

Pilot Grazing Study and Review of Grazing on WDFW Lands

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Agenda

- Current Practices
- Pilot grazing study
- Program review
- Commission discussion and questions



Grazed pasture, Klickitat Wildlife Area

Why we graze

- Habitat enhancement
- Working lands or coordinated resource management
- Weed control

Desert Wildlife Area



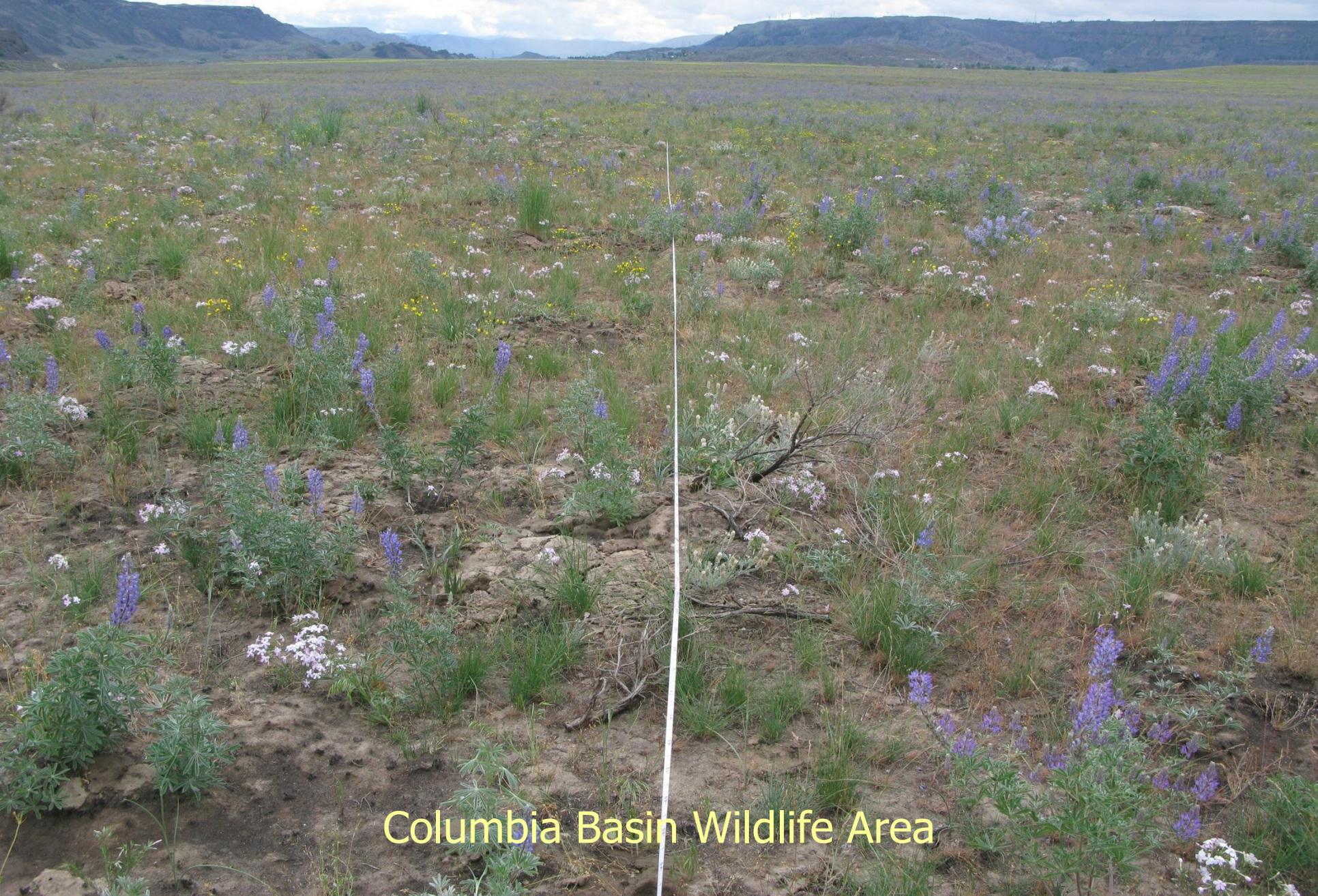


Sinlahekin Wildlife Area

Current Practices – C-6003

- Grazing permitted to:
 - Manipulate vegetation for fish and wildlife
 - Accomplish habitat objectives
 - Facilitate coordinated resource management
- Requirements:
 - Maintain ecological integrity
 - Cross-program review and best available science
 - Adaptive management
 - Grazing plans:
 - Ecological impacts and desired conditions
 - Fish and wildlife benefits
 - Monitoring and evaluation schedule
 - (utilization limits, forage estimates, and wildfire contingencies are not specifically required but now generally included also)

Banks Lake Unit, McLean permit
Range Trend Plot #3, Line 2 (120 degrees)
Loamy 9-15" PZ
23 May 2013



Columbia Basin Wildlife Area

Current Practices – other requirements

- WAC 232-12-181
- Ecosystem Standards (RCW 77.12.204, 79.13.610, aka HB1309)
- Multiple use where compatible (RCW 79.13.620)
- SEPA review, except where grazing occurs on either a section of land (640 acres) or less, or on lands subject to a lease within the last 10 years (WAC 197-11-800 [24][a])

Current Practices - continued

Grazing Permits (some fluctuation)

- 49 permits
 - Regular 5-year permits
 - Crossing and other temporary permits
 - DNR-issued permits the agency has acquired through land transactions
- 68,000+ acres (~7% of WDFW-managed lands)
- 9,300+ AUM's (this is forage, not animals on the landscape)

Cowiche/Worrell unit, Emerick Permit
Range Trend Plot #4, Line 2, 120 degrees
Loamy 15+” PZ, Columbia Plateau Steppe and Grassland
18 April 2013



Monitoring. Oak Creek Wildlife Area

Current Practices - continued

Carlton Complex – alternative grazing efforts

- Existing permittees
 - Burned WDFW pastures
 - Burned USFS/WDNR pastures
- Other producers
- Up to ~8000-9000 acres, ~1400 AUM's



Emergency Pasture, Methow Wildlife Area

Current Practices - continued

Lands Transactions

- Fee simple purchases and grazing
- Conservation Easements and grazing
- Funding and landowner conditions/objectives

Partnerships

- Grazing Easements
- Monitoring

Smoothing Iron Pasture, Pilot Grazing Project



Site: Smoothing Iron
Date: 8/1/2014
Plot: 05a3
Line: 3
Azimuth: 68°

Pilot Grazing Study

2005 – WDFW and WCA sign MOU to develop pilot grazing sites on WDFW lands (at Gov. Request).

Two sites chosen on Asotin WLA (Asotin County)

2006 – Pilot project initiated through issuance of a series of temporary Grazing permits

2007 – Formal grazing plans developed for grazing season

WDFW receives funding from Leg to continue study

Pilot Grazing Study

2007 – WSU and WDFW Science Division develop formal research approach

2008 – Commission tour of pilot grazing sites along with Western Watersheds Project

2009 – 3rd year of grazing completed on one site; 2 years completed on other site. WSU students collecting data during grazing.

Western Watershed Projects files suit in Thurston County claiming (in part) that issuance of grazing permit violated SEPA and APA

Pilot Grazing Study

2010 - Court finds in favor of Western Watersheds Project that issuance of grazing permit violated the APA and grazing stops on study sites

2011 – WSU collected additional deer nutrition data

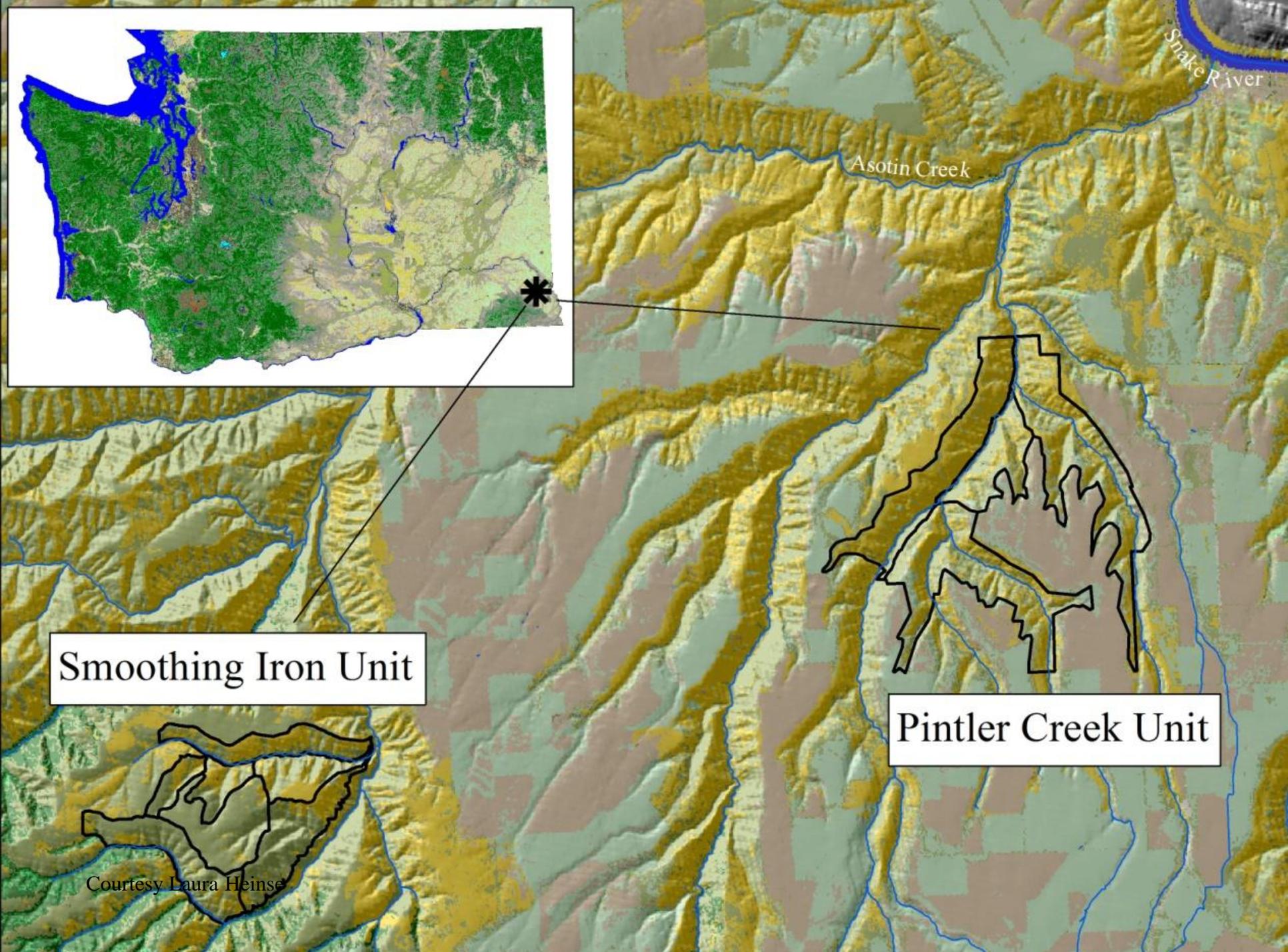
2014 – analysis completed

Recent Grazing Related Litigation

2008 – Western Watersheds Project and Steven Herman VS WDFW over Skookumchuck grazing permit

2009 – Western Watersheds Project VS WDFW over Asotin Wildlife Area grazing permit

2010 – Western Watersheds Project VS WDFW over approval of FEIS for grazing within Whiskey Dick and Quilomene Wildlife Areas



Snake River

Asotin Creek

Smoothing Iron Unit

Pintler Creek Unit

Courtesy Laura Heinse

Pilot Grazing

Linda Hardesty, Lisa Shipley, Laura Heinse, Sara Wagoner

Study scope and framework

- Grazing effects on mule deer nutrition in bluebunch wheatgrass community
- Ecological integrity monitoring
 - Identify effect of cattle grazing, if any
 - Identify most efficient and effective monitoring indicators
 - Describe demography of *Silene spaldingii* and its suitability as an indicator of ecological integrity
 - Control for weather and ecological site (soil/plant community)



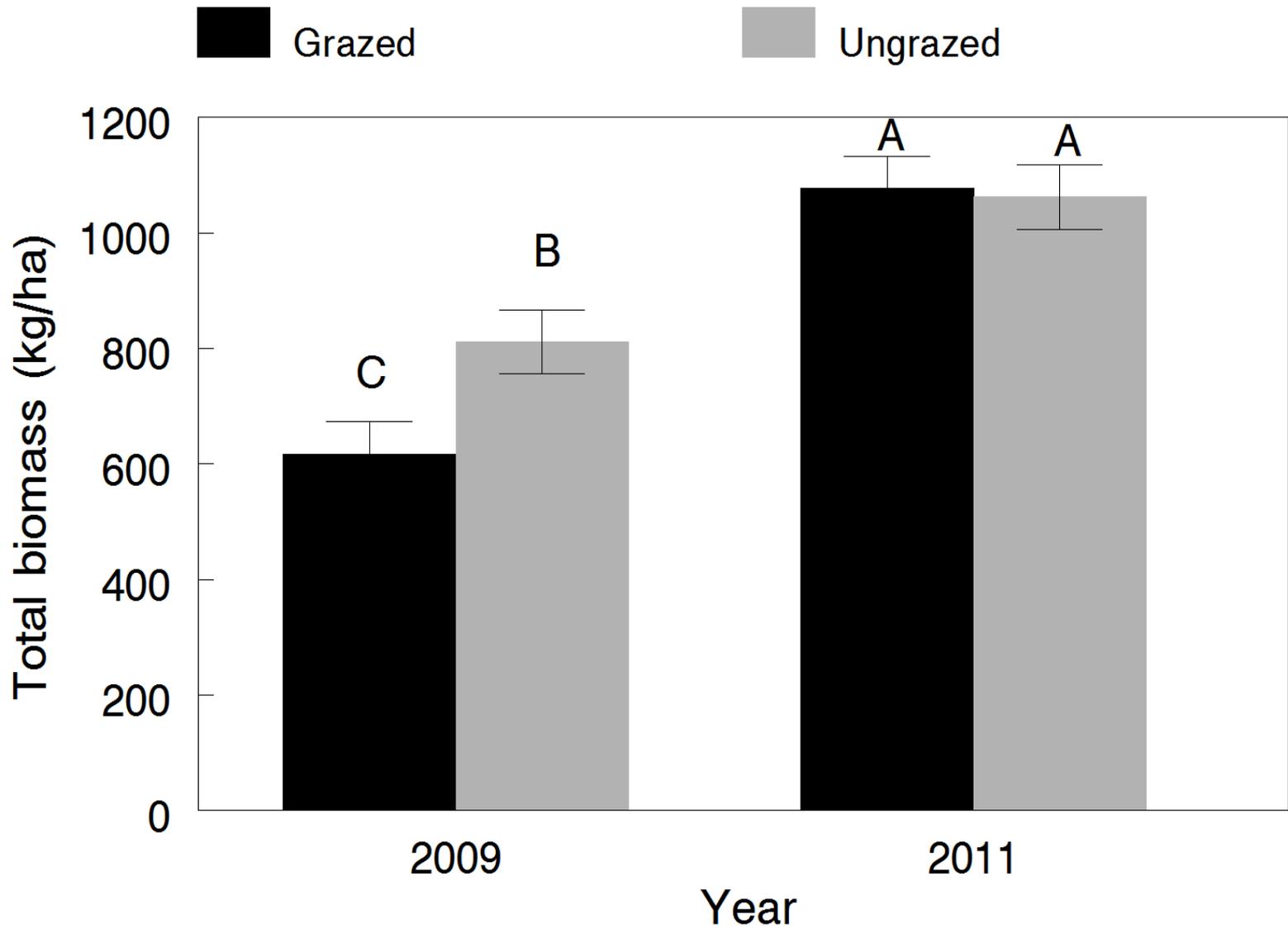
Pintler Creek Pasture

Site: 2010
Date: 11/20/10
Plot: 1
Area: 1

Pilot Grazing – continued

Deer Nutrition – 2009, 2011

- Hypotheses:
 - remove biomass and senescent vegetation
 - increase nutritional quality
- Results:
 - biomass reduction in year of grazing (gone by 2011)
 - no effect on digestible energy (DE) of forage
 - reduction in DE intake of deer, and changed preferences
 - no effect on nutritional carrying capacity except one pasture

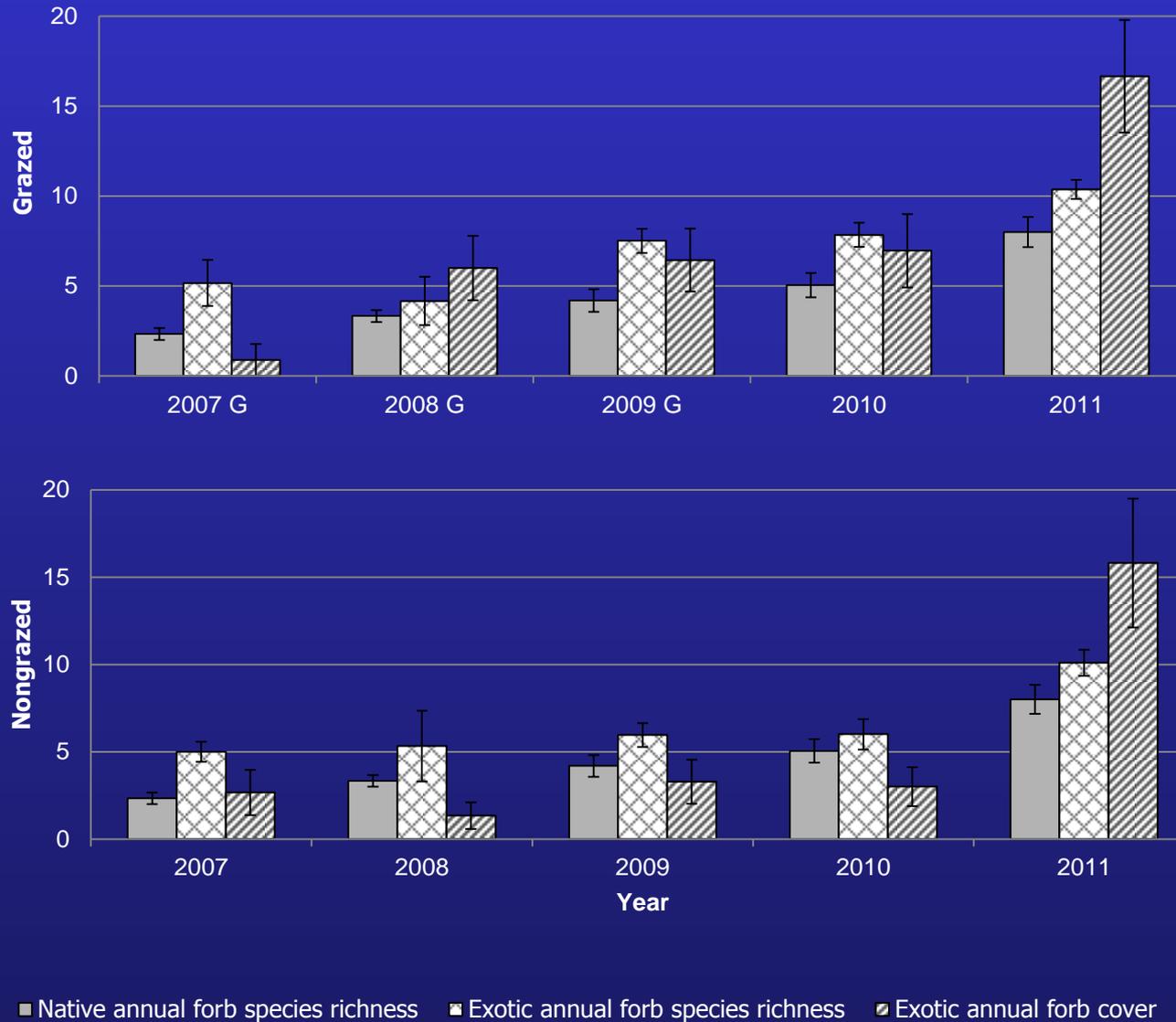


Pilot Grazing - continued

Ecological Integrity – Indicators and *S. spaldingii*

- Hypotheses:
 - negatively associated with exotic and annual species and positively associated with precipitation and temperature
 - grazing would affect ecological integrity by leading to changes in indicators
- Results:
 - Catchfly negatively associated with exotic annual grasses and forbs, total exotic species, and native annual forbs
 - Catchfly relative abundance was positively associated with weather, although reproductive effort was generally not
 - annual species diversity and cover increased on grazed and ungrazed pastures
 - weather strongly correlated with results

Species richness and cover by functional group



Pilot Grazing - continued

Summary

- Implications:
 - on dry stony ecological sites, cattle grazing might not be expected to improve mule deer nutrition
 - when grazing to 40% utilization, NRCS guidelines on bluebunch wheatgrass are recommended
 - Spalding's catchfly is not a good indicator of ecological integrity
 - ecological integrity methods have wider application than results
 - Indicator selection and sampling extent
- Limitations:
 - grazed/ungrazed plots, herbicide, wildlife herbivory, weather
 - grassland vs shrub-steppe vs forested systems

Future Implications

- No clear evidence of ecological or wildlife benefit or harm from experimental grazing
- If grazing is considered, it must be well-managed:
 - Conservative stocking
 - Careful timing
 - Utilization & trend monitoring

Acknowledgement: Linda Hardesty

Pilot Grazing - Review

Stakeholder Meetings to Review Results

- August 13 – Washington Cattleman Association
- October 31 – Nez Perce Tribe
- December 16 – Conservation Organizations and other Agencies

Program Review

Cross agency statewide work team – decision criteria

- Pilot grazing and other recent literature
- Broader Agency Review – December
- Commission and Public Review – 2015 - 2016

Questions?

