Another Way to Weigh a Bird. Arthur J. Wiseman. 1970. *IBBA News*, 42: 136-139.

Banders have used many types of containers for holding birds while they are being weighed. The present paper advocates an inverted cone of stiff cardboard (held in a wire frame) in which the bird is held in a head-down position. The gear illustrated is intended for use on a pan balance, but it could easily be adapted to a spring balance.

Beitrag zur Methodik des Flugelmessens. H. Kelm. 1970. *J. Orn., LPZ.*, 111 (3/4): 482-494. (In German with English summary).

Different techniques in measuring the wings of birds have led to results that are not comparable when obtained by different ornithologists. Deciding factors are whether the wing is measured in a bent or straightened position, and whether the convexity of the wing is removed by flattening it down to the scale. Only the maximum wing measurement of a newly dead or living bird can be regarded as constant, and it can be obtained with safety by different research workers working independently of each other. It is achieved by complete straightening of the two digital joints and the simultaneous pressing down of the wing to the scale, so that its front from the bend to the tip is parallel to the edge of the scale. OTTO KLEINSCHMIDT pioneered this measuring method and in order to distinguish his method clearly from those used by others, it is suggested it be named after him.

In skins, the maximum fresh wing measurement is irreproducible as the wing dries up in the bent position. However, it is approximately obtained by following the principle of straightening as mentioned above. Differences of proportion in the wing structure of different bird orders as well as different techniques of taxidermists result in deviations from the constant fresh measurement.

To obtain better opportunities of comparison than hitherto, it seems necessary that research workers should state which measuring techniques they use.

MISCELLANEOUS

A Radar Study of the Altitude on Nocturnal Passerine Migration. Kenneth P. Able. 1970. *Bird-banding*, 41: 282-290.

Autumnal nocturnal migration of passerines was studied by radar in Louisiana, U.S.A. Most migrants travel at relatively low altitudes (90% below 5,000 feet; 75% below 3,000 feet), with very small numbers as high as 9,000 to 11,000 feet. From exodus shortly after sunset, the birds climb rapidly and most reach maximum altitudes during the first hour, and the height distribution falls gradually after the second hour. During solid overcast conditions no attempt was made to rise above the clouds.

Northerly Movement of Silvereyes in Winter on the West Coast of the South Island. Peter Grant. 1970. *Notornis*, 17: 322-323.

Northwards flights of silvereyes along the coastal strip near Greymouth, New Zealand between 2 and 22 June 1970 are briefly described. It is estimated that about 8,000 birds passed on each of two particular days.

REVIEWS

Kookaburras, by Veronica A. Parry. Lansdowne Press Pty Ltd, Melbourne, 1970. 110 pp., 6 colour photographs, 36 black and white photographs, 3 half tone reproductions of old plates, 1 map, 2 line drawings, 6 diagrams. Price A$4.25.

This book on a familiar Australian, the Kookaburra, is the result of two and a half years research for the Author's M.Sc. Degree requirements at Monash University, Melbourne. The book commences with a brief history and zoogeography. Miss Parry is probably correct in assuming that, "The Kookaburra's ancestors, members of the genus *Dacelo*, came from New Guinea." However, her reasoning for this, should have been given. Plumage and ageing characters are discussed in some detail and it is stated that in the majority of cases the two sexes are identical; however sometimes males develop a bright blue rump. If the skin on the right hand side of the colour plate illustrating differences between sexes represents an individual with bright blue rump, then, on the basis of accurately sexed skins, I mention that females occasionally develop such bright blue rumps. Perhaps the blue rump is a character gradually gained with age.

Using patagial tags the author was able to sort out the social system of kookaburras; she found that they resided in well-defined territories which may contain a single permanently mated pair or a family group consisting of a mated pair and one or more auxiliary members. Auxiliaries are non-breeding adult birds whose capacity to breed is suppressed by their subordinate position within the family hierarchy. Auxiliaries aid in territory defence, incubation of eggs, feeding and protection of young. Such helpers at the nest are known for a number of other species of birds.

Size and function of territory are discussed. With kookaburras, territory size is lined with the auxiliary system and thus affects the population dynamics. Territorial behaviour acts through sociality in controlling the reproductive potential of the population.

Kookaburras have seven types of calls, and the function of the famous laughing song is to advertise territorial ownership.

Different postures and behaviour are described for fear, camouflage, roosting, feeding, courtship and territorial defence. Breeding biology, mortality and predation are described in two chapters and in the last intriguing chapter titled "Why have auxiliaries?" the author examines her findings in the light of various theories on population control.

The book is well written and the illustrations for the most part adequate. This study of kookaburras is of sufficient depth to merit the attention of the most hardened vertebrate zoologist yet presented in such a manner as to make fascinating reading for the layman only remotely interested in birds. To sum up, it is one of the finest books on a single species of bird that I have ever read.

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