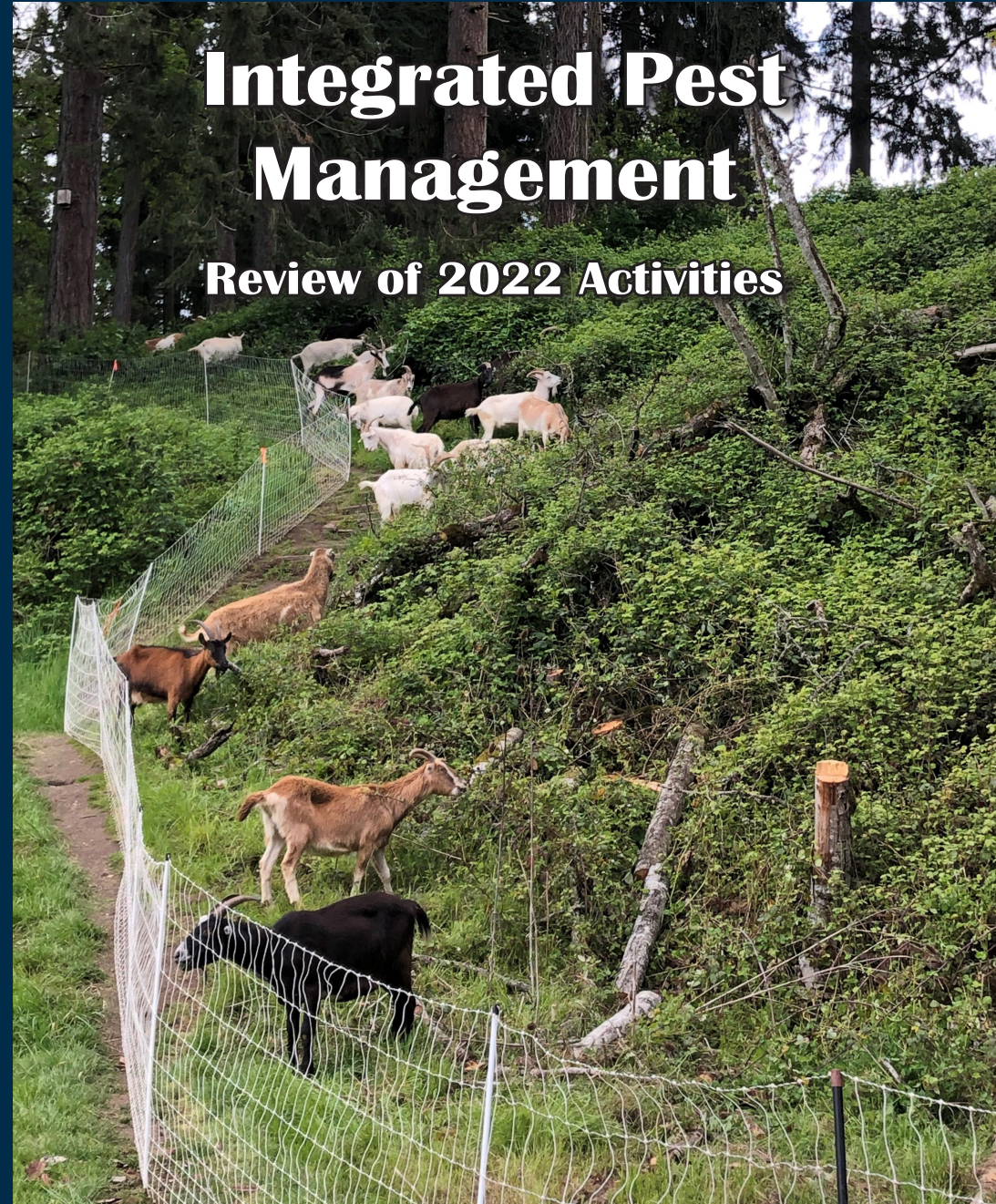


## Integrated Pest Management

### Review of 2022 Activities



### Identifying and Reporting EAB

Mature Emerald Ash Borer emerge from mid-May through late-June. Adult females lay eggs on both stressed and healthy ash trees. In 1-2 weeks, the eggs hatch and tiny larvae bore through the bark and burrow into the cambium layer. The larvae feed for several months, leaving the tree unable to transport water and nutrients.

EAB can take a few years to kill a tree. Infested trees that appear healthy may decline rapidly as the insect population grows.

The City encourages residents to take an active role in identifying and observing residential ash trees. Suspected EAB sightings and/or infestation can be reported to the Oregon Invasive Species Council hotline at [oregoninvasiveshotline.org](https://oregoninvasiveshotline.org).

The Oregon Department of Forestry's fact sheet includes signs and symptoms of EAB, including D-shaped exit holes in tree bark (below, left) and serpentine patterns underneath the bark (below, right).

Learn more about observing and identifying EAB at [bit.ly/EABalert](https://bit.ly/EABalert)



### For More Information

The development of the City's Integrated Pest Management program is a collaboration among Public Works, Natural Resources and Parks Maintenance staff.

This report, and additional information about the City's Integrated Pest Management, is available at [ci.wilsonville.or.us/naturalresources](https://ci.wilsonville.or.us/naturalresources)

To receive a copy of this report by mail, call 503-682-4960.



#### Directory

City of Wilsonville Customer Service . . . . .	503-682-1011
Natural Resources . . . . .	503-570-1570
Parks & Recreation . . . . .	503-783-7529
Public Works . . . . .	503-682-4092
City of Wilsonville website . . . . .	<a href="https://ci.wilsonville.or.us">ci.wilsonville.or.us</a>

## Integrated Pest Management (IPM)

The City of Wilsonville recognizes the importance of sound environmental stewardship and is committed to optimizing management practices to protect the people and the environment within and surrounding facilities, parks, and infrastructure maintained by City staff.

Pests can be a troublesome and persistent problem. Choosing the appropriate response requires careful planning and implementation to ensure a successful result. Whether the targeted pest is a plant, insect, or animal, the City's response takes into account public safety, environmental health and available resources.

Integrated Pest Management (IPM) offers a broad-based approach that relies on a combination of common-sense practices. An IPM Plan identifies management areas and key pests of concern and outlines approaches mindful of pest biology and the resources of the responsible organization while minimizing the risk associated with pest management.



## IPM Program Goals

The goals for selecting treatment principles and developing pest management strategies include:

- Preservation of the natural system, including pollinator habitat
- Emphasize practices to minimize risk to human health
- Reduce and eliminate chemical pest control treatments when possible
- Ensure cost-effectiveness in the short and long term
- Evaluate the efficacy of the integrated pest management



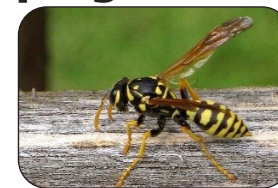
## Identifying Pests & Developing a Plan

Many of the most common pests are familiar to most people. They include gophers, rats, yellow jackets, cockroaches, and plants, such as poison oak and Himalayan blackberry.

Protecting people from human health pests is imperative, particularly in areas where human activity is high.

The IPM Plan relies on the following steps in addressing pests of concern:

- Define areas requiring management
- Maintain vigorous plant health through maintenance practices to optimize pest tolerance
- Identify pests likely to be encountered
- Determine the pest's life cycle and know which life stage to target
- Establish action threshold levels for each pest
- Scout and monitor for the presence of pests
- Implement corrective action when pest populations are observed
- Document scouting and monitoring observations, treatments, and results
- Determine if corrective actions reduced or prevented pest populations



## Emerald Ash Borer

The Arborists are taking proactive aim at a new foe that is destined to substantially alter the world's tree-cape.

Emerald ash borer, or EAB, is a metallic wood-boring beetle that destroys ash trees, and also threatens olive trees and white fringetree. First discovered in the United States in Michigan in 2002, this invasive insect is considered the most destructive forest pest ever encountered.

EAB has killed hundreds of millions of ash trees across the east coast and Midwest over the last 20 years.

The cost of mitigating the past and future destruction of this pest could be in the billions in the United States alone, as there is no effective means of eradicating EAB once it is present.

In 2022, in Forest Grove, EAB was discovered in Oregon for the first time.

The City is taking great care to observe and protect more than 1,100 Ash trees in the short term, while developing longer-term steps informed by the knowledge that infestation and loss is inevitable.



## Mechanical Practice in Action

The City of Wilsonville's Park Maintenance staff continues to implement new and innovative ways to manage invasive species.

### Goats

The City has partnered with WestSide Goat Girl LLC to help manage an acre of invasive plants in Memorial Park. About 25 goats spend almost two weeks in Memorial Park in May, eating Himalayan Blackberries, English Ivy and Holly. The Parks team is pleased to have introduced this innovative method to help control invasive species.



### Steam

Park Maintenance crews have employed a weed steamer to maintain some landscape areas. The steamer heats water to a temperature of 235-250°F, using the saturated steam to kill weeds. The steamer is safe to use around people, animals, soil organisms and waterways.



Before Steamer



After Steamer



## Four Methods of Pest Management



There are four practices used by the City of Wilsonville to control pests. Cultural, mechanical and biological practices are prioritized over the use of chemical treatments.

**1. Cultural practices** are sound agronomic and horticultural practices that optimize plant health and suppress insects, disease and weed growth

**2. Mechanical practices** use a variety of tools and equipment to eliminate pests, suppress their reproductive capacity or block them out.

**3. Biological practices** may use biological control agents to act as predators or parasites of pest species or utilize other beneficial organisms that improve plant health by enhancing soil quality.

**4. Chemical practices** are considered as a last resort when cultural, mechanical and biological options are not effective. The use of chemicals is limited to "low impact" products that provide the greatest level of protection for people and the environment.



## Chemical Use: When Other Methods Fail

Reducing chemical use is an important objective of the City's IPM plan. Chemical controls are only used if other practices are not fully effective or too costly to implement. Any chemicals used are applied in a selective manner that reduces the risk to humans and the environment.

The City of Wilsonville uses the Low Impact Pesticide List provided by Oregon State University for use in the Oregon School IPM program, which includes synthetic and organic options. The list is updated annually and is vetted based on USEPA cancer data and only allows low or very low toxicity products with the signal word of CAUTION.

The City monitors which practices it uses to control pests, including the acreage treated.

While this report illustrates the City's reliance on cultural or mechanical practices in favor of chemical practices, the most recent data demonstrates an uptick in chemical use during the last year.

This result is explained by three factors:

1. New Oregon Department of Agriculture guidance mandated a change to the methodology for tracking acreage in our database.
2. An increase in the number of park acres, total facilities, and lane miles managed by the City.
3. The introduction of new invasive pests that cannot be removed with cultural/mechanical controls, leaving only chemical control methods as the only viable option.



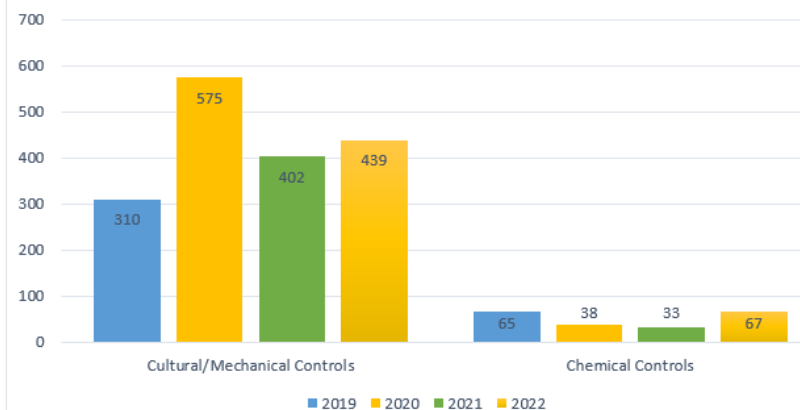
## Early Detection & Rapid Response

Not all pests are invasive but those that are can quickly become a difficult issue for crews to manage. If left unchecked, invasives can rapidly expand their range resulting in control efforts that are expensive, ineffective, or both.

The City employs the principle of Early Detection and Rapid Response (EDRR) to stay ahead of the invasives by ensuring any new invasive establishments are rapidly identified and appropriate early control measures are implemented.



Pest Control Practices - Acres Managed



## Flow: How IPM Plan is Implemented

