

Invasive species impact Oregon's infrastructure, economy, and the natural resources that Oregonians hold dear. Public and private partnerships are essential to strategically tackle invasive species.

The Oregon Invasive Species Council (OISC) acts as a catalyst to provide leadership and support collaborative efforts to protect Oregon from invasive species across the network of its members representing state and public agencies, tribes, scientists, land managers, industry leaders, educators, and members of the public.

BY WORKING TOGETHER TO ADDRESS INVASIVE SPECIES CHALLENGES, WE WILL:



PROTECT OREGON'S NATURAL RESOURCES AND ECONOMY

Invasive species pose a serious statewide threat to Oregon's economy, infrastructure, food and water systems, and environment. They have been known to impact agriculture, forestry, hydropower, water delivery systems, outdoor recreation opportunities, and tourism.



KEEP OREGON'S PEOPLE AND PLACES HEALTHY

Invasive species can jeopardize public health and transform ecosystems, resulting in widespread economic and environmental harm. Out-of-control invasive pests can lead to increased pesticide use and associated concerns affecting people and the environment.



SAVE MONEY THROUGH PREVENTION

Global trade and transportation accelerate the risk of the introduction of new invasive species. By publicizing and blocking pathways of introduction, we can prevent entry and avoid costly containment.



COLLABORATION MAKES INVASIVE SPECIES PREVENTION POSSIBLE

Prevention or eradication of invasive species is possible when there are adequate resources to work across organizations, sectors, and regions to achieve early detection and rapid response. The OISC provides a forum for communication and coordination to advance collaborative efforts such as this:

CONTAMINATED MOSS BALL PRODUCTS

In February 2021, a Petco employee in Seattle, Washington reported suspicions that moss balls being sold as aquarium products were contaminated with an invasive zebra mussel *Dreissena polymorpha*. The report was received through a U.S. Geological Survey national database and notification system. Officials from Washington's Department of Fish and Wildlife and the Washington Invasive Species Council responded quickly, confirming the mussel detection, activating an incident command system, and initiating the Columbia River Basin Interagency Invasive Species Response Plan.

Dreissena mussels have invaded major portions of North America but are not currently found in the Columbia Basin. Preventing invasions is a high priority because these non-native mussels clog and foul waterways, pipes, turbines and more, threatening native fish habitat, recreation, water delivery, and hydropower. The moss ball products they'd been found on had been imported directly from Ukraine, where these mussels are native shellfish.

Within a few days, swift response by a full suite of federal, state, provincial, and partner entities across North America addressed the sale and import of moss-balls. Oregon Invasive Species Council held a special meeting to share information. OISC-member organizations were involved in field-checking retail stores, following up to stop the distribution of imported moss ball products, communicating with other responders, and sharing safe decontamination instructions for infested moss balls and aquarium water that could contain tiny mussels or their larvae.



Moss ball with an invasive zebra mussel (Photo Credit: U.S. Geological Survey).

"The arrival of the zebra mussels through the aquarium trade is a crucial threat to Oregon's economy and environment" - Sam Chan, OSU Sea Grant & OISC Member



COLLABORATION REDUCES THE IMPACTS OF NEW INVASIVE SPECIES

Invasive species infestations have wide-reaching consequences. A rapid response increases efficiency, improves communication, and spreads workloads. The OISC provides a forum for communication and coordination to advance collaborative efforts such as this:

EMERALD ASH BORER IN OREGON

The Emerald Ash Borer (EAB) is a tree-killing beetle that's been present in North America since the mid-1990's. It's killed millions of ash trees and, in Oregon, threatens diverse ornamental ash species that have been widely planted in the urban forests and native Oregon ash that shades and cools many forested wetlands.

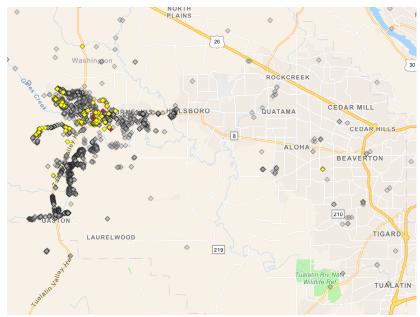
On June 30, 2022, EAB was detected infesting ash saplings and trees in Forest Grove, Oregon. This made Oregon the 36th US state to find EAB. The member agencies of the Oregon Invasive Species Council immediately activated the "Emerald Ash Borer Readiness and Response Plan for Oregon," acknowledged Oregon Department of Agriculture as the lead responder, destroyed infested woody material, and initiated standardized visual surveys and use of the Oregon invasives hotline for communicating additional observations. The infestation is still only known to occur in the Forest Grove area. Movement of firewood, horticultural ash saplings, or hobby wood could all have been pathways for its introduction.

An EAB Task Force, with seven subcommittees, continues to meet monthly to share updates; plan strategically; develop outreach information such as extension bulletins, fact sheets, "look-alike" guides, and a monthly news bulletin; and implement and demonstrate techniques for inventorying ash populations, slowing ash mortality, and safely treating infested woody material. OISC provides administrative support to the EAB Task Force and uses its website as an EAB response resource.

In 2022 Oregon's Invasive Species Hotline received 28 EAB reports & 7 were confirmed to be Emerald Ash Borer.



Ash trees at Joseph Gale Elementary School, the location where EAB was first detected in Forest Grove (Photo Credit: Christine Buhl, ODF).



Need image caption. Map Credit: ODA.



OISC MEMBER SPOTLIGHT: APPLEGATE PARTNERSHIP AND WATERSHED COUNCIL

Nathan Gehres, Habitat Restoration Project Manager for the Applegate Partnership and Watershed Council, sits on the OISC as the appointed member representing an organization or association with the purpose of advocating environmental stewardship.

Located in southwestern Oregon and dipping into northern California, the Applegate watershed encompasses almost 500,000 acres, extends into three counties - Jackson, Josephine, and Siskiyou - and is home to over 12,000 people. 70% of the watershed is managed as public lands by the U.S. Forest Service and the Bureau of Land Management.

With grant funding from state and federal sources, the Applegate Partnership and Watershed Council (APWC) implemented several invasive species projects in 2021-2022. APWC partners with students from the Ruch Outdoor School, high school students from the Innovation Academy, and local volunteers to help remove invasive plants at locations like the Provolt Recreation Site and Cantrall Buckley County Park.

- Approximately 30 acres of Woad Dyer's Woad removed annually
- Over 5 acres of Himalayan Blackberry removed from riparian zones in 2021 which continue to be treated
- Hundreds of Poison Hemlock plants have been removed each year
- Over 2 acres of English Ivy and Vinca were hand-pulled
- 48 acres of continuous removal of Himalayan Blackberry, English Ivy, Poison Hemlock, and Vinca
- 1 to 2 acres (30 feed sacks worth) of Star Thistle hand pulled each year.





Removal of Garlic Mustard along 2.1 miles of a BLM managed section of Cheney Creek, near Wilderville, OR. Approximately 10 acres were treated with the assistance of a BLM botany crew and local herbicide applicator. After seed set, 3 truckloads of bagged seed heads were removed from the site.



PUTTING OREGON'S STATEWIDE INVASIVE SPECIES STRATEGIC PLAN TO ACTION

While there is no central authority for the management of invasive species, there are many agencies & organizations actively working to protect Oregon from invasive species. Below is a snapshot of the impressive work carried out by on-the-ground invasive species managers.

OREGON'S INVASIVE SPECIES DIGITAL INFORMATION HUB

In 2017, the OISC identified the need to move away from the static "100 Worst Invaders" list and provide a dynamic, up-to-date database of emerging, or potential invasive threats to the State of Oregon. In 2021, the OISC initiated <u>Oregon's Invasive Species Digital Information HUB (HUB)</u>. The HUB officially launched in 2022. The HUB is a searchable tool that compiles available information for aggressive non-native species that pose a threat to Oregon's environment, economy, or public health. With more than 30 information fields per species, the HUB is the most rigorous available resource documenting invasive species of concern in Oregon.

In 2022, the OISC expanded the HUB to include even more species that threaten Oregon's economy, ecosystems, working landscapes, infrastructure, and natural heritage. Additional species profiles are being published in a phased approach. Transparency and collaboration are two key tenets of the HUB efforts, as can be seen in the range of information and opportunities for participation in the review process available to HUB visitors.

The HUB highlights Alert Species (species of pressing concern due to a recent event, issue, or detection) as well as Early Detection Species, allowing for the ability to upgrade or downgrade species in response to real-time events and threats.

PROTECTING OREGON FROM INVASIVE SPECIES: BY THE NUMBERS

As part of an integrated invasive species management plan, 7,000 acres were inventoried for invasive species in the Hart Mountain National Antelope Refuge and Sheldon National Wildlife Refuge

(U.S. Fish & Wildlife Service)

1,035 invasive five-spine green crab

removed from the Coos estuary. 5.5 acres managed for removal of invasive plants, including gorse, jubata grass, Scotch broom, biddy-biddy, purple loosestrife, ivy, and cotoneaster. (South Slough Estuarine Research Reserve)

After **3 years** of experimenting with eradication methods, a large population of Rusty Crayfish found in a pond near a headwater stream of the Malheur River basin is almost eliminated, and Rusty Crayfish have not been observed in nearby streams. (Oregon Department of Fish & Wildlife)

34,000 boats inspected

At 6 stations located at entry points around the state over two years. Highly invasive quagga or zebra mussels were intercepted on 18 of those watercraft, and a total of 553 watercraft were decontaminated to keep mussels and other bio-fouling organisms out of our waters.

(Oregon Department of Fish & Wildlife and Oregon State Marine Board)

Oregon's Invasive Species Hotline received

1,584 reports

including 242 regulated species reports.

(Portland State University, Oregon Invasive Species Council, Western Invasives Network, and many expert invasive species managers responding to reports)

Implemented or continued 63 Early Detection Rapid Response projects for 29 A-listed weed species. (Oregon Department of Agriculture)



CELEBRATING 20 YEARS OF THE OREGON INVASIVE SPECIES COUNCIL

In 1999, President Clinton signed Executive Order 13112 on invasive species. The order created a National Invasive Species Council and an advisory council which would "recommend plans and actions at local, tribal, State, regional, and ecosystem-based levels to achieve the goals and objectives of the management plan." Dan Hilburn (Oregon Department of Agriculture, retired) read this and thought "Somebody should do that in Oregon."

"Eventually I called Dr. Mark Systma, Oregon's aquatic nuisance species guru at PSU. He'd also read the executive order and was thinking along the same lines. We pulled in Paul Heimowitz from OSU Sea Grant and Larry Cooper from Oregon Dept. of Fish and Wildlife and together drafted a legislative concept that would create an Invasive Species Council in Oregon." - Dan Hilburn, ODA

The OISC was created by the 2001 Legislature for a "coordinated and comprehensive effort" to prevent the introduction and spread of invasive species. The OISC started small with the four founding members from state agencies that deal with invasive species, seven appointed at-large members representing "the geographic, cultural and economic diversity of the state", and no coordinator. The first meeting of the OISC was held in Salem in 2002.

One of the earliest accomplishments of the OISC, the 1866-INVADER reporting hotline (and the subsequent online reporting portal), remains one of the most useful tools the OISC has at its disposal. The hotline facilitated reporting, making it easy to connect people who noticed suspicious animals and plants, and contributing vital early detection information to the experts best able to stop the spread of invasives.

"An Oregon Dept. of Agriculture employee, Jim LaBonte, suggested we apply for a phone number that would spell INVADER. That is what we did, and the Oregon Invasive Species Hotline was born. Over the years we've received some important tips and handled some crazy calls besides." - Dan Hilburn, ODA

The OISC hired its first coordinator in 2007. This next phase of the OISC included expanding membership, providing support for the coordinator, establishing an Emergency Control Account, evaluating council activities and efforts, and the development of the 10-year Oregon Statewide Strategic Plan for Invasive Species 2017-2027. In 2008, the ex officio voting members were expanded to include the Oregon State Marine Board, Oregon Department of Environmental Quality, and Oregon Department of Forestry bringing the membership total to seven permanent members and 10 appointed members.

Awareness of invasive species by the general public took off in 2008, in part thanks to the release of <u>The Silent Invasion</u>, an award-winning documentary produced by Oregon Public Broadcasting, in partnership with SOLV, The Nature Conservancy, and Oregon Sea Grant.

The OISC expanded again in 2019 and council membership now stands at eight ex officio voting members, ten ex officio non-voting members (representing state policymakers and advisors, and federal agencies), and ten appointed members (six representing different geographic regions of the state, one Tribal representative, one member of the general public, one member representing an environmental stewardship entity, and one representing private industry).

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INVASIVE SPECIES, OREGON, & THE OISC: A TIMELINE

2001

2007

Executive Order 13122

2000

OSU hosts an Invasive Species Colloquium

Oregon Aquatic Nuisance Species Management Plan (signed by Governor Kitzhaber)

2002

OISC established (ORS 570.750) & 1-866-INVADER hotline

Quagga Mussels discovered west of the Rockies & OISC hires its first coordinator

2008

The Silent Invasion airs on OPB, OISC ex officio members expanded from 4 to 7 agencies & OISC

hosts first comprehensive Invasive Species Summit

Biofouled debris from Japan tsunami washes up on

OISC Invasive Species Emergency Control Account created with one-time funding (HB2020)

2012

2009

Oregon Dreissenid Rapid Response Plan (ODFW, OSMB, PSU) & Emerald Ash Borer discovered west of the Rockies

2013

the Oregon Coast

2014

Flowering Rush found at McNary Dam

OISC summit Protecting Oregon from Invasive Species: The Path Forward

2017

Oregon Statewide Strategic Plan for Invasive Species 2017-2027

Emerald Ash Borer Readiness and Rapid Response Plan (ODA, ODF)

2018

2016

2019

OISC membership redefined to include 8 ex officio agencies and 10 defined seats for appointed members

Emerald Ash Borer found in Forest Grove & Emerald Ash Borer Task Force formed

2022

DRAFT

SC 2021-22 ACTIVITIES

The COVID-19 Pandemic and historic wildfire events continued to impact operations throughout Oregon in 2021 & 2022, but the resilience of our dedicated members and supporters never dimmed. In spite of these continuing hurdles, we continued to address pressing invasive species issues. A snapshot of 2021-22 OISC activities is listed below:

OUTREACH

- The <u>Invasive Species Threats & Opportunities:</u>
 A <u>Primer for Oregon Policymakers</u> was developed and released in early 2021 through a collaborative effort of the members of the OISC to provide a briefing of selected serious threats from invasive species and opportunities to address these issues that span jurisdictions.
- In 2022, the OISC began hosting an Emerald Ash Borer page, a one-stop location that compiled federal, state, and local EAB information and provided guidance on EAB identification and reporting.

PLANNING

Coordinated the following cross-agency Committees & Working Groups in 2021 and 2022:

- Communications
- Governance
- Legislative
- Education and Outreach

DETECTION

- Maintained Oregon's Invasive Species Hotlines, including the Squeal on Pigs Hotline serving OR, WA & ID.
- The OISC Invasion hotline was crucial in being available to accept EAB reports from day one of the rapid response.

EDUCATION

Collaborated with students from Portland State University on <u>invasive species projects</u> that involved researching and visualizing the impacts of invasive species on people and places in Oregon. Examples include:

- Climate Change Effects on Invasives for the OISC Info HUB
- OISC Info HUB: Workflow for the Addition or Removal of Species
- Nestucca Bay National Wildlife Refuge Invasive Velvet Grass: Management Plan
- Ecological Risk Assessment for Non-native Hognose Snake in Oregon for the ODFW
- Outreach Brochure: Aquatic Invasives Identification and Prevention Guide for the Columbia Slough Watershed Council
- Common Names for Invasive Species Project for the Oregon Sea Grant
- Framework for the Ecological Risk Assessment of Green Crab (Carcinus maenas) in Oregon for ODFW
- Investigative Report on Spongy Moth Eradication for Customs and Border Protection



ADD 2021 & 2022 MEMBER NAMES & LOGOS?