

BOOK REVIEWS

The pattern of animal communities. Charles S. Elton. Methuen & Co. Ltd., London. Price in U.K. 90 shillings.

Habitat classification and the spatial arrangement of habitats make up the main theme of this book—the recognition that organisms, whether they live in the arctic, the tropics or in between, live in *space* and configurations of it that are common to corresponding communities everywhere.

Elton divides the world into seven *habitat systems*: (I) Terrestrial (II) Aquatic (III) Aquatic-Terrestrial (Transitional) (IV) Subterranean (rocks, caves and galleries, as well as certain deeper parts of sandy soils) (V) High Air (VI) Domestic (all those areas in which alterations by man, especially buildings and gardens, are so extreme as to change the habitat quite drastically) and (VII) General (a very diverse series of clearly defined habitats such as macrofungi, dung, carrion etc.). All these may be sub-divided into *formation types*, the method of subdivision depending upon the particular *habitat system*. For example the Aquatic (fresh and salt water) is sub-divided into a theoretical maximum of 25 *formation types* depending upon five categories of size on the one hand and five of speed of water movement on the other (to build up this particular system for oneself will make a pleasant wet weekend intellectual exercise for those who haven't yet read the book).

All *formation types* may be further characterised by *qualifiers* such as acid, arable, silt, freshwater, saline

On aggression. Konrad Lorenz. Methuen and Co. Ltd., London. Price in U.K.: 30 shillings.

It's a little difficult to decide what audience this book has been written for. Perhaps to bring closer together the *Three Cultures*—that of the student of animal behaviour, the student of human behaviour and the Intellectual who doesn't know too much about either of the two others. It's certainly unlikely to tell the ethologist very much he doesn't know already; and, however desirable it may be for the Average Man to understand the animal origin of much of his behaviour and to understand some aspects of animal behaviour anyhow, he's going to find the first half of the book pretty hard going. I'm not the only one who has thought that "The phylogenetic process of ritualisation creates a new autonomous instinct which interferes as an independent force in the great constitution of all other instinctive motivations" is a rather daunting way to begin a chapter of a book not aimed primarily at specialists. This is the sort of jargon that is absent in Elton's at least equally profound book. The heavy-handedness may, of course, be the translator's and not Lorenz's. It certainly did not appear in his early and remarkable book, *King Solomon's Ring*, but at that stage the scientist had not turned moralist.

I suppose if the psychoanalyst and the intellectual learn something about the role of aggression in natural selection and some other facts about animal behaviour and their human parallels this will be worthwhile. And

etc. The whole is an ingenious and stimulating concept and at least a useful variant of the more usual method of classifying animal habitats in terms of the composition of the plant communities being occupied.

A chapter describes how "ecological events" are recorded. The Bureau of Animal Population at the University of Oxford has been involved with a survey, under Elton's direction, of the communities on nearby Wytham Hill for over 20 years now and this chapter outlines the methods used.

Although the book is based on an account of that work, it is something much more. It discusses terrestrial systems generally and, to quote the dust-jacket briefly, "the whole is unified by a discussion of movements and invasions, and the way in which patterns lead to stability in natural communities."

Don't think that this is a book only for specialists and then only for those forever laid in the narrow cell of *animal ecology*. All ecologists, as well as all those interested in natural history and conservation, should read it. If time is short, then read at least the two first and the two last chapters. Not only will you learn a great deal but you will be stimulated and impressed that so important a book can be written with such a disarming simplicity, without jargon, with humour and with a breadth of knowledge—not only of ecology—that is the hallmark of a remarkable mind.

There are nearly 100 good illustrations and nearly 600 references. G.R.W.

for those who've read about the subject before, there's often something new or interesting in the book. But there'll be many reasonable ethologists (or near-ethologists) who will think that to describe a fox as having "a disgusted expression on his face" is being just a little too anthropomorphic. There will be others who may think that the statement that the dingo eliminated Tasmanian devils and -tigers on the Australian mainland by competing with them successfully for food is by no means the incontrovertible fact it is made out to be, and so on.

No reasonable person will disagree with the exhortation in the book's final paragraph that "love and friendship should embrace all humanity, that we should love all our human brothers indiscriminately" (we've heard all that before), but it's a little disturbing in the same paragraph to read that "the bond of personal love and friendship was the epoch-making invention created by the great constructors". Where is Lorenz heading? A little further along this road to mystical union of ethology with morality and the "great constructors" will be spelt with capital initials. I wonder whether Aldous Huxley would have written the foreword instead of his brother, had he been available.

The dust jacket says there are "16 half-tone plates and 6 line drawings in the text". All I could find in the copies of *On aggression* I examined were 5 line drawings. G.R.W.