Scottish Ornithology.

The Geographical Distribution and Status of Birds in Scotland. By Evelyn V. Baxter and Leonore Jeffery Rintoul. Pp. vii + 425. (Edinburgh and London: Oliver and Boyd, 1928.) 15s. net.

THE feathered population of the British Isles has been subjected of late years to scrutiny so intense as to cause misgiving, and in some cases indignation, among such lovers of birds as are not specialists.

The conditions necessary for the satisfaction of the scrupulous framers of ornithological statistics imply the slaughter, euphemistically termed the 'collection' or 'securing,' of very many harmless birds. In the *Zoologist* for January 1913, Dr. C. J. Patten, in discussing the reported occurrence of four Redbreasts, *Erithacus rubecula*, at the Tuskar Lighthouse, remarked: "The birds were not captured, and so these occurrences cannot carry the same weight that they would had the specimens been secured and forwarded for corroboration."

In their volume on "The Geographical Distribution and Status of Birds in Scotland," Miss Baxter and Miss Rintoul are at pains to distinguish between the British and Continental forms of several species. In regard to the Redbreast, for example, while they record the British form as resident in every part of Scotland except Shetland and St. Kilda, the Continental variety is reported from only fourteen localities. Now, whereas the difference between the two subspecies cannot be detected until specimens are in hand, hundreds of Redbreasts must have been 'collected' to establish a fact not of first-rate importance. We do not accuse the authors of a direct share in such slaughter, but their statistics are founded on the result of industry in that line on the part of others; and they inform the reader in the preface that "a great deal of work remains to be done before we have a comprehensive knowledge of the status in Scotland of even our commonest birds."

We note with satisfaction that the authors observe timely reticence by withholding information about certain scarce birds, remarking that "in some instances in the interests of birds themselves it has been necessary to suppress the localities where they breed; for example, the Greenshank in Southern Scotland." It would have been well to observe the same precaution in respect to some other species—the Chough, for example, which formerly used to breed in many parts of Scotland but is now resident in two places only, where it is in imminent danger of extermination owing to the

hostility of jackdaws and the baneful industry of collectors.

The authors consider it expedient to comply with modern practice in duplicating specific names, and I suppose we must not attribute it to a deficient sense of humour which sanctions the diminutive wren to be heralded as *Troglodytes troglodytes troglodytes*; but surely injustice is done to the great pioneer of classification by adding (L) to these cumbrous titles. Linnæus was content to denote the wren as *Motacilla troglodytes*, and assuredly he would have disclaimed having laden the Grey Plover with such cacophonous polysyllables as *Squatarola squatarola squatarola*! Clumsy nomenclature such as this causes the enemy to blaspheme and friends to complain. In such cases as it may be desired to duplicate the specific name, this might be conveniently indicated by adding a numeral (2).

The Buffet-headed Duck, *Clangula albeola*, is not mentioned in the volume under review, although Yarrell records a solitary instance of its occurrence in Orkney in 1841, and states that the bird was to be preserved in the Natural History Museum at Margate.

The foregoing frank criticism must not be interpreted as unfavourable to what is a thorough piece of work, which must have cost the authors no slight labour to compile and will prove very useful for reference.

HERBERT MAXWELL.

Crystal Physics.

- (1) *Lehrbuch der Kristallphysik (mit Ausschluss der Kristalloptik)*. Von Prof. Dr. Woldemar Voigt. Nachdruck der ersten Auflage ergänzt durch eine spätere Arbeit des Verfassers und mit einem Geleitwort von Prof. M. v. Laue. (Sammlung von Lehrbüchern auf dem Gebiete der mathematischen Wissenschaften mit Einschluss ihrer Anwendungen, Band 34.) Pp. xxvi + 978. (Leipzig und Berlin: B. G. Teubner, 1928.) 41 gold marks.
- (2) *The Physics of Crystals*. By Dr. Abram F. Joffé. Edited by Prof. Leonard B. Loeb. Pp. xi + 198. (New York: McGraw-Hill Book Co., Inc.; London: McGraw-Hill Publishing Co., Ltd., 1928.) 15s. net.
- (3) *Bibliography of Crystal Structure*. By Jared Kirtland Morse. Pp. xix + 164. (Chicago: University of Chicago Press; London: Cambridge University Press, 1928.) 15s. net.

IT cannot be too strongly emphasised that crystal physics is no longer a highly specialised branch of physics, dealing with solid matter in what was