



Presentations

Research Directions on Efficacy of Invasive Chokecherry Management

Gino Graziano

University of Alaska Fairbanks, Institute of Agriculture, Natural Resources and Extension

We know that we can kill invasive chokecherry (*Prunus padus* and *virginiana*) trees, and at even dense infestations—if we are persistent—we can keep the population from completely rebounding. The next five years of research at UAF will study how chokecherry and removal efforts impact regeneration and fitness of native trees. Invasive plant managers have observed lack of vegetation rebounding after chokecherry removal, and suspect that chokecherry is changing the soil. Combining bioassays, metabolite identification and DNA metabarcoding with invaded and uninvaded soils, we can start to understand if and what changes occur from invasion and if they correlate with plant fitness.

We will extend this work to field testing removal of trees to determine if those soil changes persist, how removal impacts tree growth and use of the area by moose. This talk will describe our proposed study design and site needs. Got a site we can use? Let us know.

The Status of Invasive Plants on the Tongass

Laura Holloway, Abby Lund and Eric Rizzo

U.S. Forest Service

Tongass National Forest ecologists Eric Rizzo and Abby Lund, and botanist Laura Holloway, will give an overview of invasive plants in the Tongass National Forest: what are the priority management species, where are they distributed, what strategies are we using? We will also highlight a few new and/or unusual invasive plant infestations.

Clean, Drain, Dry, and Digitize: A Decade of Aquatic Invasive Species Prevention at Alaska's Alcan Border

Kim Holzer, Michael Foley and Jonah Withers

U.S. Fish & Wildlife Service

Preventing the introduction of invasive freshwater mussels into Alaska remains a critical conservation priority, particularly at the Alaska-Canada (Alcan) border where the overland transport of watercraft presents an ongoing risk. To strengthen this frontline prevention program, we undertook a comprehensive effort to modernize how data are collected, standardized and used. The updated workflow, utilizing ArcGIS's Survey123 software, provides consistency and quality geospatial data, enabling real-time insights that improve actionable, on-the-ground inspection effort and management decisions. Further, standardizing the 10-year dataset enables year-over-year comparisons to improve identification of emerging trends, allowing us to better-identify watercraft dispersal within Alaska. The result is a more proactive system supplemented by a digital dashboard for streamlining prevention at the border and focusing early detection surveillance efforts in the field where they will have the greatest impact.



Scanning the Horizon: Southcentral Alaska Invasion Hotspot Surveillance Project Takeaways

Kim Holzer and Katherine Schake

U.S. Fish & Wildlife Service and the Alaska Center for Conservation Science at UAA

Southcentral Alaska was identified as a hotspot for terrestrial and freshwater invasive species introductions because the region serves as the state's main hub for transportation, trade, tourism and population. It includes Alaska's largest city, busiest commercial seaport and the busiest cargo airport in the United States—creating numerous pathways for invasive species to arrive and spread. To address this vulnerability, federal, state, tribal and academic partners launched a collaborative Early Detection and Rapid Response surveillance initiative in ports and natural environments across the roughly 100,000 km² geography. Surveillance priorities were developed from existing regional horizon scans, invasiveness ranking systems, agency watchlists, Cooperative Invasive Species Management Area strategic plans and species occurrence data portals.

One of the greatest benefits of implementing the framework was a shift beyond individual programs and land ownership boundaries toward a place-based approach centered on shared species of concern. A common geographic area and funding stream strengthened interagency alignment and a sense of collective purpose across complex and sometimes fragmented land management structures. Field trainings expanded detection skills and awareness outside natural resource managers to include K–12 educators, university students and community partners. Prioritized species lists and simplified survey protocols made identification more accessible for non-specialists. Together, these efforts led to multiple new terrestrial and freshwater species detections and built statewide capacity extending from this gateway region to remote and rural Alaska destinations. While this invasion hotspot pilot project strengthened planning and detection capacity, response actions remain limited by available resources. This presentation will share hotspot accomplishments, new tools and resources developed for proactive conservation and identified next steps to continue to build solutions on the ground to detect and respond to new invasive species populations.

Juneau's Uplift Meadows: Globally Rare and Uniquely Vulnerable to Non-native Plant Invasion

John Hudson

Southeast Alaska Watershed Coalition

The city and borough of Juneau is the second largest city by land area in the country, though the vast majority of its 1.7 million acres are dominated by rock, snow and ice. These areas are virtually immune to invasion by non-native plants, and only a few species have established in the borough's expansive and intact spruce-hemlock forests. In fact, Juneau's invasive plant populations are mostly restricted to the human footprint.

So, if most of the borough's undeveloped lands are weed-free, what keeps a Juneau invasive plant specialist awake at night? Ongoing post-neoglacial isostatic rebound, of course! Rebound creates marshes from estuaries and meadows from marshes, typically on the uplifting deltas of certain rivers. These habitats—aptly known as uplift meadows—are globally rare and highly productive systems. Unfortunately, they are also vulnerable to invasive plant species. Invasive reed canarygrass, creeping buttercup and orange hawkweed have found their way into and thrive within these meadows. This presentation describes our ongoing efforts to manage invasive plants in these meadows and similar habitats around Juneau.

Keeping Ahead of the Curve: Management of European Green Crab on Annette Islands Reserve (AIR) in 2026

Ian Hudson and Nicole Reynolds

Metlakatla Indian Community

Since 2022, the Metlakatla Indian Community (MIC) has been on the forefront of European Green Crab (EGC) management in the State of Alaska. Through intensive trapping and scoping, in 2026 MIC checked 10,800+ traps and removed over 35,000 individual EGC from AIR. Such intensive efforts require careful planning and local ecosystem understanding.

With the goal of achieving functional eradication of AIR's EGC population, the MIC Department of Fish & Wildlife's Crab Team has prioritized important cultural and economic subsistence areas to limit the environmental degradation caused by EGC. With five seasons of intensive trapping efforts, MIC DFW's Crab Team has on-the-ground experience in identifying potential EGC habitat and locations for trapping in the intertidal zone.

This year, we expanded our community outreach by co-hosting a Southeast EGC workshop and the first ever community handpicking event for EGC awareness day. Partnering with the Southeast Alaska Tribal Ocean Research (SEATOR), Native American Fish and Wildlife Society (NAFWS) and Ketchikan Indian Community (KIC), we developed the second EGC workshop based in Southeast Alaska. Together, we hosted 15 tribal organizations from throughout the Southeast over three days and gave them tools to develop their own EGC monitoring and trapping program.

Elodea: Proactively Developing Novel Herbicide Control Strategies and Techniques—Solutions on the Water

Cody Jacobson

Alaska Department of Natural Resources (ADNR), Division of Agriculture

This presentation will provide an overview of the 2026 field season of herbicide control and containment efforts conducted by the ADNR Division of Agriculture and collaborators throughout several watersheds along with challenges faced in the fight against *Elodea* spp., a pervasive aquatic plant that threatens critical salmon habitat throughout Alaska. New and evolving application strategies and techniques will be discussed as well as several different aquatic herbicide formulations currently being used by ADNR.

Elodea (*Elodea* spp., Common waterweed) is Alaska's only known invasive submersed freshwater aquatic plant that has been identified in several regions of the state including 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 Lower Six Mile Lake on Joint Base Elmendorf-Richardson, Anchorage and in Crescent Lake on the Kenai Peninsula in 2023. *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 Airforce base. These watersheds are currently in some state of herbicide control based on funding availability. ADNR is partnering with numerous collaborators on these control efforts.

Beyond the Classroom: Invasive Species Capacity Building through Place-based Education

Ashley Lutto, Kim Holzer and Katie Bobowski

U.S. Fish & Wildlife Service and Prince William Sound College

Invasive species pose a significant threat to Alaska's unique ecosystems, economy and biodiversity. Effective prevention and early detection depend not only on natural resource managers/researchers but also on community awareness and action. One of the best ways to inspire community awareness and action is through youth engagement and teacher empowerment. Recognizing this, U.S. Fish & Wildlife Service (USFWS) and Prince William Sound College (PWSC) partnered to build invasive species prevention capacity into existing place-based educational programs, PWSC 4-Teachers professional development course and undergraduate natural resource technician occupational endorsement certificate. By using local landscapes, waterways and experiences as learning resources, place-based education transforms invasive species from an abstract environmental issue into a relevant, observable, and actionable concern. We will highlight overall goals of programs and the approaches that move learning outside traditional classroom settings, including field observations, species identification, lesson planning, and collaboration with local resource managers. These experiences provide teachers and students with opportunities to understand how invasive species affect ecosystems, develop a sense of responsibility for the places where they live, and expand early detection efforts.

European Green Crab: Updates on status and Policy changes needed to enhance management options in the State of Alaska

Barbara Morgan

University of Alaska Southeast, Ketchikan

Since European Green Crab (EGC) were found in Alaska in 2022, tens of thousands have been removed from Annette Island by Metlakatla Indian Community, and thousands from Ketchikan beaches by Ketchikan Indian Community, as well as volunteers. The increase in EGC numbers removed from these areas shows a clear need for a comprehensive management plan and changes to regulations to remove barriers to rapid response actions. Several proposed actions to change regulations regarding the harvest of EGC have been made, most are still pending. All will make harvesting EGC easier to accomplish, which will engage the public in helping to manage this growing invasion. The many organizations and approaches, as well as the collaborative effort, are working to fill the need in removing EGC from our beaches. The process of removal and the after-action results are varied, and are being adjusted as information is gathered.

Native Sod Mats for Proactive Restoration of Disturbed Permafrost Landscapes

Ethan Overton, Christa Mulder, Katie Spellman, Summer Nay and Brenna Wells

University of Alaska Fairbanks and the Salcha-Delta Soil and Water Conservation District

Vegetation and organic matter insulate permafrost soils during warm summer conditions. When disturbance removes this vegetation, increased permafrost thaw can cause soil subsidence and groundwater accumulation, threatening infrastructure and land use. Rapidly restoring native vegetation could help maintain insulation while potentially simultaneously reducing opportunities for invasive plant establishment. This approach may be particularly valuable for disturbance by off road vehicles, where vegetation loss and potential seed introduction coincide. However, restoration strategies that rapidly reestablish vegetation and insulation remain limited.

We evaluated sod blocks, intact mats of vegetation and organic matter, as a revegetation technique to provide immediate insulation after disturbance. We tested how plant community composition and diversity influence insulation using combinations of six native species representing three functional groups: graminoids, mosses and legumes. Mats were grown in a greenhouse for one year, then transplanted onto woodchips at a disturbed site at Bonanza Creek Long Term Ecological Research site near Fairbanks in June 2026. We compared vegetated mats with bare soil and woodchip controls, using temperature and thermal conductivity measurements to calculate ground heat flux.

Both vegetated mats and woodchip controls had lower heat flux than bare soil, with no difference between vegetated and woodchip treatments. Graminoids were associated with lower heat flux and a lower likelihood of soil cracking. Cracking was associated with higher heat flux. When cracking was included in the model, the association between graminoids and heat flux was no longer apparent. Together, these patterns suggest graminoids may improve insulation by reducing soil cracking and helping mats remain intact. Native sod mats containing graminoids may combine immediate insulation with restoration of native vegetation. Although invasive plant establishment was not considered here, rapidly establishing native cover could complement invasion prevention efforts while helping protect permafrost soils and continued land use.

The Good News Talk from Kodiak SWCD: Successes and Approaches

Masumi Palhof and Noam Pechter

Kodiak Soil & Water Conservation District (SWCD)

Managing invasive species can be an arduous task. It's easy to get frustrated when sometimes you feel like you're playing whack-a-mole. This presentation will highlight some of our wins and silver linings that keep us going, as well as the methods we used to achieve those successes. From outreach and education to containment and control, we are constantly evaluating which tools in our IPM toolbox are working and what could be improved upon. Some species we'll cover include Bohemian knotweed, white sweetclover, creeping thistle, yellow toadflax, meadow hawkweed and orange hawkweed. We will also cover our bike path project, which is as much of an outreach and education project as it is a management project. Expect lots of before and after photos, cheesy perseverance examples, positive predictions and maybe even some corny puns.

Cook Inlet as a Pathway for Invasive Northern Pike: An Update on Research

Bradley Parker

Alaska Department of Fish & Game

Northern pike are a native species to a majority of Alaska (Interior and Western Alaska), but were introduced by someone to the Southcentral region in the 1950's. They are an apex predator and predate heavily on native species in the region, including juvenile salmon. They have since spread to over 150 waterbodies and have had devastating impacts on salmon in Southcentral. Recent research has shown that they are capable of moving through Upper Cook Inlet brackish water to locations such as the Kenai Peninsula, Anchorage and West Cook Inlet. To better understand this movement, the Alaska Department of Fish & Game has initiated a project to monitor salinity trends in Cook Inlet and conduct salinity trials to ground truth marine signatures found in the otolith (inner ear bone). We deployed salinity loggers in four locations to track seasonal salinity trends throughout Cook Inlet. Additionally, we collected pike from a freshwater lake, exposed them to Cook Inlet water for 5-20 days, returned them to freshwater, then collected their otoliths for examination. Preliminary results show that salinity values in Cook Inlet are lower than models predicted. Our data suggests the Kenai Peninsula may be vulnerable to invasion as far south as the Swanson River. Additionally, salinity trials have shown that pike are likely able to survive in Cook Inlet for 10+ days as they look for new freshwater habitats to invade.

Tag-Team Invaders, Tag-Team Response: Pike Derby & Elodea Showdown

Emma Parker, Chennery Fife and MaryKate Swenarton

U.S. Fish & Wildlife Service and Trout Unlimited

This past July, Trout Unlimited (TU) and the Big Lake Chamber of Commerce hosted a pike derby to raise awareness of the presence of northern pike in Big Lake and recruit anglers to help combat the invasion. Anglers from the region came to fish for pike, compete for prizes and learn more about the impact of pike on salmon populations. While the event was centered around pike, there is another invasive aquatic species in Big Lake: Elodea. An event centered around one invasive species could have potentially spread another one. Therefore, TU brought in the U.S. Fish & Wildlife Service to address both invasive species in the span of one afternoon. Come learn about the impacts of northern pike and Elodea on Big Lake, how the event went and how collaboration between many state, federal, local and non-profit partners is key to stopping the spread of invasive species.

Using Genomics to Help Us Understand Patterns of Dispersal and Adaptation in Invasive Northern Pike

Mikay Reuter, Mac Campbell and Matt Hale

Texas Christian University and the University of Sydney

Invasive species harm local ecosystems, economies and cultures. Researchers have made substantial efforts to study the recent increase in the number and frequency of successful invaders; however, relatively little information exists on how genetics influences a species' ability to become a successful invader. Whole genome sequencing could be useful in this regard as it allows researchers to ask questions about the role genetics plays in successful invasion from a whole genome perspective. Moreover, such data helps determine whether populations may be genetically predisposed to successful invasion.

One such invasive species, northern pike (*Esox lucius*), is native to the Holarctic region but was introduced to southcentral Alaska in the 1970s, substantially impacting native salmonid populations. Since then, management efforts have focused on suppression and removal of pike, yet their range continues to expand. Recently, otolith data from populations in the Kenai Peninsula and Anchorage areas suggest that pike may be dispersing through the Cook Inlet to colonize new or previously eradicated lakes. Whether certain populations are genetically pre-adapted for marine dispersal remains unclear. If there are DNA mutations that predispose some populations of pike to be successful invaders, then such populations should be the target of multifaceted eradication efforts. We sequenced 107 pike, including native, invasive and known dispersers, to assess genetic similarities in marine disperser populations and identify whether the ability to disperse through the Cook Inlet is heritable. Our analyses found signals of genetic variants specific to invasive and marine disperser populations, potentially suggesting a genetic basis for marine dispersal. We recently sequenced 35 additional pike collected in Summer 2026 to further analyze these patterns. In doing so, we hope to identify populations of pike that are predisposed to marine dispersal and share this information with local managers so they can identify which populations should be prioritized for eradication.

Implementing Harvest Incentive Programs: Lessons Learned from Invasive Species Managers

Catherine E. de Rivera, Hailey Gatlin, B. Larson, D. Forest-Hines, E. Riley and A. Lubitow

Portland State University, Environmental Science & Management Department

Harvest incentive programs (HIPs) are increasingly used as management tools to reduce invasive species populations while engaging the public in removal efforts, but their effectiveness remains contested. This study uses a mixed-methods approach, combining an anonymous online survey of environmental managers with qualitative interviews to identify common barriers, enabling conditions and design considerations associated with HIP implementation across taxa and management contexts. Survey respondents with HIP experience described planning criteria, success metrics and barriers to implementation, while respondents without HIP experience identified perceived barriers to adoption. Interviews with managers who have run HIPs provided additional detail on implementation strategies. Insufficient funding, limited public engagement and logistical or operational constraints emerged as significant barriers.

Managers reported that success in their programs relied on careful planning, clear success metrics, diversified funding sources, strong partnerships and multipronged participation strategies. Ecological objectives—such as population reduction, evaluation of population dynamics or early detection—were common, but many managers prioritized social goals such as sustained participation and engagement. HIPs are not universally appropriate for managing introduced species; the best approach depends on management goals and system ecology and managers largely described HIPs as a valuable supplementary management tool, rather than a standalone control method. This study offers recommendations for avoiding common barriers to help managers evaluate and design HIPs as part of their invasive species control strategies.

Green Crab Spread and Impacts

Catherine E. de Rivera

Portland State University, Environmental Science & Management

Less than four decades after its accidental introduction to San Francisco Bay, the green crab (or five-spine shore crab), *Carcinus maenas*, has reached Alaska. With its established population already booming and expanding along the coastline, the potential for further spread remains high. While major negative impacts to industry or ecology have not been observed on the west coast, research highlights potential risks to impact Dungeness crab, oysters, eelgrass and other species and habitats.

This talk provides an overview of the green crab's invasion history and modeled spread, evaluates vulnerable resources in Alaska, and outlines management options and research needs. The presentation aims to help resource managers and other interested participants to make informed decisions about trapping to reduce impacts from green crabs on culturally and economically important species.

Pedal to the Metal: Alexander Creek Suppression Project

Thomas Sitz

Alaska Department of Fish & Game (ADF&G)

Invasive northern pike (*Esox Lucius*) have wreaked havoc on the Alexander Creek drainage. This top-level predator has a drastic impact on the native fish that occupy this system. The last two decades have shown rapid declines in returning salmon stocks, most heavily affected are Chinook salmon. ADF&G's aquatic invasives team has been conducting a northern pike suppression project for the better part of two decades. Suppression efforts have been ramped up on the system with the goal of increased salmon returns and prevalence of native fish species. Effort has been ramped up on Alexander Creek as well as the Sucker Creek drainage with increased netting effort and targeted rotenone treatments. This presentation will detail the results of these intensified efforts.

Planning for *Prunus* and Beyond: Turning Management and Restoration Strategies into Results

Hannah Thompson, Ashley Novella and Lizzie Bishop

Anchorage Soil and Water Conservation District

Invasive *Prunus* species present a complex and growing management challenge across the Anchorage area, with infestations spanning multiple landownerships, land uses, and habitats. In response, the Anchorage Cooperative Invasive Species Management Area (ANC-CISMA) set out to create a *Prunus* Strategic Management Plan to establish management goals, prioritize infestations and identify appropriate management actions. Through the process of creating the plan, revegetation was identified as a critical gap in *Prunus* management. An increasing number of sites have experienced substantial degradation of native plant communities, limiting natural regeneration potential and leaving disturbed areas vulnerable to reinvasion following treatment. To address this gap, the Anchorage Soil and Water Conservation District is working with revegetation experts across Alaska to develop and evaluate approaches for restoring treated sites. Current efforts include testing revegetation species prescriptions, developing survey methods for evaluating potential restoration sites, and establishing monitoring for evaluating revegetation success. This work aims to improve the long term effectiveness and resilience of *Prunus* management in Anchorage. Lessons learned through this project can provide a framework for other communities in Alaska seeking to incorporate restoration into *Prunus* management.

Survey and Monitoring of Northern Pike in the Matsu

Brennan Watson

Alaska Department of Fish & Game

In this presentation I will discuss the ongoing efforts of the Alaska Department of Fish & Game (ADF&G) to survey and monitor populations of northern pike in the Matsu Valley. ADF&G uses gillnetting, angling, eDNA and visual surveys to detect northern pike in waterbodies across Southcentral Alaska. This presentation will give an update on current known pike distribution, highlight major changes and present results and updates about various survey efforts. This includes eDNA and netting surveys on the Cottonwood Creek Drainage and the Jim Creek Drainage. The talk will also highlight native fish passage efforts at one of the first pike passage barriers in Alaska.

The Incident Command System:

Introduction and Application to Invasive Species Rapid Response in Alaska

Ben Wishnek, McKayla Spencer and Jasmine Maurer

U.S. Fish & Wildlife Service and the Kachemak Bay National Estuarine Research Reserve

Clear, concise and organized communication is imperative to have during any type of emergency response. Breakdown in communication can add distress to already chaotic situations and put values at risk at greater likelihood of harm. Yet many instances of response still have flaws in communication structure that can lead to negative consequences. As such, the incident command system (ICS) was developed to provide structure for incidents to facilitate communication in emergency management.

The ICS was developed in the late 1960's and early 1970's following communication problems observed in wildfire response in California. Since being developed it has become institutionalized in emergency management, especially after the establishment of a unified national framework for handling domestic incidents in 2003. More recently this framework has started to be applied to invasive species management (for example European green crab (EGC) and northern pike in Alaska). EGC were first detected in Alaska in 2022 and have been rapidly expanding in the southeastern part of the state. Given the vast amount of coastline and its jurisdictional complexity in the state, a Rapid Response Plan for EGC that utilizes the ICS was developed in 2023 to ensure efficient response to this novel invasive species. The plan and the ICS have had limited chances of being put into place in practice. Partners on the Kenai Peninsula held a EGC rapid response exercise utilizing the Rapid Response Plan in Seldovia in August 2025 to put the ICS into practice and increase collective preparedness as EGC continues their northward spread. A rapid response exercise for northern pike held in August 2026 planted the seed for potential application of ICS for northern pike response in Alaska. Lessons learned demonstrating the flexibility of ICS and capacity needed for rapid response to EGC and northern pike will be discussed.

Inlet Intruders 2: Monitoring for Invasive Northern Pike Using Cook Inlet as a Pathway in 2026

Eric Wood

Alaska Department of Fish & 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 decade, 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 & 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 2026 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 first installed in the spring of 2025. This effort brought many challenges in 2026, but was a success in documenting northern pike invasion frequency, monitoring native fish run-timing and usage, and allowing us to learn much to improve our efforts in the 2027 field season.

Translating Information to Action:

Real-World Application of Invasive Species Horizon Scans and Risk Assessments

Katherine Wyman-Grothem,

U.S. Fish & Wildlife Service

When invasive species management is reactive, ecological and social harm is often unavoidable and management costs escalate quickly. Yet despite the clear benefits of prevention, individuals and institutions alike often struggle to anticipate future threats and invest proactively. How can invasive species professionals identify future invaders before they become the next crisis, and translate that information into action?

For more than a decade, the U.S. Fish & Wildlife Service has developed and applied rapid risk screening, in-depth risk assessment, and horizon scanning tools to identify nonnative species with the greatest potential for introduction, establishment, and harm at various geographic scales. These approaches help transform uncertainty about the future into actionable information that can guide strategic investments in prevention and early detection.

This keynote will explore how horizon scans and risk assessments are being used across the United States and globally to prioritize surveillance efforts, strengthen rapid response planning, implement outreach and education, and support the development of new or enhanced regulations. Real-world examples show how risk assessment can improve preparedness and help organizations make more effective use of limited budgets and capacity.

The presentation will also address the challenges that often prevent risk information from being translated into action, including knowledge gaps, inadequate resources, and failures in risk communication. Attendees will leave with practical strategies for overcoming these barriers and advancing a more proactive approach to invasive species management.



Posters

Effects of Invasive European Bird Cherry (*Prunus padus*) Leaf Litter on Seedling Establishment of White Spruce (*Picea glauca*)

Jacob Baltz, Katie Spellman and Gino Graziano

University of Alaska Fairbanks (UAF) Honors College Climate Scholars Program, UAF Department of Fisheries and Marine Sciences, UAF Department of Natural Resources and Environment and International Arctic Research Center, UAF Institute of Agriculture, Natural Resources and Extension

Invasive European bird cherry (*Prunus padus*) has undergone widespread population expansion throughout urban areas of Alaska. The Alaska Division of Agriculture issued a quarantine on *P. padus* in 2025; however, little research has been conducted on the ecological impacts of the species on Alaskan forests. There is increasing concern that *P. padus* invasion after a forest disturbance, such as bark beetle kill or wildfire, could change successional patterns. Our study examines the effects of *P. padus* leaf litter on the initial growth of white spruce (*Picea glauca*), an abundant climax species in the affected boreal forests. We established five treatments in a greenhouse study testing how the germination rates and growth of white spruce varied with litter species (native *Betula neoalaskana* or invasive *P. padus*) and position (above or below litter layer). We used soil only as a control. We found that both total spruce seedling number and biomass was significantly higher when seeds were sown below the litter. Specifically, the biomass was even larger in the seedlings under the chokecherry litter. We suspect the chokecherry leaves retained more moisture, allowing more spruce seedlings to germinate and grow quicker. Our results suggest that in the first stage of growth of *P. glauca*, if the timing of spruce seed dispersal predates the leaf drop timing of surrounding chokecherry trees, the spruce seedlings may benefit. In the case that the spruce seeds are dispersed after the leaf drop period, there could be a significant reduction in the number of successful spruce seedlings. Future direction for this research will include longer term study of seedling growth, soil chemistry, and documentation of the phenology of leaf drop and seed dispersal in European bird cherry, birch and spruce.

Utilizing the “Regenerative Agriculture” Wave for Invasive Species Management

Matt Butler

Kodiak Soil and Water Conservation District

It is critical for invasive species managers to learn about new concepts as they become available, including opportunities for cross-disciplinary management tools. “Regenerative Agriculture” is one concept that is quickly picking up steam. While there isn’t one definitive definition, all regenerative agriculture practices and outcomes focus on working with existing natural processes to improve soil health. When producers increase diversity and introduce other conservation practices, they can mitigate invasive species introductions, reduce habitat for invasives and even combat existing invasives on their land. As the U.S. government, non-profits and some corporations move toward regenerative agriculture, Alaska invasive species managers should become familiar with its mindset and some available programs.

Chemical Control of *Prunus padus* and *virginiana* in Interior Alaska

Theo Hilpert, Autumn Fish and Aditi Shenoy

Fairbanks Soil and Water Conservation District

Invasive European Birdcherry (*Prunus padus*) and Chokecherry (*Prunus virginiana*) outcompete native vegetation through rapid growth and reproduction, reducing habitat and food sources for native species. There are several methods for controlling them and for the past two seasons the Fairbanks Soil and Water Conservation District (FSWCD) used herbicide injection and cut stump treatments. The goal of these treatments is to safely and effectively control *P. padus* and *P. virginiana*, promoting the health of native Alaska ecosystems. The long term objective is to eradicate these invasive trees in targeted locations. Over the course of treating *P. padus* and *P. virginiana*, some common questions from the public have arisen: how long it takes for this treatment to kill trees, what causes resistance to treatment effectiveness, when to retreat a tree that is resistant and how effective it is to treat a freshly cut tree trunk. To answer these questions we collected and compiled data from herbicide treatments (injection of glyphosate shells and cut-stump treatments) that we performed over the past two seasons in Fairbanks and Galena.

2026 Beaver Creek Survey Results

Jesi Lobato

U.S. Fish & Wildlife Service

Beaver Creek, a Wild and Scenic River corridor in interior Alaska, offers an important opportunity to monitor terrestrial invasive plant species due to its remote landscape, frequent recreational use and connection to the Yukon Flats National Wildlife Refuge. During a two-week survey covering 140 river miles and 52 sampling sites, terrestrial invasive plants were assessed using transect surveys that targeted large gravel bars, known camp sites and aircraft pickup sites. Using Avenza Maps and Survey 123 for field navigation and data collection, surveyors documented two non-native species—common dandelion (*Taraxacum officinale*) and hawkweed (*Hieracium spp.*). These species were found only at known aircraft pickup points and further downstream.

These findings suggest that despite the frequent recreation use, terrestrial invasive infestations are very limited. However, evidence of non-native plants at known aircraft pickup sites highlights the ongoing risk of vector-based introductions via contaminated aircraft. Recommendations emphasize pilot-friendly cleaning guidelines, reinforcing the shared-mission stewardship message for users, and strengthening outreach on preventing spread. Continued surveillance, education, and interagency collaboration remain critical to safeguarding this intact river ecosystem.

The Enemy of my Enemy is my Friend: Seed-destroying Insects of two Urban Forest Invaders in Alaska

Alexandria Wenninger

University of Alaska Fairbanks

Prunus virginiana L. is a species of chokecherry which is ranked as 'extremely invasive' in Alaska. Chokecherry has been planted widely throughout the state as an ornamental, however, birds and other wildlife consume the seeds and deposit them in wildland areas. In Alaska, chokecherry is an aggressive spreader which is rapidly displacing native trees and shrubs in forests and stream corridors. The non-native chokecherry midge (*Contarinia virginianiae* Felt) (Diptera: Cecidomyiidae) was first recorded in Alaska in 2021 on invasive chokecherry. The species induces fleshy, hollow galls within chokecherry fruits which result in abortion of the seed. The chokecherry midge is of interest because of its potential to reduce the spread of invasive chokecherry to new wildland areas via seed. While the chokecherry midge is not native to Alaska, the species does not seem to have negative ecological impacts; it has only been observed using invasive *Prunus virginiana* as a host.

Rosa rugosa Thunb. is an exotic species of rose that is ranked as 'highly invasive' in Alaska. Rugosa rose is salt-tolerant and well-adapted to coastal habitats where its dense growth habit outcompetes lower-growing vegetation and displaces native species. The rose seed chalcid (*Megastigmus nigrovariegatus* Ashmead) (Hymenoptera: Megastigmidae) is a native pre-dispersal seed predator of wild roses in Alaska, but also readily infests non-native *R. rugosa* seed. In September 2025, I collected ten rugosa rose hips from three locations in Anchorage, Alaska. *M. nigrovariegatus* was reared from 21% of these collected seeds (422 wasps reared from 2020 seeds). Seed infestation rates within sites ranged from 4% to 37%, so while impact is not homogenous across the landscape, this does show that *M. nigrovariegatus* is operating as a natural enemy of rugosa rose by reducing the number of seeds capable of spreading to new locations.

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