

Weed Management on the Washington State Capitol Campus









History

Prior to Initial Pilots Projects (4 years ago)

Oregon Tilth

ecoPRO











Our Goals: West Campus

- Continue to reduce use of synthetic chemicals for weed and control and increase other cultural control methods
- More closely research and inspect purchased soils and compost for potential weed seed contamination
- Continue to trial and experiment with new weed management strategies that are part of an IPM program



Our Goals: East Campus

- Eliminate pesticide use in certain areas, reduce use overall.
- Continue to experiment with different methods of organic weed control.
- Improve soil quality for better plant health.







Our Goals: Campus Parks

- Experiment with weed burner for all gravel paths around Heritage Park.
- Thatch and over seed all turf areas where needed, also soil leveling.
- Cardboard and mulch problem areas.







What have we been trying?

Weed prevention

Mulching with leaves, cardboard, paper, burlap, arborist wood chips, organic mulch, dense plantings.

Weed control

Weed burner, string trimmer, hand pulling, organic liquid herbicides.







Case Study: Lasagna Sheet Mulching



This shrub bed was filled with dandelions in past years.

Added a thick layer of leaves with about 3-4 inches of arborists wood chips on top in the fall of 2015.

Close to 100% success by fall of 2016.







Case Study: Oyster Sheet Mulching









Case Study: Cardboard/Burlap Sheet Mulching









Case Study: Leaf Mulching











Case Study: Organic Mulching



Arborist wood chips



Nutrient rich black bark acting as a weed suppressor







Case Study: Weed Burner



Before burning



One day after second burn



After burning once a week for 3 weeks







Case Study: Organic Liquid Herbicides

- Phydura: Clove oil and vinegar based. Non-selective.
- Household (5%) Vinegar: Non-selective.
- Fiesta: Active ingredient is iron. Selective turf herbicide.







Phydura



One day after Phydura application



Two weeks after application







Vinegar





Weeds two days after being sprayed. They eventually recovered, but we did have some success when spraying weeds in sidewalk cracks on a hot day.







Fiesta





Weeds in a section of turf at Heritage Park after being treated. The weeds showed damage after within a day after application, but regrowth occurred within two weeks.







Case Study: Density in Plantings











Case Study: String Trimming









Case Study: Turf Health

- Mowing height
- Mulch mowing
- Aeration
- Compost top-dressing







Case Study: Turf Health



Mowing high to reduce weeds in turf







Next Steps

- ca Continue and expand ecolawn wildflower plantings







Questions/Comments







