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.
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

- More flame burning
- Continue with denser plantings
- Continue with sheet mulching
- Continue and expand ecolawn wildflower plantings
- Experiment with salts
Questions/Comments