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U.S. Fish & Wildlife Service

Strategic Habitat Conservation

Selecting Surrogate Species for Conservation Planning and Design

The U.S. Fish and Wildlife Service joins others in the conservation community to safeguard our Nation's fish, migratory birds, aquatic species, anadromous fish, endangered and threatened species, and public lands. The unprecedented scale and complexity of challenges we face in the 21st century, however, require us to expand our vision for conservation and the partnerships we work with to achieve it. To ensure a bright future for fish and wildlife in the face of widespread threats such as drought, climate change and large-scale habitat fragmentation, we can no longer base our actions solely on past experience and success. We must conserve landscapes capable of supporting self-sustaining populations of fish and wildlife, while also contributing to the well-being of people.

Since the sheer number of species for which the Service, states, and other partners work with makes designing and conserving landscape-scale habitats impractical on a species-by-species basis, the Service is now developing a process to collaboratively identify **surrogate species**. "Surrogate" is a commonly-used scientific term for species that represent other species or aspects of the environment (e.g., water quality, habitat, etc.). Surrogate species are categorized for a variety of purposes (umbrella, representative, focal, keystone, indicator, flagship) and their use for system-based conservation planning is well documented in the scientific literature.

Identifying and selecting surrogate species will help ensure that "site-scale" delivery actions and individual

projects of Service programs are coordinated and linked to landscape-scale goals—as defined and expressed in the biological planning and conservation design aspects of our agency's **Strategic Habitat Conservation** approach. This will enable our conservation actions to have a better chance of adding up to real results for fish, wildlife and plants in defined landscapes and help the Service express our goals and achievements more clearly and understandably to the public, our partners and Congress. Conservation delivery will be stronger and more lasting, because this approach will make our mission more relevant to American society and engender increased support for conservation.

The Service is currently working with states and other conservation partners to develop technical guidance for identifying and selecting surrogate species in defined landscapes. The guidance discusses the advantages, conservation applications, and limitations of this conservation planning technique. It also provides direction for setting biological objectives and discusses the importance of establishing new and refining existing collaborations within the conservation community to help us collectively meet the conservation needs of the nation's fish, wildlife and plants. Used consistently, the guidance is intended to improve how we define biological objectives and where we target efforts, resulting in more cost-effective management decisions and conservation investments.



The range of the Eastern brook trout stretches from the southern Appalachians into Canada. The species has endured a century of decline due to factors such as climate change, development, habitat loss and fragmentation, invasive species and poor water quality. Conserving habitat for the Eastern brook trout can also benefit other species that depend on the forested headwaters of fast flowing, coldwater stream ecosystems, such as freshwater mussels, cerulean warbler and Indiana bat. Photo/USFWS

For more information visit:
www.fws.gov/landscape-conservation