

New Approaches to Managing Semi-arid Grasslands: Promoting Habitat Diversity While Supporting Livestock Production

A two-day workshop in Cheyenne, Wyoming on October 8 & 9

Location: Little America Conference Center in Cheyenne, Wyoming

Date: October 8 & 9, 2008

RSVP: Space is limited. Please **RSVP** via email by **August 31, 2008** to Elli Fowler at efowler@edf.org.

Sponsors:

Society for Range Management
USDA Agricultural Research Service
Wyoming Game and Fish Department
Wyoming Chapter of The Nature Conservancy
Rocky Mountain Bird Observatory
Environmental Defense Fund

Organizers:

Ted Toombs – Environmental Defense Fund
Bryce Krueger – Wyoming Game and Fish Department
Dr. Justin Derner – USDA Agricultural Research Service
Dr. David Augustine – USDA Agricultural Research Service
Seth Gallagher – Rocky Mountain Bird Observatory

Audience:

Local, regional, and national level wildlife biologists and rangeland specialists from state and federal agencies, and people from cattlemen's and conservation organizations in western grassland states: MT, SD, ND, NE, WY, CO, KS, OK, TX, NM.



Overview

Most semi-arid grassland in the Great Plains is privately owned and managed primarily for livestock production. These rangelands contain a wide diversity of plant and animal species, and conservation organizations are working with interested landowners to develop management approaches that address both conservation and livestock production goals. They also seek new opportunities to capitalize on financial incentives and emerging ecosystem service markets.

New management strategies that seek to promote plant and animal diversity hold the promise of enhancing wildlife habitat, while maintaining livestock production and overall rangeland health. These new approaches are based on the concept of promoting grassland heterogeneity, or variability in plant composition and structure, which is linked to biodiversity. For example, grassland birds have been shown to require heterogeneity at various temporal and spatial scales to meet nesting and foraging requirements. Management strategies that promote heterogeneity focus on the goal of generating variable vegetation structure and composition. These strategies attempt to mimic natural disturbance regimes and result in a shifting mosaic of vegetation over space and time. Bird conservation organizations and wildlife agencies throughout the Great Plains have recommended the adoption of heterogeneity-based management. However, techniques used to apply it have been demonstrated mostly in other regions.

This workshop will describe some of these new approaches to heterogeneity-promoting management, provide examples of applications of this management, and seek feedback on how to incorporate heterogeneity-promoting management into policy so that they are more extensively applied in the West.



Agenda Day 1

October 8



9:00am - Noon

What is habitat diversity management and why is it important?

1. Introduction: The need to integrate wildlife habitat goals into range management. (Ted Toombs, Environmental Defense Fund)
2. Keynote Speaker: The importance of vegetation heterogeneity to biodiversity and why new approaches to range management are needed. (Dr. Dave Engle, Oklahoma State University)
3. Methods, consequences, and tradeoffs of managing lands for livestock production and wildlife. (Dr. Justin Derner, USDA Agricultural Research Service)
4. Socio-economic barriers and opportunities faced by agencies and private landowners when shifting to habitat diversity management. (speaker to be announced)

1:30pm - 4:30pm

Habitat diversity management in practice

1. Managing grasslands for multiple objectives: A landowner's perspective. (speaker to be announced)
2. The value of rangeland heterogeneity in a high cost future: A producer's perspective. (Dr. Allen Steuter)
3. Patch-burn grazing in the Flint Hills of Kansas. (Jane Koger – rancher)
4. "Conservation Grazing" at Grasslands National Park, Saskatchewan, Canada. (Dr. Scott Mitchell, Carleton University)
5. Methods of managing for heterogeneity in shortgrass steppe: A comparison of fire, prairie dog and cattle grazing effects on mountain plover habitat. (Dr. David Augustine)
6. Restoring grassland ecosystem diversity on public and private lands in Thunder Basin, Wyoming. (Dr. Jon Haufler)

5:00pm - 8:00pm

Reception

Hors d'oeuvres and refreshments will be served.

Agenda Day 2

October 9

8:30am - Noon

1. A decision-tree approach to assessing scale issues when promoting heterogeneity. (Dr. David Augustine)
2. Examples of habitat diversity management techniques. (Dr. David Augustine, Ted Toombs, Seth Gallagher, Bryce Krueger and Dr. Justin Derner)
3. Facilitated Discussion: Feedback on habitat diversity management techniques.

Discussion Topics:

- a. Identification of research and application needs
- b. Issues and concerns
- c. Identification of implementation methods and hurdles
- d. Discussion on policy changes needed
- e. Integration of techniques into NRCS framework
- f. Reaching out to "early adopters"
- g. Developing model projects

