



December 14, 2022
8:30AM-12:00PM
[Microsoft Teams](#)

AGENDA

- 8:30AM CALL TO ORDER**
Rick Boatner, Chair
- 8:35AM ROLL CALL**
- 8:40AM READING & APPROVAL OF MINUTES OF JUNE & OCTOBER 2022 MEETINGS – page 3**
Rick Boatner, Chair
- 8:45AM REPORTS OF OFFICERS**
- Financial Report & Budget Planning – page 18**
Rick Boatner, Chair
- Coordinator Update**
Rick Boatner, Chair
- 9:15AM REPORTS OF COMMITTEES**
- Ex-Officio Voting Members Special Meeting – December 8, 2022**
Rick Boatner, Chair
- Welcome New 2023 Appointed Members – page 21
 - Leadership Team Selected for 2023
- Governance Committee**
Christine Moffitt, PhD, Chair
- Bylaws Revisions – page 42
- Communications Committee**
Karen Ripley, Chair
- Awards Subcommittee
 - Nominations – page 47

Legislative Committee

Peter Kenagy, Chair

- Legislative & Governor's Office Update/2023 Session Preview – Senator Lew Frederick; Representative David Brock Smith; Morgan Gratz-Weiser, Office of Governor Kate Brown
- Legislative Primer & Biennial Report to Legislature

Education & Outreach Committee

Sam Chan, PhD, Chair

Digital Information Hub Working Group

Alex Staunch

Emerald Ash Borer Task Force

Chris Benemann; Wyatt Williams, PhD

11:40AM UNFINISHED BUSINESS - None

11:40AM NEW BUSINESS

2023 Meeting Planning

Rick Boatner, Chair

11:55AM ANNOUNCEMENTS & PUBLIC COMMENT

Rick Boatner, Chair

12:00PM ADJOURNMENT & PASSING OF THE GAVEL

Rick Boatner, Chair

Glenn Dolphin, Incoming Chair



June 14, 2022
Southwestern Oregon Community College, Coos Bay

YouTube Video Recording
<https://youtu.be/cGnJQfChwZo>

Draft Minutes

Attendance

Voting Members

Present	Name	Statutory Position
X	Christine Moffitt, PhD, Acting Chair	Coos, Curry, Douglas, Jackson or Josephine Counties (appointed)
X	Troy Abercrombie	State Department of Agriculture (ex-officio)
X	Catherine de Rivera, PhD	Center for Lakes & Reservoirs (ex-officio)
X	Rick Boatner	State Department of Fish & Wildlife (ex-officio)
	Sam Chan, PhD	Sea Grant College Program (ex-officio)
X	Wyatt Williams, PhD	State Department of Forestry (ex-officio)
X	Josh Emerson	State Department of Environmental Quality (ex-officio)
	Glenn Dolphin	State Marine Board (ex-officio)
X	Noel Bacheller	State Parks & Recreation Department (ex-officio)
X	Eugene Wier, Freshwater Trust	Environmental Stewardship Organization/Association (ex-officio)
X	Katie Murray, Oregonians for Food & Shelter	Private Industry Organization/Association (appointed)
	Cheryl Shippentower	Native American/Indian Tribe (appointed)
X	Brian Clapp, Union County	Gilliam, Hood River, Jefferson, Morrow, Sherman, Umatilla, Union, Wallowa, Wasco or Wheeler Counties (appointed)

	Tim Newton	Baker, Crook, Deschutes, Grant, Harney, Klamath, Lake or Malheur Counties (appointed)
X	Chuck Fisk	Benton, Lane, Linn, Marion or Polk Counties (appointed)
X	Alex Staunch	Clackamas, Multnomah, Washington or Yamhill Counties (appointed)
X	Peter Kenagy, Kenagy Family Farms	Member of the Public (appointed)
	(vacant)	Clatsop, Columbia, Lincoln or Tillamook Counties (appointed)

Non-Voting Members

Present	Name	Statutory Position
	Senator Lew Frederick	Member of the Senate (ex-officio)
X	Representative David Brock-Smith	Member of the House of Representatives (ex-officio)
X	Patrick Sieng, Public Affairs Counsel	State Invasive Species Coordinator (ex-officio)
X	Morgan Gratz-Weiser	Office of the Governor (ex-officio)
	Charity Glade	US Department of Interior – Bureau of Land Management (ex-officio)
X	Karen Ripley	US Department of Agriculture – Forest Service (ex-officio)
	Sean McMillen	US Department of Agriculture – Animal & Plant Health Inspection Service (ex-officio)
X	Kathy Pendergrass	US Department of Agriculture – Natural Resources Conservation Service
X	Nikki Brooks	US Department of Homeland Security – Customs & Border Protection (ex-officio)
X	Jen Poirier	US Fish & Wildlife Service
	Heidi McMaster	US Bureau of Reclamation

Others Attending:

- The Honorable Melissa Cribbins, Coos County Commissioner
- Troy Abercrombie, Oregon Department of Agriculture
- Anna Cole, Southwestern Oregon Community College
- Sabra Comet, South Slough National Estuarine Research Reserve
- Robyn Draheim, Tideline Consulting PDX
- Alicia Givens, Public Affairs Counsel
- William Lackey, Oregon Department of Transportation

- Jeanne Standley, Friends of South Slough Reserve and Retired BLM Invasives Manager
- Gary Vondererohe, Oregon Department of Fish & Wildlife
- Lindsey Wise, Portland State University

Welcome & Introductions ([YouTube 0:33](#))

Dr. Christine Moffitt called the meeting to order at 9 a.m. She provided some introductory remarks, welcoming members and guests to Coos Bay.

Anna Cole from Southwestern Oregon Community College welcomed guests to the campus and provided background on the college and the Umpqua Hall science building.

Attendees in person introduced themselves.

Council & Network Partner Reports

Hub Update ([YouTube 0:50](#))

Alex Staunch, Information Hub Working Group Co-Chair, presented an overview of background, where we are, where we are headed, and working group needs.

[View Slides](#)

MOU & Legislative Concept ([YouTube 1:05](#))

Dr. Cat de Rivera provided background on the MOU with the Department of Agriculture. A group has been working on the MOU for over a year. The MOU was designed to designate responsibilities between the department and the council and established ongoing working trust relationship. There was discussion around arbitration. A finalized MOU will be coming soon.

[View MOU](#)

Troy Abercrombie said that the legislative concept for the council's insurance has been submitted by the department through the process. The bill will be presented during the 2023 legislative session.

Welcome New Members ([YouTube 1:19](#))

Brian Clapp from Union County, the newest voting member representing Eastern Oregon counties, introduced himself. He serves as the weed control supervisor for Union County.

Approval of March 8, 2022 Meeting Minutes ([YouTube 1:21](#))

VOTE: Karen Ripley made a motion to approve the minutes. Chuck Fisk seconded the motion.

There was discussion about various changes to the minutes, including:

- More detailed minutes

- Corrections to roundtable update by Dr. Wyatt Williams
- Corrections to roundtable update by Karen Ripley, including new name for spongy moth
- Corrections to roundtable update by Dr. Sam Chan
- Corrections to Legislative Concept-Insurance. Karen Ripley clarified that “waivers in the interim” meant auto insurance, not liability insurance.
- Additions of last names to all
- Corrections to roundtable update by Karen Ripley. The communications committee needs to start working on the 2021 annual report.

The motion passed unanimously.

[View Revised Minutes](#)

Budget Update ([YouTube 1:48](#))

The latest budget information from the Department of Agriculture was presented with figures through the end of May. Operations account balance is \$150,479.27. Emergency Control account balance is \$53,140.38. The BLM Grant balance to spend is \$14,687.50. The US Forest Service grant balance to spend is \$33,637.50.

Legislative Outreach Plan/Primer Re-Launch ([YouTube 2:07](#))

Patrick Sieng said that the legislative primer was distributed to all legislators via email. He presented information about the current legislature, committees, important timelines for the legislative session, and a suggested outreach plan. We will be requesting an informational hearing in front of one of the agriculture or natural resource committees during the legislative committee days. The plan will be discussed by the legislative committee.

Revision of State Aquatic Nuisance Species Plan ([YouTube 2:20](#))

Robyn Draheim and Dr. Cat de Rivera discussed revision of the state ANS management plan, which is several years old. Updates are needed due to new species (from 120 to 248), new partners in the revision and review process, and to tie together AIS management efforts.

[View Slides](#)

Beach Grass Restorations on Oregon Dunes ([YouTube 2:40](#))

Jeanne Standley, retired from the Bureau of Land Management, discussed collaborators in dune restoration, why restoration is needed, restoration planning, restoration plan needs, habitat improvements, prescribed burning, ground-based herbicide, manual treatments, revegetation, and USFS accomplishments.

[View Slides](#)

Oregon Department of Agriculture Update: SW Oregon Priority Weeds & Biocontrols Update ([YouTube 3:18](#))

Troy Abercrombie presented on behalf of ODA regarding several invasive insects (Japanese Beetle; Emerald Ash Borer biocontrol; Tree of Heaven survey that will facilitate spotted lanternfly awareness; Mediterranean oak borer; ODA has over 20 projects of the IPPM program). He provided more detail on three A-rated noxious weeds (Spartina, matgrass, cape ivy) and jubata grass – similar to pampas grass, and “tower of jewels”, and gorse present in SW Oregon. He named the ODA contacts for invasive plants. He described biocontrol for gorse and the psyllid (insect) developed for Japanese knotweed biocontrol.

[View Slides](#)

Public Comment ([YouTube 3:40](#))

There was no public comment.

Working Lunch: Roundtable Discussion of Leadership, Committee Updates, Change of Common Names ([YouTube 4:33](#))

Dr. Christine Moffitt discussed leadership changes on the council. She is not able to serve as chair. Leadership is working on finding a voting member who can serve as chair.

Legislative & Local Policy Update ([YouTube 4:50](#))

Coos County Commissioner Melissa Cribbins discussed gorse issues in Coos and Curry Counties, which have been responsible for fires in the area. There has been a collaborative group of government and local citizens called the [Gorse Action Group](#).

Morgan Gratz-Weiser from Governor Kate Brown’s office introduced herself. She is the Governor’s natural resources policy advisor and will be working with the council. The Governor’s Office is monitoring the wildfire season, drought issues, and species migration. There is transition in the office because of Governor’s Brown’s last year in office.

Representative David Brock Smith discussed his work with sudden oak death, additional funding at the legislative Emergency Board, and further collaboration with the council and legislature. He said he would help educate fellow legislators about work of the council and need for increased funding.

Speed Presentations & Site Previews

Sudden Oak Death ([YouTube 5:38](#))

Dr. Wyatt Williams presented on sudden oak death in Oregon including disease treatment, economic impact, new detections, infestation in Port Orford, risk of disease and spread, and program leads at the department of forestry.

[View Slides](#)

Smallmouth Bass Removal ([YouTube 6:03](#))

Gary Vonderohe from ODFW discussed smallmouth bass management in the Coquille River and information they have been gathering such as diet, length, future management and how citizens can help.

[View Slides](#)

Background & Preparation for Green Crab Field Visit, Spartina Removal

Dr. Schon Schooler from the South Slough National Estuarine Research Reserve and Sylvia Behrens Yamada from Oregon State University discussed the ecology and management of the invasive green crab. Topics included identification, biology, spread and colonization, dispersal and recruitment, population growth, effects, and management options.

[View Slides](#)

Challenges & Opportunities for Shellfish Growers ([YouTube 6:55](#))

Megan Considine provided an overview of mud blister worm and pacific oysters based on her masters degree research. Steven Rumrill from ODFW was the advisor. Topics discussed were identification, stages, infestation, integrating research with extension, regulatory change, and outreach and engagement.

[View Slides](#)

Preview of Dock Visit to Charleston ([YouTube 7:10](#))

Scott Groth from ODFW gave a preview of the dock visit in Charleston. He discussed marine invertebrates.

Public Comment

There was no public comment.

Hub Working Group Work Session ([YouTube 7:26](#))

Adjourn

The council adjourned at 4:30 p.m.

June 15, 2022

- Members of the council conducted various field visits in the area:
 - Green Crab Trapping Demonstration at the Coos History Museum. Dr. Shon Schooler provide a demonstration of the trapping used for monitoring of green crap. He discussed the ways to easily identify the crabs and the methods used.

- Recreational Harvesting, Scientific Permitting, Species ID, Tunicate Survey at the Charleston Marine Life Center. Trish Mace provided a brief tour of the Charleston Marine Life Center, part of Oregon Institute of Marine Biology.
- Scott Groth provided a tour of the Charleston Boat Basin and biofouling issues in the area. He shared the monitoring plates used to follow colonization.
- South Slough Wetland Restorations and Removal of Pampas Grass at the South Slough National Estuarine Research Reserve. Dr. Alice Yeates, of South Slough National Estuary Research Reserve led the group on a field visit to the site of a recent upland restoration and removal of Pampas Grass within the Reserve Boundary.
- Finally, the group stopped at the Visitor Center of the SSNERR and had general discussion of the reserve programs, and Sabra Comet provide information about potential interactions with her as Coastal Training Program Coordinator within the NOAA/Reserves Network.



October 18-19, 2022
Oregon Department of Fish & Wildlife
Salem

YouTube Video Recording
10/18/22: [Part 1](#) | [Part 2](#)
10/19/22: [Part 1](#) | [Part 2](#)

[Meeting Exhibits](#)

Draft Minutes

Attendance

Voting Members

Present	Name	Statutory Position
X	Rick Boatner, Chair	State Department of Fish & Wildlife (ex-officio)
X	Christine Moffitt, PhD, Vice Chair	Coos, Curry, Douglas, Jackson or Josephine Counties (appointed)
X	Chris Benemann	State Department of Agriculture (ex-officio)
X	Cat de Rivera, PhD	Center for Lakes & Reservoirs (ex-officio)
X	Rick Boatner	State Department of Fish & Wildlife (ex-officio)
X	Sam Chan, PhD	Sea Grant College Program (ex-officio)
X	Wyatt Williams, PhD	State Department of Forestry (ex-officio)
X	Josh Emerson	State Department of Environmental Quality (ex-officio)
X	Glenn Dolphin	State Marine Board (ex-officio)
X	Noel Bacheller	State Parks & Recreation Department (ex-officio)
X	Eugene Wier, Freshwater Trust	Environmental Stewardship Organization/Association (ex-officio)
X	Katie Murray, Oregonians for Food & Shelter	Private Industry Organization/Association (appointed)

	Cheryl Shippentower	Native American/Indian Tribe (appointed)
	Brian Clapp, Union County	Gilliam, Hood River, Jefferson, Morrow, Sherman, Umatilla, Union, Wallowa, Wasco or Wheeler Counties (appointed)
	Tim Newton	Baker, Crook, Deschutes, Grant, Harney, Klamath, Lake or Malheur Counties (appointed)
X	Chuck Fisk	Benton, Lane, Linn, Marion or Polk Counties (appointed)
X	Alex Staunch, Mosaic Ecology	Clackamas, Multnomah, Washington or Yamhill Counties (appointed)
X	Peter Kenagy, Kenagy Family Farms	Member of the Public (appointed)
	(vacant)	Clatsop, Columbia, Lincoln or Tillamook Counties (appointed)

Non-Voting Members

Present	Name	Statutory Position
X	Senator Lew Frederick	Member of the Senate (ex-officio)
X	Representative David Brock-Smith	Member of the House of Representatives (ex-officio)
X	Patrick Sieng, Public Affairs Counsel	State Invasive Species Coordinator (ex-officio)
X	Morgan Gratz-Weiser	Office of the Governor (ex-officio)
X	Stacy Johnson	US Department of Interior – Bureau of Land Management (ex-officio)
X	Karen Ripley	US Department of Agriculture – Forest Service (ex-officio)
X	Sean McMillen	US Department of Agriculture – Animal & Plant Health Inspection Service (ex-officio)
X	Kathy Pendergrass	US Department of Agriculture – Natural Resources Conservation Service
X	Nikki Brooks	US Department of Homeland Security – Customs & Border Protection (ex-officio)
X	Jen Poirier	US Fish & Wildlife Service
X	Heidi McMaster	US Bureau of Reclamation

Others Attending:

- Director Curt Melcher, Oregon Department of Fish & Wildlife
- James Capurso, PhD, US Department of Agriculture – Forest Service
- Michelle Delepine, West Multnomah Soil & Water Conservation District

- Robyn Draheim, Tideline Consulting PDX
- Will Lackey, Oregon Department of Transportation
- Jessica Keys, Office of US Senator Jeff Merkley
- Rode Krige, Portland State University
- Josh Mulhollem, Oregon State Marine Board
- Ashley Newcomb, Portland State University
- Matt Paroulek, Port of Portland
- Anthony Prisiandaro, Bureau of Reclamation
- Kit Rouhe, PhD, Portland State University
- Steve Rumrill, PhD, Oregon Institute of Marine Biology
- Shon Schooler, PhD, South Slough National Estuarine Research Reserve
- Emma Scott, Portland State University
- Theresa Thom, PhD, US Fish & Wildlife
- Reagan Thomas, Portland State University
- Gary Vonderohe, Oregon Department of Fish & Wildlife
- Lindsey Wise, Portland State University

Welcome

Chair Rick Boatner called the meeting to order at 1:00 p.m.

Introductions

Council members and guests introduced themselves. Curt Melcher, Director of the Oregon Department of Fish & Wildlife, welcomed council members and talked briefly about the departments work in preparation for the 2023 legislative session.

Council Business

Approval of June 2022 Minutes

Chair Rick Boatner said that the minutes were included in the packet and distributed prior to the meeting. Hyperlinks to video are included in the minutes. The consensus of the council was to review the minutes after the meeting and submit comments/changes by October 21st. The approval

Budget/Financial Report

Chair Rick Boatner said that the council had \$111,329.68 in the operations fund and \$53,400.78 in the emergency fund. Grant Balances were: \$14,687.50 in the US Bureau of Land Management grant, \$33,637.50 in the US Forest Service grant fund, and \$29,230.00 in the University of California Hub grant. There was some discussion about expending funds prior to the end of the biennium. The education and outreach committee will revisit previous grant proposals if additional funds are available. There was also some discussion about additional work for Emerald Ash Borer efforts. Some funding from US Forest Service will be coming. Patrick Sieng will work with the Department of Agriculture to outline expected expenses and how much might be leftover to use for grants for outreach and/or awards.

Emergency Control Account Funding

Chair Rick Boatner said there have not been recent requests for funding out of emergency control account but there is a need to increase funding. There was discussion about how to replenish this account during the next legislative session. Representative David Brock Smith has a draft legislative concept to allocate more funds to the emergency control account as well as OISC operations. The legislative committee and leadership will meet with Representative David Brock Smith to discuss his proposal and coordinate with the Department of Agriculture. It was unknown if the Department of Agriculture had a policy option package specifically for the emergency control account. The executive committee will work on further budget evaluation and allocation.

Legislative Revision Changes (Staggering Council Seats)

Chair Rick Boatner said that when the legislature made changes to the OISC statute, the council ended up with eight positions being appointed on one year and just two during the next year. The goal would be to have 5 positions on a rotating basis each year. Discussion was whether a legislative concept was needed. Senator Frederick suggested that the change be implemented into the bylaws and just reported to the Legislature. A suggestion was made that three positions be extended by a year to get the appointed voting members on schedule. The Governance Committee and the Legislative Committee will work together on proposals for the bylaws.

New Business

Proposed Bylaws Changes (Chair/Vice-Chair Succession) – Exhibits Page 1

Chair Rick Boatner discussed bylaws changes needed for chair/vice-chair succession. An amendment would be needed to Article III, Section 2 in the bylaws. There was a rotation schedule from 2005 to 2019 prior to changes from the Legislature. A proposal was introduced to go back to a rotation for chair and vice-chair through the ex-officio voting members. There was discussion about a co-vice chair from the appointed voting members to assist the leadership and whether the chair should be elected.

VOTE: Dr. Cat de Rivera made a motion to have the chair and vice-chair of the council be selected from a rotation of ex-officio voting members to be determined by the council with an optional appointed voting member elected as a co-vice chair. Noel Bacheller seconded the motion. The motion passed unanimously.

VOTE: Dr. Cat de Rivera made a motion for the council to develop a rotation between the ex-officio voting members which is subject to change as needed. Dr. Sam Chan seconded the motion. The motion passed unanimously.

Council Business

Memorandum of Understanding Update

Dr. Cat de Rivera said that the memorandum of understanding with the Department of Agriculture was complete. She will send to Patrick Sieng to distribute to the council and post on the website.

Council Reports

Wildfire Recovery/Weed Issues – Exhibits Page 4

Dr. Wyatt Williams shared information about the 2020 wildfires and post-fire challenges with invasive plants. He shared a fact sheet discussing the wildfires and efforts from the Department of Forestry on recovery.

ODFW: Mussels, Inspection Stations, Crayfish

Chair Rick Boatner said that the department conducted 14,000 watercraft inspections, which matched 2016 numbers. There were 6 boats with mussels and 289 boats with other invasive species. Numbers were down throughout most western states. There are a few stations still open and there are some commercial vessels that will come through in the winter months.

House Agriculture Committee Recap

Dr. Christine Moffitt provided an update on the council's presentation to the House Agriculture, Land Use, and Water Committee. Dr. Christine Moffitt attended virtually with Chair Rick Boatner, Alex Staunch, and Peter Kenagy. The presentation was well received and included topics such as the information hub, emergency control account. More communication with the Legislature is required going forward.

Legislative/Governor's Office Update

Representative David Brock Smith

Representative David Brock Smith said that the council's presentation was well received. He looks forward to working with the council on funding needed. He also has a funding bill for sudden oak death and smallmouth bass in the Coquille River.

Senator Lew Frederick

Senator Lew Frederick said it was important for legislators to support the council. He said that the makeup of the legislature was still to be decided with the upcoming elections and turnover among the membership.

Morgan Gratz-Weiser, Office of Governor Kate Brown

Morgan Gratz-Weiser thanked Senator Frederick and Representative Brock Smith for their support during the 2022 session and provided some information about issues and transition plan for the Governor's Office. She encouraged the council to engage with new staff in the Governor's Office next year. The

Governor's Recommended Budget will be drafted by the new Governor and released by February 1st.

Public Comment

There was no public comment.

Invasive Species Challenges on the Willamette River (Video Not Available)

Members of the council visited the farm of council member Peter Kenagy. Members from Willamette Riverkeepers described the issue of ludwigia and mitigation along the Willamette River.

Wednesday, October 19, 2022

Proposed Bylaws Changes (Chair/Vice-Chair Succession) Continued

Chair Rick Boatner developed the rotation for chair and vice chair. The proposed schedule is:

- 2023: Chair – OSMB, Vice-Chair – Sea Grant
- 2024: Chair – Sea Grant, Vice-Chair – OPRD
- 2025: Chair – OPRD, Vice-Chair – DEQ
- 2026: Chair – DEQ, Vice-Chair – ODA
- 2027: Chair – ODA, Vice-Chair – ODF
- 2028: Chair – ODF, Vice-Chair – PSU
- 2029: Chair – PSU, Vice-Chair – ODFW
- 2030: Chair – ODFW, Vice-Chair – OSMB

Committee Reports

Communications

No Report

Governance

Dr. Christine Moffitt said governance issues were discussed yesterday. Updating information on the website is also important.

Legislative

Peter Kenagy said that the committee will engage with Representative David Brock Smith regarding his legislative concept. There was discussion about coordinating efforts with the Department of Agriculture. Representative Brock Smith's proposal is to allocate \$480,000 to the council - \$300,000 for operations, \$100,000 for education and outreach, and \$80,000 for the emergency control account. Current funding from the department is approximately \$200,000 per biennium. There was discussion about more funds to the emergency control account versus education and outreach.

Education & Outreach

Dr. Sam Chan said that the committee had been meeting jointly with the Communications Committee. There is a lot of overlap and he suggested that the committees continue to meet together and possibly merge them. He said the committee should revisit proposals that were submitted in 2019 for potential grant possibilities.

Working Group Reports

Information Hub – Exhibits Page 8

Alex Staunch said that they are rolling out approximately 70 species. There is a goal to have 120 species introduced by January. Emma Scott, Rode Krige, and Reagan Thomas from Portland State University provided a profile of 10 species, criteria for inclusion/exclusion, current workflow, and had questions for the council on how to prioritize. Dr. Cat de Rivera said that there is a grant from the University of California regarding climate change with a survey coming out soon.

Emerald Ash Borer – Exhibits Page 11

Chris Benemann provided background on the Emerald Ash Borer, current status, information about the Task Force, funding from the state, and next steps. Dr. Wyatt Williams discussed moving ash wood, wood waste needs, wood utilization needs, written plan for alternate practices, replanting, survey and research needs, ash seed sites, and project maps and photos.

Smallmouth Bass – Exhibits Page 34

Gary Vonderohe from the Department of Fish & Wildlife provided an update on Smallmouth Bass in the Coquille River Basin. He provided a refresher from his June presentation to the council and discussed work occurring during 2022, and removal and results.

Feral Swine – Exhibits Page 43

Chair Rick Boatner discussed feral swine in Oregon including damage, the 2007 action plan, management tools, and partnerships. It is believed that Oregon is feral swine free now.

Green Crab

Dr. Cat de Rivera provided background on the Green Crab, formerly known as European Green Crab. Dr. Steven Rumrill discussed management of Green Crab, recreational fisheries and catch limits, regional management in the Pacific Northwest, national management and control plan, management in Oregon,

eDNA – Exhibits Page 49

Jim Capurso from the US Forest Service discussed concerns about limited sampling of aquatic invasive species. A region-wide strategy for the Northwest was created.

Marion Soil & Water Conservation District Plant Work

No Report/Update. Subject tabled to another meeting.

State Plan Revision

Robyn Draheim said that they are almost done with the implementation table, which identifies the action items they have come up with through stakeholder meetings. A draft is being developed and comments will be requested.

Other Business

Dr. Christine Moffitt asked whether the council materials should be available to the public. The consensus is that the council is a public entity and that all materials should be available and posted to the public. Dr. Christine Moffitt questioned the video links and slides in the minutes. The consensus was that the council liked the access to the information and said that minutes should just have a summary on actions items but they do not need to be a transcript.

There was some discussion and questions to Chris Benemann regarding the legislative and agency budget process.

Hazard Analysis and Critical Control Point (HACCP) Training

Dr. Theresa Thom provided a presentation on HACCP and explained why planning is essential, five steps of HACCP planning, and the benefits of a strong planning team.

Other Business

There was discussion about bringing back the council awards and having a dinner next year to recognize winners. Nominations will be sought, and the council will discuss possible nominations. The goal is to hold the dinner during the legislative session and invasive species awareness week.

The council scheduled their next meeting for December 14, 2022 from 8:30 a.m. to noon.

Public Comment

There was no public comment.

Adjourn

Chair Rick Boatner adjourned the meeting at 2:00 p.m.

Revenue and Expenditures
AY23 Activity
through November 30, 2022

	Emergency Fund through 11/11/22	Emergency Fund through 11/30/22	Change	OISC Operations through 11/11/22	OISC Operations through 11/30/22	Change
AY21 Carryover Balance	53,083.44			22,859.83		
Revenue:						
Interest Income	604.71	722.27	117.56	33.96	40.42	6.46
Donations	0.00	0.00	0.00	0.00	0.00	0.00
Federal Grant	0.00	0.00	0.00	0.00	0.00	0.00
U.S.F.S	0.00	0.00	0.00	0.00	0.00	0.00
BLM	0.00	0.00	0.00	10,000.00	10,000.00	0.00
USDA- Aphis	0.00	0.00	0.00	0.00	0.00	0.00
USFWS	0.00	0.00	0.00	0.00	0.00	0.00
Incidental Income	0.00	0.00	0.00	52.21	52.21	0.00
Charges for Services	0.00	0.00	0.00	29,230.00	29,230.00	0.00 ^{1/}
AY23 GF Appropriation	0.00	0.00	0.00	0.00	0.00	0.00
Lottery Revenue	0.00	0.00	0.00	0.00	0.00	0.00
AY23 Lottery Revenue	0.00	0.00	0.00	159,777.00	159,777.00	0.00
Total Revenue	604.71	722.27	117.56	199,093.17	199,099.63	6.46
Expenditures:						
Travel	0.00	0.00	0.00	0.00	0.00	0.00
Office Supplies	0.00	0.00	0.00	2,355.20	2,399.15	(43.95)
Meeting Costs - \$1,326.25 of the \$2,399.15						
Statewide Government Service Charges	0.00	0.00	0.00	12,570.46	12,706.85	(136.39)
Professional Services	0.00	0.00	0.00	99,625.00	105,875.00	(6,250.00)
Attorney General	0.00	0.00	0.00	314.60	314.60	0.00
Advertising - Marketing/Campaigns	0.00	0.00	0.00	0.00	0.00	0.00
Advertising - Public Meeting Notices, etc.	0.00	0.00	0.00	0.00	0.00	0.00
Merchant Fees	186.00	186.00	0.00	186.00	186.00	0.00
Rent - Other Equipment	0.00	0.00	0.00	0.00	0.00	0.00
Payroll	0.00	0.00	0.00	0.00	0.00	0.00
Contractual	0.00	0.00	0.00	4,575.00	4,916.00	(341.00) ^{2/}
Administrative Fee	30.00	32.00	(2.00)	0.00	0.00	0.00
Total Expenditures	216.00	218.00	(2.00)	119,626.26	126,397.60	(6,771.34)
Remaining Balance	53,472.15		53,587.71	102,326.74		95,561.86
Committed Expenditures:						
					0.00	
					0.00	
Available Balance	53,472.15	0.00	53,587.71	102,326.74		95,561.86

^{1/}Subaward from the University of California awarded in May 2022.

^{2/}Payment to Samara Group and Environmental Science Associates for work on the subaward from University of California

Grant Number	Grantor	Grant Award Period	Award Number	PCA	Award Amount	Total Spent *	Direct Exp. Left to Spend
271204	BLM	6/19/20-12/31/22	14OL4318A0015	24019	20,000.00	5,312.50	14,687.50
271201	U.S. Forest Service	9/1/20-12/31/24	20-DG-11062765-713	24020	50,000.00	16,362.50	33,637.50
109906	University of California	3/1/22-2/28/23	SA18-4060-42	43055	29,230.00	4,575.00	24,655.00
Totals					99,230.00	26,250.00	72,980.00

*Updated with expenditures through 11/28/22.

	Operations Fund		Emergency Fund		BLM Grant (12/31/22)		Univ. of CA Grant (2/28/23)		USFS Grant (12/31/24)	
	11/30/2022		9/30/2022		11/28/2022		11/28/2022		11/28/2022	
	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual
Revenue										
Carryover	\$ 22,859.83	\$ 22,859.83	\$ 53,083.44	\$ 53,083.44	\$ 20,000.00	\$ 20,000.00	\$ 29,230.00	\$ 29,230.00	\$ 50,000.00	\$ 50,000.00
Interest Income	\$ 70.00	\$ 40.42	\$ -	\$ 722.27	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Donations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Incidental Income	\$ -	\$ 52.21	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Charges for Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
General Fund Appropriation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Lottery Revenue	\$ 159,777.00	\$ 159,777.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Revenue	\$ 182,706.83	\$ 182,729.46	\$ 53,083.44	\$ 53,805.71	\$ 20,000.00	\$ 20,000.00	\$ 29,230.00	\$ 29,230.00	\$ 50,000.00	\$ 50,000.00
Expenditures										
Travel	\$ 1,500.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Office Supplies	\$ 2,600.00	\$ 1,072.90	\$ -	\$ -	\$ -	\$ -	\$ 480.00	\$ -	\$ -	\$ -
Meeting Costs	\$ 2,000.00	\$ 1,326.25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Statewide Government Service Charges	\$ 12,300.00	\$ 12,706.85	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Professional Services	\$ 144,000.00	\$ 105,875.00	\$ -	\$ -	\$ 20,000.00	\$ 5,312.50	\$ -	\$ -	\$ 50,000.00	\$ 16,362.50
Attorney General	\$ 350.00	\$ 314.60	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Advertising - Marketing/Campaigns	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 450.00	\$ -	\$ -	\$ -
Advertising - Public Meeting Notices, etc.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Merchant Fees	\$ 264.00	\$ 186.00	\$ -	\$ 186.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Payroll	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contractual	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,300.00	\$ 4,575.00	\$ -	\$ -
Administrative Fee	\$ -	\$ -	\$ -	\$ 32.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenditures	\$ 163,014.00	\$ 121,481.60	\$ -	\$ 218.00	\$ 20,000.00	\$ 5,312.50	\$ 29,230.00	\$ 4,575.00	\$ 50,000.00	\$ 16,362.50
Remaining Balance	\$ 19,692.83	\$ (61,247.86)	\$ (53,083.44)	\$ (53,587.71)	\$ -	\$ (14,687.50)	\$ -	\$ (24,655.00)	\$ -	\$ (33,637.50)

Monthly Expenditures

Public Affairs Counsel	\$ 6,250.00
Squeal on a Pig	\$ 53.00
Microsoft	\$ 28.00
Website	\$ 100.00
Merchant Fees	\$ 11.00
DAS	\$ 25.00
Secretary of State	\$ 20.00
TOTAL Monthly Expenditures	\$ 6,487.00
Months Remaining	7
TOTAL Remaining Expenditures	\$ 45,409.00

Dr. Shon Schooler

Statement of Interest

I am interested in reducing the impacts of invasive species. I would like to serve on the Oregon Invasive Species Council as the representative of this region. I believe my interest and experience will benefit the people of the State of Oregon (and beyond) by reducing the impacts of invasive species.

I have worked on the research and management of invasive species for around 30 years. Over this period, I have published over 40 scientific papers on the ecology, effects, and management of invasive species. I have a Bachelor of Science in Environmental Studies from the University of Wisconsin-Madison and a Master of Science and a PhD from Oregon State University. As an undergraduate I worked on biological control of the pea aphid, an invasive agricultural pest. My graduate research was focused on the biological control of purple loosestrife and the effect of purple loosestrife and reed canary grass on wetland plant and animal communities. I completed my PhD in 2003. I then worked at the Commonwealth Scientific and Industrial Research Organization (CSIRO), which is the Australian Federal Government's research agency, for 7 years studying the effects and management of invasive aquatic plants including alligator weed, salvinia, water fanwort, mistflower, and water hyacinth. I then took a position as the Research Coordinator at the Lake Superior National Estuarine Research Reserve (LSNERR) in Superior, Wisconsin. There, along with other topics of interest, I studied the invasive rusty crayfish and the emerald ash borer. After 8 years at the LSNERR I took the position of Science Lead at the South Slough National Estuarine Research Reserve (SSNERR) where, along with other topics, I have been studying the 5-spine crab (aka green) crab for the past 5 years.

Curriculum Vitae

Shon S. Schooler, Ph.D.

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Work address:

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Charleston, OR 97420 USA
Phone: (541) 888-8270 x 315
Email: shon.schooler@dsl.oregon.gov

Education:

- 2003 **Ph.D.**, Effect of Purple Loosestrife and Reed Canary Grass on Wetland Plant and Moth Communities. Department of Entomology, Oregon State University, USA
- 1998 **M.S.**, Biological Control of Purple Loosestrife, *Lythrum salicaria*, By Two Chrysomelid Beetles, *Galerucella pusilla* and *G. californiensis*. Department of Entomology, Oregon State University, USA
- 1994 **B.S.**, Environmental Sciences, Department of Entomology, University of Wisconsin – Madison, USA

Employment history:

July 2018 - present

Title: **Lead Scientist**, South Slough National Estuarine Research Reserve, Oregon Department of State Lands, Charleston, OR, USA

Supervisor: Dr. Bree Yednock

Description: conducting and coordinating ecological research, writing reports and scientific articles, supervising students and technical staff, communicating results to researchers, land managers, and the public, and linking research projects to education and management needs.

July 2011 – July 2018

Title: **Senior Scientist**, Lake Superior National Estuarine Research Reserve, University of Wisconsin-Superior, Superior, WI, USA

Supervisor: Dr. Erika Washburn

Description: developing a long term ecological research site, conducting and coordinating ecological research, writing reports and scientific articles, supervising students and technical staff, communicating results to researchers, land managers, and the public, and linking research projects to education and management needs.

July 2007 – August 2011

Title: **Project Leader**, CSIRO Ecosystem Sciences, Brisbane, QLD, Australia

Supervisor: Dr. Rieks van Klinken

Description: developing and implementing research on the ecology, impact, biological control, and management of invasive plants, writing reports and scientific articles, supervising students and technical staff, and communicating results to researchers, land managers, and the public.

December 2003 – June 2007

Title: **Post-doctoral Fellow**, CSIRO Entomology, Indooroopilly, QLD, Australia

Supervisor: Dr. Mic Julien

Description: developing and implementing research on the biological control, ecology, impact and management of invasive plants, writing reports and scientific articles, communicating results to researchers, land managers, and the public. Includes surveying for biological control agents in the native range, prioritizing potential agents, importing agents into quarantine and testing host specificity.

December 2000 - December 2003

Title: **Graduate Research/Teaching Assistant**, Department of Entomology, Oregon State University, Corvallis, OR, USA

Supervisor: Dr. Peter McEvoy

Description: studying the impact of two invasive plant species, purple loosestrife and reed canary grass, on wetland plant and animal communities, introduction and post-release monitoring of agents for biological control of purple loosestrife, modeling spread of biological control agents, site selection and pre-release monitoring toward biological control of rush skeletonweed, communication of progress to funding agencies, writing reports and scientific articles, teaching laboratory courses (see list below).

January 1999 - December 2000

Title: **Ecological Research Scientist, GIS-based watershed assessment**, Earth Design Consultants, Corvallis, OR, USA

Supervisor: Dr. Ralph Garono

Description: develop a stratified sampling program for assessing lamprey distributions in PNW coastal estuaries using GIS and multivariate analyses.

April 1996 - February 1998

Title: **Graduate Research/Teaching Assistant**, Department of Entomology, Oregon State University, Corvallis, OR, USA

Supervisor: Dr. Peter McEvoy

Description: develop and implement a strategy to monitor the biological control of purple loosestrife in Oregon, modeling spread of biological control agents, communication of progress to funding agencies, writing reports and scientific articles, teaching laboratory courses (see list below).

May 1992- November 1995

Title: **Research Technician**, Department of Zoology, University of Wisconsin, Madison, WI, USA

Supervisor: Dr. Anthony Ives

Description: rear colonies of aphids, parasitoids, and hyperparasitoids for ecological experimentation of insect biological control, carry out experimental protocols in field and greenhouse experiments, write reports and papers.

Teaching Experience:

- 2017 Course developer and lecturer, Biology 481: Environmental Science Research Methods, University of Wisconsin-Superior, Superior, Wisconsin
- 2004 Course developer and lecturer, Biological Control of Tropical Weeds, Long Pocket Laboratories, Brisbane, Queensland
- 2003 Teaching Assistant, Botany and Plant Pathology 515: Forest Insect and Disease Management, Oregon State University, Corvallis, Oregon
- 2002 Teaching Assistant, Entomology 311: Introduction to Pest Management, Oregon State University, Corvallis, Oregon
- 2002 Teaching Assistant, Biology 371: Ecological Methods, Oregon State University, Corvallis, Oregon
- 2002 Teaching Assistant, Biology 102: General Biology, Oregon State University, Corvallis, Oregon
- 2001 Teaching Assistant, Biology 101: General Biology, Oregon State University, Corvallis, Oregon
- 2001 Guest Lecturer, Biology 371: Ecological Methods, Oregon State University, Corvallis, Oregon
- 1996 4-H Summer Camp, Introductory Entomology, Oregon 4-H Center, Salem, Oregon
- 1996 Teaching Assistant, Biology 371: Ecological Methods, Oregon State University, Corvallis, Oregon

Post-Graduate Advising:

- 2022-present Lara Breitreutz, PhD student, graduate committee member, Oregon State University, NOAA Margaret A. Davidson Fellow.
- 2019-2023 Taylor Dodrill, PhD student, graduate committee member, Portland State University, NOAA Margaret A. Davidson Fellow.
- 2019-2022 Elissa Connolly-Randazzo, M.S. student, graduate committee member, Portland State University (received M.S.)
- 2019-2020 Kimberly Sims, M.S. student, supervisor/graduate committee member, Oregon State University (received M.S.)
- 2017- 2018 Katie LaPlante, M.S. student, graduate committee member, University of Wisconsin- Green Bay, Green Bay, WI, USA (received M.S.)
- 2014-2017 Nick Bolton, PhD student, secondary supervisor, Michigan Technological University, Houghton, MI, USA (received Ph.D.)
- 2012-2015 Emily Graham, PhD student, secondary supervisor, University of Colorado-Boulder, Boulder, CO, USA (received Ph.D.)
- 2008-2012 Zati Sharip, PhD student, graduate committee member, CSIRO Entomology and University of Western Australia, Perth, WA, Australia (received Ph.D.)
- 2005-2010 Celine Clech-Goods, PhD student, primary supervisor, CSIRO Entomology and University of Queensland, Brisbane, QLD, Australia (received Ph.D.)
- 2004-2009 Imogen Bassett, PhD student, secondary supervisor, University of Auckland and CSIRO Entomology, Auckland, New Zealand (received Ph.D.)
- 2004-2005 Amylouise Kruger, Masters Student, New England University and CSIRO Entomology, Armidale, NSW, Australia (received M.S.)

Fellowships and Awards:

- 2008 Sunshine Coast Environment Council, Froggie Award, April 20, Noosa, Australia
- 2008 CRC for Australian Weed Management Award for Best Summer Student Supervisor, May 18, Cairns, Australia
- 2007 CSIRO Entomology Productivity Award, Canberra, Australia
- 2003 OSU College of Agricultural Sciences Distinguished Student Award, Corvallis, Oregon
- 2003 OSU Entomology Club Travel Fellowship, Corvallis, Oregon
- 2002 Western Aquatic Plant Management Society Scholarship
- 2001 Yerex Graduate Fellowship, Corvallis, Oregon
- 1997 National Science Foundation Graduate Fellowship: Honorable Mention
- 1993 Holstrom Undergraduate Environmental Fellowship, Madison, Wisconsin
- 1990 Thomas A. Jacob Foundation Award for Environmental Studies, Wausau, Wisconsin

Publications:

Peer Reviewed Journal Articles

- In prep **Schooler, S.**, Garono, R.G., Spatial and temporal patterns of under-ice hypoxia in the St. Louis River Estuary over six years. **Journal of Great Lakes Research** *In prep*
- 2020 Boulding, E.G., Behrens Yamada, S., **Schooler, S.S.**, Shanks, A.L., 2020. Periodic invasions during El Niño events by the predatory lined shore crab (*Pachygrapsus crassipes*): forecasted effects of its establishment on direct-developing indigenous prey species (*Littorina spp.*). **Canadian Journal of Zoology** 98:787-797. doi: 10.1139/cjz-2019-0250
- 2018 Graham, E.B., Gabor, R.S., **Schooler, S.**, McKnight, D.N., Nemergut, D.R., Knelman, J.E., 2018. Oligotrophic wetland sediments susceptible to shifts in microbiomes and mercury cycling with dissolved organic matter addition. **PeerJ** 6:e4575; DOI 10.7717/peerj.4575
- 2018 Bolton, N., Shannon, J., Davis, J., Van Grinsven, M., Noh, N., **Schooler, S.**, Kolka, R., Pypker, T., Wagenbrenner, J., 2018. Methods to improve survival and growth of planted alternative species

- seedlings in black ash ecosystems threatened by emerald ash borer. **Forests** 9:146-156 doi: 10.3390/f9030146
- 2015 Bickel, T.O. and **Schooler, S.S.**, 2015. Effect of water quality and season on the population dynamics of *Cabomba caroliniana* in subtropical southeast Queensland, Australia. **Aquatic Botany** 123:64-71.
- 2012 Sharip, Z., Hipsey, M.R., **Schooler, S.S.**, Hobbs, R.J., 2012. Physical circulation and spatial exchange dynamics in a shallow floodplain wetland. **International Journal of Design & Nature and Ecodynamics** 7:274-291.
- 2012 Xu, C., **Schooler, S.S.**, and van Klinken, R.D. Differential influence of clonal integration on morphological and growth responses to light in two invasive herbs. **PLoS ONE** 7(4): e35873. doi:10.1371/journal.pone.0035873
- 2012 Yeates, A.G., **Schooler, S.S.**, Garono, R.J. and Buckley, Y.M., 2012. Biological control as an invasion process: Disturbance and propagule pressure affect the invasion success of *Lythrum salicaria* biological control agents. **Biological Invasions** 14:255-271.
- 2012 Sharip, Z., **Schooler, S.S.**, Hipsey, M.R., Hobbs, R.J., 2011. Eutrophication, agriculture and water level control shift aquatic plant communities from floating-leaved to submerged macrophytes in Lake Chini, Malaysia. **Biological Invasions** 14:1029-1044.
- 2011 **Schooler, S.S.**, Julien, M.H., Salau, B., and Ives, A.R. 2011. Alternative stable states explain unpredictable biological control of *Salvinia molesta* in Kakadu. **Nature** 470:86-89. (doi:10.1038/nature/09735)
- 2011 Yeates, A.G. and **Schooler, S.S.** Varying influence of *Lantana camara* L. and its removal on small tree dynamics in a recently burnt wet sclerophyll forest in Northern New South Wales. **Ecological Management and Restoration** 12:237-241.
- 2011 **Schooler, S.S.**, De Barro, P., Ives, A.R. 2011. The potential for hyperparasitism to compromise biological control: Why don't hyperparasitoids drive their primary parasitoids hosts extinct? **Biological Control** 58:167-173. (doi:10.1016/j.biocontrol.2011.05.018)
- 2011 Cabrera-Walsh, W., **Schooler, S.S.**, Julien, M., 2011. Biology and preliminary host range of *Hydrotimetes natans* Kolbe (Coleoptera: Curculionidae), natural enemy candidate for biological control of *Cabomba caroliniana* Gray (Cabombaceae) in Australia. **Australian Journal of Entomology** 50:200-206. (doi:10.1111/j.1440-6055.2010.00793.x)
- 2011 Quinn, L.D., **Schooler, S.S.**, and van Klinken, R.D., 2011. Effects of land use and environment on alien and native macrophytes: lessons from a large-scale survey of Australian rivers. **Diversity and Distributions** 17:132-143. (doi: 10.1111/j.1472-4642.2010.00726.x)
- 2010 **Schooler, S.S.**, Cook, T., Prichard, G., and Yeates, A., 2010. Disturbance-mediated competition: The interacting roles of inundation regime and physical and herbicidal control in determining native and invasive plant abundance. **Biological Invasions** 12:3289-3298. (doi: 10.1007/s10530-010-9722-y)
- 2010 Van Driesche, R.G., Carruthers, R.I., Center, T., Hoddle, M.S., Hough-Goldstein, J., Morin, L., Smith, L., Wagner, D.L., Blossey, B., Brancatini, V., Casagrande, R., Causton, C.E., Coetzee, J.A., Cuda, J., Ding, J., Fowler, S.V., Frank, J.H., Fuester, R., Goolsby, J., Grodowitz, M., Heard, T.A., Hill, M.P., Hoffmann, J.H., Huber, J., Julien, M., Kairo, M.T.K., Kenis, M., Mason, P., Medal, J., Messing, R., Miller, R., Moore, A., Neuenschwander, P., Newman, R., Norambuena, H., Palmer, W.A., Pemberton, R., Perez Panduro, A., Pratt, P.D., Rayamajhi, M., Salom, S., Sands, D., **Schooler, S.**, Sheppard, A., Shaw, R., Schwarzländer, M., Tipping, P.W., van Klinken, R.D. 2010. Classical Biological Control for the Protection of Natural Ecosystems. **Biological Control** 54:S2-S33. (doi: 10.1016/j.biocontrol.2010.03.003)
- 2010 Xu, C., **Schooler, S.S.**, and van Klinken, R., 2010. Effects of clonal integration and light availability on the growth and physiology of two invasive herbs. **Journal of Ecology** 98:833-844. (doi: 10.1111/j.1365-2745.2010.01668.x)
- 2010 Guan, B.H., An, S.Q., **Schooler, S.** and Cai, Y. 2010. Influence of substrate phosphorus concentration and plant density on growth and phosphorus accumulation of *Alternanthera philoxeroides*. **Journal of Freshwater Ecology** 25:219-225.

- 2009 **Schooler, S.S.**, McEvoy, P.B., Hammond, P., and Coombs, E.M. 2009. Negative *per capita* effects of two invasive plants, *Lythrum salicaria* and *Phalaris arundinacea*, on the moth diversity of wetland communities. **Bulletin of Entomological Research** 99:229-243.
- 2008 **Schooler, S.S.**, 2008. Shade as a management tool for the invasive submerged macrophyte, *Cabomba caroliniana*. **Journal of Aquatic Plant Management** 46:1168-171.
- 2008 **Schooler, S.**, Cook, T., Bourne, A., Prichard, G., and Julien, M. 2008. Selective herbicides reduce alligator weed (*Alternanthera philoxeroides*) biomass by enhancing competition. **Weed Science** 56:259-264.
- 2007 Wilson, J.U., Yeates, A.G., **Schooler, S.S.** and Julien, M.H. 2007. Rapid response to shoot removal by the invasive wetland plant, alligator weed (*Alternanthera philoxeroides*). **Environmental and Experimental Botany** 60:20-25.
- 2007 **Schooler, S.S.**, Yeates, A.G., Wilson, J.R.U., and Julien, M.H. 2007. Herbivory, mowing and herbicides differently affect the productivity and nutrient allocation of alligator weed. **Aquatic Botany** 86:62-68.
- 2006 **Schooler, S.S.**, McEvoy, P.B. and Coombs, E.M. 2006. Negative per capita impacts of purple loosestrife and reed canary grass on plant diversity of wetland communities. **Diversity and Distributions** 12:351-363.
- 2006 **Schooler, S.S.**, Clech-Goods, C. and Julien, M.H. 2006. Ecological studies to assess the efficacy of biological control on alligator weed and lippia populations. **Australian Journal of Entomology** 45:272-275.
- 2006 **Schooler, S.S.**, Julien, M.H., and Walsh, G.C. 2006. Predicting the response of *Cabomba caroliniana* to biological control agent damage. **Australian Journal of Entomology** 45:326-329.
- 2006 **Schooler, S.S.**, Baron, Z., and Julien, M. 2006. Effect of simulated and actual herbivory on alligator weed growth and reproduction. **Biological Control** 36:74-79.
- 2006 **Schooler, S.S.** and McEvoy, P.B. 2006. Relationship between insect density and plant damage for the golden loosestrife beetle, *Galerucella pusilla*, on purple loosestrife (*Lythrum salicaria*). **Biological Control** 36: 100-105.
- 2003 **Schooler, S.S.**, Coombs, E.M. and McEvoy, P.B. 2003. Nontarget effects on crepe myrtle by *Galerucella pusilla* and *G. calmariensis* (Chrysomelidae), used for biocontrol of purple loosestrife. **Weed Science** 51:449-455.
- 2001 R.J. Garono, R.L. Kiesling, E. Wold, **S.S. Schooler**, and D. Bradsby. 2001. Adult Insect Assemblages as a Conservation Planning Tool. **Verhandlungen des Internationalen Verein Limnologie** 27:4032-4041.
- 1999 Ives, A.R., **Schooler, S.S.**, Jagar, V.J., Knuteson, S.E., Grbic, M. and Settle, W.H. 1999. Variability and parasitoid foraging efficiency: a case study of pea aphids and *Aphidius ervi*. **American Naturalist** 154:652-673.
- 1996 **Schooler, S.S.**, Ives, A.R. and Harmon, J. 1996. Hyperparasitoid aggregation to variation in *Aphidius ervi* host density at three spatial scales. **Ecological Entomology** 21:249-258.

Peer Reviewed Book Chapters

- 2013 Sharip, Z., Hipsey, M.R., **Schooler, S.S.**, Hobbs, R.J., 2012. Physical circulation and spatial exchange dynamics in a shallow floodplain wetland. Pages 151-167 in Brebbia, C.A., Jorgensen, S.E. (Eds.), Lake Sustainability, WIT Press, Southampton, UK.
- 2012 McEvoy, P.B., Grevstad, F., **Schooler, S.** 2012. Managing insect outbreaks: Lesson from Biological Control of Weeds, Pages 395-428 in Barbosa, J., Letourneau, D., Agrawal, A. (Eds.), Insect Outbreaks Revisited, Wiley-Blackwell.
- 2012 **Schooler, S.S.** 2012. Alligator weed: a disturbance-driven invasive aquatic plant. Pages 25-35 in Francis, R.A. (Ed.), A Handbook of Global Freshwater Invasive Species. Earthscan, London, UK.
- 2012 **Schooler, S.S.**, Palmer, W.A., Morin, L., 2012. *Ageratina riparia* (Regal) K. & R. - mistflower, Pages 33-42 in Julien, M., McFadyen, R., Cullen, J., (Eds.), Biological control of weeds in Australia 1960 to 2010. CSIRO Publishing, Collingwood, Australia.

- 2012 **Schooler, S.S.**, Cabrera-Walsh, G., Julien, M. 2012. *Cabomba caroliniana* Gray - cabomba, Pages 108-117 in Julien, M., McFadyen, R., Cullen, J., (Eds.), Biological control of weeds in Australia 1960 to 2010. CSIRO Publishing, Collingwood, Australia.
- 2012 Julien, M., Sosa, A., Chan, R., **Schooler S.** Traversa, G. 2012. *Alternanthera philoxeroides* (Martius) Grisebach - Alligator weed, Pages 43-51 in Julien, M., McFadyen, R., Cullen, J., (Eds.), Biological control of weeds in Australia 1960 to 2010. CSIRO Publishing, Collingwood, Australia.
- 2011 Sharip, Z., **Schooler, S.S.**, Hipsey, M.R., and Hobbs, R.J. 2011. Physical circulation and spatial exchange dynamics in a shallow floodplain wetland. In: S.E. Jorgensen, C.A. Brebbia, and V. Popov (Eds.), Lake Sustainability. WIT Transactions on Ecology and the Environment. WIT Press, Southampton, UK.
- 2009 **Schooler, S.**, Cabrera-Walsh, W. and Julien, M.H. 2009. *Cabomba caroliniana* Gray (Cabombaceae). Pages 88-107 in R. Muniappan, G.V.P. Reddy and A. Raman eds. Biological Control of Tropical Weeds using Arthropods, Cambridge University Press, Cambridge, UK.
- 2004 **Schooler, S.S.**, P.B. McEvoy and E.M. Coombs. 2004. The Ecology of Biological Control. Pages 15-26 in E.M. Coombs, J.K. Clark, G.L. Piper, and A.F. Cofrancesco, eds. Biological Control of Invasive Plants in the United States. Oregon State University Press, Corvallis, OR.
- 2004 Coombs, E.M., **S.S. Schooler** and P.B. McEvoy. 2004. Nontarget impacts of biological control agents. Pages 106-113 in E.M. Coombs, J.K. Clark, G.L. Piper, and A.F. Cofrancesco, eds. Biological Control of Invasive Plants in the United States. Oregon State University Press, Corvallis, OR.
- 2004 Piper, G.L., E.M. Coombs, B. Blossey, P.B. McEvoy and **S.S. Schooler**. 2004. Purple loosestrife. Pages 281-292 in E.M. Coombs, J.K. Clark, G.L. Piper, and A.F. Cofrancesco, eds. Biological Control of Invasive Plants in the United States. Oregon State University Press, Corvallis, OR.

Peer Reviewed Conference Proceedings

- 2012 Morin, L., Piper, M., White, A. and **Schooler, S.S.** 2012. Spread, specificity and initial impact of the white-smut fungus *Entyloma ageratinae* on mistflower in Australia. In: *Proceedings of the 18th Australasian Weeds Conference*, (ed. V. Eldershaw), pp. 88-91. Weed Society of Victoria Inc., Melbourne.
- 2012 Sharip, Z., Hipsey, M.R., **Schooler S.S.**, Hobbs R.J. 2012. Physical circulation and spatial exchange dynamics in a shallow floodplain wetland. WIT Transactions on Ecology and the Environment
- 2008 **Schooler, S.S.** and Julien M. 2008. Progress on the biological control of two invasive aquatic plants, cabomba (*Cabomba caroliniana*) and alligator weed (*Alternanthera philoxeroides*). Page 243 in van Klinken, R.D., Osten, V.A., Panetta, F.D. and Scanlan, J.C. eds. 16th Australian Weed Conference Proceedings. Cairns, Australia.
- 2008 Quinn, L.D., **Schooler, S.S.**, and van Klinken, R.D. 2008. Invasion of aquatic macrophytes in peri-urban waterways of south-east Queensland. Page 108 in van Klinken, R.D., Osten, V.A., Panetta, F.D. and Scanlan, J.C. eds. 16th Australian Weed Conference Proceedings. Cairns, Australia.
- 2008 Clech-Goods, C., **Schooler, S.S.**, Lovelock, C., and Schmidt, S. 2008. Does plant response to the limiting resource explain invasibility? An experimental test using two invasive weeds and their non-invasive native congeners. Page 107 in van Klinken, R.D., Osten, V.A., Panetta, F.D. and Scanlan, J.C. eds. 16th Australian Weed Conference Proceedings. Cairns, Australia.
- 2006 **Schooler, S.S.** and Julien M. 2006. Effects of depth and season on the population dynamics of *Cabomba caroliniana* in SE Queensland. Pages 768-771 in C. Preston, J.H. Watts, and N.D. Crossman, eds. Proceedings of the 15th Australian Weed Conference. Weed Management Society of South Australia, Adelaide, Australia.
- 2005 **S.S. Schooler**, D.G. Williams, K. Stokes, and M. Julien. 2005. Invasive Plants: Impacts and Management in Rivers and Catchments. Proceedings of the Brisbane Riversymposium: <http://www.riversymposium.com/2005/index.php?element=46>
- 2000 McEvoy, P. Grevstad, F.S., **Schooler, S.S.**, Schat, M. Coombs, E.M. 2000. Weed biological control as an invasion process. In: Spencer, N.R. (Ed) Proc 10th Int Symp Biological Control of Weeds, Montana State University, Bozeman, Montana, pp. 596-597.

Edited proceedings

- 2017 A. Lein, **S. Schooler**, 2017. Proceedings of the St. Louis River 2017 Science Summit, March 14-15, University of Wisconsin Superior, Superior WI, USA
- 2016 A. Lein, **S. Schooler**, 2016. Proceedings of the St. Louis River 2016 Science Summit, February 3-4, University of Wisconsin Superior, Superior WI, USA
- 2015 B. Sapper, E. Westerlund, **S. Schooler**, M. Zhuikov, 2015. Proceedings of the St. Louis River 2015 Science Summit, March 31- April 1, 2015, University of Wisconsin Superior, Superior WI, USA
- 2014 M. Krick, B. Sapper, **S. Schooler**, M. Zhuikov, 2014. Proceedings of the St. Louis River 2014 Science Summit, February 25-26, 2014, University of Wisconsin Superior, Superior WI, USA
- 2013 **S. Schooler** and J. O'Malley, 2013. Proceedings of the St. Louis River 2013 Science Summit, February 26-27, 2013, University of Wisconsin Superior, Superior WI, USA
(<http://digital.library.wisc.edu/1793/65792>)
- 2012 **S. Schooler**, S. Bliss, R. Garono, P. Collins, 2012. Proceedings of the St. Louis River 2012 Science Summit, March 8-9, 2012, University of Wisconsin Superior, Superior WI, USA
(<http://digital.library.wisc.edu/1793/61486>)
- 2011 **S. Schooler**, R. Garono, P. Collins, 2011. Proceedings of the St. Louis River 2011 Science Summit, February 7-8, 2011, University of Wisconsin Superior, Superior WI, USA
(<http://digital.library.wisc.edu/1793/56442>).

Reports, Magazines, and Newsletters

- 2020 **S. Schooler**, S. Yamada, K. Andreasen, 2020. Status of Green Crabs in Coos Bay: Monitoring Report 2020. Oregon Department of State Lands, 9pp.
- 2011 **S. Schooler**, 2011. Mistflower white-smut fungus arrives in Australia. Bush Hands Newsletter, Sunshine Coast Council, Issue 62:11-12.
- 2010 **S. Schooler**, 2010. Update on the Cabomba biological control project. Lake Macdonald Catchment Care Group Newsletter, May 2010, p.2
- 2008 **S. Schooler** and L. Lawrence, 2008. Progress on the biological control of cabomba. Farming Ahead Journal: Science for Tomorrow, Sept 2008 no:200, p.53
- 2007 **S. Schooler** and M. Julien, 2007. Insects for the Biological Control of Invasive Aquatic Plants. Entomological Society of Queensland News Bulletin 34:151-152.
- 2007 **S. Schooler** and T. Grice, Wetland weed threat. Wimmera Mail Times, 05/02/2007, p.10
- 2006 **S. Schooler**, M. Julien, and L. Lawrence, Toward the Biological Control of Cabomba. Garrard's Pest Review, Spring Issue, p.34-35.
- 2005 **Schooler, S.S.**, Julien, M., and Lawrence, L. 2005. Toward the Biological Control of Cabomba in Australia. BioControl News and Information 26(3):75-76.
- 2005 **Schooler, S.S.** and Julien, M. 2005. Progress Toward the Biological Control of Cabomba. Lake Macdonald Catchment Care Group Newsletter, April Issue, p.6-8
- 2004 **Schooler, S.S.** 2004. Cabomba: Investigating the Latin connection. Australian Farm Journal BUSH, May Issue, p.16-18.

External Funding:

- 2020 Leveraging Citizen Science to Map Lamprey Distributions in Oregon using eDNA Methods, USDA: USFS, 2-year project, Co-PI with D. Rudd, \$58,693.
- 2019 Using citizen science and eDNA to map lamprey species distributions along the Oregon Coast, USDA: USFS, 1-year project, Co-PI with D. Rudd, \$19,500.
- 2015 Mitigating the impacts of emerald ash borer through underplanting before infestation, Wisconsin Department of Natural Resources, 1 year project, PI, \$8,700.
- 2015 LSNERR undergraduate student project awards, University of Wisconsin-Superior, URSCA Program, Co-PI with T. Ledder, \$6,000.

- 2015 LSNERR undergraduate technician award, University of Wisconsin-Superior, Undergraduate Research Scholarship, and Creative Activity (URSCA) Program, \$4,000.
- 2014 Curriculum Planning to Increase Undergraduate Research in Biology, 1 year grant, University of Wisconsin, Co-PI with N. Danz, M. Arnhold, M. Balcer, E. Burkett, C. Sanda, K. Schmude, and J. Schuldt, \$3,000.
- 2014 Summer Undergraduate Research Fellowship, University of Wisconsin Foundation, 3 month project, Co-PI with J. Ripley (student), \$3,500.
- 2014 Integrating prior vegetation surveys to test spatial and temporal patterns of wetland floristic quality in the St. Louis River Estuary, 2 year project, Wisconsin Sea Grant, Co-PI with N. Danz, \$94,712.
- 2013 Creating a University of Wisconsin-Superior Center for Undergraduate Research, Scholarship and Creative Activity, 3 year project, University of Wisconsin System Growth Agenda Grant, PI, \$302,900.
- 2013 St. Louis River Estuary Science Summit, conference costs solicited from various sponsors, \$6,500.
- 2013 Measuring the impact of climate change on the St. Louis River Estuary: development of a NERR Sentinel Site, 2 year project, Great Lakes Restoration Initiative, USEPA, \$45,000.
- 2012 St. Louis River Estuary Science Summit, conference costs solicited from various sponsors, \$5,500
- 2011 Ecology and biological control of alligator weed, 2 year project, Australian Rural Industries Research and Development Corporation, \$272,000 (total \$467,000)
- 2010 Restoring biodiversity in NSW through biocontrol of mistflower, 2 year project, New South Wales Environmental Trust, \$95,016 (total \$188,778)
- 2009 Biological Control and Ecology of Cabomba and Alligator Weed, 1 year project, Australian Weeds Research Centre, \$264,462 (total \$510,821)
- 2007 Cabomba Biological Control and Ecology, 2 year project, Australian Department of Agriculture, Fisheries and Forestry, \$510,000 (total \$1,021,427)
- 2006 Cabomba Biological Control Host Specificity Testing, 2 year project, Burnet Mary Regional Catchment Group, \$150,000 (total \$347,261)
- 2006 Cabomba Biological Control and Ecology, 2 year project, various stakeholders collected through the Lake Macdonald Catchment Care Group and administrated by the Mary River Catchment Coordinating Committee, \$80,000
- 2006 Alligator Weed Biological Control and Ecology, 2 year project, New Zealand Landcare, \$40,000
- 2006 Alligator Weed Biological Control and Ecology, 2 year project, Land and Water Australia, \$375,584 (total \$842,321)
- 2006 Effect of Land Use and Peri-urban Development on Aquatic Weeds, 2 year project, Land and Water Australia, \$281,386 (total \$471,231)
- 2005 The Crawford Fund Training Program, Biological Control of Tropical Weeds International Course (S.S. course coordinator), funds for participant from Kenya, \$2,500, total funds for course \$50,700
- 2005 Cooperative Research Centre for Australian Weed Management: Relating resource opportunity to plant community invasibility: Creating integrated strategies to manage alligator weed and lippia, 3 year funding for PhD student, \$84,882
- 2004 Cooperative Research Centre for Australian Weed Management: Response of alligator weed growth to simulated vs. actual herbivory, funding for summer student, \$3,000
- 2002 Oregon Department of Agriculture, Noxious Weed Board: Mass rearing and monitoring of *Hylobius* weevils for the control of purple loosestrife, Co-PI with P.B. McEvoy, \$21,998
- 2002 Oregon Department of Agriculture, Noxious Weed Board: Impact and Biological Control of Purple Loosestrife In the Columbia River Estuary, Co-PI with R.G. Garono, \$10,000
- 2001 US Fish and Wildlife Service, Predicting and Controlling Invasion by Purple Loosestrife at the Baskett Slough National Wildlife Refuge., Co-PI with P.B. McEvoy, \$10,000
- 2001 Oregon Department of Agriculture, Noxious Weed Board: Predicting and controlling invasion of urban wetlands by purple loosestrife, Co-PI with P.B. McEvoy, \$18,000
- 2001 Port of Portland, Portland Bureau of Environmental Services, and the Columbia Slough Watershed Council: Biological control of purple loosestrife in the Lower Columbia River Estuary, Co-PI with P.B. McEvoy, \$10,000

- 2000 Oregon Department of Agriculture, Noxious Weed Board: Predicting and controlling invasion of urban wetlands by purple loosestrife, Co-PI with P. B. McEvoy, \$15,000
- 2000 Lower Columbia River Estuary Program (LCREP), Port of Portland, Metro Parks and Greenspaces, Bonneville Power Administration, and the Columbia Slough Watershed Council: Biological control of purple loosestrife in the Lower Columbia River Estuary, Co-PI with P.B. McEvoy, \$30,000
- 1999 Confederated Tribe of Siletz Indians: Development of a GIS-based monitoring framework for Pacific lamprey populations, Co-PI with R.J. Garono, \$8,500

Conference and Symposia Organization

- 2018 Conference: St. Louis River Science Summit 2018, March 13-14, UW-Superior, Superior, WI, USA.
- 2017 Conference: St. Louis River Science Summit 2017, March 14-15, UW-Superior, Superior, WI, USA.
- 2016 Conference: St. Louis River Science Summit 2016, February 3- 4, UW-Superior, Superior, WI, USA.
- 2015 Conference: St. Louis River Science Summit 2015, March 31- April 1, UW-Superior, Superior, WI, USA.
- 2014 Conference: St. Louis River Science Summit 2014, February 25-26, UW-Superior, Superior, WI, USA.
- 2013 Conference: St. Louis River Science Summit 2013, February 26-27, UW-Superior, Superior, WI, USA.
- 2012 Conference: St. Louis River Science Summit 2012, March 8-9, UW-Superior, Superior, WI, USA.
- 2010 Symposium: How do we measure the environmental effects of biological control in natural systems? Biological Control for Nature Conference, Oct 4-7, 2010, Northampton, MA, USA.
- 2009 Symposium: Quantifying the environmental impacts of invasive species. International Congress of Ecology (INTECOL), Aug 16-21, 2009, Brisbane, QLD, Australia.

Selected Presentations:

Invited presentations

- 2022 Shon Schooler and Sylvia Yamada, “History of the green crab invasion of Coos Bay”, Coos History Museum First Tuesday Talks, Coos Bay, OR, October 4, 2022.
- 2022 Shon Schooler and Sylvia Yamada, “Ecology and management of invasive green crabs”, Oregon Institute of Marine Biology Seminar Series, Charleston, OR, April 22, 2022.
- 2022 Shon Schooler and Sylvia Yamada, “Green Crab Invasion of Coos Bay”, North Bend Rotary Club monthly meeting, January 19, 2022.
- 2022 Shon Schooler, Deborah Rudd, Ian Rodger, Becky Flitcroft, and Jenni Schmitt, “Using eDNA and community volunteers to map distributions of lampreys in the Oregon Coast Range.” Lamprey Information Exchange virtual meeting, January 11, 2022.
<https://www.gotostage.com/channel/512344cd391c40d39715e29a5a4e82f6/recording/97b5480fa134403aa56bd49e7b2999e3/watch?source=CHANNEL>
- 2021 Shon Schooler and Sylvia Yamada, “Status of green crabs in Coos Bay”. European Green Crab West Coast Technical Workgroup annual meeting. Virtual meeting, Dec 16, 2021.
- 2021 Green crab invasion of Coos Bay, Virtual meeting, July 15, 2021, South Slough NERR Commission Meeting.
- 2021 Shon Schooler, Deborah Rudd, Ian Rodger, Jenni Schmitt, and Becky Flitcroft. “Using eDNA to map the distribution of lamprey species along the southern Oregon Coast.” South Slough Reserve virtual meeting, May 19, 2021.
- 2020 Assessing the abundance and distribution of lamprey species along the southern Oregon Coast, Virtual meeting, July 13, 2020, South Slough NERR Commission Meeting.
- 2019 Invasive European green crab monitoring methods in Coos Bay, Central Oregon Community College Environmental Science class, Oregon Institute of Marine Biology, September 28, 2019, Charleston, OR, USA.
- 2019 Assessing the abundance and distribution of lamprey species along the southern Oregon Coast, South Coast Lamprey Working Group annual meeting, South Slough Interpretive Center, September 24, 2019, Charleston, OR, USA.

- 2019 Use of eDNA to map lamprey species distributions along the Oregon Coast. Citizen Science Workshop, South Slough Interpretive Center, July 10, 2019, Charleston, OR, USA.
- 2019 A Brief Environmental History of Coos Bay. Oregon Society of Soil Scientists Annual Workshop, South Slough Interpretive Center, April 19, 2019, Charleston, OR, USA.
- 2019 European Green Crab impacts on eelgrass: Implications for eelgrass restoration in Coos Bay. Eelgrass Recovery Workshop, University of Oregon, March 26, 2019, Eugene, OR, USA.
- 2019 Assessing the distribution of lamprey species along the southern Oregon Coast using eDNA sampling methods. American Fisheries Society, Oregon Chapter, March 4-8, Bend, OR, USA.
- 2019 Friends of South Slough Interns: Helping us measure the effect of sea-level rise on Coops Bay tidal wetlands. Friends of South Slough Annual Meeting, February 27, 2019, Coos Bay OR, USA.
- 2019 Effect of sea-level rise on Coos Bay tidal wetlands. Coast Watch King Tides, January 18, 2019, Oregon Institute of Marine Biology, Charleston, OR, USA.
- 2018 Effect of sustained high-water levels on aquatic vegetation in Pokegama Bay. 2nd Annual Lake Superior Manoomin Restoration Workshop, April 9-10, 2018, Duluth Convention Center, Duluth, MN, USA.
- 2018 Biological Control of Invasive Aquatic Plants, Biology 481 Plant-Animal Interactions Class Lecture, University of Wisconsin Superior, February 12, 2018, Superior, WI, USA.
- 2017 Winter conditions in the St. Louis River estuary: 5 year trends for dissolved oxygen, ice thickness, and algal productivity. Twin Ports Freshwater Folk Seminar Series, December 5, 2017, Superior, WI, USA.
- 2017 Winter conditions in the St. Louis River estuary: 5 year trends for dissolved oxygen. National Estuarine Research Reserve Annual Conference, November 15, 2017, Corpus Christi, TX, USA.
- 2017 Understory plantings to reduce the effect of emerald ash borer on riparian zone erosion. City of Superior Forestry Board, January 19, 2017, Superior, WI, USA.
- 2016 Research at the Reserve: Water quality, Invasions, and Climate. University of Wisconsin-Superior, Reserve Advisory Board Meeting, December 8, 2016, Superior, WI, USA.
- 2016 The impact and management of invasive species in the St. Louis River estuary, University of Minnesota-Duluth: Water Resources Seminar Series, December 5, 2016, Duluth, MN, USA.
- 2015 Using Science to Make Decisions, University of Wisconsin-Superior McNair Program Environmental Science Workshop, June 11, 2015, Superior, WI, USA.
- 2014 Using research and monitoring to protect water resources: The role of the Lake Superior National Estuarine Research Reserve, Izaak Walton League: Hartley Nature Center, September 3, 2014, Duluth, MN, USA.
- 2014 The Power of Science: How do we know?, Rivers-2-Lake Teacher Mentoring Program, University of Wisconsin-Superior, August 7, 2014, Superior, WI, USA.
- 2014 Science: How do we know?, University of Wisconsin-Superior McNair Program Environmental Science Workshop, July 7, 2014, Superior, WI, USA.
- 2014 Using research and monitoring to protect water resources: The role of the Lake Superior National Estuarine Research Reserve, RV Blue Heron Science Friday: University of Minnesota Large Lakes Observatory, May 30, 2014, Duluth, MN, USA.
- 2014 Ecological mysteries in the St. Louis River Estuary. Lake Superior Binational Forum Public Meeting “The Mysteries of Lake Superior, from Top to Bottom”, March 28, 2014, Superior, WI, USA.
- 2014 Studying the effects of climate change on freshwater estuaries at the Pokegama Bay Sentinel Site, St. Louis River Estuary Summit, February 25-26, 2014, Superior, WI, USA.
- 2013 Ecological mysteries in the St. Louis River Estuary: the disappearance of dissolved oxygen and rusty crayfish, River Talks Seminar Series, Red Mug Coffeehouse, November 26, 2013, Superior, WI, USA.
- 2013 The LSNERR Sentinel Site Regional Engagement Strategy, National Estuarine Research Reserve Annual Conference, Nov 19, 2013, Shepardston, WV, USA.
- 2013 Ecological mysteries in the St. Louis River Estuary: the disappearance of dissolved oxygen and rusty crayfish, University of Minnesota-Duluth: Water Resources Seminar Series, November 12, 2013, Duluth, MN, USA.
- 2013 New Ways to View the Environment: The Role of Technology in Environmental Monitoring, Wisconsin Science and Technology Symposium, July 23, 2013, UW-Superior, Superior, WI, USA.

- 2013 Aquatic Plant Invasions: Impacts, Mechanisms, and Management, July 1, 2013, University of California – Davis, Davis, CA, USA.
- 2013 The Pokegama Bay Sentinel Site: Measuring Climate Change Impacts in the St. Louis River Estuary, St. Louis River Estuary Summit, February 26-27, 2013, UW-Superior, Superior, WI, USA.
- 2013 Research at the Lake Superior NERR, UW Superior Department of Biological Sciences, February 8, 2013, UW-Superior, Superior, WI, USA.
- 2012 Research at the Lake Superior NERR, UW Extension Center Directors Meeting, UW-Superior, October 22, 2012, Superior, WI, USA.
- 2012 The Lake Superior NERR and Environmental Leadership; UW-Extension Leadership Academy Conference, September 27, 2012, UW-Superior, Superior, WI, USA.
- 2012 Introducing the Lake Superior National Estuarine Research Reserve, Port Area Committee, April 10, 2012, Duluth, MN, USA.
- 2011 Science, Education, and Stewardship: The Lake Superior National Estuarine Research Reserve, Science on Tap, South Shore Brewery, November 15, 2011, Ashland, WI, USA.
- 2011 Science, Education, and Stewardship: The Role of the New Lake Superior NERR in Ecosystem Management, US-EPA Mid-continent Division Seminar Series, November 2, 2011, Duluth, MN, USA.
- 2011 Lake Superior National Estuarine Research Reserve: The First Year, Great Lakes Coastal Management Regional Meeting, October 20, 2011, Sturgeon Bay, WI, USA.
- 2011 Invasions of riparian and aquatic plants: Impacts and Management. Queensland Department of Environment and Resource Management Seminar Series, July 18, 2011, Mt Coot-tha Botanic Gardens, Brisbane, QLD, Australia.
- 2011 Biological Control of Aquatic Weeds in SE Queensland. War on Weeds: Aquatic Weeds Forum, June 24, 2011, Noosa, QLD, Australia.
- 2011 The Big Three: The most important issues facing the St. Louis River and management implications. June 20, 2011, University of Wisconsin Superior, Superior WI, USA.
- 2011 Invasive Aquatic Plants: Impacts, Mechanisms, and Management, Department of Environmental Science and Management Seminar Series, March 17, 2011, Portland State University, Portland, Oregon, USA.
- 2010 Invasive Plant Ecology and Management, CSIRO Ecosystem Sciences Seminar Series, Sept. 23, 2010, Canberra, Australia.
- 2010 Investigating the mechanisms behind biological invasions, CSIRO Ecosystem Sciences Science Review, Feb. 9, 2010, Canberra, Australia.
- 2009 Managing Aquatic Weeds: the role of biological control and landscape management, National Hydraulic Research Institute of Malaysia (NAHRIM), Sept. 29, 2009, Putrajaya, Malaysia.
- 2009 Effect of Peri-urban Land-Use on Aquatic Weeds, 10th Queensland Weed Symposium, July 26-29, 2009, Managing Weeds: Maximizing Knowledge of Recent Research, Yeppoon, QLD, Australia.
- 2009 Ecology and Biological Control of Invasive Aquatic Plants, THECA Forum: Waterways: Clear or Muddied, May 9, 2009, Brisbane, QLD, Australia.
- 2009 The Ecology and Management of Invasive Aquatic Plants, University of Western Australia, Centre for Water Research, Mar 11, 2009, Perth, WA, Australia.
- 2008 The Ecology and Management of Invasive Aquatic Plants, CSIRO Entomology Seminar Series, Oct 30, 2008, Canberra, ACT, Australia.
- 2008 Ecology and biological control of *Cabomba caroliniana* in Australia, Cabomba Stakeholders Forum, May 30, 2008, Lake Macdonald Botanic Gardens, Cooroy, QLD, Australia.
- 2007 Ecology and biological control of *Cabomba caroliniana*; a subtropical aquatic invader in Australia and Canada, AgCanada Research Centre, June 28, 2007, Lethbridge, Alberta, Canada.
- 2006 Biological Control of Aquatic Plants, April 7, 2006, Kakadu National Park Salvinia Management Workshop, Cooina, NT, Australia.
- 2005 Ecology and Biological Control of Cabomba and Alligator Weed, Nov. 15, National Aquatic Weeds Management Group, Melbourne, Australia.
- 2004 Biological Control of Alligator Weed and Current Research on Alligator Weed, Oct. 11, 2004, Alligator Weed Field Day, The Wetlands Centre, Shortland, NSW, Australia

- 2003 Purple Loosestrife: Managing Plant Invasions and Biological Control Programs., United States Fish and Wildlife Service: All-Hands Meeting, August 11, 2003, Finley Wildlife Refuge, Corvallis, Oregon, USA
- 2002 Impact and biological control of purple loosestrife in the lower Columbia River Estuary. Sea Resources Watershed Learning Center, July 29, 2002, Chinook, Washington, USA
- 2002 Impact and management of two introduced invasive wetland plants: Purple loosestrife and reed canary grass. Friends of Smith and Bybee Lakes, February 6, 2002, Portland, Oregon, USA.
- 2001 Purple Loosestrife: Mapping, Monitoring, Modeling, and Managing Plant Invasions and Biological Control Programs., USDA-ARS Invasive Plant Research Laboratory, December 17, 2001, Fort Lauderdale, Florida, USA.
- 2001 Impact of purple loosestrife (*Lythrum salicaria*) and reed canary grass (*Phalaris arundinacea*) density on wetland plant and moth communities in northwest Oregon. Society of Wetland Scientists Pacific Northwest Chapter Meeting, May 16-18, 2001, Hood River, Oregon, USA.
- 2001 Biological Control of Purple Loosestrife in the Lower Columbia River Estuary, Lower Columbia Estuary Project Implementation Committee, Jan. 11, 2001, Portland, Oregon, USA.
- 2000 Impacts of Purple Loosestrife on Riparian Habitat, Oregon Department of Agriculture, 5th Interagency Noxious Weed Symposium, Dec. 6-8, 2000, Corvallis, Oregon, USA.
- 2000 Biological Control of Purple Loosestrife in the Lower Columbia River Estuary, Purple Loosestrife Mini-Summit, November 14, 2000, Portland, Oregon, USA.

Conference presentations

- 2022 Shon Schooler and Sylvia Yamada, European green crab invasion of Coos Bay, Pacific Estuarine Research Society Annual Meeting, March 18, 2022.
- 2017 Understory planting to mitigate the impacts of Emerald Ash Borer, St. Louis River Science Summit, March 14-15, 2017, University of Wisconsin- Superior, Superior, WI, USA.
- 2015 An Environmental History of the St. Louis River Estuary: Developing a Site Profile for the LSNERR, St. Louis River Science Summit, March 31 – April 1, 2015, University of Wisconsin- Superior, Superior, WI, USA.
- 2012 Detecting Climate Change Impacts at the Lake Superior National Estuarine Research Reserve, NERR Annual Conference, November 27, 2012, Shepardstown, West Virginia, USA.
- 2010 Impact of two invasive plants on plant and herbivore communities, The St. Louis River Estuary Science Summit, March 8-9, 2012, Superior, Wisconsin, USA.
- 2009 Measuring the environmental impacts of invasive plants on freshwater ecosystems, Biological Control for Nature Conference, October 4-7, 2010, Northampton, Massachusetts, USA.
- 2009 Mechanisms and management of amphibious plant invasions: Lessons from Alligator weed in Australia, International Congress on Biological Invasions, Nov 2-6, 2009, Fuzhou, China.
- 2008 Quantifying per capita impacts of invasive species: Impacts of two invasive plants on wetland plant and herbivore communities. International Congress of Ecology (INTECOL), Aug 16-21, 2009, Brisbane, Queensland, Australia.
- 2008 Biological Control of Aquatic Weeds: Past, Present, Future. Weeds Forum: Practical Solutions for Weed Management. Oct. 15, 2008, Tweed Heads, Queensland, Australia.
- 2007 Progress on the biological control of two invasive aquatic plants, cabomba (*Cabomba caroliniana*) and alligator weed (*Alternanthera philoxeroides*), 16th Australian Weeds Conference, May 18-22, 2008, Cairns, Queensland, Australia.
- 2007 Biological control of cabomba (*Cabomba caroliniana*) and alligator weed (*Alternanthera philoxeroides*), International Conference on the Ecology and Management of Alien Plant Invaders (EMAPi), Sept 17-21, 2007, Perth, WA, Australia.
- 2006 Ecology and biological control of *Cabomba caroliniana*, International Symposium on the Biological Control of Weeds (ISBCW), April 22-27, Montpellier, France.
- 2006 Ecology and biological control of *Cabomba caroliniana* 15th Australian Weed Conference, Sept 25-29, 2006, Adelaide, SA, Australia.

- 2006 Introduced aquatic weeds reduce the diversity of wetland plant and moth communities, Ecology Across the Tasman, Ecological Society of Australia and Ecological Society of New Zealand Joint Conference, Aug 28 - Sept 1, 2006, Wellington, New Zealand.
- 2005 Negative effect of aquatic weeds on wetland plant and herbivore communities, Society for Wetland Scientists International Conference, July 9-14, 2006, Cairns, Queensland, Australia.
- 2005 Invasive Plants: Impacts and Management in Rivers and Catchments International River Symposium, September 6-9, 2005, Brisbane, Queensland, Australia.
- 2004 Introduced weeds reduce diversity of wetland plant and moth communities, New Zealand Entomological Society Annual Conference, April 17-20, 2005, Napier, New Zealand.
- 2003 Negative effect of purple loosestrife and reed canary grass on plant and moth communities, International Congress of Entomology, Aug. 15-21, Brisbane, Queensland, Australia.
- 2003 Impact of two invasive plants, purple loosestrife (*Lythrum salicaria*) and reed canary grass (*Phalaris arundinacea*), on wetland plant and moth communities in the Pacific Northwest. XI International Symposium on Biological Control of Weeds, Apr. 27-May 2, 2003, Canberra, Australia.
- 2003 Purple Loosestrife in Oregon: Mapping, Monitoring, and Managing Society for Ecological Restoration and Society of Wetland Scientists National Meeting, Restoration Toolbox, March 24-28, 2003, Portland, Oregon, USA.
- 2002 Impact of two invasive plants, purple loosestrife (*Lythrum salicaria*) and reed canary grass (*Phalaris arundinacea*), on wetland plant and moth communities in the Pacific Northwest. Entomological Society of America National Meeting, Nov. 17-20, 2002, Fort Lauderdale, Florida, USA.
- 2001 Impact of purple loosestrife (*Lythrum salicaria*) and reed canary grass (*Phalaris arundinacea*) density on wetland plant and moth communities in northwest Oregon. Lepidopterists' Society National Meeting, July 27-28, 2001, Corvallis, Oregon, USA.
- 2001 Impact of two invasive wetland plants (purple loosestrife and reed canary grass) on wetland plant and moth communities in northwest Oregon. Ecological Society of America National Meeting, Aug. 5-10, 2001, Madison, Wisconsin, USA.
- 2000 Examining landscapes at landscape scales: Using GIS to develop a stratified-random sampling method for examining lamprey populations in the Alsea Basin, Oregon, Society of Wetland Scientists International Meeting, Aug. 6-12, 2000, Québec City, Canada.
- 1998 Monitoring the biological control of purple loosestrife (*Lythrum salicaria* L.) Ecological Society of America National Meeting, Aug. 9-14, 1998, Baltimore, Maryland, USA.

Other presentations

- 2015 Identification of ash trees and signs of the emerald ash borer community forum, Ash Borer Beetle Blitz, LSNERR Learning Center, April 22, 2015, Superior WI, USA
- 2011 Impact and Control of Mistflower, Springbrook Community Group, February 5, 2011, Springbrook, QLD, Australia.
- 2008 The Biological Control of Aquatic Weeds, Community Workshop: Community Involvement in Pest Plant Biocontrol Programs: Pine Rivers Shire, Nov. 26, 2008, Eaton Hill, QLD, Australia.
- 2008 Biological Control of Aquatic Weeds: Past, Present, Future. Weeds Forum: Practical Solutions for Weed Management. October 15, 2008, Tweed Heads, QLD, Australia.
- 2007 Biological control of alligator weed and cabomba, Queensland Department of Primary Industries Seminar Series, Alan Fletcher Research Station, July 24, 2007, Sherwood, QLD, Australia.
- 2006 Ecology and Biological Control of Aquatic Plants, Alligator Weed and Cabomba, 2006, CSIRO Entomology Post-Doc Forum, Canberra, Australia.
- 2006 Alligator Weed: Current research on biological control and ecology, 2006, Williamstown Community Centre, Raymond Terrace, Australia.
- 2006 Ecology and biological control of *Cabomba caroliniana*, Long Pocket Laboratories Seminar Series, 2006, Brisbane, Australia.
- 2006 Biological control of alligator weed and cabomba, Managing Aquatic Weeds Seminar and Field Day, 2006, New South Wales Department of Primary Industries, Grafton, NSW, Australia.

- 2006 Biological control of alligator weed and cabomba, National Aquatic Weeds Management Group, 2006, Albury, NSW, Australia.
- 2006 Management plan for *Salvinia molesta* in Yellow Water, 2006, Kakadu National Park, Cooina, NT, Australia
- 2006 Research summary on aquatic weeds in Australia, 2006, CSIRO Long Pocket Laboratories, Brisbane, Australia
- 2005 Ecology and Biological Control of Cabomba and Alligator Weed, November 15, 2005, National Aquatic Weeds Management Group, Melbourne, Australia.
- 2004 Mechanisms of Invasion, CSIRO Entomology Seminar Series, October 27, 2005, Canberra, ACT, Australia.
- 2004 Invasion Theory: Mechanisms of Invasion, Long pocket Labs Seminar Series, August 1, 2004, Indooroopilly, Queensland, Australia.
- 2004 The Ecology of Cabomba in South America, Long Pocket Labs Seminar Series, July 23, 2004, Indooroopilly, Queensland, Australia.
- 2004 Prospects for Biological Control of Cabomba, Lake MacDonal Community Care Group Meeting, May 18, 2004, Tewantin, Queensland, Australia.
- 2004 Research and Management of Alligator weed: Future Directions, April 21-22, 2004, Second Alligator Weed Workshop, Raymond Terrace, New South Wales, Australia.
- 2004 Management of Cabomba: Prospects for Biological Control, Noosa Parks Association, April 16, 2004, Noosa, Queensland, Australia.
- 2003 Impact of purple loosestrife and reed canary grass on wetland plant and moth communities PhD Dissertation Presentation, Department of Botany and Plant Pathology, December 1, 2003, Oregon State University, Corvallis, Oregon, USA.
- 2003 Impact of the invasive wetland plants purple loosestrife and reed canary grass on plant and moth communities in the Pacific Northwest. OSU Biology Student Graduate Symposium, February 22-23, 2003, Newport, Oregon, USA.
- 2001 Impact of two invasive wetland plants (purple loosestrife and reed canary grass) on wetland plant and moth communities in northwest Oregon. OSU Department of Entomology Conference, April 14, 2001, Corvallis, Oregon, USA.
- 2000 Monitoring invasions and biological control: the continuing investigation of purple loosestrife, OSU Department of Entomology Conference, April 29, 2000, Corvallis, Oregon, USA.
- 2000 Using GIS to develop a stratified-random sampling method for examining lamprey populations in the Alsea Basin, Oregon, OSU Graduate Student Conference, April 5, 2000, Corvallis, Oregon, USA.
- 2000 Increase, spread, and effectiveness of two beetle species introduced to control purple loosestrife in Oregon OSU Biology Graduate Student Symposium, March 4-5, 2000, Newport, Oregon, USA.
- 1998 Monitoring the biological control of purple loosestrife (*Lythrum salicaria* L.) OSU Department of Entomology Conference, April 18, 1998, Corvallis, Oregon, USA.

Professional Service Activities:

-
- 2013-present System-wide Monitoring Program Oversight Committee: NOAA National Estuarine Research Reserve System
 - 2013-2018 Wild Rice Restoration Workgroup: St. Louis River Estuary: Minnesota Department of Natural Resources
 - 2012-2014 Technical Review Committee: University of Wisconsin Sea Grant
 - 2012-2014 Strategic Committee: NOAA National Estuarine Research Reserve System
 - 2011-2013 St. Louis River Area of Concern Fish and Wildlife Habitat and Populations Beneficial Use Impairment Delisting Committee, Minnesota Department of Natural Resources
 - 2004-2011 Australian National Aquatic Weed Management Group
 - 2002-2003 Graduate Student Representative, Department of Entomology, Academic Standards Committee, Oregon State University, Corvallis, Oregon, USA

2000-2001 Graduate Student Representative, Department of Entomology Faculty meetings, Oregon State University, Corvallis, Oregon, USA

Volunteer Activities:

2004-2008 Seagrass Watch, collecting data on density of seagrass in Moreton Bay, Queensland, Australia
2000-2004 Treasurer, Oregon State University Entomology Club, Corvallis, Oregon, USA
2002-2003 Graduate student mentor, EarthWatch research project investigating the impact of purple loosestrife in the lower Columbia River Estuary and mentoring seven high school students
2001-2002 Manager of Bug Zoo, a club dedicated to public outreach of live invertebrate fauna
1996-1998 Editor of OSU Department of Entomology Newsletter
1996 4-H Summer Camp, Introductory Entomology, Oregon 4-H Center, Salem, Oregon, USA

Media Coverage:

Sep 14, 2022 Shon Schooler and Colleen Walker, Coos Bay researchers use tea bags to understand marsh health, Oregon Public Broadcasting: Think Out Loud, September 14, 2022. <https://www.opb.org/article/2022/09/14/coos-bay-researchers-use-tea-bags-to-understand-marsh-health/>

Dec 1, 2021 Shon Schooler, Sara Stansbury, Sylvia Yamada, Green crab invading Oregon estuaries. Jefferson Exchange, Jefferson Public Radio, December 1, 2021. <https://www.ijpr.org/show/the-jefferson-exchange/2021-11-30/wed-8-am-oregon-implores-you-eat-more-green-crab>

Nov 27, 2021 Shon Schooler, Invasive green crabs threatening local species. National Public Radio Weekend Edition, host Scott Simon, Nov 27, 2021 <https://www.npr.org/2021/11/27/1059490262/invasive-green-crabs-are-threatening-local-species-the-solution-eat-them>

Nov 23, 2021 Shon Schooler, Scientists say: eat more green crabs. Oregon Public Broadcasting: Think Out Loud, Nov 23, 2021. <https://www.opb.org/article/2021/11/23/scientists-say-eat-more-green-crabs/>

Jan 4, 2021 Status of European Green crabs in Coos Bay, Oregon. The Jefferson Exchange, Jefferson Public Radio, 30 minutes, Geoffrey Riley, Ashland, OR, USA.

Jan 28, 2013 Sustaining the Freshwater Sea: Episode 6. Superior's Sister, University of Wisconsin Sea Grant Institute, podcast:
<http://www.seagrant.wisc.edu/home/Default.aspx?tabid=601&AudioGroupID=44#>

Feb 12, 2011 Saturday Scientist: Managing salvinia in Kakadu. ABC radio, Richard Margetson, Darwin, Australia

Feb 10, 2011 Biological control of salvinia in Kakadu. ABC radio, Darwin, Australia

Nov 24, 2006 Management of cabomba, ABC, television news, Darwin, Australia (national coverage)

Feb 28, 2005 Cabomba, Channel 7, television news, Brisbane, Australia

Oct 12, 2004 Hunter epicentre of weed problem, Newcastle Herald, newspaper, Australia, p16.

Oct 13, 2004 Project aimed at combating weed: Cabomba, Gympie Times, newspaper, Australia, p.19

Aug. 1, 2002 Purple loosestrife focus of study by scientists and students, D. Hazen, Clatskanie Chief, newspaper, USA, p.9

Oct. 9, 2000 Bugs munch way through killer weed, J. Fitzgibbon, The Oregonian, newspaper, USA, p.20

Undergraduate mentoring:

Sebastian Velazquez	2022	Project on the use of alternative baits for monitoring and control of green crabs
Colleen Walker	2022	Projects on green crab trap catch at different depths and position (upper, mid, lower) in estuary, fish communities, marsh decomposition rates, and lamprey eDNA
Sara Stansbury	2021	Project examining green crab recruitment and molting and marsh decomposition.
Jordan Pantoja	2021	Project examining invasive green crab intraspecific predation

Renne Heller	2019-2020	Project examining invasive green crab predators
Luke Donaldson	2019	Project examining herbivory on a native lily
Chris Carlson	2018-2019	Project examining invasive green crabs
Sam Hansen	2017-2018	Project examining the impact of increased light on under-ice algal productivity and communities, Summer Undergraduate Research Fellowship: goose herbivory on wild rice
Murphy Steininger	2017-2018	Project examining microplastics in western Lake Superior rivers
Adam Lein	2014-2018	Project examining algal productivity measurements: in-river sonde compared with laboratory values, URSCA project assistant, summer intern project at Kachemak Bay NERR
Leo Dressen	2016-2017	Project examining chemicals of emerging concern in the St. Louis River
Sydney Mauch	2015-2016	Project examining the impact of biological control on purple loosestrife, McNair Fellow
Michael Krick	2014-2016	Project on carbon storage and sediment accretion in Pokegama Bay
Joe Ripley	2012-2016	Project on low dissolved oxygen. Received UW-Superior summer undergraduate research fellowship (SURF) in 2014
Karada Tudor	2013-2015	Project on invasive and native crayfish. Received 2 nd place for research poster at 7 th annual Wisconsin Science and Technology Symposium. Co-writing journal article
Josh Mutchler	2012-2013	Project on under-ice dissolved oxygen. Received best student oral presentation at Society of Wetland Scientists Conference in 2013
Allie Quick	2012-2013	Project on rain-garden effect on total suspended solids
Brian Lester	2012-2013	Project on invasive and native crayfish
Seth Bliss	2011-2012	Project on purple loosestrife biological control
Jessica Carlson	2011-2012	Project on purple loosestrife biological control
Clementine LeNaire	2010-2011	Project on parasitism and predation of mistflower gall fly
Simon Benateau	2009-2010	Project on parasitism and predation of mistflower gall fly
Zoë Baron	2005-2006	Project on alligator weed herbivory. Co-wrote journal article and article published in Biological Control.

22 November 2022

Oregon Invasive Species Council Ex Officio Voting Members

Dear Colleagues:

It is with pleasure that I support the nomination of Dr. Shon Schooler to serve as a voting ex-officio appointed member of the Oregon Invasive Species Council starting in January 2023. Dr. Schooler has broad education and experience in research and monitoring of invasive species in Oregon and elsewhere as evidence from his CV.

Dr. Schooler's participation will enhance important links with regional entities along the South Coast, and with the Oregon Department of State Lands. His position as Lead Scientist at the South Slough National Estuarine Research Reserve (SSNERR) will provide the opportunity for increased partnership of the OISC with this important Oregon institution. His current monitoring and research of Green Crab populations was featured in our June meeting of the Council, and he led a field trip to a collecting site. The SSNERR is actively engaged in using tools such as environmental DNA in regional watersheds, and this e-DNA work has partners across the nation. Dr. Schooler participated in our October meeting discussion of these emerging tools that can provide enhanced understanding of distributions of species and understanding of risks. I believe Dr. Schooler's addition to the Council will be a strong asset to the scientific expertise across estuarine, freshwater and terrestrial systems.

Sincerely,

A handwritten signature in blue ink that reads "Christine M. Moffitt". The signature is written in a cursive, flowing style.

Christine Moffitt, PhD
OISC Vice Chair

Statement of Interest for the Oregon Invasive Species Council

Nathan Gehres

I grew up in the woods of Southwest Oregon, exploring the diverse habitats found here. A changing climate, the impacts from an expanding human population, and an influx of invasive species have stressed and altered the landscape of my childhood in dramatic ways. A desire to preserve the remaining plant communities is one of the driving motivations behind my current work with the Applegate Partnership & Watershed Council (APWC).

My own experience with botany began while working on forest science research projects during my undergrad years at Oregon State University. I continued to work for the university after graduating, before moving on to help establish a new reserve for the Nature Conservancy in Southern Washington. I then returned to the field of botany in positions with UC Berkeley, the University of Nevada Las Vegas, and the University of New Mexico. After over a decade away, I returned to Oregon to work for the US Forest Service (USFS) on a botany crew out of Gold Beach. The crew surveyed for invasive species populations in the Rogue River Siskiyou National Forest. At the close of this seasonal position, I worked for the Great Basin Institute, running a soil and botany crew throughout northern California and Nevada. I have been thoroughly steeped in the plant sciences for well over two decades now.

APWC's restoration efforts are normally focused on riparian areas, though we are branching out to the uplands. Past projects have treated large populations of blackberries, Vinca, Poison Hemlock, Canary Reed Grass, Dyer's Wode, Garlic Mustard, and a multitude of others. We regularly partner with the BLM, USFS, the local CWMA, soil conservation districts, state agencies, local experts, and private landowners. This has led to the formation of fruitful relationships across our region. Our watershed also spans Jackson and Josephine Counties, providing a large footprint for projects and partnerships in both counties.

Our efforts at APWC are funded through grants. Consequently, I have gained a lot of experience writing grants, managing budgets, and overseeing projects from inception through implementation and final reporting. It has also given me perspective on the difficulties and complications that arise with grant-funded projects, especially those that attempt something as difficult as invasive species removal. APWC is also based in a rural community, our office is in Ruch, that is regularly overlooked by decision makers in the more urban areas and our community is a voice that often is not heard.

I believe my skill set and desire to help conserve the plant communities that make Southern Oregon a botanical wonderland will make me a great candidate for the Oregon Invasive Species Council.

Thank you for your time,

Nathan Gehres



Strauss Ecological Services Inc.

316 SW K St.

Grants Pass, OR 97526

(541)842-0284

www.StraussEcoServices.com

StraussEcoServices@outlook.com

November 29, 2022

Oregon Invasive Species Council

To whom it may concern,

The purpose of this letter is to recommend Nathan Gehres for a board member position to the Oregon Invasive Species Council.

Nathan is the Habitat Restoration Project Manager with the Applegate Partnership and Watershed Council. As a contractor specializing in noxious weed control I have interacted with Nathan on several projects in Southwestern Oregon. He has assisted with removal of state listed noxious weeds such as garlic mustard (*Alliaria petiolata*) in restoration projects involving the watershed council. He is also actively involved with the Cooperative Weed Management Area meetings for Josephine and Jackson County.

I think Nathan would be a great representative of an organization that is an environmental advocate. He would also be an effective representative of an entity based in Jackson and Josephine Counties. I encourage you consider Nathan Gehres for a board position to the Oregon Invasive Species Council, and if I can be of further assistance, or provide you with any further information, please do not hesitate to contact me.

Sincerely,

Kyle Strauss

Strauss Ecological Services Inc.



APPLEGATE PARTNERSHIP, INC.

dba Applegate Partnership & Watershed Council

P.O. Box 899 | Jacksonville, OR 97530 | 541) 899-9982

janelle@apwc.info | www.apwc.info

a 501 (c)(3) Nonprofit Organization

November 30, 2022

Oregon Invasive Species Council

coordinator@oregoninvasivespeciescouncil.org

To whom it may concern,

I am writing on behalf of Nathan Gehres, an Applegate Partnership staff member and Applegate Watershed community member. Mr. Gehres was hired in 2020 to manage and develop habitat restoration projects in the Applegate Watershed. This position requires Mr. Gehres to work with a wide variety of land managers including private landowners, private land managers and public land managers. He has also had the opportunity to work collaboratively with local community organizations including the Cooperative Weed Management Area work group in Jackson and Josephine County.

Mr. Gehres has been an asset to the Partnership, bringing skill sets, knowledge, and the desire to expand his knowledge base. We believe that this appointment would benefit him as much as it would benefit the Applegate Partnership through the knowledge and connections provided as a council member.

We strongly recommend that you consider Nathan Gehres as a member of the Oregon Invasive Species Council, and we highly recommend him to participate in this council.

Sincerely,

Janelle Dunlevy
Executive Director



Bylaws of the Oregon Invasive Species Council

Adopted: 2002

Last updated: June 2021

ARTICLE I: Name/Purpose

Section 1: Name. The name of this organization is the Oregon Invasive Species Council.

Section 2: Purpose. The purpose of the Oregon Invasive Species Council is to conduct a coordinated and comprehensive effort to keep invasive species out of Oregon and to eliminate, reduce, or mitigate the impacts of invasive species already established in Oregon.

Section 3: Scope. The Oregon Invasive Species Council was created to prevent non-native species that cause economic or environmental harm from entering Oregon or spreading to new areas of the state. Invasive species within the scope of the Council do not include humans, domestic livestock, or non-harmful exotic organisms.

ARTICLE II: Membership

Section 1: **Ex-officio voting members.** Per ORS 570.770 (revised 2019), eight members of the Council are ex officio voting members with terms that do not expire.

Section 2: **Appointed members.** The voting ex-officio members shall appoint a total of ten additional term-limited voting members that are representative of the geographic, cultural and economic diversity of this state, following ORS 570.770 (revised 2019).

Section 3: **Ex-officio nonvoting members.** Per ORS 570.770 (revised 2019), seven or more members are designated ex officio nonvoting members without a specified term of service.

Section 4: **New appointments.** At least two months prior to the expiration of appointed member terms, the Chair shall invite nominations from the Oregon Invasive Species Council and other parties for new members or renewal of appointees eligible for a second consecutive term.

Section 5: **Resignation and Removal.** Resignation from the Oregon Invasive Species Council must be in writing and received by the Chair. An appointed member may be removed for excess absences or other reasons by a majority of the voting members.

Section 6: **Incomplete terms.** When an appointed member vacancy occurs through resignation or termination before the term expires, the ex-officio members shall appoint a new member representing a similar interest.

Section 7: **Designated alternate.** Each voting member may have the agency or organization that the Council member represents designate an alternate (other than a current Council member) to attend, participate and vote

in Council meetings that the Council member does not attend. Appointed members must notify the Council Chair of alternate attendance before the meeting.

ARTICLE III: Administration

Section 1: **Officers.** The officers of the Oregon Invasive Species Council shall be Chair, ~~and~~ Vice-Chair and a second Vice-Chair nominated from the ten appointed members. Other officers may be named as deemed necessary.

Section 2: **Chair and Vice-Chairs.** A voting ex-officio member will serve as Chairperson and another voting ex-officio member to serve as Vice-chair. In addition, a second Vice-Chair will be nominated from the ten appointed members of the Council. Each year, the Council will select a voting member to serve as Chairperson and another voting member to serve as Vice-Chairperson per Oregon Administrative Rule (pending new OAR #).

Section 3: Rotation of Officer Duties. The Chair and Vice-chair position shall rotate among the ex officio members such that each ex officio member serves one year as Chairperson and one year as Vice Chairperson, according to the following rotation schedule.

<u>Year</u>	<u>Chair</u>	<u>Vice-chair</u>
<u>2023</u>	<u>OSMB</u>	<u>Sea Grant</u>
<u>2024</u>	<u>Sea Grant</u>	<u>OPRD</u>
<u>2025</u>	<u>OPRD</u>	<u>DEQ</u>
<u>2026</u>	<u>DEQ</u>	<u>ODA</u>
<u>2027</u>	<u>ODA</u>	<u>ODF</u>
<u>2028</u>	<u>ODF</u>	<u>PSU</u>
<u>2029</u>	<u>PSU</u>	<u>ODFW</u>
<u>2030</u>	<u>ODFW</u>	<u>OSMB</u>

Section ~~43~~: **Quorum.** A majority of the total number of voting members constitutes a quorum for the transaction of business.

Section ~~54~~: **Officer Terms.** Officers shall serve a term of one year. Officers shall not serve more than two consecutive terms as an Officer. The Council will vote to fill the vacant office.

Section ~~65~~: **Council Coordinator.** A Council Coordinator may be employed to administer the operation and functions of the Council. The scope of duties will be as determined by the Council. Council Coordinator maintains regular contact with the Council Chairperson, who shall outline the nature, frequency and means for carrying out such coordination.

Section ~~76~~: **Duties of Chair and Vice-Chair.**

The duties and powers of the Chairperson and Vice Chairperson (per OAR#) are as follows:

(a) The Chairperson may perform the duties, including but not limited to, selection of committee chairs, development of Council meeting agendas and facilitation of council meetings, oversight of the OISC Coordinator's work, and guidance of council decision making. The Chairperson will also serve as the liaison to the Governor's Natural Resource Office and Oregon Department of Agriculture, and represent the views and interests of the Council generally. The Chairperson's duties also include reporting to the legislative assembly.

(b) ~~Either~~ The Vice Chairperson may assist the Chairperson and fill in for the Chairperson as necessary. The Vice Chairperson will lead the Governance Committee, serve as the liaison to interested stakeholder groups, and oversee and track committee action items with assistance from the OISC Coordinator.

ARTICLE IV: Meetings

Section 1: **Regular meetings.** Regular meetings shall be held three times each year. The schedule of regular meetings for a given year shall be set by the Invasive Species Council during the last regular meeting of the prior calendar year.

Section 2: **Special meetings.** Special meetings may be called by the Chair or a majority of voting members.

Section 3: **Notice.** Notice of each meeting shall be given to each voting member at least ten days before the meeting. Notices of regular meetings shall also be published in the State Register.

Section 4: **Minutes.** Minutes from each Invasive Species Council meeting shall be provided to voting members at least ten days before the next meeting. Minutes must be approved, with any necessary changes, by a quorum at the next regular meeting.

ARTICLE V: Decision-Making

Section 1: **Consensus.** The Invasive Species Council shall endeavor to make consensus decisions representing agreement of all members present at a meeting.

Section 2: **Voting.** When the Chair deems that a consensus decision is not possible, decisions shall be based on a majority vote by the quorum. The Chair shall make the deciding vote in the event of a tie. Dissenting votes will be noted for the record.

Section 3: **Designated Alternate Voting.** A designated alternate authorized by the agency or organization represented by a voting Council member can attend a Council meeting that the Council member does not attend and cast a vote in lieu of the Council member absence.

Section 4: Email or Absentee Voting

Section 5: **Quorum.** A majority of the total number of voting members constitutes a quorum for the transaction of business. Meetings may be held without a quorum, however, no Council decisions can be made.

ARTICLE VI: Committees

Section 1: **Establishment.** Current committees, purpose, goals, and membership can be found in Council meeting minutes and on the Council's website.

Section 2: **Committee Membership.** Per ORS 570.790, committees may consist of Invasive Species Council members and/or other individuals, as designated by the Chair or a majority of the quorum. The Chair shall appoint all committee chairs.

Section 3. **Committee Operating Procedures.** The Chair or Executive Committee may assign Council action items to an appropriate committee(s). Additionally, the Council may assign action items to a committee by consensus or vote. For assignments and tasks that require time investments beyond in-committee discussion, the committee chair may create/assign a working group.

3(a): **Committee Meetings.** As necessary, committee Chairpersons or a chair-designated committee member may schedule meetings to complete assigned action items. Committees have the authority to make recommendations to the Council, thus, committee meetings are public and appropriate notice must be filed.

3(b). **Working Groups.** In the event that a committee action item cannot be accomplished during the course of standard meetings, the committee chairperson may request the formation of a temporary or ongoing working group that consists of councilmembers and network partners.

- i. Working groups will meet as needed to gather and aggregate information, create outreach and education product concepts and explore options for accomplishing Council objectives.
- ii. Working groups do not have the authority to make recommendations to the Council and these meetings are not subject to public meeting disclosure.
- iii. Upon completion, or when a benchmark is reached, the working group will report to the full committee at which point the committee can recommend to forward an official recommendation to the council, request further development from the working group or terminate the assignment.

Section 4. **Reporting.** Committees shall report to the Chair or Vice Chair. Committees chaired by the Council Chair will report to the Executive Committee. Committees chaired by the Council Vice-Chair will report to the Chair and/or Executive Committee at the Chairperson's discretion.

Section 5. **Executive Committee.** The Executive Committee was formed in 2021 and includes the Chair, Past Chair, Vice Chair, committee chairs, and an Oregon Department of Agriculture representative. The purpose of the Executive Committee is to share information between Council committees, discuss priorities and assistance needed, create OISC meeting agendas, and make the OISC meetings more efficient and effective.

ARTICLE VII: Amendments to the Bylaws

Section 1: Amendments. These Bylaws may be amended when necessary by a two-thirds majority of the quorum. Proposed amendments must be submitted to the Chair by the Bylaws Committee.

ARTICLE VIII: Independent Network Partners

Section 1. The Oregon Legislature has recognized that the Council has a strong network of "local, state, federal, tribal and private entities" that cooperatively combat the threat posed by harmful invasive species. *See* ORS 570.750(4).

- a. As an informational resource, the Council may list on the Council's webpage member entities and individuals who are within the network.
- b. The Council may invite to its meetings organizations and individuals within the network to exchange information with the Council bearing on invasive species efforts in Oregon.

Section 2. Although the Council is not authorized to direct or control members of the network in Oregon helping to combat destructive invasive species, the Council can partner with independent network members that voluntarily choose to cooperate with the Council and other state agencies in helping to prevent the introduction into and spread within Oregon of destructive invasive species.

A Nominee First & Last Name ⓘ

Dominic Maze

A Nominee Affiliation

City of Portland, Bureau of Environmental Services

✉ Nominee Email

Dominic.Maze@portlandoregon.gov

☎ Nominee Phone

(503) 823-5988

📄 Statement of Nomination ⓘ

Dom discovered EAB in Oregon (Forest Grove) (when he was just out being a dad)

☰ Region ⓘ

+

A First & Last Name of Nominator ⓘ

Cat de Rivera

A Nominator Affiliation

Portland State U/CLR/OISC

✉ Nominator Email

derivera@pdx.edu

☎ Nominator Phone

(971) 678-1575

📅 Created on

10/10/2022

▼ Field 12

Local Leadership & Collaboration Award ▼

A Nominee First & Last Name ⓘ

Robert Emanuel

A Nominee Affiliation

Clean Water Services

✉ Nominee Email

emanuelr@cleanwaterservices.org

☎ Nominee Phone

(503) 681-3652

☰ Statement of Nomination ⓘ

Robert has been protecting Oregon's natural landscapes for many years, but I would like to highlight his recent leadership on the Emerald Ash Borer Task Force and his efforts to involve the local community in responding to this invasive species. Robert has provided local geographical data, tools, access to land for survey efforts, and training for staff at Portland Metro, Oregon Department of Agriculture, Oregon Department of Forestry, United States Forest Service, Animal and Plant Health Inspection Service, several soil and water conservation districts, and many other stakeholders, industries, and cooperators. His efforts have contributed a great deal to our understanding of Emerald Ash Borer pest status in Oregon and will help slow its spread into other regions of the western United States.

☰ Region ⓘ

Portland Metro ✕ +

A First & Last Name of Nominator ⓘ

Cody Holthouse

A Nominator Affiliation

Oregon Department of Agriculture

✉ Nominator Email

cody.holthouse@oda.oregon.gov

☎ Nominator Phone

(503) 910-6615

📅 Created on

11/28/2022



Local Leadership & Collaboration Award

A Nominee First & Last Name ⓘ

Dominic Maze

A Nominee Affiliation

City of Portland Environmental Services

✉ Nominee Email

Dominic.Maze@portlandoregon.gov

☎ Nominee Phone

(503) 823-5988

📄 Statement of Nomination ⓘ

On June 30, 2022 Dominic Maze spotted the first emerald ash borer detection west of Colorado. Following the EAB Response Plan, he immediately reported the potential ID to Oregon Department of Forestry which enabled us to act quickly. He was informed and correct in his assessment.

☰ Region ⓘ

+

A First & Last Name of Nominator ⓘ

Christine Buhl

A Nominator Affiliation

Oregon Department of Forestry

✉ Nominator Email

christine.j.buhl@odf.oregon.gov

☎ Nominator Phone

(503) 798-7739

📅 Created on

11/29/2022

▼ Field 12

Invader Crusader Award ▼