

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

In reply refer to:
N22

December 15, 1959

UNIFORM USE OF COMMON AND SCIENTIFIC NAMES
OF FLOWERING PLANTS AND VERTEBRATE ANIMALS

Discussion:

Common names of plants and animals are used in our daily administrative and park visitor contacts. Less frequently, when more specific identification is required, the scientific names are applied. Regularly in museum records and in technical studies, the scientific names are employed. To avoid confusion and to promote clarity, standards for uniform use of common and scientific names throughout the Service have been approved.

Standardized use of common and scientific names has been the subject of considerable discussion and study by appropriate national and international organizations. The use and development of scientific names is governed almost universally by rules and decisions made by organizations such as the International Botanical Congress and the International Commission on Zoological Nomenclature. Normally these decisions are approved and adopted (occasionally with slight modifications) by national scientific organizations. Ideally, the aim is that each life form should be known throughout the world by a single scientific name.

Like several other aspects of scientific work, biological nomenclature is a subject which is inherently and inevitably complex and which we can neither simplify ourselves nor expect other scientists to simplify for us. Nor can we arbitrarily freeze or independently adopt nomenclature contrary to recognized authorities. Terminology reflects the status of knowledge in a field, and taxonomic names must change as understanding of phylogeny and classification progresses in an orderly manner.

Common names, on the other hand, have become established largely by local usage. Unfortunately, this usage has not always reflected the true classification relationship of plant or animal. Frequently, for widely distributed forms a multitude of different "local" names have been used. It is as confusing to the park visitor and layman to have a single form called by various common names in different National Parks as it would be for a scientist to have a specific form referred to by different scientific names in separate portions of its range.

This need for uniform usage of common as well as scientific names has long been recognized by national professional societies. Attempts have been made or are being made to establish standardized lists for major plant and animal groups. The American Ornithologists' Union has approved such a list for birds; The American Joint Committee on Horticultural Nomenclature has developed the Standardized Plant Names; the American Society of Ichthyologists and Herpetologists has adopted a list for amphibians and reptiles; and the American Fisheries Society has accepted a list for fishes. A committee of the American Society of Mammalogists has worked on a similar list for mammals. Unfortunately, no nationally accepted list of common names for mammals exists although agreement between different authors appears to be drawing closer. Consequently, the common names used in the guides by Burt (1952) and by Palmer (1954) have been selected as standards by the National Park Service until such time as an official list of common names of mammals is approved. Both are used because there is no adequate basis for a choice between them at this time.

Once a common name is adopted, there should be little, if any, need for changing it. As with the use of certain scientific names, some common names will not always be fully acceptable to all concerned. Nevertheless, it is the intent of this policy that within the National Park Service we shall adhere to the uniform use of common and scientific names as adopted in the following standards. The use of a single common name for a given species will reduce confusion, whereas the continued use of secondary or optional common names would only weaken the objective of achieving such uniformity.

- I. Policy: Uniform common and scientific names of flowering plants and vertebrate animals shall be used throughout the National Park Service, in all phases of park protection, management, interpretation, and public contact in accordance with standards approved by the Director.

- II. Standards: The following publications and their subsequent supplements are approved as the standards for nomenclature of common and scientific names of flowering plants and vertebrate animals with exceptions as noted.

A. Plants:

1. Flowering Plants, Except Trees:

Standardized Plant Names, 2nd edition, by Harlan P. Kelsey and William A. Dayton. J. Horace McFarland Co., Harrisburg, Pa. 1942.

2. Trees:

Check List of Native and Naturalized Trees of the United States, Including Alaska, by E. L. Little. U. S. Forest Service Agricultural Handbook No. 41. U. S. Government Printing Office, Washington 25, D. C. 1953.

3. The most recent regional publication which adheres to the provisions of the International Code of Botanical Nomenclature shall be used as the standard for plants not listed in either SPN or the Check List of Trees.

B. Vertebrate Animals:

1. Birds:

A. O. U. Check List of North American Birds, 5th edition, by committee of American Ornithologists' Union. 1957. (Secure from George G. Sibley, Fernow Hall, Cornell University, Ithaca, N. Y.)

2. Amphibians and Reptiles:

Common Names for North American Amphibians and Reptiles, by committee of the American Society of Ichthyologists and Herpetologists. Copeia, 1956: No. 3, pp. 172-185. (Reprint with index, \$1.00, from Dr. H. Bayard Green, Biology Department, Marshall College, Huntington 1, West Virginia.)

3. Fishes:

List of Common and Scientific Names of the Better Known Fishes of the United States and Canada, 2nd edition. American Fisheries Society Special Publication No. 2. In press (to be released in 1960). (Secure from Office of Secretary, American Fisheries Society, Box 483, McLean, Virginia.)

4. Mammals:

a. Scientific Names:

List of North American Recent Mammals, by Gerrit S. Miller and Remington Kellogg. U. S. National Museum Bulletin No. 205. U. S. Government Printing Office, Washington 25, D. C. 1955.

b. Common Names:

1) The Mammal Guide, Mammals of North America North of Mexico, by Ralph S. Palmer. Doubleday & Co., Inc. Garden City, N. Y. 1954.

--OR--

2) Field Guide to Mammals, by W. H. Burt. Houghton Mifflin Co., Boston. 1952.

Exceptions to Standards: Changes in the standards approved for scientific names are occasionally necessary because of subsequent rulings of the International Botanical Congress or the International Commission on Zoological Nomenclature; therefore, the infrequent changes in scientific nomenclature resulting from rulings by either of these organizations shall be used in preference to nomenclature previously included in the standards.

1. Spelling and form used for common names of plants as listed on pages 127 to 131 of the U. S. Government Printing Office Style Manual, 1959 edition, is required in preference to other standards. Accordingly, unusually long combinations for names found in SPN, such as "jackinthepulpit" and "forgetmenot," should be separated into their component words, but linked by hyphens, as jack-in-the-pulpit and forget-me-not.

2. In botanical nomenclature a plant genus is given a common name; for example: oak for Quercus, pear for Pyrus. Frequently this common name is used as part of a name which identifies a plant found in an entirely different genus. In these cases a compound name is formed to show this difference by the use of hyphens or by combining the component words into a single name; for example: poison-oak for Rhus, pricklypear for Opuntia. The use of hyphens or the use of the solid word compound is governed by its usage in the standard which applies to the individual common plant name or as modified by the list on pages 127 to 131 of the GPO Style Manual.

III. Guidelines:

1. The same scientific name and the same common name should be used for a particular plant or animal wherever it occurs throughout the Service. Standardized names are approved to increase clarity and reduce confusion and to promote uniform usage. Unqualified use of local common names weakens the purpose and intent of this standardization.

2. When used, the standard common and scientific names shall be incorporated into all phases of park protection, management, interpretation, and public contact. This will include such media as: talks, exhibits, labels, publications (issued either by the Government or by cooperating associations), audio-visual presentations developed for interpretive or general informational purposes, and internal Service reports, papers, or communications. The scientific name, of course, will not always be used together with the common name in these media; in interpretive and informational presentations, for example, the unrestricted use of scientific names is distracting and meaningless to the average park visitor.

3. Separate common names for subspecific forms which are distinguished only by minute visible or minor taxonomic differences shall not be used. However, when a subspecies of animal or variety of plant possesses visible characteristics which permit it to be readily recognized in the field by the park visitor, a common name for the form may be used (example: black-tailed deer and mule deer).

4. A local common name which differs from the approved nomenclature shall be used only when it has interpretive significance or its use is necessary for clarification. In such cases the standard name must be mentioned, with the local name subordinate to it. When a nonstandard local name is used in publications or exhibits, its subordinate rank with respect to the standard name will be indicated by parentheses or a parenthetical phrase, quotation marks, footnotes, or other explanatory treatment.

5. When a scientific name which differs from the approved standard is used in technical publications or in internal Service reports or communications, it shall be enclosed in parentheses immediately following the standard name. Exceptions shall be indicated by footnotes for individual names or by a statement in the text for more general deviations. When a change in scientific nomenclature has resulted from subsequent international rulings, only the "new" scientific name is required.

6. The approved reference being used as the standard shall be mentioned in the text or in footnotes of specialized publications which are for sale or for general distribution. Such notation is not necessary in general informational literature or in nontechnical Service reports and communications.

7. Discussions on scientific and common names incorporated in the introductions to the approved standards will be helpful in explaining details regarding the use and determination of nomenclature.

8. The describer's name following the scientific name of a plant or animal shall not be used except in technical scientific presentations, where its use shall be optional.

9. Scientific names for families or genera are always capitalized, while names for species or varieties never are.

10. Scientific names for genera and lower divisions are distinguished by underlining or by the use of different type face, usually italic.

11. Only common names derived from proper nouns shall be capitalized, except for names like jack-in-the-pulpit and brown-eyed-susan.

12. Reference lists specified in the Museum Records Handbook, Chapter 6, pp. 2-4, are intended for sequence in filing rather than for nomenclature in cases where names used therein differ from these standards.

13. Endings for patronymic specific or infraspecific scientific names for vertebrate animals shall be formed by adding, to the exact name of the person honored, the appropriate suffix in the genitive case: -i for a man (bairdi, oxidi) or -ae for a woman (canfieldae, edithae). This is in accordance with the recommendations of the International Commission on Zoological Nomenclature (Bull. Zool. Nomen., 4:205-209, 1950). For birds, the AOU Check List shall be followed for the spelling of patronymic names.

14. Endings for patronymic specific or infraspecific names for plants shall be formed in accordance with the following recommendations adopted by the Eighth International Botanical Congress, Paris, 1954 (Chapter VI, "Orthography and Gender of Names," Article 73, Recommendation 73C, International Code of Botanical Nomenclature):

"(a) When the name of the person ends in a vowel, the letter i is added (thus glazioui from Glaziou, bureaui from Bureau).

"(b) When the name ends in a consonant, the letters ii are added (ramondii from Ramond), except when the name ends in -er, when i is added (thus Kerneri from Kerner). . .

"(d) When epithets taken from the name of a man have an adjectival form they are formed in a similar way (e.g. Geranium robertianum, Verbena hasslerana) . . .

"The same provisions apply to epithets formed from the names of women. When these have a substantival form, they are given a feminine termination (e.g. Cypripedium hookerae, Rosa beatricis, Scabiosa olgae, Omhalodes lucilae)."