

Data Management, Input, and Mining of Pinus Albicaulis and Other Native Oregon Plant Species for INR



Avery McClure, Institute for natural Resources Botany Data Management intern, BS Environmental Science, Portland State University, Portland OR

Introduction: The Institute for Natural Resources is a research institute with the goal of helping “decision makers identify and use relevant science in making natural resource policy and management decisions”.

Duties:

- Input USFS and BLM data into Biotics
- Data Mining for native species occurrences using open source tools
- Pinus Albicaulis Mapping in Arcgis

What is Biotics? A mapping software used by a network of governmental and non-governmental agencies.

What tools are used to data mine?

Open-source data networks such as OregonFlora, Consortium of the PNW, Consortium of CA, and the Intermountain Regional Herbarium Network.

Why Pinus Albicaulis?

Pinus Albicaulis (Whitebark Pine) is an endangered tree native to Oregon. Recent disturbances of pine beetles, blister rust, and fire suppression are threatening the species.

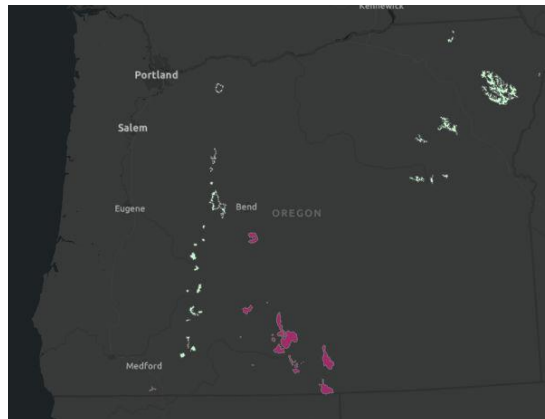


Figure 1. Map of Whitebark Pine created in Arcgis

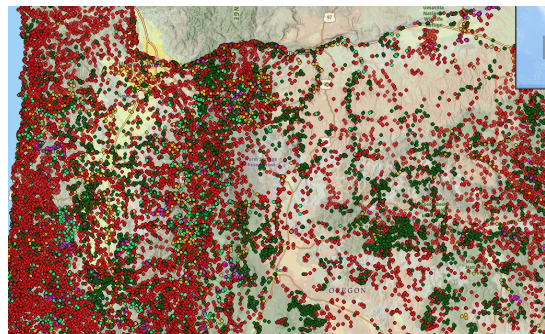


Figure 2. Map of all Source Features and Element Occurrences in Biotics

Why is this important?

Personally: This internship, under the leadership of Sue Vrilakas and Eleanor Gaines, has helped me grow in my knowledge and problem solving skills for tools that are relevant to my major. Quickly picking up on new skills and having the experience with these useful tools gives me confidence and credibility when searching for future careers.

Broadly: The work being done by all the hardworking people at INR is essential for giving policymakers the tools to make wise, scientifically sound decisions regarding natural resource management. The Whitebark Pine is one of a multitude of species that goes into a species book with recommendations and distribution data to educate decision makers. This book is created and updated to follow these species and make new recommendations based on the data collected every two or three years.

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