# WATER WISE WEDNESDAY WORKSHOPS

4/16 - Environmentally Friendly Ways to Manage Pests



### But first, a Moment for Backflow!

Public Service Announcement from the Water Department

### **IF SO, MAKE SURE** YOU HAVE ONE **DO YOU OF THESE! HAVE ONE OF THESE?** A NO Irrigation Backflow Preventers are

ŠPOKANE

required by the State of Washington

to safeguard our drinking water.

SAFE WATER'S THE GOAL, BACKFLOW CONTROL!





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## SAFE WATER'S THE GOAL, BACKFLOW CONTROL!

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**For More Info Visit** the Cross Connection Page on the City of **Spokane** Website







### Plant Health Care & Integrated Pest Management

#### By Kris Moberg-Hendron (she/her) 2025

WSU Spokane County Extension Master Gardener Program



WSU Extension programs and employment are available to all without discrimination. Evidence of noncompliance may be reported through your local Extension office.



### WASHINGTON STATE UNIVERSITY **EXTENSION**

#### WSU Extension Master Gardener Mission



Engaging university-trained volunteers to empower and sustain diverse communities with relevant, unbiased, research-based horticulture and environmental stewardship education.



## **Clean Water**

Promotes integrated pest management to minimize polluted runoff.

- Health of people, wildlife and ecosystems
- We all have a role to play
- Sustainable landscapes using IPM strategies





### **Plant Health Care System**

Healthy plants prevent pest issues

*Identify* plants in landscape Learn about plants

- \* Cultural needs
- \* Potential pests
- \* Environmental conditions





### Plant Health Care System

Study local ecosystem over time

- \* Temperature
- \* Sun exposure
- \* Prevailing wind
- \* Precipitation
- \* Soil types
- \* Drainage



### **RIGHT PLANT, RIGHT PLACE**

**BEFORE** Purchasing or Planting Anything: Consider all traits & requirements:

- \* Cold hardiness
- \* Light requirements
- \* Soil requirements
- \* Water requirements
- \* Mature size
- \* Proper installation
- \* Gardener time & energy





### INTEGRATED PEST MANAGEMENT

#### Goal:

Long-term prevention of pests or damage through ecosystem management



### **IPM PROGRAMS**



#### **Major Strategy Components**

- 1. Pest ID
- 2. Monitor & assess:

numbers & damage

- 3. Guidelines: is action needed?
- 4. Prevent problems
- 5. Combine management tools:

cultural, physical,

biological, chemical

6. Evaluate & record







Organism damages or interferes with desirable plants

- \* Cause physical damage
- \* Transmit disease
- \* Nuisance

#### Can be:

- \* Plant
- \* Vertebrate
- \* Invertebrate
- \* Nematode
- \* Pathogen
- \* Unwanted organism (ecosystem harm)



### **MONITOR & ASSESS**





Monitor: Check fields, landscape, forest, buildings

- Identify & Record:
  - \* Which pests present
  - \* How many
  - \* Damage caused

#### Assess:

- \* Pest-specific information
- \* Pest biology
- \* Environmental factors

YOU decide: Tolerate or Act



### **PEST CONTROL**



### TIMING is essential

- Biological
- Cultural
- Mechanical / physical
- Chemical





Main Types



- \* Conservation protect beneficials
- \* Augmentation enhance beneficials
- \* Classical import natural enemies

#### Use *natural enemies* to control

- \* Predators
- \* Parasites
- \* Pathogens
- \* Competitors







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#### Practices reduce **NOT** eliminate:

#### \* Pest Establishment

#### \* Reproduction

#### \* Dispersal

#### \* Survival





### MECHANICAL & PHYSICAL CONTROLS

- \* Most effective early in season
- \* Remove & kill pest directly
- \* Make environment unsuitable





### **CHEMICAL CONTROL**



#### **Pest No More** Herbicide

Controls grasses and grassy weeds (crabgrass, foxtail, nutsedge, and others) in landscape areas

Monosodium acid methanearsonate	
2,4-D, dimethylamine salt	
Mecoprop-p, dimethylamine salt	
Dicamba, dimethylamine salt	

Other ingredients. 84.62% Total 100.00%

Pesticide Company, Inc.

125 Pest Control Rd. Lincoln, NE 68583 (402) 555-5555 MERGENCY: 800-555-1234





Photo: Nebraska Extension

#### Use of pesticides

- \* Pest specific most selective & effective
- \* Safest for other organisms, air, soil,

water

- \* Well-timed
- \* Combine with other approaches = more effective, long-term control
- \* Select & apply method minimize human & environmental harm



### CHEMICAL CONTROL



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Active Ingredients:	
Monosodium acid methanearsonate	
2,4-D, dimethylamine salt	
Mecoprop-p, dimethylamine salt	
Dicamba, dimethylamine salt	

Other ingredients.	84.629
	Total 100.00%

Pesticide Company, Inc.

125 Pest Control Rd. Lincoln, NE 60583 (402) 555-5555 MERGENCY: 800-555-1234





Photo: Nebraska Extension

**Important Label Warnings** 



Routine use:

- \* pest resurgence
- \* secondary pest explosion
- \* pest resistance
- \* continual research!

### **INTEGRATED PEST MANAGEMENT FOR** HOMEOWNERS



Education with an emphasis on personal safety, environmental protection, and effective integrated pest management.

Integrated Pest Management (pdf) https://s3.wp.wsu.edu/uploads/sites/2076/2024/07/C195-IPM.pdf

Gardening Web Resources (HortSense & PestSense) https://hortsense.cahnrs.wsu.edu/ https://pestsense.cahnrs.wsu.edu/Home/PestsenseHome.aspx https://growsmartgrowsafe.org/





- \* Clean water is everyone's responsibility
- \* Healthy plants avoid pest issues
- \* Eradication new invaders only
- \*. PHC & IPM practices help keep water clean
- \* Healthier people, wildlife, and ecosystems
- \* IPM leads to a sustainable landscape







## Thank you for attending today's educational event!

Help us better serve your needs. Please tell us how we did by taking this short survey.



https://bit.ly/ClnWater



## Questions?

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