

characters, either in any one locality, or differing in one locality from another. Such are called constant species. Others may be very constant in any one locality, yet appear in more or less modified forms in different localities, according to geographical, geological, or climatic conditions. Others may be constant in one locality, but show considerable range of variation in another; or may vary to a greater or less degree towards a certain form in one place, and towards quite a different form in another. But few that vary at all in any locality, vary to the same degree, or within the same limits wherever they occur. In short, whilst some species do not vary to any extent anywhere, others seem, as it were, to lend themselves enormously to local variation. In some instances difference of food-plant is accountable in a great measure for variation in size and color, and it has been observed that the fact of a larva confining itself to different food-plants in different parts of the country does not necessarily indicate different species. Breeding, and careful records of early stages, have often resulted in a distinct specific relationship having been traced through between forms presenting somewhat striking differences in different habitats, which might otherwise easily have passed as distinct species. The expression "specific relationship" must not be taken to mean positive "specific identity," as the legitimate use of that expression will depend on the concise meaning attached to the word "species," briefly discussed in a previous paper.

Some species have seasonal varieties, that is, they pass through their entire metamorphoses more than once a year, and the different breeds assume different characters, according to the season or length of time spent in larval and pupal stages. Others show dimorphic variation, sometimes in one sex, sometimes in both. That is to say, two different forms, suggesting two species, can be bred from the same batch of eggs, even without any actually intermediate form appearing at all. And this may occur regularly in some localities, never in others. In both the foregoing instances, as in many others, unfamiliarity with the species concerned has resulted in the separation of what are merely varieties into species. In some years too, a species shows a stronger tendency to a certain form of variation than in others.

A species varying differently, or appearing under a modified form, in different localities, is said to exist in those localities in the form of a "local race," which is sometimes referred to, with doubtful justice, as an "incipient species." It is questionable whether a truly distinct species can ever be evolved whilst direct specific relationship can be maintained by interbreeding, on what may be called, for convenience, the confines of their range, or where the races meet. Complete isolation from blood relationship for a lengthy period under special conditions, is probably necessary before a race can be said to begin to exist