

Science You Can Use *Tool*

Selecting a Focal Species Under the 2012 Planning Rule? A new focal species toolkit streamlines the process

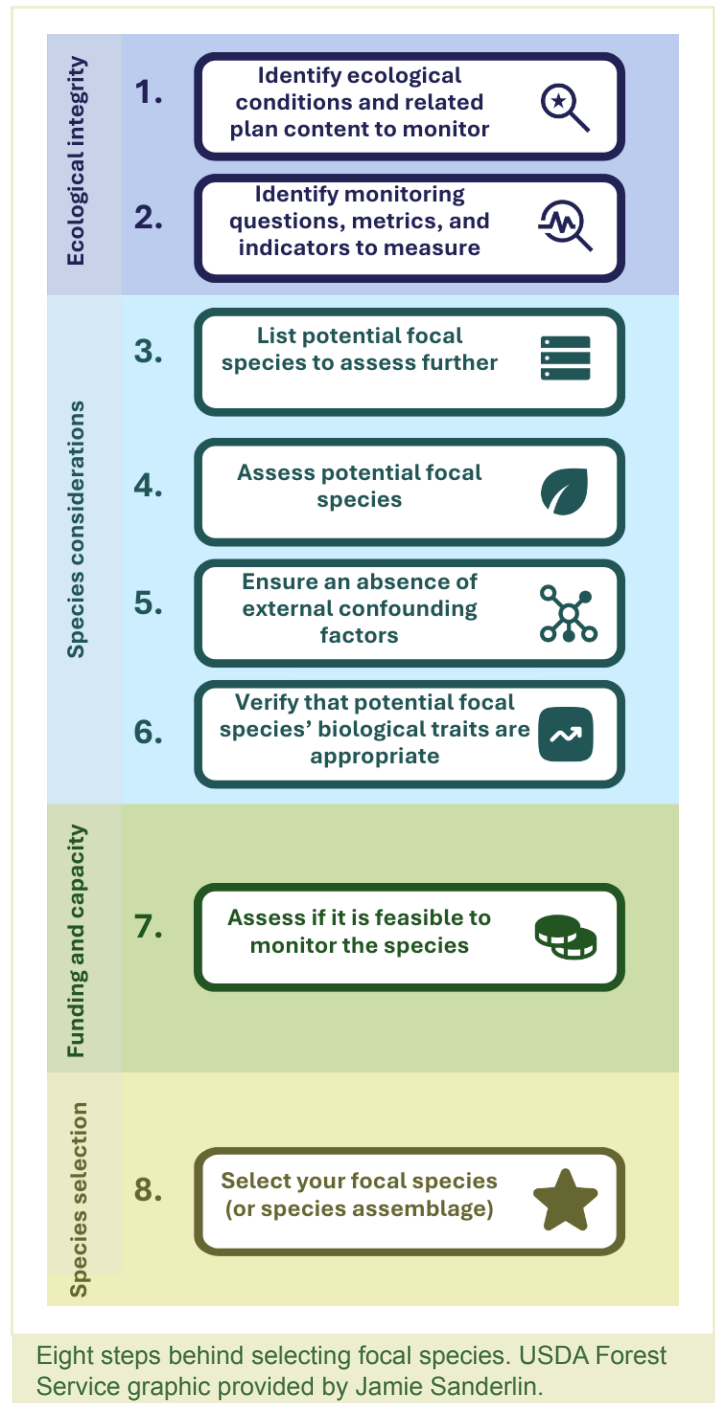
The USDA Forest Service is required to develop “land management plans,” which serve as roadmaps for maintaining the health and productivity of national forests and grasslands. These plans are designed to support ecological integrity, or an ecosystem’s ability to withstand environmental disturbance. One way that national forests and grasslands, or “planning units”, measure ecological integrity is by looking at the way that focal species respond to the effects of management activities and environmental changes.

Focal species are carefully selected species whose characteristics make them useful proxies for the ecological conditions in the areas they inhabit. Monitoring focal species can reveal benefits and stressors caused by management activities, alert managers to changing habitat, and provide a measure of progress towards desired conditions. Changes in a focal species’ abundance, distribution, reproductive success, or survival can provide information about the overall integrity of an ecosystem.

Although selecting focal species may seem straightforward, the factors involved can be complex since species depend on different ecological conditions and may represent different parts of an ecosystem. The focal species toolkit helps managers and planners select species that will be the most efficient and effective monitoring indicators.

Who is this designed for?

“We created this toolkit for the planning community to provide a more efficient and standardized decision-making process for selecting focal species under the 2012 Planning Rule,” said Jamie Sanderlin, a Research Wildlife



Biologist (Quantitative Vertebrate Ecologist) with the Rocky Mountain Research Station. This new [toolkit](#) provides planning units with technical support and science-backed recommendations to keep land management plans and monitoring programs aligned with the [2012 Planning Rule](#) while ensuring that ecological integrity is being maintained.

What is in it? How can it be used?

The Focal Species Toolkit standardizes the selection of focal species and offers a new way for planners to streamline the documentation process across national forests and grasslands. The toolkit includes a simple, science-backed [worksheet](#) that walks users through the eight main steps to use when selecting a focal species. The toolkit also offers a wide breadth of resources to help users choose their focal species, including real-world examples that illustrate the decision-making process.

“This science-based tool will support selecting species aligned with desired conditions, allowing for cost-efficient monitoring of progress towards desired conditions,” Sanderlin explains.

Toolkit Authors

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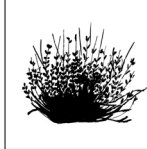
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Key Takeaways

- A new focal species toolkit makes the focal species selection process more efficient and effective.
- A new focal species toolkit walks users through the process of selecting focal species so they can easily justify and document their decisions.
- A new focal species toolkit offers helpful resources for users that link focal species monitoring to science and management needs.

Focal Species	Focal Species	Focal Species	Not an appropriate Focal Species
			
sagebrush	cheatgrass	bark beetle	pronghorn

Sagebrush supports the habitat of many sagebrush-obligate wildlife species and thus can represent high ecological integrity.

Cheatgrass is an annual invasive grass whose presence in large amounts can indicate low ecological integrity.

Bark beetles are a forest pest whose irruptive dynamics that kill large swaths of forests can indicate low ecological integrity.

Pronghorn is a game species whose populations may change in response to hunter harvest, potentially reducing links to ecological integrity.

USDA Forest Service graphics provided by Jamie Sanderlin.

Did You Know?

Snowshoe hares have limitations as focal species because of cyclical trends – it is hard to differentiate their ecological response from natural population trends.

Further Reading

Taylor, E.; Sanderlin, J.S.; Helm, J. E.; Probasco, [et al.]. [A toolkit to assist Forest Service National Forests and Grasslands with selecting focal species under the 2012 Planning Rule](#). Res. Note RMRS-RN-104. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 49 p.

[Focal Species Toolkit Project Page](#)

[Erika Reiter](#) is the author of this Science You Can Use Tool.



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