

Notes on Björn Kurtén<sup>1</sup>

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Björn Kurtén (1924-1988), a member of the editorial board of this journal, was probably the first real paleoecologist. There still aren't many. His doctoral thesis, published in 1953, was a remarkably innovative work. It included studies of life tables, natural selection, and developmental fields for several species of fossil and recent mammals. The whole approach was new. He later extended this into related subjects such as evolutionary rates and allometry. One normally doesn't associate the latter two subjects, but Kurtén combined them with an index of evolutionary differentiation based on changes in allometries. (Unfortunately, and uncharacteristically, the data and specific allometries used for this index remain unpublished.)

Much of Kurtén's early work appeared in relatively obscure journals, and it is less well known than it deserves. Fortunately Columbia Univ. Press has recently republished much of it. Even more visible papers have been overlooked, though, perhaps because he was decades ahead of most others. A good example is his demonstration, in the 1959 Cold Spring Harbor symposium, that estimates of evolutionary rates are strongly affected by the interval used. This result is now usually attributed to a paper in Science, 1983, by an author who actually criticized Kurtén for not seeing this. Another example is his still-puzzling finding of no evolutionary response to strong selection for centuries on a tooth in a local population of cave bears. (Perhaps, as I think has been suggested, most cave bears wintered outside caves and there was no such selection on these animals, which repopulated the cave.)

Kurtén's first language was Swedish, a minority language in his native Finland. "Björn" means "bear" in Swedish, and a moderate part of his early work was on cave bears and their relatives. He did much to popularize science, especially in Swedish, in which he wrote several novels also; one was published as early as 1941, and he was one of the best-known Scandinavian novelists. The two which have appeared in English are pretty good, better scientifically and not a worse read than Jean Auel's on Neanderthal-human times. Several good semi-popular books in English also exist. Columbia Univ. Press published them all because of a clause they still like to insert in their contracts binding authors to them for life. One of these books, *Not From the Apes*, was a heretical and in my opinion dead wrong (in its title theme) treatment of human origins. Kurtén was going to revise it, but I don't know how.

A major focus of his work was mammalian (especially carnivoran) taxonomy and Pleistocene faunal evolution. This resulted in what are probably his best-known books, on the Pleistocene mammals of Europe and (with Elaine Anderson) North America. These made sense out of an immense amount of data of highly variable quality and often obscurely published. They also have some original evolutionary analyses, which seem to have escaped much notice because of their publication here.

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It is a bit awkward being a paleontologist in a country which has almost no fossils. Kurtén was a wide traveler, and he wrote all his scientific papers in foreign languages, mostly English but also German. He was a gentle person and did much of his writing while on his family's own island (Stangsholmen) in the Baltic. He was offered a professorship at Yale about 1960 but preferred the environment, in several senses, of Finland. His own full professorship there came later. His death eliminates the (personal) chair and leaves Finland without institutional recognition of the superior legacy in paleontology he has left there.

I thank Elaine Anderson and Mikael Fortelius for information, but almost all of what I say here came, in one way or another, from Kurtén himself.