



Managing Gorse and Other Flammable Invasives

Wildfire Risk Reduction Training

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Managing Invasive Plants

- Gorse, a case study
- Treatment methods
- Strategies for effective control
- Consider biology and physiology
- Competition/restoration/rehabilitation
- Outsmart and outlast
- Control for specific invaders
- Resources

Gorse, a Case Study

- Noxious Weed
 - A plant defined by law as particularly troublesome, undesirable and difficult to control.
 - Oregon Revised Statutes declare noxious weeds to be "a menace to public welfare"!
- Introduced by founder of Bandon, 1873
- Escaped cultivation
- Spread throughout Bandon area
- Responsible for devastating fires

Historical Records

- Circa 1930 "During one of our vacations in Bandon a fire started in the gorse which was rather frightening because of the intense heat and flames which rose a hundred feet into the air. The fire was eventually brought under control with no loss of property." Historian Thomas McClintock
- Sept. 26, 1936 Gorse in Bandon was ignited and exploded into an inferno. The fire quickly swept through the town, laying waste to the business district along with hundreds of homes. Only a handful of structures were left standing by the time the fire died out. Most of the town's 1,800 residents managed to reach safety, though ten (11) died in the flames.

Sept 27, 1936



BUSINESS DISTRICT AND DOCKS AFTER THE GREAT FIRE, BANDON, OREGON.

W-8

Gorse Fueled Fires 2010



Treatment Methods

- Manual
- Mechanical
- Chemical
- Biological
- Cultural
 - Fire
 - Competitive planting
 - Fertilizer



Manual

- Hand pulling, cutting, grubbing
- Generally well suited to home landscape
- Selective- targets specific plants
- Basic tools - gloves, shovel, loppers to mowers, chainsaws
- Fewer specialized skills required
- Can be labor intensive

Mechanical

- Mowing, masticating, plowing, tilling
- Some appropriate in home landscape
- Selective to non-selective
- More specialized tools
 - Includes heavy equipment
- More specialized skills
- Typically less labor intensive



Chemical

- Use of herbicides
- Generally well suited to home landscape
- Selective to non-selective
 - Varies with herbicide
- May require specialized training
- Typically less labor
- Often most effective with other treatments
 - eg. mow or burn before spraying
 - eg. remove dead material

Biological and Fire

- Insects
 - Diseases
 - Pathogens
 - Herbivores
 - Fire
-
- Generally not suited to home landscape

Competitive Planting

- The best defense is a good offense
- Cultivate desirable site adapted species
 - Plant and maintain the plants you want
 - They use light, moisture and nutrients
 - Reduce establishment and survival of weeds

Keys to Success

Work Smarter, Not Harder

- Primary strategy for weed (fire) control
 - Prevention
 - Early detection and rapid response
 - Control of established infestations

Keys to Success

Most Effective Control

- General Methods and Strategies work on many plants
- For most effective control
 - Set priorities
 - Positively identify target
 - Biology and Physiology
 - Select best methods and timing for species



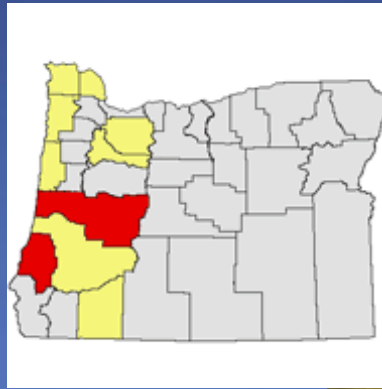
Biology and Physiology

- Life History
 - Annuals, Biennials or Perennials
 - Herbaceous or Woody
- Reproductive strategies
 - Seed production and longevity
 - Vegetative reproduction
 - Sprouters vs non-sprouters
- Physical Needs
 - Light and moisture requirements
- Behavior in specific environments

Last Key to Success

- Persistence Pays
- eg. Dandelions - spray, pull, dig
 - kill them dead
- Later new plants appear
- Did treatment work?
- Effective control may take years
 - Don't give up!

Gorse



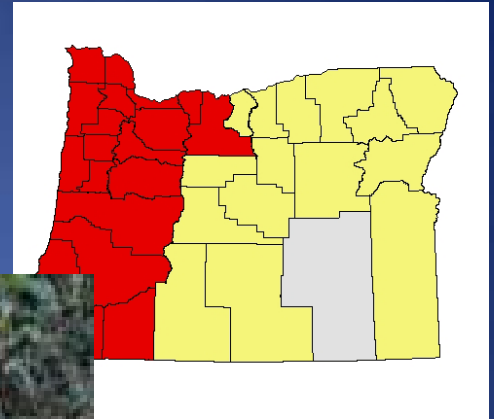
Woody resprouting perennial



Gorse

- Most effective control combines methods
 - Herbicide
 - Immediately after blossoms drop
 - Garlon, Crossbow, Escort, Roundup
 - cultivation
 - mowing
 - competitive planting
- Handpulling, grubbing on small infestations

Armenian (Himalayan) Blackberry



Woody
Perennial

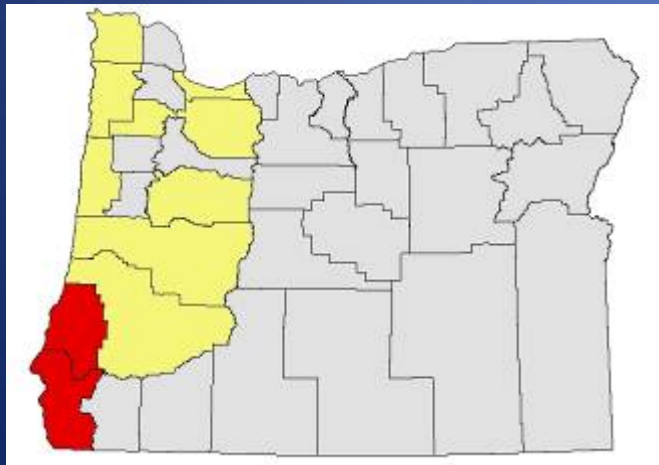
Thickets
are a fire
hazard
when close
to buildings

Blackberry

- Hand pull, dig small patches
- Herbicide on larger infestations
 - Crossbow
 - Roundup, Rodeo
 - Escort
- Fall
- May take up to 6 months for herbicide effects

Pampas grass

Herbaceous perennial



Pampas grass

- What do we know about it?
 - Annual, biennial, perennial
 - Broadleaf or monocot
- What are the resources at risk?
- What techniques might work?
- When?
- How much time and cost for treatments?

Local Resources

- South Coast Watershed Council
 - Curry Weed Advisory Board
- Curry County Cooperative Extension
- Internet and books
 - PNW Weed Management Handbook
 - <http://uspest.org/pnw/weeds>
 - Control of Problem Weeds
 - Weeds of California
 - TNC Element Stewardship Abstracts

