

How to work with
DANGEROUS PLANTS
in Seattle's landscapes and
natural areas



What do we mean by a “dangerous plant”?

Thorny or prickly – scratches and cuts

Burning, stinging or otherwise irritating your skin - liquid or plant parts causing mild dermatitis, or caustic reactions

Poisonous – nervous system, allergenic or other reactions when the toxin gets inside your body.

Can be native or non-native plants!

How could I be exposed to these plants?

Exposure routes include direct skin contact, OR by getting the toxin inside your body - most often through ingestion, through an open wound, or through eyes or other orifices.

Having healthy, unbroken skin is your first line of defense!

Personal protective equipment is the last line of defense!

General Considerations

People's sensitivity can change over time – generally increasing sensitivity with more frequent exposures

When working in the field be aware of plant parts not immediately visible

Also ensure other crew members' safety – contain the plants you're working on



Thorny or Prickly Plants

Himalayan blackberry

English holly

Devil's club

Native Roses

Himalayan blackberry

Identification

- Up to 15 feet tall
- Stout, arching canes up to 40 feet long
- Stiff thorns along stems

Skin protection

- Gloves
- Long sleeves and long pants
- Boots or shoes that cover feet completely



English Holly

Identification

- Large, dense evergreen tree/shrub
- 15-50 feet tall and 15 feet wide or more
- Leaves usually have sharp, stout spines along edges

Skin protection

- Gloves
- Long sleeves and long pants
- Boots or shoes that cover feet completely



Devil's Club

Identification

- 3-5 feet tall
- Large palmate leaves
- Straight, woody stems

Skin protection

- Gloves
- Long sleeves and long pants
- Boots or shoes that cover feet completely



Nootka Rose

Identification

- 2-20 feet tall
- Grows in dense thickets
- Thick thorns
- Cuts can be infected with the fungal disease called Rose thorn disease -

Skin protection

- Gloves
- Long sleeves and long pants
- Boots or shoes that cover feet completely





Burning or Stinging Plants

Stinging nettle

Giant hogweed

Poison oak

Stinging Nettle

Identification

- Height: 3-7 feet
- Leaves: fine-toothed, tapered
- Straight, single stems

Skin protection

- Gloves
- Long sleeves and long pants



Poison oak

Identification

- Pacific poison oak can grow either as a shrub or a vine
- Leaflets have hairs on both sides
- Contains urushiol which causes an allergic reaction and rash and
- Affects people, but not animals

Disposable skin protection

- Full-body coverage: Tyvek Suits
- Gloves, Boots, Headgear or hood

Leaves of three, let it be!



Giant Hogweed

Identification

- Size – 10 to 15 feet when in flower; hollow stems, 2-4 inches diameter
- Dark reddish-purple raised spots and stiff bristle-like hairs
- Sharply incised compound leaves up to 5 feet wide

Skin protection

- Full-body coverage: Tyvek Suits
- Gloves, Boots, Headgear





Poisonous plants

Poison Hemlock

Bitter nightshade

English holly

Poison Hemlock

Identification

- Usually 3-7 feet tall, but can reach 8 feet
- Leaves: fine-toothed, tapered

Effects

- All parts of the plant are poisonous; dead canes remain toxic for up to three years
- Do not burn this plant!

Disposable skin protection and avoid possible ingestion

- Ingestion is the primary danger, but it is also toxic to the skin and respiratory system
- Full-body coverage: Tyvek Suits with hoods and foot covers



Bittersweet nightshade

Identification

- Slender perennial vine or semi-woody shrub
- Purple star-shaped flowers and red egg-shaped berries
- Spreads by seed and stem and root fragments
- Has unpleasant smell which repels some animals

Effects

- Toxic to people, pets and livestock from solanine and dulcamarine toxins.
- Eating any part of the plant is dangerous
- Touching the plant may be harmful if one has cuts or other wounds

Skin protection and avoid ingestion

- gloves, long sleeves and long pants



English Holly

Identification

- Large, dense evergreen tree/shrub
- 15-50 feet tall and 15 feet wide or more
- Leaves are thick, glossy, and wavy, 1-3 inches long
- Leaves usually have sharp, stout spines along edges

Effects

- Berries are toxic to humans when ingested

Ingestion

- Do not eat around berries



PPE for all
prickly,
stinging or
poisonous or
plants

Gloves for specific situations and exposure risk

Long sleeve woven shirts with elbow padding

Long pants with double panel knees

Avoid seams or open-weave clothing

Combine rain gear and protection

Goggles and face shields

Steel-toed boots

Face shields

Created from top quality materials such as Polycarbonate, Lexan, and Propionate

Should be hard-coated to protect against abrasions and chemicals.

Also available is a gold-coated face shield for high-heat conditions.

These face shields also safeguard your eyes from Ultraviolet (UV) light, and the green shades also block some Infrared (IR) light, working in direct sunlight.



Thorn resistant materials

- 100% synthetic suede
- Suede
- Goatskin leather

- Padded or double panel for palms or knees
- Reinforced finger pads



Thorn resistant gloves

Cleaning your PPE for use around dangerous plants

See the notebook for detailed information

Review this webpage from the National Institute for Occupational Safety and Health (NIOSH)

<https://www.cdc.gov/niosh/topics/plants/default.html>

Questions?

