

Managing Problem weeds
North of 45°



- Established in PNW in 1880's by T.D. Merrill & Clark Ring
- Family Owned Timberlands in USA, Canada, and NZ
 - Merrill Family
 - Ireland Family
 - Ring Family (28,000 acres in WA, OR, B.C.)
 - Merrill & Ring Forest Products LP
 - Merrill & Ring Theodosia Holdings, Ltd.
 - Ring Family LP
 - Seedtree, LLC

Ring Family Timberlands

- Annual Average Harvest of 0 to 1,000 acres
- Broad scope in site and latitude (<2,500 ft. elev.)
- Numerous small parcels with neighbors
- Properties w/ diverse management History



3 Key Weeds

Bigleaf Maple



Scotchbroom



Woodland Grounel





Bigleaf Maple

A secondary component in 3rd growth stands

Tools:

- Broadcast Spray
- Basal Clump Spray
- Foliar Clump Spray
- Hack & Squirt





Cherry Grove, OR
Site-Prep requires
follow-up!

Aerial Application - September 2014

2 qt. Accord XRT + 12 oz. Polaris SP + 4 oz. Oust Extra + 6 oz. Syl-tac

Foliar Clump Pre-Treatment

Cherry Grove, OR (BP Unit)

- Site-Prep (8/2017):
 - **Hardwood Clump Pre-treatment: (2.5% Imazapyr 4 + 1% MSO)**
 - BP Broadcast Spray
 - 2 qt. Accord XRT II + 4 oz. Oust Extra
- Follow-up Treatment:
 - BP Broadcast Spray (5/18/2018)
 - 3 qt. atrazine + 12 oz. Transline + 7 oz. Esplanade + 24 oz. Grounded W
 - Basal Spray Clean-up (8/2019)
 - 15% Garlon 4 in Basal Oil



Mt. Vernon, WA

“A Lesson in Timing”



8/8/2017

Mt. Vernon, WA

- Site-Prep (9/2017):
 - Hack-Squirt large Hardwoods & “Clean” Stumps (50% Imazapyr 4)
 - BP Broadcast Spray
 - 1.5 qt. Alligare 5.4 + 12 oz. Imazapyr 4 + 3 oz. Oust Extra + 16 oz. MSO (**double spray maple clump resprouts**)
- Follow-up Treatments:
 - BP Broadcast Herbaceous Spray (6/25/2018)
 - 20 oz. Transline + 7 oz. Esplanade F
 - BP Broadcast Release Spray (9/2019)
 - 1.5 qt. 2,4-D LV6
 - Basal Spray Clean-up (15% Garlon 4 Ultra + Basal Oil)



9/25/2019



Lessons learned

- Hold Units for Site-Prep
- Remember the “big picture.”
 - Don't be distracted by the stumps
 - Follow-up hardwood control may be inevitable.





Forks, WA
Maybe Aerial
Site-Prep is
enough?

Aerial Application - September 2017

1.5 qt. Accord XRT + 12 oz. Imazapyr 4 + 4 oz. Oust Extra + 16 oz. MSO

Mixed results. Can we be more effective from the air?





Maple as a 3rd Growth Stand Component
Deming, WA

9/2017



Deming, WA



Site-Prep 7/31/2019:

48 oz. Roundup Pro Conc. + 32 oz. Rotary 2SL + 3 oz. Oust Extra
+ 3.3 oz. Opensight + 24 oz. MSO

(Ground Spray Follow-up in Summer 2020 or 2021)









Thoughts Regarding Bigleaf Maple

- Which tools are available?
- Coverage Matters
- Combine methods & minimize entries
- Broadcast Spray requires follow-up
- Coordinate with other activities (planting?)
- Remember the “big picture” and don’t create a different problem



Scotchbroom

- Maintain as roadside issue
 - Roadside spray every 2-3 years
 - Spot treat outside road prism
- Show no Mercy!
- Know when to quit (and maintain it as a different roadside issue)

Treat Scotchbroom
when it's like this.....





.....not like this!



Because when it gets like this.....



It starts
showing up
on
neighboring
units!

Sol Duc Valley, WA

- 1960's Logging Camp
- Poor Stocking/Vigor
- "Rehab" Harvest July 2016 (Piled Cleanly by Logger)



Sol Duc Valley, WA

- Site-Prep Spray (9/2016)
 - 1.5 qt. Accord XRT II + 3 oz. Oust Extra + 8 oz. Polaris SP + 3.3 oz. Opensight + 16 oz. MSO
- Herbaceous Spray 1 (5/2017)
 - 20 oz. Transline



7/21/2017

Sol Duc Valley, WA

- Site-Prep Spray (9/2016)
 - 1.5 qt. Accord XRT II + 3 oz. Oust Extra + 8 oz. Polaris SP + 3.3 oz. Opensight + 16 oz. MSO
- Herbaceous Spray 1 (5/2017)
 - 20 oz. Transline
- Fall Release/Hdwd Clump Spray (9/2017)
 - 3% Garlon 4 + 1% MSO (Scbrm)
 - 2.5% Imazapyr 4 + 1% MSO (hdwds)



7/21/2017

Sol Duc Valley, WA

- Site-Prep Spray (9/2016)
 - 1.5 qt. Accord XRT II + 3 oz. Oust Extra + 8 oz. Polaris SP + 3.3 oz. Opensight + 16 oz. MSO
- Herbaceous Spray 1 (5/2017)
 - 20 oz. Transline
- Fall Release/Hdwd Clump “Spot” Spray (9/2017)
 - 3% Garlon 4 + 1% MSO (scbrm)
 - 2.5% Imazapyr 4 + 1% MSO (hdwds)
- Dormant/Herbaceous Spray 2 (4/2018)
 - 1.25 qt. Garlon 4 + 16 oz. MSO + 2 oz. Oust XP



Sol Duc Valley, WA

- Site-Prep Spray (9/2016)
 - 1.5 qt. Accord XRT II + 3 oz. Oust Extra + 8 oz. Polaris SP + 3.3 oz. Opensight + 16 oz. MSO
- Herbaceous Spray 1 (5/2017)
 - 20 oz. Transline
- Fall Release/Hdwd Clump Spray (9/2017)
 - 3% Garlon 4 + 1% MSO/2.5% Imazapyr 4 + 1% MSO
- Dormant/Herbaceous Spray 2 (4/2018)
 - 1.25 qt. Garlon 4 + 16 oz. MSO + 2 oz. Oust XP
- BP Clean-up (5/2019)
 - 3% Garlon 4 + 1% MSO

3/22/2019

Woodland, WA

- No Burn Piles
- Site-Prep (9/2016)
 - 1.5 qt. Accord XRT II + 3 oz. Oust + 3.3 oz. Opensight + 8 oz. Polaris SP
- Herbaceous Spray 1 (6/2017)
 - 20 oz. Transline
- Basal Spray (7/2019)
 - 15% Garlon 4 in basal oil

Free to Grow w/ Minimal Scotchbroom Invasion!



“Raines Rehab”

Cherry Grove, OR



Raines Rehab Cherry Grove, OR

- **Site-prep - Sept. 2013 (20 gal/acre)**
 - 1 qt. Accord XRT II
 - 2 qt. Garlon 4 Ultra
 - 3.3 oz. Opensite +
 - 3 oz. Oust Extra
 - 2 qt. Superspread MSO
- **Herbaceous 1 - April 2014**
 - 4 qt. Atrazine
 - 16 oz. Transline
- **Herbaceous 2 – April 2015**
 - 1.5 lb Westar
- **BP Clean-up – Summer 2016**
 - Basal Spray hdwds (15% Garlon 4 Ultra)
 - Foliar Spray Scbrm (3% Garlon 4 + 1% MSO)



6/9/2015



12/3/2019



Ideas for Managing Scotchbroom

- Be Pro-Active and Vigilant
- Maintain as a Roadside Issue
- Minimize Ground Disturbance
- Treat it in the right timing
- Plant Big Trees
- Recognize when to change strategy



Woodland Grounself

(*Senecio sylvaticus*)



Sequim, WA

- Fall Site-Prep (Backpack):
 - 3 qt. Accord + 4 oz. Oust Extra
- Planted Spring 2016
- Walk away?

Sequim, WA

- Replant Spring 2017 (150 TPA)
- Herbaceous Spray May 2017
 - 2 oz. Oust XP + 20 oz. Transline
- Basal Spray July 2018 (hdwds)





Spring Atrazine

An effective solution from
Forks to Forest Grove

- Atrazine applied at 4 qts./acre
- In combination with Transline and/or 2,4-D
- Add Grounded W for better, longer lasting control



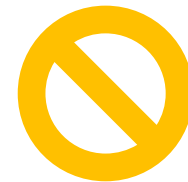
Reasons to Consider Alternatives to Atrazine



Label Restrictions



Logistics



Site Restrictions

Tenino, WA

Cleantraxx as an alternative within a designated groundwater sensitive area

Atrazine

(4 qt. atrazine + 32 oz. Freelexx + 10 oz. Transline + 24 oz. Grounded W)



Cleantraxx

(72 oz. Cleantraxx + 32 oz. Freelexx)



Onalaska, WA

Esplanade F in Site-Prep to reduce senecio

Site-Prep: 64 oz. Alligare Gly 5.4 + 8 oz. Imazapyr 4 + 3 oz. Oust Extra + 7 oz. Esplanade F + 16 oz. MSO

Spring Transline (20 oz./acre)



No Spring Treatment



Castle Rock, WA

20 oz. Transline® as a follow-up to Opensight® in site-prep (BP unit near homes)

Oct. 1, 2019 (after 1st growing season)



Shelton, WA

20 oz. Transline® as a follow-up to Opensight® in site-prep (BP unit near active sawmill)

Sept. 19, 2019 – 3 months after treatment



Sept. 19, 2019 – no spring treatment



Pysht, WA

20 oz. Transline® as a follow-up to Opensight® in site-prep (BP unit near neighbors)

Sept. 18, 2019 - 3 months after treatment



Skips tell no lies....



Pysht, WA

- Burned April 2, 2019
- Planted April 10, 2019
- BP Herbaceous Spray June 22, 2019
 - 16 oz. Transline
 - 7 oz. Esplanade
 - 2 oz. Oust XP



Pysht, WA

- Burned April 2, 2019
- Planted April 10, 2019
- BP Herbaceous Spray June 22, 2019
 - 16 oz. Transline
 - 7 oz. Esplanade
 - 2 oz. Oust XP



A “Split Decision”

Herbaceous Spray (applied June 22, 2019):

12 oz. Transline + 7 oz. Esplanade + 2 oz. Oust XP



Site-Prep Spray (applied August 27, 2019):

48 oz. R/up Pro Conc. + 32 oz. Rotary 2 SL + 3.3 oz. Opensight + 3 oz. Oust Extra





Don't underestimate the effectiveness of slash!

Copalis Beach, WA

Site-Prep: 2 qt. Accord XRT II + 16 oz. Polaris SP + 4 oz. Sulfomet Extra



Thoughts regarding Woodland Grounzel:

- If you control Woodland Grounzel (senecio) and you will likely control most other herbaceous weeds.
- Fall site-prep complemented by a spring atrazine/transline mix is my “sure thing” combo for first-year control.
- Reduced levels of senecio are observed on sites treated with Esplanade F[®]
- Units treated with Opensight[®] in the fall and Transline[®] late during the following spring have lower levels of senecio.
- Slash can be effective in controlling herbaceous weeds.

