

# Integrated Pest Management

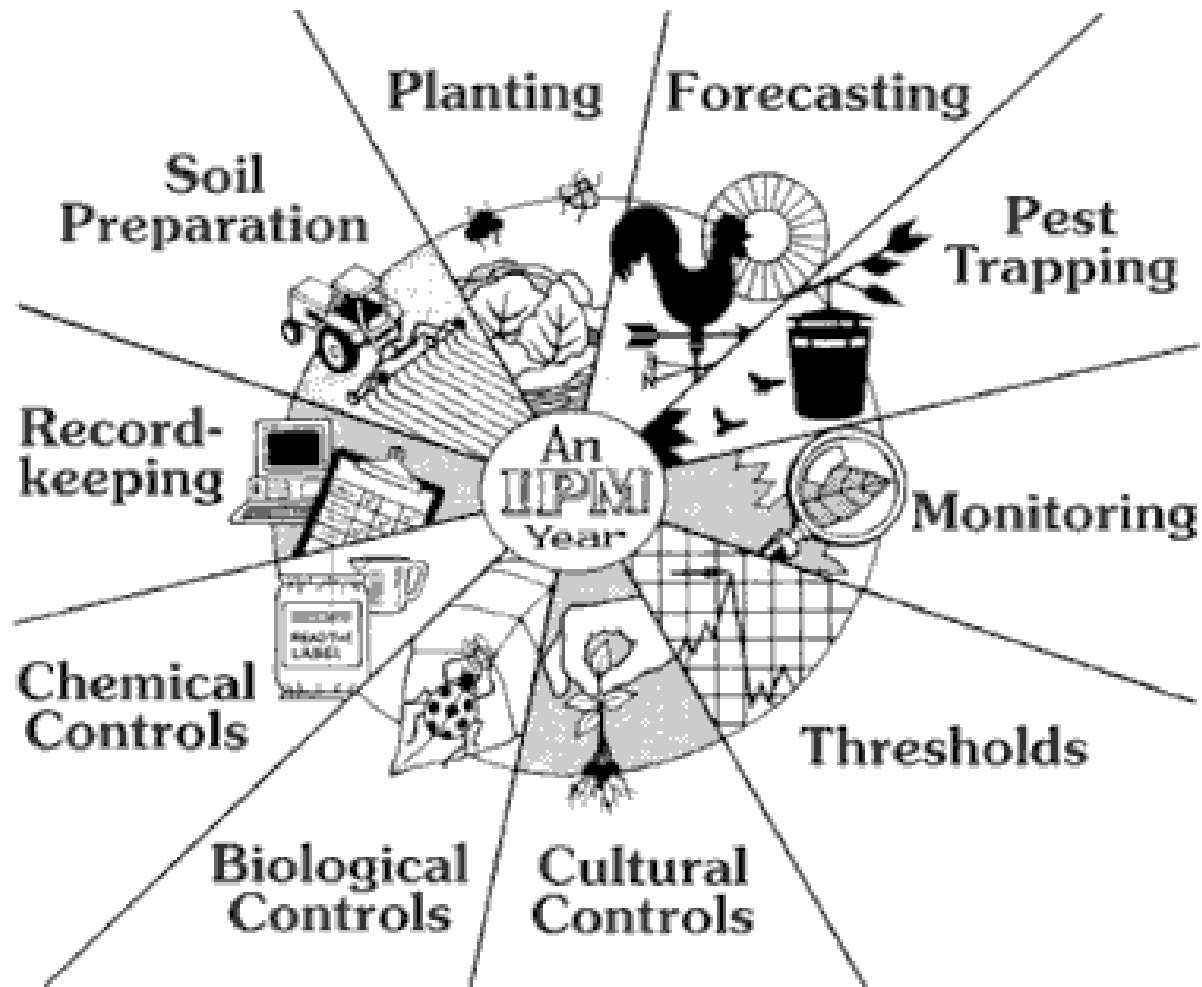
- *Addressing public health risks*
- *Protecting the environment*
- *Creating consistency in statute*

Presentation to a joint meeting of the House Committee on Environment and Water and the Senate Committee on Environment and Natural Resources 5/25/2010

# Children are especially vulnerable



# What is IPM?



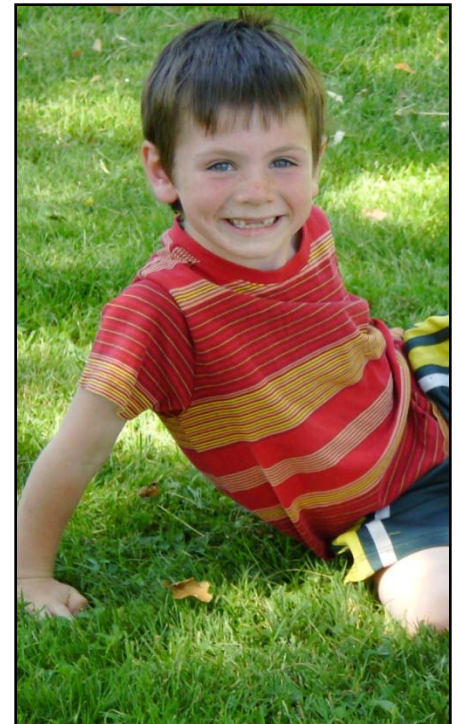
*Courtesy of IPM Institute NA and Cornell University*

# IPM in 2009

## **SB 637 (2009) Requires adoption of integrated pest management plans for schools. Defines IPM as:**

The long-term prevention or suppression of pest problems through economically sound measures that:

1. Protect the health and safety of people;
2. Protect the integrity of buildings and grounds;
3. Protect local ecosystem health;
4. Excludes routine applications for aesthetic purposes;
5. Allows low-impact pesticides if non-chemical measures ineffective;
6. Requires public notification through onsite posting.



# Oregon IPM in the 1990s

**EXISTING DEFINITIONS - ORS 634.650 - 634.665:**

**Goal:**

**Align or “harmonize” the older State IPM Statute with SB 637 and HB 2212.**



- Almost twenty years old out of date;
- Update to reflect the latest science;
- Based on the latest medical evidence of human harm, especially children;
- Establish a hierarchy of management options protective of environmental health.

# Original Oregon IPM Statute

## 634.655 Policy

*The Legislative Assembly declares that it is the policy of the State of Oregon to require all state agencies that have pest control responsibilities to follow the principles of integrated pest management.*

# Original Oregon IPM Statute

## 634.660: Interagency Integrated Pest Management Committee.

- **Each of the following state agencies or services shall implement integrated pest management practices when carrying out the agency's duties related to pest control:**
- (1) State Department of Agriculture, including the control of noxious weeds.
- (2) State Department of Fish and Wildlife.
- (3) Department of Transportation.
- (4) State Parks and Recreation Department.
- (5) State Forestry Department.
- (6) Department of Corrections.
- (7) Oregon Department of Administrative Services.
- (8) The Department of State Lands.
- (9) Each Oregon institution of higher education.

# Original Oregon IPM Statute

## **634.665 Agencies to provide personnel training; appointment of coordinators; duties.**

Each state agency or institution listed under ORS 634.660

- (1) ... shall provide integrated pest management training for employees responsible for pest management.
- (2) ... shall designate an integrated pest management Coordinator ... [to] manage the integrated pest management program of the agency or institution.



# Oregon IPM dropped in the 2000's

**ORS 413 (2001)**

## **Abolished the Interagency Integrated Pest Management Committee**

**Section 8** dissolved Interagency Integrated Pest Management Committee.

**Section 11** amended ORS 634.665, on IPM requirements, training programs and IPM coordinators for state agencies

**Section 12** repealed ORS 634.670 which defined IPM committee

# Leadership in Toxics Reduction

**Build on existing programs that already make the linkages:**

- 1. Pesticide Stewardship Partnership (DEQ, ODA, OSU)**
- 2. Integrated Plant Protection Center (OSU)**
- 3. SB 737 - Priority Persistent Pollutant List For Surface Waters**
- 4. Oregon DEQ Water Quality Standards Review (fish consumption standards)**
- 5. ODOT “Herbicides as a Last Resort” pilot projects in Lane and Lincoln counties**

# What are the advantages of IPM?

## IPM is less toxic than conventional pest control methods

*“Expanding IPM programs ... would reduce human health risks posed by pests and the tactics used to manage them, and also reduce or mitigate the adverse environmental effects of pest management practices.”*

**-- USDA National Roadmap for Integrated Pest Management, 5/2004**

# Something to consider:

*A 2008 report by the US Geological Survey*

- *Detected 63 different pesticides in Oregon's waters*
- *Levels exceeded federal benchmarks for aquatic species*

\* U.S. GEOLOGICAL SURVEY, *Scientific Investigations Report 2008–5027, Pesticide Occurrence and Distribution in the Lower Clackamas River Basin, Oregon, 2000–2005*, By Kurt D. Carpenter, Steven Sobieszczyk, Andrew J. Arnsberg, and Frank A. Rinella

# NOAA and USGS Data



*“ . . . found that salmon died when exposed to combinations of pesticides that were not deadly when tested in individual trials.”*

Important implications for the recovery of threatened salmon  
. . . and people.

# Costs to the State:

*Oregon Watershed Enhancement Board alone spent **\$63.7 million** on restoration projects (2007-2008).*

*Reducing pesticide use through IPM lessens the State's own impact on Oregon's fish and rivers.*

*-- Oregon Plan for Salmon and Watersheds 2005-2007 Biennial Report,  
Oregon Watershed Enhancement Board*

# Costs to the State:

Average monthly costs to implement Washington IPM Statute

- 1998            **\$3,996**
- 1999            **\$3,616**
- 2000\*          **\$6,719.62**
- 2001            **\$4,087 (difference of \$91)**

-- Washington State Interagency Integrated Pest Management 2001 Legislative Report, p. 15

\* IPM had initial start-up cost spike for infrastructure improvements; then costs level out because of reduced labor and chemical needs.

RESULT: *“long term paybacks”*

# Costs of IPM

## IPM is cost effective at controlling pests

*“Traditional methods of spraying pesticides seldom modify the conditions that allow a pest to thrive. Compared to repetitive spray programs, the IPM approach may be expensive in the short run, but may ultimately be less expensive over time.*

*IPM is the responsible way to approach more lasting pest management solutions.” \**

\*Washington State Parks and Recreation & Washington State Dept. of Agriculture, 2001 Legislative Report



# IPM Success Stories:

## **17.15.005 – State of Washington Legislation (1997)**

*The legislature declares that it is the policy of the state of Washington to require all state agencies that have pest control responsibilities to follow the principles of integrated pest management.*

## **WSDOT 2010 Pavement Edge Study**

70% reduction in herbicides compared to 1990's annual usage.

# IPM Success Stories:

**Albert Greene, Ph.D.**

**National IPM Coordinator for the U.S. General Services Administration**

“IPM can be pragmatic, economical and effective on a massive scale.”  
Dr. Greene has implemented IPM in approximately 7,000 federal buildings in the U.S. capital area without spraying toxic insecticides.

**The University of Maryland & Montgomery Village, Maryland**

Cut city pest control costs by 22% by replacing cover sprays with a program of soil improvement, pruning, and monitoring.

**City of San Rafael, California**

Saved \$1400 by monitoring trees for elm leaf beetles instead of employing a routine overhead spray.

*“... environmental contaminants, including pesticides, are an important cause of learning and developmental disabilities.”*

- 2008 *Scientific Consensus Statement on Environmental Agents Associated with Neurodevelopmental Disorders*

