# A Field Guide to Grasses and Grass-like Plants of Idaho

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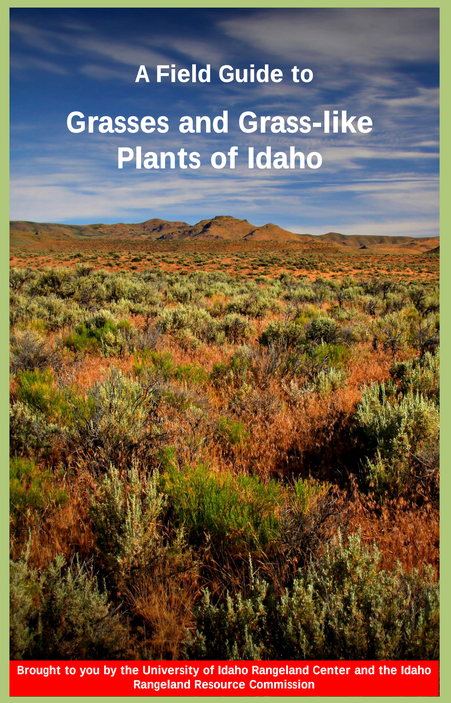


**Figure 1.** Example of book cover for *A Field Guide to Grasses and Grass-like Plants of Idaho.*

## Abstract
The purpose of this project is to develop a user-friendly field guide to grasses and grass-like plants in Idaho, specifically geared to those with limited background in botany. The guide will feature 60 Idaho grasses and grass-like plants, intended for K-16 educators and students, ranchers, land owners, recreationists, and nature enthusiasts, with accompanying K-12 lesson plans. In the form of both a printed book (Figure 1) and an offline app for iPhones and Androids (Figure 2), the guide will include colorful photographed images and line drawings (Figure 3) showing detailed characteristics and vegetative features of each grass, an easy-to-use dichotomous key, and information on each plant's history, forage value, and fire resistance. This dual resource will meet the needs of land managers making economic decisions regarding livestock production and field treatments; university students in wildlife and range sciences conducting class exercises and field research; K-12 educators during field botany excursions, teaching the use of dichotomous keys, and ecosystem studies; and recreationists engaged in nature study. Both book and app will be distributed via the University of Idaho Rangeland Center and the Idaho Rangeland Resource Commission.

**Literature Cited**

USDA, NRCS. 2015. The PLANTS Database (http://plants.usda.gov, 14 August 2015). National Plant Data Team, Greensboro, NC 27401-4901 USA.

Skinner, Quentin D. *A Field Guide to Wyoming Grasses*. Cumming, GA: Education Resources Publishing, 2010. Print.

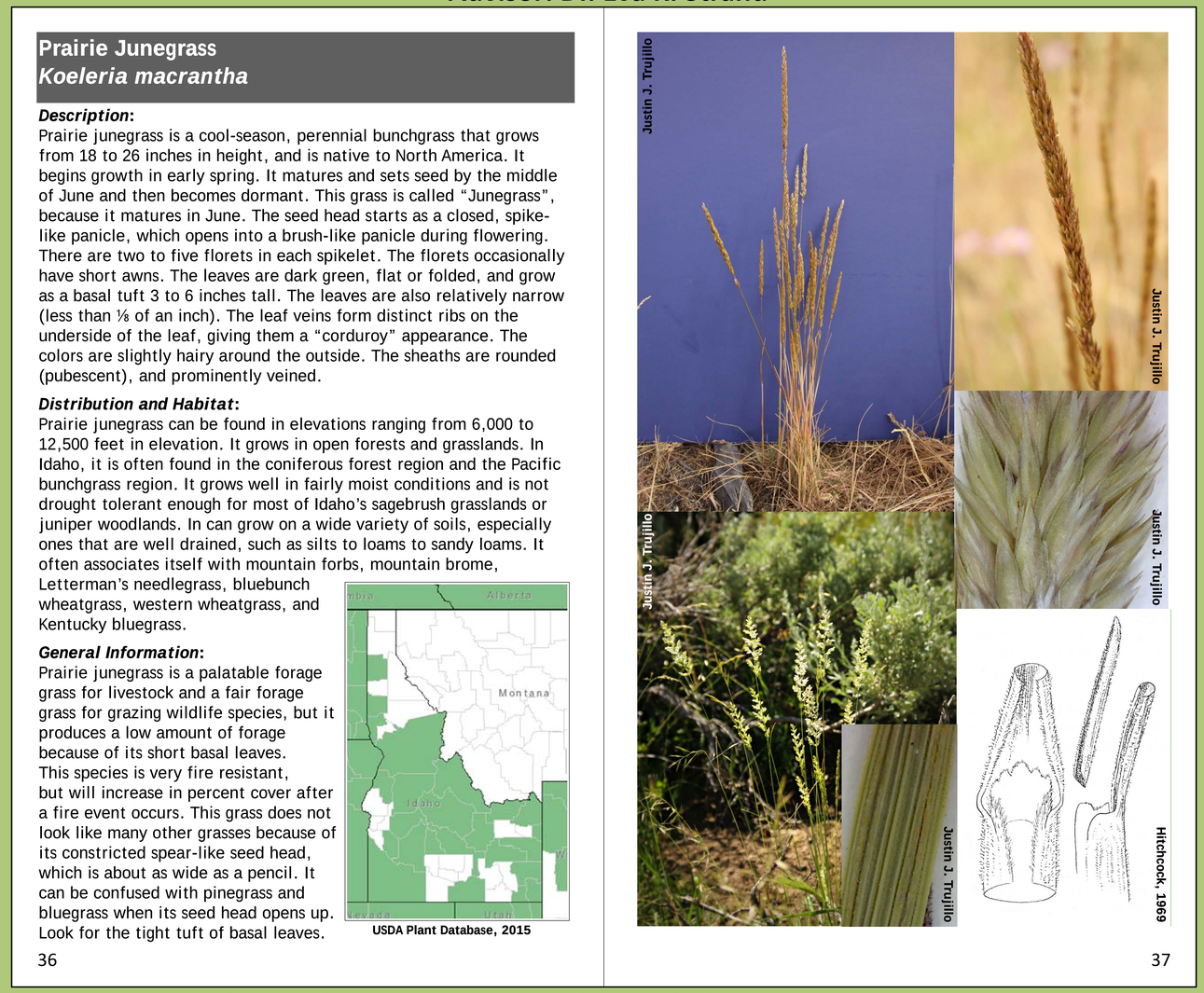


**Figure 3.** Example pages from *A Field Guide to Grasses and Grass-like Plants of Idaho*.

## Background
Within its grasslands, shrublands, meadows and open forests, over 50% of Idaho and up to 70% of land within adjacent states is covered by grasses and grass-like plants. Among their many values, these plants are the mainstay in the diets of wild and domestic hooved mammals, provide habitat for ground nesting birds and other species, mitigate soil erosion, and play an important role in wildland and range management. However grasses are not easily identified and their individual characteristics, uses and values remain a mystery to many. Since there is currently no field guide for grasses and grass-likes of Idaho, and no phone app that identifies these grasses, the book and app will be useful resources for those who have trouble when identifying grasses or grass-like plants.

## Methods
Approaches that will be taken during the project include: photographing grasses out in the field and in the lab, compiling information on plant characteristics, developing a dichotomous key, and converting the book to an app format. In addition, we plan to develop K-12 lesson plans and pilot tests with students from each target grade level for creating the field guide.

## Results
As a result of using the field guide book and/or app, participants will be able to identify up to 60 grasses and grass-like plants. They will be able to use the dichotomous key provided in the book and app, and understand the general concept of what such a key is and can do. The field guide and app will allow participants to learn facts regarding the ecological and economic use or importance of grasses and grass-like plants, which will help them be better equipped within their respective disciplines.

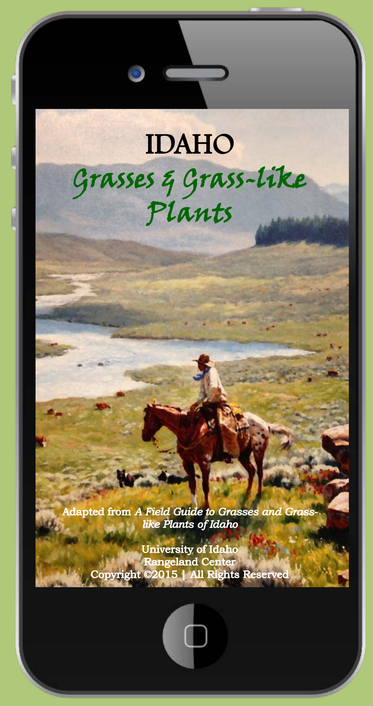


**Figure 2.** Example of app design adapted from *A Field Guide to Grasses and Grass-like Plants of Idaho*.

## Conclusion
By developing a field guide for the grasses of Idaho and an app for iPhone and Android users, we suggest that these tools will be useful for ranchers, land managers, educators, students, recreationists, and nature enthusiasts alike. With this type of visual representation in hardcover form in combination with smartphone technology, it will not only help people identify what is on the ground, but it can be useful when making decisions out in the field, in the classroom, or out on a hike when trying to identify grasses or grass-like plants in the state of Idaho.

## Acknowledgements
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**Image credits**

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