swering it has been slight. Here Pielou's "object is to guide those entering the field right to the center of it as quickly as possible." Since the center of an amorphous field is poorly defined, she may have succeeded.

Pielou states Khinchin's axioms for the information index of diversity, interprets them ecologically, and evaluates such indexes sensibly: "A community's diversity index is merely a single descriptive statistic, only one of the many needed to summarize its characteristics and, by itself, not very informative. The belief (or superstition) of some ecologists that a diversity index provides a basis (or talisman) for reaching a full understanding of community structure is wholly unfounded."

She offers a generally clear view of conceptually confused debates concerning the meaning, measurement, and implications of ecological diversity. Unfortunately, she does less than one might hope to clarify the confusion and on occasion lends further obscurity. She suggests some statistical procedures whose conditions of validity are not fully stated, whose intermediate steps are not fully defined, or whose practical or scientific worth is doubtful even to her. If science provides food for thought, these are recipes not known to be tasty or even safe for human consumption.

The last two chapters, the least mathematical and scientifically most interesting, review guesses about the causes of diversity. Here diversity is equated with numbers of species, an ancient index. If one listens to what Pielou does instead of what she says, one wonders then what all the fuss earlier about information indexes and other fancy measures has been for.—*Joel E. Cohen, Rockefeller University*

Ecological Diversity. E. C. Pielou. 165 pp. Wiley, 1975. No price given.

Pielou formulates the central problem of ecological diversity as: "Given a stable many-species community, how have its constituent species come to share the same habitat and how do they maintain themselves and interact with one another?" Real progress toward giving this question operational meaning and an-