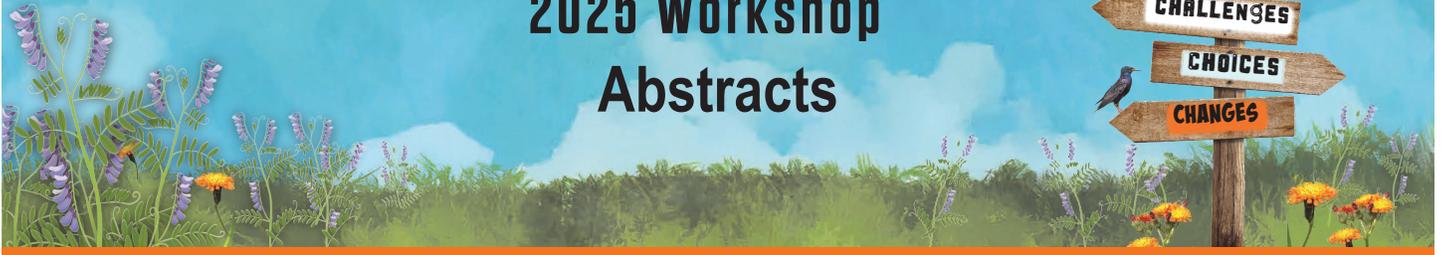


Alaska Invasive Species Partnership 2025 Workshop Abstracts



Out of Sight, Out of Mind?

The Unrealized Devastation from Invasive Northern Pike

Parker Bradley - Alaska Department of Fish and Game

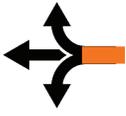
Northern pike, a species not native to Southcentral Alaska, was initially introduced to this region in the 1950s. As one of the most popular sport fish in the U.S., this top-level predator is commonly and illegally moved around by people, often with dire consequences. In Southcentral, northern pike are now known to occupy more than 150 waterbodies, and they are continuing to spread. Many of the waters where northern pike have spread are remote and difficult to access, making management actions difficult, expensive or even impossible. As a result, many people don't realize the actual impacts northern pike have had on native resident and anadromous species. The degree of these impacts depends greatly on the habitat conditions of the waterbody and duration of infestation, ranging from minor to catastrophic. A catastrophically impacted waterbody means it historically supported anadromous fish, but the fish community is now northern pike-dominated, and salmon production no longer exists. The amount of this destroyed habitat is beginning to be quantified, and unfortunately, this is painting a picture of a dire and continuously growing loss of anadromy from northern pike predation. In addition, the amount of moderately/severely impacted waters is significant and growing too. In some locations, these impacts have been reversed by eradication efforts, but that's not an option everywhere. While the situation is already precarious, there is still potential for it to get much worse, emphasizing the need for critical research focused on pathways and prevention.



With a Little Help from My Friends: Partnership and Perseverance in Responding to a Novel Elodea Infestation in Crescent Lake

Jen Chauvet - Homer Soil and Water Conservation District; Peter Frank - U.S. Forest Service

Hot on the heels of the Kenai Peninsula Cooperative Invasive Species Management Area announcing that all known infestations of elodea on the Kenai Peninsula had been eradicated, Chugach National Forest biological science technicians detected elodea in Crescent Lake in September 2023. The discovery raised concerns not only about ecological impacts to the lake itself but also the risk of invasion throughout the Kenai River watershed and beyond due to the potential for downstream spread and transport to other waterbodies via floatplanes. Central to local economies and lifestyles of Peninsula communities, the Kenai River – one of the most productive salmon rivers in Alaska – and its tributaries provide vital habitat for 40 species of resident and anadromous fish, including four species of Pacific salmon. Recognizing the need for immediate collaborative action, the Chugach National Forest techs called on the KP-CISMA and formed a Crescent Lake Elodea Working Group to begin developing a response plan. As the pieces began to fall into place to implement eradication efforts, the government restructuring in early 2025 and corresponding freezing of federal grant funds abruptly left the project short-handed and underfunded. These unexpected and disheartening setbacks left the partners scrambling to reorganize and reassess strategies. Demonstrating the KP-CISMA's longstanding commitment to cooperative action, partners rallied and pooled their resources to keep the project moving forward – the Crescent Lake Elodea eradication project became everyone's highest priority. Despite numerous obstacles and logistical hurdles along the way, the KP-CISMA completed the first year of the project – on schedule – with treatments beginning, as planned, in July 2025. The presentation will provide an overview of the project and strategies employed during the initial treatment year, including herbicide application, monitoring and community engagement. We will also share lessons learned, highlighting the fundamental role of teamwork, adaptability and perseverance in addressing complex invasive species management issues.



Best Practices for Citizen and Community Science: Tips from the Literature and Practitioners

Malin Clyde - University of New Hampshire Cooperative Extension Service

Citizen and community (participatory) science is emerging as an important method to collect science data, engage people and impact society. Malin will speak about ways to employ the methods for mutually positive outcomes in research, learning and society. Drawing from academic literature in citizen science, current global initiatives, and her own and others' practical experience in citizen science projects, Malin will share tips and resources for project design, working with volunteers, partnership engagement, program evaluation and more:

- **Resources for Best Practices:** 10 Principles of Citizen Science ECSA: <https://zenodo.org/records/5127534#.YPrkNEBCRhE>
- **Tips for Working with Citizen Science Volunteers:** https://naturegroupie.org/sites/default/files/documents/Final%20Tips%20for%20Working%20with%20CitSci%20Volunteers_Rev2018.pdf
- **Drafting a Volunteer Position Description:** https://naturegroupie.org/sites/default/files/documents/StewTrainingGuide_Workday101_VolunteerPositionDescriptionHandout_2018_0.pdf
- **Choosing and Using Citizen Science Guide (Scottish EPA):** https://www.ceh.ac.uk/sites/default/files/sepa_choosingandusingcitizenscience_interactive_4web_final_amended-blue1.pdf
- **Training to Learn More:** Online Course, Jan. 16 – March 1: “Citizen and Community Science: Designing Projects for Research and Engagement.” University of New Hampshire Professional Development and Training

From Field Notes to Decision Tools: Building a Database for Alaska's Invasive Species

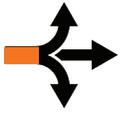
Justin Fulkerson - Alaska Center for Conservation Science

Effective management of invasive plants depends on accurate, accessible, and shareable data on species distributions. The Alaska Exotic Plants Information Clearinghouse (AKEPIC) was established to meet this need by serving as a central repository for invasive plant information in Alaska. AKEPIC combines a comprehensive list of non-native species, including invasiveness ranks and species accounts, with a mapping application that displays spatial distribution data. Since the early 2000s, the Alaska Center for Conservation Science (ACCS) has worked with partners to standardize data submissions, incorporating common fields across multiple databases and expanding the system to better support research and management. Data standardization is essential to collaboration across agencies and jurisdictions that support early detection, rapid response, and long-term management of invasive species in Alaska.

Modernizing Invasive Species Field Data Collection, Integration and Distribution: Preparing for Invasive Freshwater Mussels

Marcus Geist - Alaska Center for Conservation Science

Invasive dreissenid mussels, both quagga (*Dreissena bugensis*) and zebra (*Dreissena polymorpha*), have drastically impacted freshwater ecosystems and economies across many U.S. states and Canadian provinces. Fortunately, dreissenids have not been discovered in Alaska to date, and a partnership has assembled to fend off these invaders. The Alaska Department of Fish and Game and the U.S. Fish and Wildlife Service aquatic invasive species programs and their partners are implementing an array of projects that will be highlighted in the presentation. The University of Alaska Anchorage has created a multi-function ArcGIS online web map to display lake vulnerability and then prioritize monitoring efforts, collecting water quality (calcium concentration and pH) and/or plankton tows looking for mussel veligers, as well as benthic sampling. Each lake is attributed with a suite of factors that map users can use as filters, such as road access, boat launches, floatplane use, hydrologic connectivity, elodea and non-native pike presence, ADF&G stocking, and known fish species. A research team at the University of Alaska Fairbanks has developed a model to inform the web mapper with potential habitat suitability and further refine monitoring prioritization. The project team adapted an ArcGIS Survey 123 mobile application to collect standardized monitoring data that automatically populates a layer on the web map when returning from the field. This approach allows other partners, such as soil and water conservation districts, local watershed groups, and Alaska Native groups to join ADF&G and USFWS in a coordinated and accessible monitoring effort. This talk will introduce and demonstrate these geospatial tools that invasive species partners can use to prioritize and track monitoring efforts across Alaska.



On the Case (Bearer): Next Steps for Survey and Outreach After Confirmation of an Invasive Moth in the Anchorage Bowl

Grace Graham and Jason Moan - Alaska Division of Forestry and Fire Protection

In April 2025, larch casebearer (*Coleophora laricella*) larvae were found infesting ornamental Siberian larch (*Larix sibirica*) in Anchorage, Alaska. This is the first known detection of this invasive moth species in the state. Larch casebearer is native to Europe, where it feeds on the needles of deciduous conifers from the genus *Larix* (larch). Since its initial introduction to the eastern United States in the late 1800s, larch casebearer has become established on both planted and native larch in much of North America. Although not a tree-killer, many insects feeding on the same tree for multiple years in a row can cause declines in tree growth and vigor, as well as more severe damage such as dieback, topkill and epicormic branching. Mortality of trees by other agents, such as eastern larch beetle (*Dendroctonus simplex*) and armillaria root disease (*Armillaria sp.*) has been linked to initial tree stress induced by casebearer defoliation in native larch forests in the Lower 48. To better understand this insect's current distribution, likely entry pathway, and risk to native eastern larch (*Larix laricina*) forests of the Interior, Alaska Division of Forestry and Fire Protection, with assistance from USFS Region 10 Forest Health Protection, developed and conducted surveys of larch trees in Anchorage and other urban areas in the state. This presentation will discuss the results of these efforts as well as plans for future outreach and monitoring for larch casebearer in Alaska.

Season Extension Control for Woody Invasive Species

Gino Graziano - University of Alaska Fairbanks Institute of Agriculture, Natural Resources and Extension

Woody invasive species present challenges and opportunities for management. The challenge and opportunity revolve around their life history, which includes slow maturation and being above ground throughout the season. Slow maturity can make trees sleeper invasive species, with a longer apparent lag phase to when we recognize their spread, because small trees are overlooked, and spread doesn't accelerate until you have many large trees with lots of seed. These same features are the advantage in management. We will review broader strategies for woody invasive management. We will also review specific control strategies and herbicide label instructions for control that can extend your season and provide additional choices for managing the challenge of woody invasive species.

Challenges, Choices and Changes in Approach to Setting Goals for Invasive Species Management

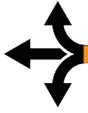
Gino Graziano - University of Alaska Fairbanks Institute of Agriculture, Natural Resources and Extension

With several hundred non-native species established in Alaska and impacts to ecosystem services accruing from several of those, the invasive species challenge in Alaska has matured to a monumental task with an unclear goal in any given effort. Invasive species science and management in Alaska are at a crossroads in defining that goal. Incipient populations of new species seem like a low-hanging fruit for eradication. How, though, do we balance the amount of effort put into eradicating a species with unknown impact with the management of those established species that we know have a large impact? Well-established invasive species with known impacts, such as invasive chokecherry and northern pike, deserve long-term management, but how do we define the goal of such management when eradication isn't feasible? What do we do with species like orange hawkweed that, once established, are hard to treat enough to ever make headway? This presentation asks a lot of questions to challenge the choices we make in invasive species management, and poses some suggestions on moving forward with both research and management supporting a common goal.

State of the State Elodea: - Decision Point: Herbicide Control Strategies - Challenges, Choices and the Road Forward

Cody Jacobson - Statewide Invasive Species Coordinator, Alaska Department of Natural Resources Division of Agriculture

Elodea (*Elodea spp.*, Common waterweed) is Alaska's first invasive submersed freshwater aquatic plant that has been identified in several regions of the state, including the Copper River Delta, Interior, Kenai Peninsula and the Matanuska-Susitna (Mat-Su) Valley. In the Mat-Su, elodea has been found within the Alexander Creek drainage that encompasses Alexander Lake, Alexander Creek, and the Sucker Lakes complex. Elodea has also been found established and spreading in the Big Lake system, including Big Lake, Mirror Lake and Flat Lake. Elodea was discovered in 2023 in Lower Six Mile Lake on Joint Base Elmendorf-Richardson, Anchorage and in Crescent Lake on the Kenai Peninsula. Elodea is also present in the Interior in Harding Lake and Chena and Piledriver sloughs, as well as a series of small lakes on Eielson Force Base. These watersheds are currently in some state of herbicide control based on funding availability. The Alaska Department of Natural Resources is partnering with numerous collaborators on these control efforts. This presentation will provide an overview of the 2025 field season of herbicide control and containment efforts conducted by DNR throughout these watersheds, along with challenges faced in the fight against this pervasive aquatic plant that threatens critical salmon rearing habitat throughout Alaska. Different application strategies and techniques will be discussed, as well as several different aquatic herbicide formulations currently being used by DNR.



Building Local Capacity Through Invasive Species Management in the Copper River Watershed

Colleen Merrick - Copper River Watershed Project / Copper River Native Association

The Copper River Watershed Project (CRWP), in partnership with the Copper River Native Association (CRNA), is advancing invasive species management by connecting workforce development with community-led stewardship. Through integrated pest management training led by Amanda Jackson, youth participants from the Youth Conservation Corps (YCC), Youth Employment and Training Initiative (YETI), and the Native Village of Tazlina youth program have gained hands-on skills in invasive plant identification, treatment methods, and restoration practices. These experiences not only protect the watershed but also serve as stepping stones into natural resource careers. This is demonstrated by participants like our summer employee, who is working toward a veterinary degree, but this experience has positioned him for a full-time summer technician position for years to come. Community involvement is equally central. Events such as the annual “Floatable Smackdown” bring families, students and Tribal members together for a fun, high-impact river clean-up, strengthening both ecological health and community pride. By weaving together technical training, cultural values and local partnerships, CRWP and CRNA are cultivating the next generation of land stewards while addressing invasive species challenges across the state.

KEYNOTE: A Need to Rethink Invasive Species Management in a Rapidly Changing Climate?

John Morton - U.S. Fish and Wildlife Service, retired

Invasive species are conventionally viewed as non-native plants and animals that spread easily and impair existing (i.e., “natural”) ecosystem services. However, these defining attributes will be increasingly challenged and problematic as “native” species move northward in latitude and upward in elevation at different rates in response to rapid climate change. Novel species assemblages are expected (and are happening!), and so naturalized, feral and ornamental species also become part of the mix. These ecological realities demand a pragmatic rethinking of why we manage invasive species in a world in which translocation and eradication become competing (but complementary) tools.

Bohemian Knotweed Control in Kodiak

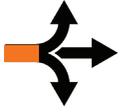
Masumi Palhof - Kodiak Soil and Water Conservation District

History of knotweed control on the Kodiak Archipelago. Methods, observations, results and questions after two decades of monitoring and control.

From Sightings to Strategy: Harnessing iNaturalist for Invasive Plant Detection and Response

Emily Reed - Southeast Alaska Watershed Coalition

There are a plethora of databases and tools available to document invasive plants in Alaska and beyond, each with its own strengths and weaknesses. Among these resources is iNaturalist, a rapidly growing citizen science platform that empowers users to identify organisms, share observations and contribute to a global dataset used by researchers, educators and land managers. The scientific community and others have questioned the reliability and precision of iNaturalist data. However, its accessibility, spatial coverage, and community verification process make it a valuable complement to more traditional survey methods. In this presentation, I will explore the advantages and limitations of using iNaturalist to document invasive plant occurrences in Alaska. I will demonstrate how iNaturalist observations can be leveraged to track species distributions over time and investigate larger spatial and ecological patterns. Finally, I will discuss practical approaches for integrating iNaturalist into local management and outreach efforts, drawing on examples from my own experiences with the platform over the past year.



European Green Crab on Annette Islands Reserve: Informing the Future of Management

Nicole Reynolds - Metlakatla Indian Community

Since the arrival of the European green crab (EGC) to Alaska in 2022, the Metlakatla Indian Community Department of Fish and Wildlife (MIC DFW) has been working extensively to manage and monitor European green crab populations on Annette Islands Reserve (AIR) and beyond. With the goal of achieving functional eradication of the reserve's European green crab population, the Metlakatla Indian Community Department of Fish and Wildlife Crab Team has prioritized important cultural and economic subsistence areas to limit the environmental degradation caused by the European green crab. Data from the 2025 trapping season show that the 2023-2024 El Niño event has resulted in higher recruitment and a broader distribution of European green crab on the reserve and southern Southeast Alaska. In 2025, MIC DFW saw a seven-fold increase in the number of crabs removed compared to all other years combined, with more than 34,000 crabs removed. The Metlakatla community's team has also been a key organization in understanding the extent of the crab in Southeast Alaska, identifying at least nine new locations around Gravina and Prince of Wales islands. With four years of intensive trapping efforts, MIC DFW's Crab Team has on-the-ground experience in identifying potential European green crab habitat and locations for trapping in the intertidal zone. As we see this crab's range expand northward, MIC DFW's knowledge will be vital for managing the invasion into the future.

Invasive Species Awareness to Action: Working with Elected Leaders

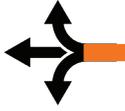
Diana Rhoades - Anchorage Park Foundation

America's urban forests are facing severe threats. In 2023, elected leaders responded, and reforestation funding was provided from the USDA Forest Service Urban and Community Forestry Program through the federal Inflation Reduction Act, a historic investment to boost the nation's tree canopy in urban and rural communities nationwide. Anchorage is still recovering from the devastating spruce bark beetle outbreak of 2016, which heavily impacted public land in Southcentral Alaska. Anchorage Park Foundation (APF) was awarded \$2 million over five years to help build a climate-resilient urban forest in Alaska's largest city. APF and partners will plant 15,000 native trees, shrubs and seedlings, provide invasive species removal and tree planting training for 170 teens and 3,500 fifth graders and youth from disadvantaged neighborhoods, invest \$200,000 in partnership organizations to complete reforestation projects, and educate 20,000 community members about ways to improve forest health. The 2026 election cycle provides the opportunity for new leadership in Alaska's municipal, state and national offices. Now is the time to engage community members and elected officials about the threats of invasive species and opportunities for our urban forests. This presentation focuses on celebrating a few of the invasive species and forest health advocates' wins — and provides tips for how to engage the public and elected leaders to take action.

Southcentral Alaska Invasive Species Hotspot Surveillance: A Collaborative Coordinated Approach to Early Detection

Katherine Schake, Kachemak Bay National Estuarine Research Reserve

Southcentral Alaska was identified as a geographic "hotspot" for terrestrial, freshwater and marine invasions, given that non-native species often arrive through ports of entry with high human population density or activity. Because the Department of the Interior has little land ownership in the area, the U.S. Fish and Wildlife Service had limited capacity to implement early detection and rapid response activities in this geography until now. Recognizing that Alaska is relatively free of invasions compared to southern latitudes, and the high ecological, economic and cultural value associated with these intact ecosystems, the goal of this work is to fill a gap in early detection surveillance in an area increasingly vulnerable to invasive species, using existing decision support tools and standing partnerships. Specific objectives to achieve this broader goal include implementing early detection monitoring programs for specific taxa (e.g. dreissenid mussels), multitaxon (northern pike, aquatic and terrestrial plants) surveillance of priority waterbodies or landscapes, field validation of environmental DNA methods, intensive bioblitzes of primary invasion pathways (e.g. shipments arriving to Port of Alaska), trainings for invasive species identification or sampling techniques, species identification services, data management for presence or absence records (plants and animals), database improvements (e.g., AKAqua) and data reporting interface enhancements (e.g., AKEPIC and AKAqua), social science about changing habits or ideas to improve detection rates and reduce invasion risk, and the collation of existing data into reports or manuscripts to share information to enhance invasive species surveillance across the state and country. The Alaska Center for Conservation Science, University of Alaska Anchorage will conduct project activities and/or coordinate them through a range of key collaborators, including Kachemak Bay National Estuarine Research Reserve, Homer and Anchorage Soil and Water Conservation Districts, Tyonek Tribal Conservation District, Alaska Department of Fish and Game, Alaska Department of Natural Resources, University of Alaska Fairbanks, and the U.S. Fish and Wildlife Service Alaska Region.



Mayday, Mayday, Not 'Just an Anchorage problem'

Tim Stallard - Alien Species Control LLC

Concerns about invasive chokecherry (*Prunus padus* and *P virginiana*) have increasingly caught the attention of the public. But many Alaskans still think of invasive *Prunus* as an urban problem and don't recognize that this species threatens forests across Alaska. New surveys this summer documented several dozen mature *Prunus padus* along semi-remote sections of the Chena and Little Susitna rivers. Control techniques will be reviewed. Varied growth forms of *Prunus* often require multiple approaches at the same site. Implementing control in remote and urban forests will be discussed.

One Thousand Miles to Nome: An Update on Non-native Plant Occurrences in Select Locations Along the Iditarod Trail

Anjanette M. Steer - Alaska Center for Conservation Science; A. Rhiannon Glover - University of Alaska Anchorage

The Alaska Center for Conservation Science at the University of Alaska Anchorage, in cooperation with the Bureau of Land Management, completed non-native plant surveys at select community checkpoints along the Iditarod National Historic Trail during the 2024 and 2025 field seasons. Land managers are concerned with the spread of a select group of invasive non-native plants to Alaska's natural areas, rivers and wetlands. ACCS staff ecologists identified and surveyed high-use areas on the Iditarod Trail (northern route) near local communities, where non-native seeds may have been introduced to the native ecosystem by way of straw used to bed the sled dogs. The protocol for data collection established by the Alaska Exotic Plants Information Clearinghouse (AKEPIC) was followed to document the presence and absence of non-native plants. Data was uploaded to the AKEPIC database and compared to previous survey results. A total of 11 communities along the Iditarod Trail were visited during the 2024-2025 field season, which included the first surveys of non-native plant presence completed (i.e., data was uploaded to AKEPIC) in the communities of Takotna, Nikolai and Koyuk. Species of particular concern, flagged by the BLM as priority invasive plants and assigned high invasiveness ranks by AKEPIC include *Melilotus alba* (white sweetclover) and *Elymus repens* (quackgrass). These species occurred in communities along the banks of the Yukon River. Although straw is suspected to facilitate the spread of non-native seeds, other mechanisms of transport were observed. Since 2010, weed-free straw and hay have been made available by Alaska's Weed-Free Forage program and required by BLM permit holders for use along the Iditarod Trail. Persistent monitoring and documentation of invasive plant infestations in the future may reveal the efficacy of these efforts and others exercised by the BLM within the lands they manage.

Asian Defoliator Moth Survey

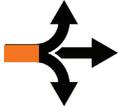
Ramsey Sullivan - Alaska Department of Natural Resources Division of Agriculture

Since 1983, Alaska has conducted annual monitoring for invasive defoliating moths such as *Lymantria dispar asiatica*, *L. dispar*, *L. mathura*, *L. monacha* and *Dendrolimus sibiricus*, to safeguard nearly 126 million acres of forest resources. For the past two decades, the Alaska Department of Natural Resources Division of Agriculture, in partnership with USDA APHIS-PPQ, the University of Alaska Fairbanks Cooperative Extension Service, U.S. Customs and Border Protection, the National Park Service, and other volunteers, deployed pheromone-baited traps statewide. Surveys target high-risk pathways including ports, border point-of-entries, shipping facilities, and tourist and recreation sites. Multiple detections of flighted spongy moths (*L. dispar asiatica*) on ships and cargo arriving from Asia highlight the persistent risk of introduction. To date, statewide monitoring has only captured isolated single specimens of exotic defoliators with no evidence of established populations. With projected moth population increases in their native range, expanding international trade routes, longer tourist seasons, and shifting climate patterns, the need for continued monitoring is critical. This program demonstrates the value of sustained, multi-agency cooperation in early detection.

Northern Pike Populations Pre- and Post-Suppression in the Tyonek Tribal Conservation District

Nicole Swenson - Tyonek Tribal Conservation District

During summer 2025, Tyonek Tribal Conservation District staff conducted pike suppression on Threemile, Second, Rollercoaster and Chuitbuna lakes. At Threemile, 1,715 pike were removed, bringing the total to over 10,000 since 2017. A mark-recapture study with ADF&G at Chuitbuna Lake showed a steep population decline, and only one pike was captured at Rollercoaster Lake following none in 2024, indicating that two of the four netted populations are now nearly extirpated. Additional work included eDNA sampling to define the southern extent of invasive pike in the Cook Inlet region. TTCD also treated terrestrial invasive species, surveyed four lakes for elodea, supported AKDNR in documenting its extent in Big Lake, while maintaining outreach to the local communities.



Cutting Costs (and Trees): Results from Anchorage's Invasive Tree Removal Incentive Program

Hannah Thompson, Lizzie Bishop - Anchorage Soil and Water Conservation District

The spread of invasive European bird cherry (*Prunus padus*) and chokecherry (*Prunus virginiana*), also known as Mayday or Prunus trees in Anchorage, is a challenge that requires a multifaceted approach to management. Invasive species do not respect boundary lines, and removing trees from public lands is only one piece of the puzzle. To slow propagule pressure in public lands, adjacent private property with mature Prunus trees needs to be addressed. In 2025, ASWCD received funding from the Division of Forestry to develop effective outreach strategies for private landowners. The project objectives were to: 1) Inform landowners about the invasiveness of these trees; 2) Develop and implement a survey to identify landowners with Prunus on their property who are interested in removal assistance; 3) Design a dynamic incentive program for tree removal based on survey responses; 4) Control invasive trees on private properties through physical and/or chemical treatment; and 5) Analyze removal outcomes to assess program cost and effectiveness. ASWCD collaborated with two local tree service companies to implement a cost-sharing program for Prunus removals in Anchorage. We will discuss our results and lessons learned for year one of this program.

Cooperative Geospatial Attention for Alaska Invasive Species

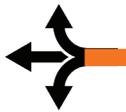
Erin Trochim, University of Alaska Fairbanks; Svetlana Grill and Denys Metelenko, EPAM

Invasive species in Alaska present a unique and urgent challenge: Their spread ignores land ownership boundaries. This creates an immense hurdle for management responses fragmented across individuals, communities, jurisdictions and agencies. From both a knowledge and action perspective, a “tragedy of the uncoordinated commons” emerges where critical opportunities for collaboration are lost and response efforts become inefficient. At this crossroads, invasive species management necessitates new approaches to knowledge sharing, participation and how technology can bridge persistent gaps. Efforts like the Alaska Invasive Species Partnership (AKISP) and the Alaska Exotic Plants Information Clearinghouse (AKEPIC) represent critical existing organizational and data-driven approaches. To complement this, we introduce Cooperative Geospatial Attention (CGA), a novel approach designed to integrate diverse knowledge bases, enable interaction across stakeholder groups, and strategically incorporate artificial intelligence. CGA focuses on mapping not just where invasive species occur, but also where attention is directed: which agencies, communities, or policies are engaged, what relationships exist between them, how topics connect, and where gaps or redundancies emerge. We achieve this by visualizing these “attention landscapes” through a graph database; our current prototype has over 6 million nodes and over 15 million connections. Combining this with agentic AI, including the use of MCP tools, provides new communication gateways for managers, researchers, and members of the public to gain a better understanding of how invasive species occurrences intersect with both the physical environment and the management and response scopes. Our unique collaborative approach underscores the choices ahead in adapting invasive species management to a rapidly changing landscape. By reducing the transaction costs of collaboration, Cooperative Geospatial Attention offers a pathway to more timely, coordinated and effective responses.

Pike in Cook Inlet? Preliminary Results from Salinity Trials, Video Weirs and Cook Inlet Salinity Monitoring

Brennan Watson - Alaska Department of Fish and Game

The Alaska Department of Fish and Game (ADF&G) is conducting a research project examining the ability of northern pike to move through Cook Inlet. Previous research has confirmed pike moving through Cook Inlet and examined pike salinity tolerance. The first part of this project is to gather data on the salinities in Upper Cook Inlet. We are doing this through a series of temperature and conductivity monitors placed throughout the area. This data should allow us to produce maps showing which areas are vulnerable at different times throughout the year. The second part of the research is to expose pike to water of known salinities for a known duration and examine the strontium signature in their otolith, helping us ground-truth results we've seen in wild pike. Pike are captured from Nancy Lake and then placed in Cook Inlet water for a known duration before being placed in an enclosure in Nancy Lake. Preliminary results are that salinity data have been collected from several sites, and the salinity exposure has confirmed the ability of pike to transition from freshwater to saltwater and back to freshwater, and produced otoliths for analyses. By combining all this data, we will better inform future prevention and containment strategies to prevent northern pike from spreading into highly vulnerable drainages via Cook Inlet.



Ladybugs & Mantids & Commercial Biological Control Regulations – Oh My!

Alexandria Wenninger - University of Alaska Fairbanks Institute of Agriculture, Natural Resources and Extension

Commercial biological control organisms are of interest to both agricultural producers and home gardeners in Alaska. The entry of these organisms into the state is regulated both at the national and state levels by the USDA Animal and Plant Health Inspection Service (APHIS) and the Alaska Department of Natural Resources Division of Agriculture, respectively. Within the past year, two companies have been approved to import a specific list of commercial biocontrols into the state of Alaska. These new approvals have created opportunities for new tools in our greenhouse integrated pest management toolbox, as well as avenues of research for the efficacy of field crop use. Unfortunately, two unapproved organisms continue to be widely imported into the state: convergent lady beetles and praying mantises. These two organisms are widely marketed to home gardeners as “safer” pest control options when in reality they pose a high risk of unintended consequences for our local ecology. This presentation will briefly cover some of the regulation processes for these organisms, the contexts for the appropriate and effective use of these organisms, the areas of research interest and the risks posed by unapproved organisms.

Inlet Intruders: Monitoring for Invasive Northern Pike Using Cook Inlet as a Pathway

Eric Wood - Alaska Department of Fish and Game

Northern pike are an invasive fish that have caused great ecological damage in Southcentral Alaska since their introduction in the 1950s. They have spread prolifically through freshwater systems both naturally and through illegal stocking events. In the last five years, mounting evidence of a new pathway has been discovered: movement through brackish waters in Cook Inlet. This talk covers the efforts of the Alaska Department of Fish and Game (ADF&G) and Tyonek Tribal Conservation District (TTCD) to document the occurrence of northern pike entering freshwater systems around Cook Inlet, and to determine the frequency and timing of these incursions. Four systems (Westchester Lagoon, Campbell Lake, Threemile Creek and Miller Creek) were monitored during the 2025 field season. Miller Creek was monitored using a traditional weir, installed and maintained since 2021, after northern pike were eradicated from the system above. The other three systems were monitored using video weir systems installed in the spring of 2025. These efforts were mostly a success; documenting pike entering through Cook Inlet, monitoring native fish run-timing and usage, and allowing us to learn much to improve our efforts in the 2026 and 2027 field seasons while the project is funded.

Methods Developed to Locate European Green Crabs Using Conservation Detection Dog Teams

Collette Yee, Matilda Haliburton, Jennifer Hartman and Heath Smith - Rogue Detection Teams, Rice, Washington; Linda Shaw - National Oceanic and Atmospheric Administration, Alaska Regional Office, Juneau

The European green crab (*Carcinus maenas*) is an invasive species responsible for degrading important marine habitats and outcompeting and preying on native species. Introduced to North America in the 1800s, it was first documented in Alaska in 2022. Green crabs have the potential to severely impact Alaska’s marine ecosystems and commercial fisheries. Early detection can allow for action and mitigation before major damage has occurred, and help control its spread. We report the development of using conservation detection dog teams to locate green crabs as a potential early detection method. By introducing detection dogs to varied habitats and samples of green crabs, teams were able to demonstrate the dogs’ ability to detect green crabs along shorelines in Willapa and Makah bays in Washington. After an initial field trial in Willapa Bay, conservation detection dog teams found two wild green crabs along with several molts in Makah Bay. The results of this short pilot (eight days) suggest that conservation detection dog teams have the potential to be a promising tool for researchers and fisheries managers conducting early detection surveys.