Fort-de-France and thus available locally, contains much useful information on the birds of the French West Indies, but is not a field guide. As such, of course, it has been superseded by Benito-Espinal (1990), but the readable species accounts in Pinchon (1976) still have their value and might stimulate beginners in the French West Indies.

Raffaele, H. A. 1983. *A guide to the birds of Puerto Rico and the Virgin Islands*. San Juan, Puerto Rico, Fondo Educativo Interamericano, 247 pages. (Distributed in the U.S.A. by Addison-Wesley Publishing Company, Reading, Massachusetts.) A practical field guide with good color illustrations by Cindy House and John Wiessinger showing field marks with arrows. The text includes details useful for field identification, comments on relative abundance and habitat, voice, nesting, and distribution outside the study area. Additional features of this guide are information about good birding sites, with attractive maps, and a locality check-list. The binding is not as sturdy as it should be, and does not stand up to heavy field use. Measuring 19 x 12.5 x 1.5 cm this guide does not fit easily into a pocket, but can be slipped into a daypack or backpack. This book was reviewed by Armistead (1983) and Dick (1984).

Raffaele, H. A. 1989. *A guide to the birds of Puerto Rico and the Virgin Islands*. Revised edition. Princeton, Princeton University Press, 253 pages. This revised edition, besides the illustrations by Cindy House and John Wiessinger, also has single plates by Cynthia Fisher, Alejandro Grajal, and John Yrizarry. This greatly improved version of the original guide by Raffaele (1983) will prove very helpful in its area. The text format is much easier to consult and the binding is much sturdier than that of the original edition, thus making this book *the* guide for birders in Puerto Rico and the Virgin Islands. Its size is the same as that of the original edition. Raffaele's second edition was reviewed by Kepler (1991) and Waide (1991).

4. GALAPAGOS ISLANDS

Castro, I., & A. Phillips. 1996. *A guide to the birds of the Galápagos Islands*. Princeton, Princeton University Press, 144 pages. [In the United Kingdom published by Christopher Helm (Publishers) Ltd.] The field guide by Harris (1974) (see below), long the only existing one for the Galápagos avifauna, now has a strong competitor in the new guide by Castro & Phillips (1996). Measuring 15.5 x 21.5 cm, this volume is a little larger than Harris's book, and hence will not so easily fit into a pocket as Harris's does.

This slight drawback is partially compensated for by the iconography by Antonia Phillips, which is clearly superior to that in Harris. Four very attractive plates depict major habitats (wet coastal areas, dry coastal areas, the *Scalesia* zone, and the *Miconia* zone) and their bird life. They are like dioramas of these four quite different, and distinctively Galápagos, environments. The other plates (pages 34–61) illustrate the resident and migrant species of the archipelago. Some plates are more crowded than others, for instance the boobies and frigatebirds on page 42. All in all, although I found the plates good, they are not of the high standard one has come to expect in the latest Neotropical field guides. The two plates of Darwin's finches (pages 60–61) are disappointing in that they do not depict a broader range of plumage variability in those dull-colored but difficult birds. The species accounts include information about status, identification, distribution, breeding, food, and voice. The plates and species accounts, which form the bulk of the guide, are preceded by a general introduction to the Galápagos and its avifauna, and are followed by a useful bibliography and a check-list of Galápagos species. Peter Grant wrote the foreword. Until the definitive field guide to the birds of the Galápagos comes along, I will take with me both Harris and Castro & Phillips, as the latter book does not actually replace the former, and both actually complement each other.

Harris, M. 1974. *A field guide to the birds of Galapagos*. London, Collins, 160 pages. This slim little book is easy to slip into a pocket while in the field. Illustrated by Barry Kent MacKay, it contains both color and black-and-white plates, as well as line drawings. While adequate, the illustrations are not excellent. They permit the identification of the easier species, but caution is required for others (especially Darwin's finches). The plates are scattered throughout the text so that while in the field one has to leaf back and forth between text and plates, something I found to be a definite drawback. The concise text includes good information on identification as well as distribution and, when applicable, breeding. The endemic Darwin's finches are treated in detail. In addition the text contains useful information about the Galápagos Islands

and their breeding species, and birding information for several islands as well as during the voyage between Guayaquil and the archipelago. Harris's book, in spite of some shortcomings, is very good and useful overall, and has not been truly superseded by the more recent one by Castro & Phillips (1996).

Harris, M. 1982. *A field guide to the birds of Galapagos*. London, Collins; Lexington, The Stephen Greene Press, 160 pages. This revised edition of Harris (1974) has the same number of illustrations, and seems to differ little in other respects from the first edition, except that it is printed on better paper.

DISCUSSION

The best field guides. To be totally honest, I would have to say that there is simply no book, among the many mentioned in this review, that I would single out as "the best" field guide to birds of any part of the Neotropical Region. As I hope I have made quite clear in the preceding pages, there are several excellent guides, as well as several poorer ones, and some that are not truly adequate as aids in field identification, especially of difficult species. In Europe (and the Western Palearctic Region in general) and North America (Nearctic Region), where there is an abundance, almost a glut, of field guides on the bird book market nowadays, one could perhaps select the best field guides for either region, although I am not certain that I would be able to pick one "best" field guide for each region. But in the Neotropical Region such competition is still lacking: as a result of this situation most guides are still unique enough that they have little competition within their respective area.

Thus Colombia has only two field guides covering the entire country, whereas Venezuela, Costa Rica, Panamá, or Chile have only one each. In other countries, however, like México, at the northern end of the Neotropical Region, several guides are now available, but their publication has been staggered over more than 40 years, from Blake's (1953) pioneer book to Howell & Webb's (1995) latest volume. An examination of these Mexican guides reveals the tremendous growth and maturation of ornithology in México, and the parallel development of field guides to accommodate — as well as to feed

on — such a progress. Hence, to compare Blake (1953) with Davis (1972), Edwards (1972, 1989), or with Peterson & Chalif (1973), or to compare the last three plus Blake with Howell & Webb (1995) is not truly fair to the authors and illustrators of these texts, since these volumes were not all produced more or less simultaneously, and actually reflect the evolution of field ornithology (and field ornithologists themselves) in México. The same is true in Argentina, at the southern end of the Neotropics. How can one compare Olrog's (1959) pioneer and, let's face it, primitive field guide, to the much more sophisticated books by Narosky & Yzurieta (1987, 1989), de la Peña (1988, 1989, 1992a, 1992b, 1994), and Canevari *et al.* (1991), published 28–31 years later?

In spite of these remarks one can comment on the *relative adequacy* of the various books reviewed herein. Extremely useful in the field are several books that are actually more than field guides in a restricted sense, especially the tomes by Howell & Webb (1995) for México, Stiles *et al.* (1989) for Costa Rica, Ridgely & Gwynne (1989) for Panamá, Hilty & Brown (1986) for Colombia, and Fjeldså & Krabbe (1990) for the Andes and Patagonia. Note that these five books were published within a 10 year span, 1986–1995. One of the great merits of each of these books is that they are based, not only on extensive field work, but also, and quite importantly in my opinion, on equally extensive museum work by the authors and illustrators themselves. These authors and illustrators know their birds extremely well and have done their homework conscientiously, and consequently their volumes are authoritative. The common drawback of these otherwise outstanding books, and for the field worker it is not an insignificant one, is their size and weight, which are such that one needs a backpack to carry even a single one of them. These newer field guides are no longer pocket-sized the way the good old Peterson guides were! In fact, they are hybrids between manuals and field guides. I have mentioned this point earlier and will discuss it further in the last section of this paper. Another problem is that for some of these guides the paper on which the text was printed is not very robust and does not gracefully resist the wear and tear of Neotropical field use.

In the more traditional field guide format (small, truly pocket-sized) I can mention as good to excellent the following books: Bond (various editions) for the West Indies, Brudenell-Bruce (1975) for the Bahamas, French (1991) for Trinidad and Tobago, Araya *et al.* (1986, 1993) for Chile, Koepcke (1964, 1970) for west-central Perú, Narosky & Yzurieta (1987, 1989) for Argentina and Uruguay, Strange (1992) for the Falkland Islands, and Watson (1975) for South Georgia and the Antarctic Peninsula.

Of these, perhaps the best, in my opinion, is the one by Narosky & Yzurieta (1987, 1989) for Argentina, not so much because of its illustrations, which are rather poor, even if adequate, as because of its text. Written by two ornithologists who are intimately familiar with their avifauna, the species accounts are succinct yet they really distill the field essence of the species. In their Introduction (page 18 of the 1989 English edition) they wrote: "The reader may be assured that no word, symbol or space is present or absent by chance . . ." They have indeed thought out their text remarkably thoroughly, and have been able to pack in just what is indispensable, and to leave out the rest. This is truly a feat. The more I have used this field guide, the more my admiration for its authors has increased. And furthermore I don't need a backpack to carry their guide!

The ideal field guide. Ever since I started writing and illustrating a field guide myself (see Fig. 1 for a project for two plates) I have become keenly aware of the difficulties and pitfalls of such an enterprise, and so my remarks are probably more carefully thought out today than they would have been a few years ago. Book reviewers who criticize field guides have a simple task as long as they have not written and/or illustrated one themselves. It is easier to criticize the book that "ought to be" than to review the book "that is" and that rests in one's hands. Given this *caveat emptor*, let me nevertheless describe what I would consider to be the "ideal" field guide.

I will take into account in this discussion field guides for regions where birding has a longer tradition, and where field guides have been in use for much longer, than in the Neotropics, namely the western Palearctic and North America (Nearctic Region), two regions and avi-

faunas that, incidentally, I also can claim to know reasonably well.

In my opinion, important features of the ideal field guide include such a diversity of items as size, weight, type of binding, quality of paper, quality of cover (hard versus soft), typography and font size, position of plates in regard to text, amount of text information in each species account, plate legends, extra material (description of the area, birding sites, bibliographic references, ornithological societies, and the like). Of course one all-important feature is the plates, their quality and their ability to depict the birds in natural positions yet in ways that permit quick and easy comparisons without overwhelming the user by superfluous details, recalling (a truism in field guides, but a point often overlooked) that such plates are meant primarily for use in the field.

Given the above, and on the basis of my personal use of a variety of field guides *in the field*, I believe that the ideal field guide should be small (no larger than about 12 x 18 x 2 cm) and light in weight (no more than about 600–700 g), be bound in soft-covered, pliable, yet tough material, have sturdily bound (not glued!) signatures, and be printed on good paper that will resist heavy field use (for instance, some kinds of glossy paper may be attractive but the pages will stick together as if glued when wet). These features will, first, guarantee ease of carrying the book in the field and, second, ensure its prolonged and pleasurable use under various and often harsh field conditions (including Patagonian grit, tropical downpours and fungi, and occasional immersion in Amazonian rivers or in seawater).

In the ideal field guide all species of the study area should be illustrated *in color*. In addition, some plates should be in black and white (see last section). These plates should represent the

species in somewhat stylized, comparable, yet realistic attitudes for ease of consultation and comparison. One must remember that no matter how good the text, it is the plates that any user, whether tyro or expert, looks at *first* in any field guide. I do not believe that it is necessary for the birds in the plates to be painted with feather-by-feather accuracy. What I believe to be important, however, is a depiction that closely corresponds to what one actually sees in the field at a certain distance through binoculars. Hence some of the complications of plumage details should be simplified and synthesized into patterns. I will return to this point in the final section of this essay. For species with several different plumages (because of sex, age, or other factors, such as polymorphism), such variation should be represented. In addition to color plates the ideal field guide should also include a certain number of line drawings illustrating characteristic attitudes of some species, such as flight songs, displays, or feeding positions, and habitat, or nests. Finally the text, with accompanying range maps, should be placed on the page opposite each plate, to minimize time wasted by thumbing between figures and text. The text itself should be concise and to the point, which is, after all, to give the user just the details that one needs for accurate field identification, and little more. The rest should be left for another kind of book, whether it is called a handbook, a treatise, or a manual.

Within these rather strict limitations for the "ideal field guide," only one of the books on Neotropical birds reviewed in this piece nearly qualifies: Narosky & Yzurieta (1987, 1989) on the birds of Argentina and Uruguay. I have found the text to be truly excellent from the point of view of field use, as stated earlier, but the guide does not fully qualify as ideal because its plates are not as good as they ought to be.



FIG. 1. Projects for two plates for Vuilleumier's forthcoming *Field Guide to the Birds of Patagonia* (and adjacent regions). Top: Five species of tit-spinetails (genus *Leptasthenura*). Top row, from left to right: Plain-mantled Tit-Spinetail *L. aegithaloides aegithaloides* (Chile) and *L. aegithaloides pallida* (Argentina), Tufted Tit-Spinetail *L. platensis*; bottom row, from left to right: Araucaria Tit-Spinetail *L. setaria*, Striolated Tit-Spinetail *L. striolata*, Brown-capped Tit-Spinetail *L. fuliginiceps*. Bottom: the two species of *Melanodera* finches. Top three birds are Yellow-bridled Finch *M. xanthogramma* (upper left: "yellow-phase" male; center: "gray-phase" male; upper right: female); bottom two birds are Black-throated Finch *M. melanodera* (bottom left: male; bottom right: female). From drawings by F. Vuilleumier.



Some other books come close in terms of format, but either their plates are not in color, or they lack range maps, or both (e.g., Araya *et al.* 1986, 1993, Koepcke 1964, 1970).

Elsewhere in the world, field guides that fit my definition would include Slater *et al.* (1989) and Pizzey & Knight (1997) for Australia, and *A field guide to the birds of Japan* (Wild Bird Society of Japan 1982) for those islands. Several of the European and North American field guides also fit my definition, for example Robbins *et al.* (1966, 1983) for North America, Bruun & Singer (1970, 1978) for Europe, and Heinzel *et al.* (1972, 1995) for the western Palearctic. Even though none of the above books is perfect, each comes very close to perfection. Each is remarkably tough, compact, easy to pack, and easy to use in the field. I usually leave at home some of the more "complex" field guides, even those, such as the beautifully illustrated recent guide by Lars Jonsson (1992), that include the latest advances in field identification, because I find them to be too big, and also because I find their text to be too detailed for quick and dirty field use.

Role of field guides in the development of Neotropical ornithology. I have already mentioned elsewhere in this essay several aspects of field guides that have greatly influenced the development of ornithology in the Neotropics. One aspect can be called accessibility to the avifauna. I will illustrate this role here by stating, once again, the importance played by Olrog's guides in Argentina. No guide existed in that country prior to Olrog (1959). Ornithologists who were interested in field work had a very difficult time indeed identifying species other than the better known and more common ones. Crude as its illustrations were, Olrog (1959) opened the eyes of an entire generation of ornithologists in Argentina to the over 900 species in the country. In other words, this little book made the ornithological riches of that country widely accessible to everybody, including professionals and, very importantly, conservationists. This access, furthermore, was not restricted to ornithologists. Members of the general public also were thus able to learn about Argentine birds. A role similar to Olrog's (1959) guide for Argentina can be ascribed to Bond's (1936, 1947, and sub-

sequent editions) field guide to the birds of the West Indies. I venture to guess that nobody interested in West Indian birds or their conservation ever traveled in the Antilles without a copy of some edition of Bond's guide in their pocket. The same could be said about Blake's (1953) guide for México and northern Central America from its publication date until the early 1970s.

The accessibility made possible by these guides, among other things, eventually also opened the way to another development, one that would probably not have been predicted by the authors of these pioneering guides. Over the years, tourism (including ornitho-tourism) to wild and semi-wild areas increased dramatically, thus creating a demand for more and better field guides to birds of ever more remote regions and ever richer avifaunas in the Neotropics. Indeed, present day ornitho-tourists have become so sophisticated that they have become exceedingly critical of the available field guides and have scorned the earlier pioneering guides, unaware of the fact that field guide production is no small matter, and that the newer guides are better in part because they do not repeat the mistakes of their predecessors.

Here we touch on another aspect of the role of field guides, which, somewhat redundantly, one might call a sort of reciprocal feed-back. Once a new field guide has been published, more ornithologists will go out in the field to study birds in the area covered by the new book. As a result of this increased activity, the avifauna of that area will become better known, and more publications will follow on breeding biology, distribution, ecology, and other topics. This information, of course, will sooner or later be incorporated by the next generation of field ornithologists in the latest generation of field guides.

Field guides thus do two interrelated things: (1) they reflect the development of ornithology, of ornithologists, and of ornithological knowledge, and the increase in ornithological activity, and are thus a mirror of the growth of ornithology, and at the same time (2) they foster the further development of ornithology, including the improvement of the field skills of its practitioners, and act thus as catalysts that help to speed up the growth of ornithology.

One last aspect I wish to mention briefly here is the role of amateurs versus professionals in the development of field guides and of ornithology in the Neotropics. By "amateur," of course, I mean a person who does not earn a living from the practice of ornithology and by "professional" a person who does. The distinction, although obvious, actually becomes blurred by the modern use of the noun "birder." A birder is any person who watches birds, whether amateur or professional. Many birders today are also professionals. Nowadays, ornithological journals that are the organs of scientific ornithological societies catering chiefly to professionals virtually no longer publish basic ornithological information (such as geographical distribution and descriptive breeding biology). This task has been largely taken over by journals published by ornithological societies founded by and maintained for amateurs, both in the Neotropical Region and outside. A good example is *Cotinga*. Note here the important point that many professionals read, subscribe to, or contribute pieces to these amateur journals, in part because this basic ornithological information, which is no longer published in the professional literature, is still fundamental. In the past, field guides were written by professional ornithologists, for instance Blake (1953), Bond (1947), Olrog (1959), and Koepcke (1964). Today, by contrast, many field guides are being written by amateurs or by birders who started as amateurs. Thus, given the tremendous importance of field guides in the growth of Neotropical ornithology, I view the increasing role played by amateur ornithologists in the Neotropical Region as one of the latest aspects in the developments of ornithology in the Region. Many authors have written about the role of amateurs in ornithology in general, but this topic remains to be treated fully in the context of the evolution of Neotropical ornithology. The role of amateurs in the history of North American ornithology has been reviewed by Mayr (1975), Ainley (1980), and Kastner (1986).

THE FUTURE

Field guides in preparation. Even though there are already a respectable number of field guides for birds of the Neotropics on the market today,

many of them excellent, there remain serious gaps in geographic coverage, especially in South America. Some of these gaps, I am happy to report, will soon be filled by the publication of field guides that are, either already in press, or in preparation. Thus in the West Indies, the publication of the new field guide to the birds of the West Indies by Raffaele *et al.* is expected for the first half of 1998. In the same area, Garrido, Kirkconnel & Compañy are preparing what should be an outstanding guide to the birds of Cuba.

In South America, field guides are being prepared for such species-rich countries as Ecuador (by Paul Greenfield and others), Perú, and Brazil, as well as for avifaunas as unique as that of Chile (by Howell & Webb). For South America as a whole, I have heard that Ridgely and Tudor are preparing a condensed version of their ambitious 4-volume treatise, but with illustrations of more species. Jorge Rodríguez Mata has nearly finished painting the plates of all of South America's non-passerine birds, and it is greatly to be hoped that his fabulous artwork will soon see publication. Field guides for Bolivia, Paraguay, Uruguay, French Guiana, and Suriname, would certainly be extremely welcome.

Given the tremendous expertise that now exists on Neotropical birds and the remarkable ease with which one can now travel to some of the most remote parts of the Region, and given the ever increasing needs of ornithologists, conservationists, and eco-tourists, I have no doubt that the next decade will see an even greater development of field guides to Neotropical guides than that witnessed in the years 1988–1998. This evolution will be fascinating to follow.

Shape of field guides. I do hope that the trend to publish ever thicker and heavier field guides (which are actually more like handbooks than field guides) will be reversed or at least modified. Thus Stiles *et al.* (1989) weighs 1.1 kg, Hilty & Brown (1986) 1.5 kg, and Howell & Webb (1995) 1.7 kg. If you need to carry more than one field guide during a trip (and who doesn't?) then you are talking about a weight of 3–5 kg of "field guides" in your backpack. Where will it stop? Why couldn't these books have been split into

two, as it were, on the one hand a heavy *handbook*, with some illustrations and a generous text and full bibliography, and a *pocket-sized field guide* on the other, with all the color plates but an abbreviated text focusing on field identification and giving only the minimum amount of information on other topics. Thus, details of habitat, breeding, clutch-size, migration, subspecies, and other topics would be left out of the field guide, but fully included in the handbook. After all, what is a field guide if one needs extra luggage to carry this behemoth in the field?

Field guide illustrations. I also hope that the trend to publish ever more detailed illustrations in field guides (or field guides cum handbooks) will not be carried to an extreme. I may be an old reactionary, but I admit, without any guilt whatsoever, to preferring some of the illustration style of an older generation of field guides over some of the newer one. These earlier illustrations were simpler and more stylistic, yet they did manage to convey the jizz of the species, and the best ones in fact did it splendidly. For many species, what counts in field identification is the main color pattern, not the finest details. Not that the details are uninteresting. The intricately designed patterns of some species of *Caprimulgus*, for instance, are exquisite, and their variation among species fascinating. But when one glimpses one of these birds flying rapidly at dusk or for a split second in the beam of a car light or a flashlight, the patterns are gone. Indeed, the colors are modified by the artificial light that may shine on the birds. One needs a stylistic sketch showing the *main* features, no more. For such creatures, of course, one also needs information about the flight jizz and the voice. Some older field guides, in Europe (for instance Barruel 1949) and North America (for instance Peterson 1947), had sepia or black and white plates. Look at them closely again and use them in the field again, and then tell me whether, in the best of cases, the artist did not manage to convey what the species looks like just as well as through a color illustration with a lot of plumage detail. I am aware, of course, that some of the latest Neotropical field guides *have* black and white plates (e.g., Hilty & Brown 1986, Howell & Webb 1995).

As far as color plates go, if you want to see artwork that is stylized, yet realistic and, what's more important, useful for field identification, then take a good look at Robert Hainard's illustrations in the small and now largely forgotten guide on the birds of Switzerland that he co-authored with Guggisberg as long as 55 years ago (Guggisberg & Hainard 1943). These plates are simply brilliant. Indeed, they are masterpieces. They are not only illustrations of birds in the field that look alive and appear as they are perceived by an observer, but they are also truly art. Of the current generation of field guide authors-illustrators, world-wide, I would say that only Lars Jonsson approaches Robert Hainard. Jonsson (1992) also has depicted birds in terms of life and patterns and has done it as an artist. Unfortunately, Lars too often also paints too many feathers. And of the current generation as far as the Neotropics are concerned, then, in my opinion, only Jon Fjeldså (e.g., Fjeldså & Krabbe 1990) combines, as do Hainard and Jonsson, art and realism. Jon's birds are simplified, yet they synthesize all that make them the species they are, and at the same time they go beyond being mere illustrations. Don't misunderstand me, however: I may prefer the art of Jon Fjeldså, but I do like the work of others also, including, among several more, Dana Gardner, Guy Tudor, Sophie Webb, and Jorge Rodríguez Mata.

Field guides, development of Neotropical ornithology, and museum collections. To end this essay I return briefly to the topic of the role of field guides in the development of Neotropical ornithology. I repeat here my conviction that field guides, which are fundamentally a tool for amateurs rather than for professionals, have nevertheless influenced the latter's world profoundly and irrevocably, and have contributed to the incredible growth of ornithology, as a science, in the Neotropics. Some of the first field guides to Neotropical birds were written by professionals, museum scientists who combined extensive knowledge of museum specimens with equally extensive field experience. Some of the latest and best field guides have been written by amateurs, but by no means all. Some of the best recent guides, like those by Stiles *et al.* (1989) and Fjeldså & Krabbe (1990) are definitely the work

of professionals, and of professionals who combine the best museum tradition with the best field tradition. Thus, and even though ever greater numbers of extremely gifted amateurs are now players in the game of Neotropical ornithology, professionals still play a crucial role in this fascinating dialectic between museum and field, between observation for fun and observation with a scientific focus. Many amateurs have brought the art of field identification to new heights, but they have done so, knowingly or not, because professionals were around all the time and gave them the material basis for this development. What I am talking about, of course, is the very tight interdependency between field guide preparation and the availability of top notch bird collections.

All field guides, without exception, have depended for their preparation on the availability of large reference collections. The latter, of course, have been put together, maintained, augmented, and published upon by professionals. In fact, the modern so-called museum person is just as much a field person, and may be just as avid a birder, as any other ornithologist. Unfortunately, too many amateurs are ignorant of the role museum collections have played in this equation. Neotropical ornithology started to grow because professionals went out and collected bird skins. These skins then served as the basis for checklists and catalogs prepared by them and by other professionals. These publications in turn have served as the Ur-field guides for a new generation of ornithologists who were no longer also collectors. And now the latest phases of growth in Neotropical ornithology, spurred in large part by ever more sophisticated field guides, the preparation of which depends ever so much on growing and sophisticated collections, demonstrate unequivocally this feedback loop. I consequently deplore the attitude of many non-professionals who claim mistakenly that collections and collecting are no longer necessary for the future of the field. History shows us otherwise. History, furthermore, has been consistent. There is therefore no reason to believe that the future will be different in this regard, and this no matter what form field guides may take in the future, or what kind of interrelationship between professionals and amateurs will develop in the future.

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