

#### WHAT IS IPM?

Integrated pest management (IPM) is a multi-step approach to controlling "pests" and weeds. The goal is to replace or reduce the use of pesticides, including insecticides and herbicides, with natural methods whenever possible.

#### Steps:

# 1) First, OBSERVE the problem for 1-2 months and IDENTIFY what is causing the problem.

<u>IF</u> the problem is a plant that you think may be a problematic weed, <u>THEN</u> use local resources to identify the plant:

https://emswcd.org/on-your-land/weeds/weeds-to-know/

https://weedwise.conservationdistrict.org/weeds

https://www.swcd.net/invasive-species/weed-id-and-control-2/

<u>IF</u> the problem is an insect, <u>THEN</u> use local resources to identify the insect and confirm whether it's *beneficial* or *harmful*:

http://ipm.ucanr.edu/QT/beneficialpredatorscard.html

http://ipm.ucanr.edu/PMG/menu.invertebrate.html

https://extension.oregonstate.edu/mg/have-gardening-question-ask-master-gardener OR https://extension.wsu.edu/king/gardening/mg/

We have many local beneficial insects.

Just because they're not known to you doesn't mean they're "bad."





**Convergent lady beetle adults** (left) and most reddish lady beetle species prefer aphids. Their **larvae** (right) prefer aphids but sometimes eat whiteflies and other soft-bodied insects.

#### 2) Next, EVALUATE whether you need to take action or not.

- IF the problem has been identified as a harmful weed, THEN it's best to take action.
- <u>IF</u> the problem has been identified as a *harmful* insect, <u>THEN</u> it's best to *take action*.
- <u>IF</u> the plant or insect has been identified as *beneficial or "neutral*," <u>THEN</u> it's best to *create a healthy and balanced ecosystem* that promotes healthy plants without removing the beneficial insects.

### 3) When action is needed, SELECT the most natural solution first, such as:

- Hand pulling weeds.
- Densely planting native plants so that taller plants provide shade to smaller ones.
   Native plants know how to work together to create healthy biomes in the soil.
- Applying healthy fallen leaves or mulch around plants. This helps prevent them from drying out and becoming stressed, which makes them vulnerable to pests.
- Using the jet setting on a water spray nozzle to knock aphids and other pests off of plants.
- Cleaning up any diseased leaves to reduce its ability to spread.

# 4) Finally, continue these methods for 1-2 years and MONITOR the problem. It can take time for ecosystems to return to balance.

If the problem persists, then consider choosing the least hazardous product available.

- Consult with local resources to determine hazard and toxicity levels.
  - Grow Smart, Grow Safe: www.growsmartgrowsafe.org
- Make sure to apply any products according to the instructions provided. If not applied properly, or if applied over a large area, many pesticides /herbicides /insecticides can be very harmful to people, pets, and wildlife.

### Benefits of using IPM:

Healthier outdoor spaces for people and pets

Healthier rivers and streams

Healthier habitats for fish and wildlife