

THE UNIVERSITY OF TEXAS

AUSTIN 12

DEPARTMENT OF ZOOLOGY

February 25, 1948

Professor H. B. Stenzel
Bureau of Economic Geology
The University

Dear Dr. Stenzel:

I have just received your application for a grant to attend a meeting at Denver on April 26-29. I would greatly appreciate it if you would send me, at your earliest convenience, six copies of a short abstract not to exceed one page of your proposed paper. We require this in order that the committee may be circularized in advance of a regular meeting.

Cordially yours,



J. T. Patterson, Chairman
Committee on Attendance
at Professional Meetings

JTP/S

Abstract

H. B. Stenzel: Environmental significance of dwarfed faunas; Mollusca exclusive of Ammonoidea.

As a first step in the elucidation of dwarfed faunas the significance of faunas having small average stature is discussed. The average size of individuals of ^agenus as a rule increases in successive stratigraphic horizons. This is demonstrated on the phylogenetic history of the molluscan genera *Distorio*, *Strombus*, *Turricula*, and others. Hence older Tertiary molluscan faunas have small average stature in comparison with younger Tertiary and living faunas, hence resemble dwarf faunas. This size increase is genetic. As a second step attention is called to recent studies on transplanted infertile American oysters in England. In these studies the influence of location on size is demonstrated. These size differences are entirely environmental, because all oysters came from the same genetic stock. Attention is also called to the influence of brackish water environment on average age of populations and shell size.