

nature." Social anthropologists would, I feel, be somewhat taken aback by such a statement. Later he writes: "By our very nature we are called ever and again to create and preserve new social forms. The drive to find these corresponds to the animals' drive towards hereditary forms; but the finding of them is our freedom and our constant duty."

These two quotations hardly bear analysis, but it is worth noting how shamefully old mother "nature" is used in the two cases.

But if we are to criticize Portmann, it must be said in his defence, that the ethologists themselves have not produced new popular books about their work in recent years and must not therefore complain too loudly if their studies are served up by others from outside the field. The greatest service that the publication of Portmann's book can do for us is to stimulate the leading ethologists to write new popular books on animal behaviour.

Having commented thus, it should be added finally that Portmann's volume is extremely well produced and beautifully illustrated. If they ignore the subjective comments, new-comers to ethology can learn much from it.

D. M.

TIGER TRAILS IN ASSAM. By PATRICK HANLEY. Robert Hale, Ltd. 18s.

The author spent thirty years of a wandering life in India—fifteen of them in Assam—on a tea-garden bordering the Naga Hills. Here it was his practice, on leave-days, to wander alone in the jungle following up any tracks he came across, or sometimes, on moonlight nights, to sit in a tree or machan. In this way he claims to have met many animals at close quarters and witnessed some amazing incidents, including "tigers killing their prey on at least 120 separate occasions" (p. 43), and pythons killing on forty more (p. 143). When one reads, on p. 122, "many kinds of deer" in Kenya, or on p. 49 of a "herd of 20 barking deer" one wonders how he could have spent so much time in the jungle without learning more about the habits of animals, or even their names. What, for instance, can his "grouse" (p. 22) have been and was his "lynx" (pp. 49, 144) perhaps the *chaus*, which has slightly tufted ears? Still more puzzling is the "tiny creature, scarcely 2 feet tall, which we called mouse-deer" (p. 83). Barking- and hog-deer are both about this height: mouse-deer are only 1 foot high and neither the central-Indian (spotted) kind nor either of the Malayan ones are known within 800 miles of Assam. His most glaring error is on page 22, "hullock monkeys, called langur in other parts of India." Is it possible for anyone familiar, as he was, with the langur further west, to live where he must have heard hoolocks calling every morning for fifteen years and to take so little note of the creatures around him as to confuse a long-tailed monkey with a tail-less ape—the white-browed gibbon? On p. 128 he again turns the hoolocks into monkeys, this time American ones, "great capuchin monkeys which the natives call hullocks."

When he says (p. 111) "that nothing except a man-eater or rogue-elephant will attack man unprovoked", and (p. 42) "wild beasts, suddenly

encountered, invariably try to get away as quickly as possible", I think all those who know Assam jungles will agree with him, *and then he contradicts it all* when he says: "leopards and wild boar invariably attack if near enough to man" (p. 42), and "elephants, especially cows with young, would attack immediately" (p. 39). In each case unprovoked animals are clearly implied and both are, in my experience, untrue.

Though I disagree with much that he says about the habits of tiger, leopard, pig, wild dog and, above all, elephant and python, space forbids further examples. By exaggerating the numbers, and often the aggressiveness, of animals and the ease with which the "expert tracker" can approach and watch them without their knowing it, he paints Assam jungles as fascinating yet terrifying places where one carries one's life in one's hand. Those who know how sharp tigers' ears and eyes are, can read on page 165 how, without being spotted, he was able to climb a tree with binoculars and a camera within 40 feet of four tigers.

Throughout the book the author gives us his views on trophy-hunting and killing for sport. He also discusses tsetse-control and how to improve Masai grazing. However much one may agree with him on some or all of these points, I think many will find tedious the constant repetition of phrases such as "senseless destruction" or "so-called sportsmen", for I doubt if a dictatorial style really helps any cause.

E. O. S.

MERKMALEN DER WILDEBENDEN SÄUGETIERE MITTELEUROPAS. By G. GAFFRY. Leipzig: Akademische Verlagsgesellschaft Geest & Portig K.G., 1961. DM. 23.

This extremely useful reference book by a well-known German mammalogist deals with eighty-eight species of wild mammals to be found in Central Europe. The exact limits of what constitutes Central Europe are not defined, but it is clear from the context that the British Isles, Scandinavia, France, and the Iberian Peninsula are excluded.

However, the majority of the species included are known from most or all of these territories, so that the work makes a most handy tool for workers on European mammals in general.

After short introductory chapters defining what is a mammal, with succinct data on the structure and physiology of mammals, and a statement on their origin, a systematic list is given of the eighty-eight forms included.

The main part of the work (180 pp.) deals with each species seriatim, with common and scientific name, general and special features in its structure and appearance, distribution, measurements and biological data. Each section is illustrated with clear line-drawings depicting special features, cranial and dental characters, etc., enabling the reader to identify any wild mammal he is likely to meet. All the data seems to be accurate and account is taken of ranges in individual variation.

Particularly valuable are the appendices in which the data are presented in tabular fashion rendering them easy of reference. There are included tabular presentations of such matters as ecological zoning, distribution,