

Copies to Messrs. Parker  
Rapp  
Errington

New Soils Bldg.  
May 7, 1934

Mr. Charles L. Horn  
Federal Cartridge Corporation  
Minneapolis, Minnesota

Dear Mr. Horn:

I had read the Gonzenbach article and have been scratching my head about it ever since. For this reason it interested me particularly to have your views, Ed Parker's, and Arthur Rapp's.

I agree with them that there are forces operating in the local distribution of both plants and animals which are as yet entirely beyond our explanatory powers. It does not matter whether we call this hiatus in our knowledge "earth rays" or something else; it is nevertheless a step in the right direction to recognize the existence of the hiatus.

Errington in his studies of quail populations is finding spots which are particularly tenacious of their birds, almost regardless of the abuse of the food, cover, and other factors. I myself have encountered other spots where I cannot get game to stay, no matter how perfect the environment. These spots are exceptional and they do not in any way undermine my confidence in the soundness of the principles we are following in game management, but they do convince me that there are other things over and above environment, as they now define it, which determine the presence or absence of animals and plants.

"Earth rays" has, of course, the sound of a quack name, but I see no reason why waves of some sort are not one of the plausible hypotheses which should be investigated.

I am returning the correspondence and sending copies of this letter to Ed Parker and Arthur Rapp, also Errington.

Yours sincerely,

ALDO LEOPOLD  
In Charge, Game Research

AL/vh  
Encl.

Paul: This refers to a paper by Ernest Gonzenbach in the April American Forestry entitled "New Light on Old Tree Mysteries."

A.L.