Invasive Annual Grass Spatial Data Compilation and Synthesis Project

Frequently Asked Questions

Across the West, invasive annual grasses are a major threat to sagebrush rangelands, impacting plant communities, wildlife habitat, and wildfire risk. Numerous spatial datasets mapping invasive annual grasses exist; however, land managers often struggle to identify which of these spatial products are most relevant to their work, or are unaware that these resources exist at all. Through key resources, experts collated invasive annual grass spatial datasets and identified similarities and differences among these resources. Further, they provide guidance to potential users on selecting appropriate spatial products.

The U.S. Geological Survey worked closely with partners in the Bureau of Land Management, Colorado State University, U.S. Fish and Wildlife Service, and the Intermountain West Joint Venture to collect and summarize spatial datasets that describe where and how much invasive annual grasses have infested the sagebrush biome. Results from the **Invasive Annual Grass Spatial Data Compilation and Synthesis Project** provide guidance to those tasked with combating the spread of invasive annual grasses.

This project created the following five resources:

- 1. A **compendium**, which is a collection of two-page summaries on all of the spatial products included an online database.
- 2. An **interactive Sagebrush Ecosystem Data Viewer** that allows a user to activate layers, upload polygons, identify areas of interest, and export reports without needing GIS software.
- 3. A **user's guide** to selecting invasive annual grass spatial products for the western United States.
- 4. A **journal publication** in Rangeland Ecology and Management titled "Bridging the gap between spatial modeling and management of invasive annual grasses in the imperiled sagebrush biome."
- 5. An **online database** of invasive annual grass spatial products, each summarized by 40+ criteria.

Q: Why should I use this summarization of maps and spatial datasets?

A: It's a curated summary of information to help save you time in finding relevant resources. It's meant to provide a systematic way to compare different mapping options for invasive annual grasses.

Q: Where do I download this data?

A: Links to GIS spatial data can be found in the compendium and database, as well as on the Sagebrush Ecosystem Data Viewer and SageDAT.

Q: Why only these three IAG species?

A: These three invasive grass species (cheatgrass, medusahead, ventenata) represented the greatest interest/concern among agency stakeholders working in the sagebrush biome, the focal area for this project. However, there are other invasive grasses of concern.

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Q: How do I use this suite of products to find maps and spatial datasets?

I want to read short synopses to know I want to know what criteria to consider when looking at maps and what's out there: Head to the two-page summaries. spatial datasets for a project: Dive into the user's guide. I'm trying to find local data and want to I want to understand the similarities know if this is useful to me: and differences among all of these Check out this easy-to-use webviewer spatial data resources: that you don't need GIS software to Explore the downloadable database of invasive annual grass spatial products. play with. I want to read about recent IAG mapping

and ideas for co-producing new spatial data products: **Read the journal article.**

Q: Why isn't my favorite dataset not included?

A: This project was targeted at regional spatial extents that cover multiple management jurisdictions, that were publicly accessible and released in the last decade. This project focused on summarizing maps created by spatial-statistical models that result in predictions of invasive grass cover or occurrence across large landscapes. Many resources did not meet inclusion criteria. Small and localized maps were not included at this time. Some non-map resources, including point location and occurrence databases, were noted in the Compendium Appendix but not catalogued.

Q: There are a few dozen maps in this catalogue. Do we really need more spatial data products?

A: In many cases, yes. They are all constructed differently and lead to different strengths and weaknesses of application. More can be done to increase or improve spatial mapping of invasive annual grasses, particularly for lesser-mapped species such as ventenata and medusahead.

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