BOOK RÉVIEW

Handbuch der Vögel Mitteleuropas. I. Gaviiformes-Phoenicopteriformes.-Produced by Urs Glutz von Blotzheim and Kurt Bauer, edited by G. Niethammer. 1966. Akademische Verlagsgesellschaft, Frankfurt am Main. 483 pp., 70 textfigures, 16.5×24 cm, clothbound, DM 48.00 (subscription price as part of entire set, DM 40.80).-The role the large handbooks play in ornithology can hardly be overestimated. Bent in North America, Witherby *et al.* in Great Britain, Dementiev and Gladkov in the USSR, and Niethammer in Germany are milestones in the history of our science.

Niethammer's Handbuch der deutschen Vogelkunde (1937-42) has now been succeeded by the Handbuch der Vögel Mitteleuropas. The work is planned to contain at least 11 parts (against 3 for its precursor); the total number of pages will probably amount to about 5000. This is a proof of the ever-growing interest in ornithology. The new edition covers fields hardly mentioned in the old Niethammer, e.g., population density, population dynamics, and ethology. In particular, the treatment of behavior occupies a good deal of space (e.g., 7 pages devoted to the White Stork), even though the text is concise and omits detailed discussion of more theoretical questions such as motivation. There are good drawings of the postures of the birds.

The list of references may cover as much as two pages for a single species. The authors have made painstaking efforts to quote the literature so that the reader will be able to find any source of information. A long list of general works and of bird faunas of different parts of Europe (and other continents) is given.

One notices that the description of plumages follows Stresemann's system. One thing which I do not like in the new handbook any more than in the old Niethammer is the way of indicating the breeding season by giving the time of completion of the clutches ("Vollgelege"). What really interests the reader is usually the commencement of laying.

The recent publication of the first volume of a handbook of the birds of Finland (L. v. Haartman, O. Hildén, P. Linkola, P. Suomalainen, and R. Tenovuo: Pohjolan linnut värikuvin, 1963–66, 439 + 96 pp.) gives me the opportunity to compare the text with respect to a number of species. There are a few points in the Central European handbook which are either wrong or which tell the truth but not the whole truth (alas, the same can be said about the Finnish handbook). I give them briefly:

Gavia arctica. Has occasionally bred in Finland on treeless islets and on the shore in the archipelago of the Baltic Sea. About 1 per cent of the Finnish clutches contained 3 eggs. Are clutches with a single egg ever known to be complete? Laying starts in Southern Finland at the earliest in mid-May, in Lapland from 1 June on. The migration at the coast of the Baltic mainly takes place in the morning, often very early.

Gavia stellata. Arrives in Finland somewhat earlier than arctica. The migration in early summer, which is referred to in the Central European handbook, is hardly typical of the species. Both in arctica and stellata late individuals arrive in the beginning of June (in arctica the last ones 15-17 June, in stellata until 10 June). The latitude does not as such determine the time of laying, as is shown by the commencement of laying at Hailuoto (65° N) on 29 May and in Lapland on 2 June. These areas are north of Northern Siberia where laying is said to start only at the end of June. The migration at the Finnish coast, like in arctica, takes place in the morning. There are no colonies in the present Finland, but colonial nesting was known to occur at Petsamo, now in the USSR.

Podiceps cristatus. Average incubation period 27 days (Onno, Proc. XII Intern. Orn. Congr.). Podiceps griseigena. Often seen migrating in the evening in the Finnish archipelago.

Podiceps ruficollis. The case of nesting in Finnish Lapland is not considered fully proven.

Botaurus stellaris. Broberg (in Vår Fågelvärld 1948) has made important observations about polygamy, etc. In Finland the male calls mainly at night, and also the migration seems mainly to be nocturnal.

Although I have been active as a handbook writer for years, as seen from these remarks, I do not have much to criticize in the new Central European handbook. A North American

BOOK REVIEW

ornithologist, who feels at home on the whole continent or at least in its middle and northern parts, may hardly understand the difficulties which confront the student of the Central European bird fauna. The political situation in this region has always been unstable, and certain areas have changed owners several times. The confusion of tongues makes the reading of the local literature more than difficult. Considering these facts we have to be very thankful to the authors of the new handbook for the excellent work they have done.—LARS VON HAARTMAN.