Ecological Restoration

Volume 40, Number 4  
December 2022

Editorial
How Should We Talk about Our Work?
Steven N. Handel

RESTORATION NOTES
Evaluating Restoration Techniques for a Coastal Fen on Lake Ontario Degraded by Shrub Encroachment
Sarah Kirkpatrick Humiston, Rachel Schultz and Michael Chislock

RESEARCH ARTICLES
Are Pre-Restoration Soil Seed Banks and Vegetation Nested and Predictive Subsets of Post-Restoration Communities?
Scott R. Abella

Species Composition and Ecological Characteristics of Native Seed Mixes in the Midwest (USA)
Jack Zinnen and Jeffrey W. Matthews

A Review of Restoration Techniques and Outcomes for Rangelands Affected by Oil and Gas Production in North America
Kathryn Bills Walsh and Jackson Rose

ABSTRACTS
Climate Change 270  Planning and Policy 273
Coastal and Marine Communities 270  Propagation and Introduction 273
Ecological Literacy (Education) 271  Reclamation, Rehabilitation and Remediation 273
Economics and Ecosystem Services 271  Species at Risk 273
Grasslands 271  Technology and Tools 274
Invasive and Pest Species 272  Traditional and Local Knowledge 274
Lakes, Rivers and Streams 272  Urban Restoration 275
Monitoring and Adaptive Management 272  Wildlife Habitat Restoration 275
Other Communities 272  Woodlands 276

REVIEWS
Wild by Design: The Rise of Ecological Restoration
Laura J. Martin, 2022. Reviewed by Peter Kimball Brewitt

Primer of Ecological Restoration

MEETINGS


Front Cover Feature:
The commercial seed supply for grassland restoration sites can play a significant role in the grass and forb communities that establish initially, and through time. Species which are easy to procure may dominate available seed mixes. Zinnen and Matthews examined the composition of commercially available grassland restoration seed mixes to determine how well they represent plant communities across a variety of grassland habitats. Image credit: Tabby Fenn.

Back Cover Features:
Top: Encroachment of shrubs into peatlands and other wetland habitats can alter floristic diversity by suppressing herbaceous plants. Shrubs can lower the water table, disturb nutrient cycling, and limit access to resources like sunlight. Wetland restoration through shrub removal aims to return forb and grass diversity to pre-disturbance communities. Kirkpatrick et al. compare several shrub removal techniques and report their impacts upon floristic quality in a *Typha* dominated wetland of the Great Lakes region. Image credit: Tabby Fenn.  
Middle and Bottom: Before (top, 2003) and after (middle, 2006) forest thinning for ecological restoration in *Pinus ponderosa* (ponderosa pine) forests in northern Arizona, USA. Abella presents data on the thinning treatments performed during a 12-year experiment which examined the predictability of responses by understory plant communities to forest structural restoration. Image credit: Scott R. Abella.