



# A proactive strategy for halting conversion of sagebrush rangelands to annual grasslands

### The Problem

Cheatgrass and other invasive annual grasses, such as, medusahead and ventenata, are taking over America's sagebrush rangelands, increasing wildfire size and frequency, reducing forage productivity, and threatening wildlife habitat and rural economies. Lack of bold and coordinated action is making our working lands less productive for each passing generation. Fortunately, we're not helpless and it's not too late.

We know that managing both for the health of our perennial plants, especially perennial grasses, and against invasive annuals is key to maintaining resilient rangelands. Yet, negative impacts of annual grass invasion continue to increase as our application of this knowledge has largely been too reactive, inconsistent, and small scale.

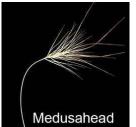
Science shows that invasive species control is more effective and cost-efficient when done early, before infestations become widespread, and when management responses are informed by the condition of the surrounding area. Idaho partners have come together to devise a new statewide strategy that provides all-hands, all-lands vision for implementing the right actions, in the right places, at the right time.

## A Proactive, Strategic Approach

Idaho's strategy starts by taking big picture view to assess the current condition of rangelands relative to the annual grass problem (see map on reverse). Three coarse region types were identified using newly-available vegetation data and analyses to help guide management actions:

**Core**. These areas represent regionally intact rangelands as characterized by relatively low cover of annual grasses. Local areas of higher annual grass cover may be present within the region, but the overall level of invasion is still relatively low. Local management in these areas is







Photos by: Beth Fowers

#### The Partners



United States Department of Agriculture

Natural Resources Conservation Service















IDAHO RANGELAND CONSERVATION PARTNERSHIP more likely to be effective at maintaining sagebrush rangelands in the long run because of the favorable landscape context.

Annual Grass Region. This region, primarily along the Snake River Plain, is dominated by moderateto-high cover of annual grasses. Some rangelands have already converted to a new annual grassland state. Local areas of lower annual grass cover are present within the region, but their long-term integrity is compromised by occurring in a setting of higher invasive annuals. Frequent fires and reinvasion from neighboring areas make maintenance of sagebrush rangelands extremely difficult.

**Transition Zone**. Areas between cores and the annual grass region are considered transitioning. These zones are undergoing ecosystem state changes at landscape scales as areas of higher annual grass cover replace relatively intact rangelands. These are important battle fronts for stemming the tide of annual grass conversion, but they are also areas of high unpredictability for management due to the rapid change that is occurring.

Identification of these broad regions allows for implementation of a strategic battle plan to tackle annual grasses:

# 1. Defend the Core.

Defending large cores from annual grass conversion is a top priority for management. Anchoring management efforts in cores first reduces the chances of getting flanked. Early and aggressive control Defend the core 
Grow the core 
Mitigate impacts

Gore

Twin Faffs

Core

Core

Data sources: Rangoland Analysis: Platform (https://rencearates.supp), Idaho Dept. of Figh & Same

Landscape Cover of Annuals on Rangelands

Low (<10%)

Mild (11-25%)

Moderate (26-50%)

High (>50%)

Sage Grouse

Priority Areas

Idaho's strategy for tackling invasive annuals. Dashed lines represent the approximate transition zone boundary between mostly intact cores and the annual grass region. Arrows depict the preferred direction of management.

of annual grass invasions and promotion of perennial grass health is needed to proactively maintain and build resilience of the core through time.

- 2. Grow the Core. While cores are being defended, a secondary priority is to grow the core by pushing back the transitioning zone. A sustained and multifaceted effort, including large-scale restoration, will be needed in these areas to halt and reverse the regional spread of annual grass conversion.
- 3. Mitigate Impacts. Finally, perpetual management will be required in the annual grass region to mitigate the most severe impacts of the cheatgrass-fire cycle on life and property. Primary actions in this region include asset protection, fine fuels reduction.

and rehabilitation and maintenance of perennial grasses.

### A Call-to-Action

Idaho's Cheatgrass Challenge strategy lays out a vision for action that provides a proactive, rather than reactive, alternative to reducing the invasive annual grass threat. However, the strategy's ultimate success hinges on community-based partnerships banding together to develop local prescriptions, coordinate actions, and leverage resources to achieve these regional goals.

For more information on the Cheatgrass Challenge or how you can help, visit: www.id.nrcs.usda.gov or contact any of our collaborating partners.