

Geotrupes vernalis (L.), var A2 Mulsant." or "if the variation be geographically determined", the variety may be designated by a geographical expression.

There is no means of designating varieties suitable for all the branches of the animal and vegetable kingdoms, and the search for one is in my opinion utopian.

D. Sharp

Parkstone

Dorset.

November 29th, 1900

My dear Mr Bernard

I return your documents having just finished reading your "Introduction".

What strikes me most is that your final proposals are exceedingly modest as compared with the vigour of your preliminary denunciations. I can quite understand that in the lower forms of life you are working at, and with the imperfect materials at your command, the attempt to *define* species may be hopeless and it may be because *nature* has in most cases *not yet defined them*. But with the higher vertebrates and insects with which alone I have any intimate acquaintance the difficulty rarely arises, because at least . . . tently [illegible] perhaps 99/100 of species have been clearly defined by nature herself. Neither do I see much difficulty in giving a clear definition of "species" on the principles of evolution. People sometimes say to me—"How can you as a Darwinian believe in 'species'. There are no such things". But as a Darwinian I have the clearest idea of what a species is, and I enclose my definition. It is one which works very well, because the numbers of well marked, and at first sight *good* species, which yet show a *complete transition* to other species, are very few indeed compared with the very large number which show no such transition.

A few criticisms of details are—Why "fanciful names" often repeated as if it were *the* characteristic of sp. names. Surely the majority *are*, and all ought to be, *descriptive* or *appropriate*. p. 12. All this very good, but I would add—"All these unnamed forms to be indicated by letters (a) (b) (c) &c. for easy reference". p. 13, 1.3. after "new" add "if very imperfectly known". p. 13. for the word "cumulative" would not "developing" or growing be better, especially as you use "adult" in the same connection. Your proposals are I think excellent for all *imperfect materials* or *lowly organised groups*—but among the higher animals a species may often be safely named as new from one or two specimens only—as when a distinct fruit-pigeon or parrot is found on a new island, the fauna of all the surrounding lands being well known. When you come to Southampton on Sat. Dec. 8th, will you not come on to us. We will gladly give you a bed, and we shall be glad to hear your S. African experiences.

Kind regards to F. O. P. C.—"the comrade" as we call him here.

Yours very faithfully,
Alfred R. Wallace

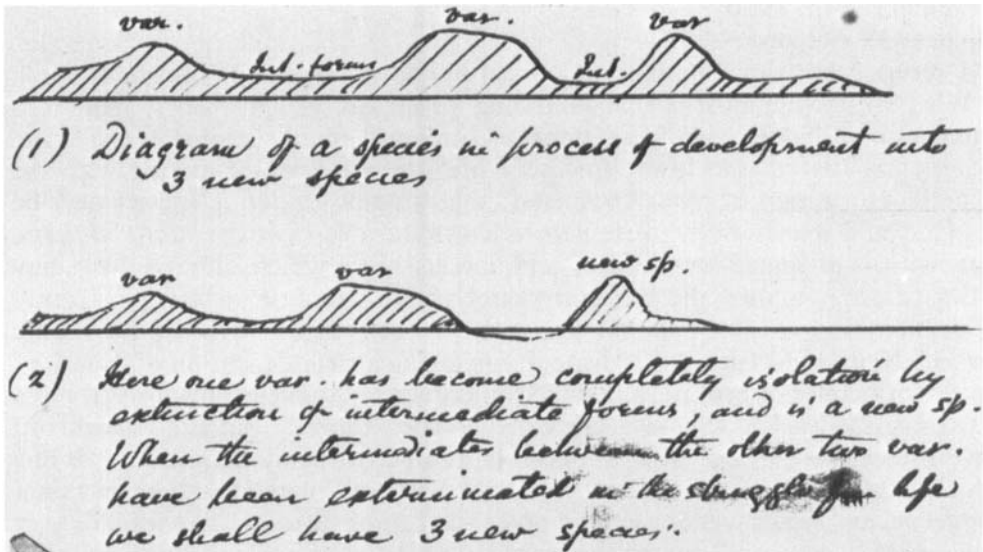
P.S. Do you know any *rich* man who will help to form an *advanced* Colony in a lovely district near London, "The Chiltern Hills." I have found an old house there I want, with an estate of 230 acres suitable for a dozen good houses. If so please send address *at once*.

A. R. W.

Definition of a Species

A species is a group of individuals which reproduce their like within *definite* limits of variation, and which are *not* connected with their nearest allied species by insensible variations.

Note. The above definition is mainly a statement of fact, founded on the theory of evolution by natural selection; and may be illustrated by the following diagrams.



Cambridge,

Decr. 1st 1900

Dear Mr Bernard,

Thanks for your note. I hope I am sufficiently philosophical to appreciate with pleasure a nomenclatorial effort exerted though it may be in a direction exactly opposed to my own proposal.

One suggestion—as I have begun philosophically—allow me to make.

It is as to the psychology of naming.

Every process, even the most extreme scientific methods, has its primary connection with our ordinary every day ideas, and in the first instance was a slight further development thereof.

In ordinary life we *name* an individual; and only after individuality is absolute. If our system of scientific zoological nomenclature is not to contravene the psychological basis of *naming*, there must be a genuine analogy between the things named. Now the only pretence that can be made as to a true individuality between groups of individuals, is as to the species. No other groups of individuals are individualised. It is this first genuine individualisation only, that you can possibly psychologically correctly name. But according to the facts of evolution you can only do this by adopting a time limit.

There may possibly be an individuality among groups of *existing* individuals