

Species Status Assessments—Threats Analysis

This material provides suggestions about how to organize the factors affecting viability. This section of your report can be organized many different ways. The way you choose is both species- and factor-dependent. Your organization depends on the timing and magnitude of various factors to the species viability as well as the interaction among factors as they create complex or cumulative situations affecting the species. Ultimately, your choice reflects the situation as it exists on the ground; therefore, it is species-specific. Here, we provide suggestions for you to consider.

- 1. Time. A temporal organization moves chronologically. In future conditions, you establish temporal parameters for your scenarios. In this section, you should lay the groundwork for those parameters. For example, are they based on the species lifespan and its generations? Or are we using timeframes that match known development projections? If those are the most important factors affecting your species, it may be appropriate to organize this section chronologically. Otherwise, consider using another strategy.
- 2. Magnitude. You may choose to arrange the factors influencing viability from the greatest to the least. This organization is likely the one that makes the most sense to the reader. Be sure that this organization is reflected not only in the arrangement of your document but also in the size of each of your subsections. If a factor is listed at the end of this section but is the longest among all the factors, the reader is likely to be confused about the magnitude of the factor's effect on the species.
- 3. **Space.** Many of the species with about which we write inhabit multiple habitats with different factors affecting them in each. Therefore, it may make sense for your species for you to arrange this section spatially. If you do so, consider the spatial arrangement an overarching one, under which another organization can be accommodated. So you would still need to decide whether a time, magnitude, or cause arrangement is warranted. Your outline for this subsection would look something like this:
 - Northern Habitat: greatest threat → least threat
 - Eastern Habitat: greatest threat → least threat
 - Southern Habitat: greatest threat → least threat



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- Western Habitat: greatest threat → least threat
- 4. **Cause:** While arranging the factors from greatest to least often makes sense to the reader, it can be challenging to the writer because factors are often interrelated. When factors have complex and cumulative relationships among one another, a causal analysis may be appropriate.

In writing a causal analysis, select what you feel is the most important feature: the cause or the result. Begin there and then trace the causal relationships either back to their source or through to their end.

When a relationship has multiple prongs—that is, it has more than one source or end—be sure to bracket that discussion before returning to the primary logical chain. Such an organizational structure might look like this:

Wildfire on a Bird Species

Causes of Wildfire

Military (live-fire training, downed trees and other fuel sources from road-building)

Civilian (campfires from hunting)

Drought (result of climate change, indirect cause of wildfire)

Feral ungulates (spreading invasive species seeds—see next)

Invasive species (creating more readily available fuel)

Effects of Wildfire

Direct impact—mortality via burning or smoke inhalation

Nest destruction

Loss of habitat resulting in

Decreased breeding success in subsequent years

Decreased available insects as a food source