Zoogeography. Philip J. Darlington, Jr. John Wiley & Sons, N. Y. xi + 675 pp. 1957. $15.00

A readable assembly of an amazing quantity of facts about the distribution of land vertebrates and fresh-water vertebrates over the world, presented as the basis for the author’s understanding of the main pattern of animal distribution and his conclusions as to how and why this pattern has been formed and what it tells about ancient land and climates.

Darlington (a taxonomist) enumerates a series of working principles for zoogeographers. For example, animals are tending both to multiply and spread and to die and lose ground, and the centers of evolution and dispersal are also likely to be centers of extinction. When working out the histories of families, simple clues should be distrusted because of the possible complexity of geographical movements. Patterns of distribution are changing constantly, and clues to geographical histories must be understood and used fairly. When facts fail, working hypotheses must be used, because science proceeds by defining problems and trying to solve them.

Sections are devoted in sequence to the several orders of vertebrates, i.e. fishes, amphibians, reptiles, birds and mammals, and these are followed by a section in which five patterns of distribution are combined into a common continental pattern, and in which the world is divided into faunal regions. Separate consideration is given to the nature, distribution and significance of the vertebrates of islands. The last quarter of the book is allocated to discussions of the evolution of the geographical patterns, the geologic past, and man.

Darlington states an important principle of zoogeography in his consideration of the reasons why man’s ancestors came down from the trees, left the forest and began to pursue game in open country, as follows (p. 627).

"It seems to be a principle of zoogeography that movements of animals into new places are usually not escapes but spreadings of dominant groups to obtain new advantages. . . . "If our ancestors had put safety first, they could have stayed in the trees. Some potential ancestors did so and are apes today. But from the very beginning the apes that became men probably ran after what they wanted more than away from what they feared."

From this point of view the author draws a highly significant conclusion (p. 645). "Any large group of people can now, if they wish, draw ideas from the whole world and combine them with their own ideas to make better ones. The people who do this best, and who remember the old lesson that gains are more important than escapes (although escapes are important too) will probably hold or take power in the future. The people who cut themselves off from ideas, or who sacrifice gains to temporary security, will not hold power long. This, I think, is the plain lesson of the history of evolution and dispersal of animals and of man himself."

Thomas H. Langlois