

# Milkweed Restoration

## The cost benefit of planting seeds vs. containerized plugs

### Overview

**Research Question:** Does the success rate for milkweed differ when established from seeds vs. containerized plugs?

Secondary questions:

- \* How could this apply to habitat management?
- \* How best should managers incorporate milkweed in restoration projects?
- \* Does this information have potential to change milkweed propagation in the valley?

### Background

- \* The Monarch Butterfly was petitioned for protection under Endangered Species Act in 2014
- \* Milkweed acts as natal breeding grounds for monarch butterflies
- \* Milkweed populations have dropped up to 90% in areas across the U.S
- \* Milkweed is included in some prairie restoration projects in the Willamette Valley
- \* Three sites were chosen to monitor and sample the growth and success of seeded and containerized planted plugs of *Asclepias Speciosa* (showy milkweed).



### Data Analysis

- \* Data was organized based on date collected and seeds or plugs
- \* Data was compiled and compared to previous counts to determine if there was a difference

### Results

- \* Plug survival rate averaged 64% in July 2017 compared to seed survival of 0%.
- \* Plug survival rate averaged 48% in August 2017 compared to seed survival of 0%.
- \* In 2018, the random sampling was changed to controlled intuitive sampling and milkweed from seed was found in two of the three areas.
- \* Both seeds and plugs are viable ways to introduce milkweed into restoration plots.

### Seeds vs Plugs

