



Section 4 EO Specifications Excerpt from the EO Data Standard (Feb 2002)

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EO specifications are used to delineate and differentiate EOs. In other words, EO specifications define precisely what evidence constitutes a valid EO (*i.e.*, the minimum size, quality, or persistence required), and what distances or factors separate one principal EO from another.

To prevent duplication of effort when developing EO specifications, it may be practical to develop a set of criteria that would be broadly applicable to an entire functional group of Elements, identified as a “specifications group”. Because Elements within a particular specifications group have similar components of species biology or community processes, EO specifications for the Elements within that group would differ only minimally, if at all. The EO specifications developed for the group could later be modified as appropriate for a particular Element in the specifications group, at which point the Element would be removed from the group; the initial set of group EO specifications would continue to be applied to the Elements remaining in the specifications group, however. Central Zoology, Botany, and Ecology should maintain documentation on EO specifications developed for specifications groups.

Central Zoology has defined a number of specifications groups and has developed EO specifications for these groups. These EO Specs are available via NatureServe Explorer; a list of the groups, including separation distances and alternate separation procedures may be found in Appendix 1.

Developing EO Specifications

Poorly conceived EO specifications are likely to be interpreted differently by different individuals and/or at different times, and result in inconsistently identified EOs. This can misdirect conservation activities. Ensuring that specifications are developed in accordance with the characteristics listed above can be accomplished, in part, by following standard guidelines. Separation distances and barriers should be identified in the EO specifications, as should location use classes and feature labels, where appropriate.

Characteristics of Elements may vary significantly in different parts of the range (*e.g.*, for species using different habitat in different ecoregions). In such cases, specific minimum criteria and separation distances could be provided in the EO specifications for the different portions of, or habitats in, the range; however, this should be done only if absolutely necessary. Bear in mind that EO specifications are primarily for data management purposes and do not attempt to precisely reflect all variation in movement patterns. It is best to have specifications that apply range-wide and that facilitate multijurisdictional conservation planning.

In the absence of global EO specifications for a particular Element, jurisdictions are encouraged to develop them in coordination with Central Zoology, Botany, or Ecology. This can help avoid the inefficiencies that result from the development of multiple interim local guidelines.

Sources of information for developing EO specifications should include the scientific literature, scientific experts in and outside of the Heritage Network, those conservation data centers that track the Element, and personal field experience with the Element. Any information that would contribute to the detail and completeness of the EO specifications for a particular Element should be forwarded to Central Heritage Operations. Any questions or comments on specifications should be directed to Central Zoology, Botany, or Ecology.

Since inventory and research continually yield new biological and ecological information, the development of EO specifications is an iterative process that incorporates new data. However, due to the collective cost to data centers in implementing revisions, specifications should only be revised when there is substantial new information that would correct any existing specifications as they relate to EO viability or other conservation considerations. Central Zoology and Botany may make minor editorial changes to EO specifications to ensure stylistic consistency. It is recommended that data centers make copies of new EO specifications as they are created or received for archiving in manual files; as subsequent editions of specifications are developed for an Element, archived copies can provide information on the previous criteria utilized in identifying occurrences of that Element, thus indicating whether data need to be reevaluated using the updated specifications.

In cases when information on a particular Element is scant or incomplete (due to lack of thorough research or secretive behaviors of the Element), it may be useful to identify another Element that is presumed or hypothesized to be functionally similar and base the EO specifications for the lesser-known Element on those of the better-known Element. Alternatively, if a specifications group comprising of functionally similar Elements can be identified, then the lesser-known Element could be added to the group and existing group EO specifications utilized.