Roadside Weed Control

Will Lackey
Vegetation Management Coordinator
What’s the Problem?
Challenges
Weeds

- Russian Thistle – 200,000 seeds
- Kochia – 15,000 seeds
- Rush Skeletonweed – 20,000 seeds
Fencerows
Noxious Weed Policy and Classification System 2013

Oregon Department of Agriculture
Noxious Weed Control Program

635 Capitol Street NE, Salem, Oregon 97301-2532, Tel (503)-986-4621
www.oregon.gov/ODA/PLANTWEEDS
African Rue
Giant Hogweed
Orange Hawkweed
Patterson’s Curse
Yellow Floating Heart
“B” List Weeds
Rush Skeleton Weed
Dalmatian Toadflax
Meadow knapweed *Centaurea pratensis*
Japanese Knotweed *Fallopia japonica*
Garlic Mustard *Alliaria petiolata*

- Highly invasive on road shoulders.
- Very shade tolerant.
- Mowing alone doesn’t prevent flowering.
Puncturevine *tribulus terrestris*
Noxious Weed Priorities

1. Safety
2. “A” List
3. “T” List
4. Isolated “B” List
5. “B” List
Integrated Vegetation Management

- Mechanical
- Cultural
- Chemical
- Biological
Prevention

• Clean Equipment
• Weed Free Fill/Aggregate
• Minimize Soil Disturbances
• Maintain Vegetation-Free Shoulder
Monitor Roadside Vegetation

Identify Problem Areas

Evaluate Treatment Options Including: No Action, Chemical, Mechanical, Biological, Cultural Methods

Establish Treatment Plan

Treat Problem Area

Monitor Treatments

Treatment Effective

Adjust Treatment Plan if Necessary

Treatment Ineffective
Early Detection Rapid Response

Catch them early - while you still can...

- Widespread awareness
- Detection
- Introduction

Eradication:
- Simple
- Feasible
- Difficult
- Impossible - only expensive local management
Great Scott!
Continuous Monitoring of Roadside Vegetation

Identify Problem Areas

Evaluate Treatment Options Including: No Action, Chemical, Mechanical, Biological, Cultural Methods

Establish Treatment Plan

Treat Problem Area

Monitor Treatments

Treatment Effective

Adjust Treatment Plan - Follow up if Necessary

Treatment Ineffective
Mechanical Control
Mechanical Control BMP’s

- Timing
- Clean Equipment
- Basal Bark/ Cut Stump
- Train Personnel
REMEMBER THAT TIME
YOU FORGOT TO THINK?

I'M NOT RIGHT IN THE HEAD.COM
Biological Control

*Bruchidus villosus*
Biological Control BMP’s

• Only release ODA approved BioControl Agents
• Avoid disturbing the site
• Be Patient
Cultural Control Methods

• Seeding
• Cleaning Equipment
• Weed Free Erosion Control
• Burning
Chemical Control
Herbicide BMP’s

• Appropriate Licenses
• Follow the Label
• Wear Appropriate PPE
Evaluate Alternatives

Weed Barriers

Infrared

Goats
Adopt-a-Highway

- Noxious Weed Pulling
  - Noxious Weed Removal Plan
  - Approved by ODA or County Weed Board
- [http://www.oregon.gov/ODOT/HWY/OOM/Adopt/AAH.shtml](http://www.oregon.gov/ODOT/HWY/OOM/Adopt/AAH.shtml)
Coordination
Herbicide Resistant Weeds
<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 1</th>
<th>3 years later</th>
<th>After spraying</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before spraying</td>
<td>After spraying</td>
<td>– before spraying</td>
<td></td>
</tr>
<tr>
<td><img src="image1" alt="Before spraying" /></td>
<td><img src="image2" alt="After spraying" /></td>
<td><img src="image3" alt="3 years later – before spraying" /></td>
<td><img src="image4" alt="After spraying" /></td>
</tr>
</tbody>
</table>

The table above shows the comparison of plant growth and effects after spraying in different conditions over different time periods.
Weeds

• Russian Thistle – 200,000 seeds
• Kochia – 15,000 seeds
• Rush Skeletonweed – 20,000
Herbicide Resistance Prevention

- IPM
- Rates
- Herbicide Mode of Action
Summary

- Challenges
- Prevention
- IVM
- Coordination
- Prevent Herbicide Resistant Weeds