

of "*Rana pipiens* Schreber, Montauk Pt., New York"; or "*R. pipiens*, southeastern corner of J. B. Smith farm, 5 miles west of Montauk Pt., in cattail swamp"; or even "*R. pipiens* from Long Island," "... from the East Coast," and so on. The precision or breadth of the geographical designation will vary according to the needs of the investigator and with the actual geographical distribution of the character or combination of characters under study. Inevitably, perhaps, repeatedly discussed populations will come to be referred to as "Montauk A," "Reelfoot Lake," "Rock Island," and so forth, but this will no more prove a pitfall than is the geographical vernacular familiarly applied to "strains" of *Drosophila virilis* (Patterson and Stone, 1952), or the locality names by which experienced trappers can often distinguish a series of pelts.

If a character combination of a population remains at all co-ordinate and consistent in its territorial occupancy, there is every reason why we should refer to it merely by mentioning the species concerned and either the locality or full distribution that it occupies. There is no evident advantage in the use of the recommended form "*montaukensis*" over "Long Island race" or "Montauk A." If we find at Lhasa a population of mice of known species that carries a distinctive black cheek stripe, the name "*lhasensis*" conveys this no more readily than does "Lhasa race." If it subsequently be found that the entire Tibetan Plateau is inhabited by mice carrying black cheek stripes, "Lhasa race" is readily expanded, so that we can speak of the "Tibetan race" just as easily as, and interchangeably with, "Lhasa race." The city of Lhasa remains a feature of the Tibetan Plateau, and so do the black-cheeked mice of both places. The very informality and flexibility of a vernacular system are among its most appealing characteristics. A geographical vernacular designation lacks the esoteric authoritarianism surrounding the Latin trinomial, but it is this very quality of trinomials that we consider most mis-

leading, cumbersome, and generally repellent, especially to the uninitiated. The geographical vernacular is more broadly communicable, more frankly expressive, fully as mnemonic, at least as certain in the long run to be precise, and it cuts the taxonomic red tape to practically nothing. Its present unostentatious use in many individual papers in several taxonomic fields reveals no serious operational drawbacks. In short, we feel that the facts we have outlined call for serious, conscious consideration of the desirability of eventual abandonment of the subspecies trinomial and its replacement by a system of reference based on the vernacular employment of relevant geographical names.

Summary

1. Mayr's criterion for the species, that of free interbreeding of populations in nature, when qualified by the conditions of sympatry and synchrony, and extended by morphological analogy to isolated populations, has proved to be objective and practicable for taxonomic work.

2. Roughly, the subspecies has been defined as a genetically distinct geographical fraction of the species. The assumption has been followed, tacitly or otherwise, that when secondary characters vary geographically, this variation tends to follow whatever "diagnostic" characters are chosen to delimit races, and that the subspecies in general can be shown upon further analysis to be a concrete unit. This assumption is demonstrated herein to be contravened by the data available in the literature dealing with geographical variation.

3. Three other prominent features affecting the subspecies concept render it even more subjective and arbitrary in taxonomic practice: the polytopic race, the microgeographic race, and the artificiality of quantitative methods of defining the formal lower limits of the subspecies.

4. Most taxonomic analysis at the intra-specific level has been directed toward the end of naming and characterizing new