

moved about 20 m away and waited. Approximately 30 min later one of the young's food-call changed to a nest defense call and then it stooped at the owl, hit the net, but escaped. This behavior by the same fledgling occurred 4 times within the next 15 min before it was captured. Its weight (159 g) indicated a female and all her flight feathers had blood in quill; we estimated her age at 30-32 days. After banding and releasing, she immediately perched and uttered a nest alarm call (we believe at us for she could not see the owl from her position) before flying from view. The other 2 young had continued food-calling but they never uttered a nest alarm call.

F. Hamerstrom (pers. comm.) observed 2 similar occurrences where 2 recently fledged Northern Harriers (*Circus cyaneus*) were caught after stooping at decoy live Great Horned Owls. Acker (Auk 94; 374-375, 1977) reported an immature (65-70 days old) female Red-shouldered Hawk (*Buteo lineatus*), at hack, attempting to build a nest and feed 2 captive Northern Harrier chicks. These observations suggest that some behavior patterns commonly associated with breeding adults, are present soon after fledging in some raptors.

We would like to thank D. Amadon, D. Evans, M. Fuller, M. Gratson, and F. and F. Hamerstrom for their review of this note.

Book Reviews

Recent Advances in the Study of Raptor Diseases. Proceedings of the International Symposium on Diseases of Birds of Prey, J.E. Cooper and A.G. Greenwood, eds., 1981. Chiron Publications, Ltd., West Yorkshire, England. 165 pp. \$25.00. (obtainable through CHIRON PUBLICATIONS, P.O. Box 25, Keighley, West Yorkshire BD22 7BA, United Kingdom.

This publication contains the edited proceedings of the First International Symposium on Diseases of Birds of Prey held in London, July 1 - 3, 1980. The text provides excellent clinical and surgical information for veterinarians treating raptors. The volume is divided into three parts: Part I - Pathology and Microbiology; Part II - Surgery and Anesthesia; and Part III - Medicine and Therapeutics. Two additional workshops are incorporated which contain topics on mortality factors in wild populations and captive breeding that will appeal to the raptor biologist, aviculturist, and individuals involved with rehabilitation of raptors.

Highlights of Part I include discussion on bacterial flora and haematzoa of raptors, effects of chronic lead ingestion, causes of death in trained raptors and infectious diseases of birds of prey. Part II deals with anesthesia, surgical treatment of bumblefoot and diagnostic laparoscopy. Significant information is presented on the ossification of long bones in raptors, thermoplastic coating material in fracture repair and the use of external fixation is demonstrated with several illustrated case reports. The section on medicine and therapeutics contains discussion on avian malaria, serum chemistry profiles, aspergillosis, tuberculosis, management of bumblefoot and visual defects in raptors.

Topics on captive breeding include the influence of cross-fostering on mate selection in captive kestrels, microbiological aspects of egg hatchability in captive American Kestrels, breeding of condors at the New York Zoological Park, hand rearing of vultures and abnormal and maladaptive behavior in captive raptors.

The section on mortality factors in the wild included studies on the causes of mortality in British kestrels, problems of rehabilitation, maintenance energy requirements and rate of weight loss during starvation in birds of prey and the relationship of body weight, fat deposit, and moult to the reproductive cycles in wild Tawny and Barn Owls.

In summary, a program of well-respected speakers from several countries presented well illustrated material covering a wide range of selected topics based upon their experience and investigative studies in addition to reviewing applicable literature. It contains useful information for the veterinarian and avicultural personnel involved with breeding and rehabilitation of raptors.

Philip K. Ensley, D.V.M.

The Barn Owl. D.S. Bunn, A.B. Warburton, R.D.S. Wilson. 1982. buteo Books, Vermillion, South Dakota (\$32.50). 264 pages, 1 color frontispiece, and 32 black and white plates.

In the preface, the authors state their main reason for producing this monograph on the Barn Owl (*Tyto alba*) was "the very fact that so little was known about the species. . .", and they set out to improve our understanding of this strigiform by drawing upon their combined 38 years experience with it in Britain and from both published and unpublished data from Britain, Europe, and elsewhere. Perhaps the most impressive feature of the monograph is its scope — chapters include topics such as Description and Adaptations, Voice, General Behavior, Food, Breeding, Movements, Factors Controlling Population. . ., and Distribution in the British Isles. Also included is a chapter on Folklore, as well as Appendices on development of young and techniques for observing Barn Owls. The sheer volume of information presented certainly leaves one with a better understanding of this interesting raptor, and in this sense the author's objective is attained.

Despite its good points, the professional is apt to be a bit disappointed. There is little hard data presented from the authors' own studies, and their most valuable contributions in the sections on territory and hunting methods are based primarily upon observations of diurnally active and unmarked individuals. One cannot help but wonder if the conclusions would differ had the subjects been marked and diurnal observations supplemented with radio-tracking at night. Chapters upon which the authors place considerable emphasis, particularly Voice, General Behavior, and Breeding, tend to be overly anthropomorphic and many of the conclusions the authors arrive at are not supported by compelling or even highly persuasive data. A shortcoming which I found particularly evident was a dearth of information from North America; many pertinent findings of comparative value concerning *T.a. pratincola* were not mentioned. This is particularly true in the section on possible conservation measures where nest boxes are discussed. Reference to the highly successful work in this area by Carl Marti and Phil Wagner in Utah (Marti et al. 1979. Nest boxes for the management of Barn Owls. Wildl. Soc. Bull., 7:145-148) would have greatly strengthened this section.

These faults are not likely to keep the nonprofessional from enjoying the monograph, and persons with an avid interest in owls will certainly want to obtain a copy if they can afford the rather steep price. The book should be especially interesting to those who have an occasional opportunity to observe Barn Owls and want to learn more about this intriguing species.

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