Owls of the World, 2nd ed.

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Owls of the World, 2nd ed.—Claus König and Friedhelm Weick. 2009. Yale University Press, New Haven, Connecticut. 528 pp., 72 color plates, distribution maps, line drawings. ISBN 9780300142273. Cloth, $75.00.—Advertised as “the most comprehensive and advanced book ever published on owls,” this second edition describes 250 species, 37 more than the first edition (König et al. 1999), 12 of which are new to science. The introductory chapter provides information on owl morphology, anatomy, and topography that both novice and experienced owl researchers should find useful. This chapter also provides brief sections with general information on owl food habits, hunting, behavior, breeding biology, and vocalization, and closes with an informative section on systematics and taxonomy. Here the authors reveal their adherence to the biological species concept defined by Ernst Mayr; they recap the split of Old World scops owls (Otus) and American screech owls (Megascops), including the assignment of the American Flammulated Owl to Piloscoptes (P. flammeolus); and they present information to justify the split of Glaucidium into two genera, Glaucidium and Taenioglaux, the former having an “occipital face” consisting of two dark eye spots on the hindneck, the latter with streaked head and nape. The line drawings in this introductory chapter are impressive and informative. Clearly, the line drawings of the feet of a selection of owls will help readers visualize distinguishing characteristics described in the systematics section. The structure and a majority of the content of the chapter, however, are virtually identical to that of the first edition; a notable change is the addition of line drawings of head plumage of adult and natal owls of 16 species with distinct diagnostic characteristics.

The next two sections, “How to Study Owls” and “Conservation,” are new additions. The first is extremely brief, less than a page in length, and limited in content. It provides basic, tried-and-true, common-sense advice for owl researchers (e.g., “Owls are most vocally active at the beginning of the reproductive period. . . . Owl studies are therefore best timed to coincide with these periods. . . . All observations should be routinely recorded for later evaluation, noting date, time and weather conditions. . . . Numerous droppings, remains of prey and pellets under certain perches indicate the vicinity of an occupied nesting site.”). Other than a brief narrative on the use of playback of conspecific calls to survey owls and the value of recording owl calls on tape, there is no mention of technologically advanced research methods that are now commonly employed to study owls (e.g., radiotelemetry, time-lapse and real-time videography, stable isotope analysis, DNA analysis, etc.). All owl researchers, however, should take note of the basic methods covered in this section and pay close attention to the emphasis placed on becoming familiar with owl activity.

The “Conservation” section provides a short paragraph on threats to owls (e.g., destruction of habitat); describes the fitting of nest boxes for several owl species; illustrates, and thus promotes, methods of supplemental feeding to help owls through the hard times; and lists species that are globally threatened, near threatened, or in significant decline. Granted, over the past 50 years, artificial nest structures have been used as a management tool to augment various avian populations. Nest boxes have been employed in economic and ethological research as well. However, as König indicates in his discussion of the reintroduction of locally extinct populations of Eurasian Eagle Owl (Bubo bubo) and Eurasian Pygmy-owl (Glaucidium passerinum), nest boxes are successful only if “given the right environmental conditions.” Before employing nest boxes, agencies charged with conservation efforts should determine whether deployment of nest boxes is an appropriate conservation strategy. The area should first be surveyed to assess prey availability and to verify the existence of suitable cover, and the circumstances surrounding the population decline should be evaluated to develop a plan to alleviate the detrimental influences. The paragraph on supplemental feeding represents a slippery slope that I see more as “feel good” behavior for humans than a conservation strategy for owls. I would be particularly
concerned about the creation of an artificial system in which owls become dependent on supplemental feeding. But, if “undertaken locally,” supplemental feeding may be an appropriate short-term management approach for some species. Wink et al.’s contribution of a chapter on molecular phylogeny and systematics of owls is a substantial addition to the second edition. The methods and analysis are sound and the references current; 40% of the references are original studies published since the printing of the first edition (König et al. 1999). The mitochondrial cytochrome- b gene database was increased from 270 to 700 individuals, representing 150 taxa. The revised analysis also includes sequence data from the nuclear recombination activation gene (RAG-1) and the lactate dehydrogenase-B intron (LDH-B intron). Results from the combined data sets of ncDNA and mtDNA provide a sound basis for the taxonomic restructuring proposed. In summary, Strigiformes are divided into two families: Tytonidae and Strigidae. Tytonidae consist of two subfamilies: Tytoninae and Phodilinae, each with one genus, Tyto and Phodilus. Strigidae are more complex than Tytonidae and have been subdivided into three subfamilies, Striginae, Surninae, and Ninoxinae. Striginae consist of six tribes: Bubonini with genera Bubo (including the former Nyctea, Ketupa, and Scotopelia); Strigini with genera Strix and Jubula; Pulsatrigini with genera Pulsatrix and Lophostrix; Megascopini with genera Megascops and Psiloscops; Asionini with genera Asia and Pitilopsis; and Otini with genera Otus and Mimizuku. Surninae consists of two tribes: Surnini with genera Surnia, Glaucidium, Taenioglaux, Athene, and Microthene; and Aegolini with genus Aegolius. Ninoxinae (formerly considered Ninoxini in the subfamily Surninae) consist of three genera, Ninox, Uroglaux, and Scologlaux. This phylogenetic structure differs considerably from that of the first edition, which recognized six tribes. Wink et al. wrap up the chapter with a discussion of owl evolution, in which they cite two key studies (Fain and Houde 2004, Ericson et al. 2006) that support the hypothesis that owls are more closely related to diurnal raptors than they are to nightjars, a view that was previously proposed and questioned by taxonomists (Mayr and Amadon 1951, Cracraft 1981, Sibley and Ahlquist 1990). There is a noticeable difference in the tone quality of the revised color plates, with more distinct contrast and richer colors, and the distribution maps that now accompany the color plates are a welcome addition. It seems that the authors took note of reviewers’ comments of the first edition (e.g., “colors are often washed out . . . plumage of many species are much duller than they should be” [Marks and Barrowclough 2001:811]) and made appropriate changes. I, too, was less impressed than with the plates in the first edition. However, I can honestly say that the revised illustrations are impressive and informative, with subtle differences in plumage color tones evident.

The addition of “first description” information to the section on systematics is most appreciated; any species account in a taxonomic treatment, Vassar College, 223 Raymond Avenue, no. 250, Poughkeepsie, New York 12604, USA; e-mail: glproudfoot@vassar.edu

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