

Ecological Restoration

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Front Cover Feature: An endangered whooping crane (*Grus americana*) passes over a marsh along Turnstake Island on the edge of San Antonio Bay in Texas. The 2010 Deepwater Horizon oil spill compromised vast stretches of wetland habitat along the U.S. Gulf Coast, threatening both wildlife and human populations. The spill generated ecosystem-level damage that requires coordinated planning to optimize funding allocation among competing restoration needs. Powell and Fikes present a systematic framework for the decision-making processes that will facilitate restoration practice in this region where thousands of additional oil wells, pipelines, refineries, and marine petrochemical vessels continue to function. Image credit: Kaila Drayton

Back Cover Features:

Top: A modest headstone marks the resting place of one of two eminent female ecologists in Ohio. To celebrate the contribution of the Braun sisters, Conover et al. report on efforts to replace *Hedera helix* and other invasive plant species at the grave site with native species. Image credit: Denis Conover

Middle: Non-native annual grasses like *Bromus tectorum* threaten rangelands in the western U.S. Integrating herbicide with fall seeding of native perennial grasses is a common restoration strategy that assumes spring emergence of seed. However, fall seeding may reduce the success of native grasses where *Bromus tectorum* is present. Altrichter et al. tested eight seeding dates of *Pseudoroegneria spicata* to determine the effect on resistance to invasion by the annual grass. Their results expand the window of opportunity for perennial grass seeding. Image credit: Jane Mangold

Bottom: *Picea mariana* (black spruce) emerges from the substrate of an overburden dump in Schefferville northern Quebec, Canada. Mining operations produce many types of non-target substrates that can be difficult to revegetate. Jean et al. examined the influence of *Salix* cutting orientation on root and shoot growth to identify optimal treatments for different mining substrates. Image Credit: Roudy Jean