INVADERS ON THE EDGE!

AKISP

COOPERATIVE EXTENSION SERVICE
UNIVERSITY OF ALASKA FAIRBANKS

2023 Alaska Invasive Species Workshop Agenda

Monday, Nov. 6

Public presentation
Harrigan Centennial Hall

7:00 - 8:00 p.m **The ocean is warming and becoming more acidic – What does this mean for Alaska's coastal species?** – Cascade Sorte, University of California Irvine, School of Biological Sciences

Tuesday, Nov. 7

8:00 - 8:30 a.m. **Registration, snacks and refreshment**

8:30 - 8:40 **AKISP welcome:** Danielle Verna, board chair

8:40 - 9:40 **Keynote: Impacts of species invasions in a changing world -** Cascade Sorte, University of California Irvine, School of Biological Sciences

9:40-10:00 **Break**

10:00 - 11:00 **AKISP board and committee updates**
Board accomplishments – Chair Danielle Verna
Committee Updates
Government relations
Marine
Outreach and Education
Elodea
Northern pike
Workshop planning
Ad hoc committee updates
First Detector

11:00-11:20 **Wildfire and invasive plants in Alaska's boreal forest: State of the science —** Taylor Seitz, University of Alaska Fairbanks, International Arctic Research Center

11:20-11:40 **Invasive plant seed bank development after wildfire in Alaska's boreal forest —** Jessie Skalisky, University of Alaska Fairbanks Climate Scholars Program

11:40-12:00 **Panel discussion**

12:00-1:00 Lunch on-site

Aquatic Invasive Species

1:00 - 1:20 **Out of Sight, Out of Mind? The unrealized devastation from invasive northern pike —** Parker Bradley, Alaska Department of Fish & Game

1:20-1:40 **Functional eradication of invasive signal crayfish in the Buskin watershed, Kodiak, Alaska —** Matt Van Daele, Sun'aq Tribe of Kodiak

1:40-2:00 **Lessons from two of Alaska's human-mediated dispersal networks for aquatic invasive species —** Tobias Schwoerer, University of Alaska Fairbanks, International Arctic Research Center

2:00-2:20 **Panel discussion**

2:20-2:40 **Break**

Lessons Learned

2:40 - 3:00 **Stay Flexible: Lessons from the field in Kodiak —** Masumi Palhof, Kodiak Soil and Water Conservation District

3:00 - 3:20 **An infested powerline corridor intersects a world renowned salmon stream: Lessons learned from four years managing reed canarygrass on the Russian River** — Maura Schumacher

3:20 - 3:40 **Fresh on the Fringe: Finding invasive species on urban edges of Anchorage —** Hannah Thompson, Anchorage SWCD

3:40 - 4:00 **Something Old and Something New: 2023 early detection and rapid response in Southwest Alaska —** Ben Wishnek, U.S. Fish and Wildlife Service

4:00-4:20 **Panel discussion**

4:20-4:35 **Introduce the nominees —** John Hudson, board member

4:35 - 4:45 **Closing remarks**

Wednesday, Nov. 8

8:00 - 8:30 a.m. Registration, snacks and refreshments

8:30 - 8:40 Welcome

Terrestrial Control Options

8:40-9:00 **Reed canary grass — ornamental ribbongrass — control efforts along the Metolius River —** Michael Curmine, U.S. Forest Service

9:00-9:20 **Controlled trials with chicken tractors to control orange hawkweed —** Casey Greenstein, Homer Soil and Water Conservation District (virtual presenter)

9:20-9:40 **Not in My Backyard: Community-driven invasive chokecherry tree removal on the Kenai Peninsula** — Patrick Houlihan, Homer Soil and Water Conservation District

9:40-10:00 **Factors affecting the management and detection of aminopyralid, a persistent herbicide used for invasive plant management in Alaska —** Gino Graziano, University of Alaska Fairbanks, Institute of Agriculture, Natural Resources and Extension

10:00-10:20 **Panel discussion**

10:20-10:40 **Break and poster setup**

10:40-11:20 **Poster session**

11:20-12:00 **Member rapid updates**

12:00-1:00 **Lunch on-site — voting closes at 1 p.m.**

Data

1:00-2:20 **Invasive Species Data Session: Presentations, tools, and discussion for collecting and sharing data**

2:20 - 2:40 **Break**

2:40 - 2:50 **Invasive Species Data Session continued:**

- **Pros and cons of using apps –** Gino Graziano UAF, IANRE

2:50-3:10 **Alaska Statewide Data Portal demonstrations: How to contribute, view, and extract data from the new Alaska Non-Indigenous Aquatic Species Clearinghouse —** Kim Schuster, UAA, ACCS, KBNERR; **Updates and release of AKEP-IC 2.0**, Justin Fulkerson, UAA ACCS

3:10-3:40 **Identifying and establishing collective needs for AKISP and data management —** Discussion

3:40 - 4:10 **Biggest Invasive Species Geek *Round 1*** (2022 champion Masumi Pahlof)

4:10 - 4:30 **Voting results**

AKISP Board awards

Closing comments

Thursday, Nov. 9

8:00 - 8:30 a.m. Registration, snacks and refreshments

8:30 - 8:40 Welcome

European green crab

8:40-9:00 **On the Leading Edge: European green crab in Alaska 2023** — Genelle Winter, Metlakatla Indian Community

9:00-9:20 **European Green Crab state update** — Tammy Davis, Alaska Department of Fish & Game

9:20-9:40 **Exploring Trap Innovation: Evaluating efficacy of modified crab traps in invasive species monitoring** — Nicole Reynolds, Kachemak Bay National Estuarine Research Reserve

9:40-10:00 **Break**

10:00-10:20 **The Process of Updating Alaska's European Green Crab Response Plan: Lessons learned and next steps —** Jasmine Maurer Kachemak Bay National Estuarine Research Reserve; Ben Wishneck U.S. Fish and Wildlife Service; and Tammy Davis Alaska Department of Fish and Game

10:20-10:40 **Invasive Intruders: The European green crab threat.** (Video) Josiah Martin, Martin Media (contractor), U.S. Fish and Wildlife Service

10:40-11:00 **Panel discussion:** Invasive European green crab

11:00-11:30 **Member rapid updates**

11:30-12:00 **Biggest Invasive Species Geek *Final Round.* Announce winner**

12:00-1:00 **Lunch on-site**

Terrestrial Invasive plants

1:00-1:20 **Knot in My Backyard — the Juneau knotweed experience** — John Hudson, Southeast Alaska Watershed Coalition

1:20-1:40 **Monitoring the phenology and distribution of Japanese knotweed (Fallopia japonica) in Sitka, Alaska using citizen science** — Alexandra McCarrel, Sitka Sound Science Center

1:40-2:00 **Should the psyllid, Aphalar itadori be used for biological control of invasive knotweeds (Fallopia spp.) in Alaska? —** Fritzi Grevstad, Oregon State University

2:00-2:20 **Panel discussion**

2:20-2:40 **Alaska Weed-Free Products Certification Committee** – Summer Nay, Chair Weed Free Products Committee

2:40 - 2:50 **Meeting final remarks**

Board Meeting

3:00 - 5:00 **New board member orientation, officers, and work plan**

Keynote speaker

Cascade Sorte is a global change ecologist who studies the impacts of climate change and invasive species. As a marine biologist, Cascade does field experiments in coastal marine ecosystems. She has studied the impacts of global change in Southeast Alaska since she served as a Scientist in Residency Fellow at the Sitka Sound Science Center in 2014. Cascade's work on species invasions extends across aquatic and terrestrial ecosystems. She has led and participated in international synthesis groups working to understand how climate change will influence the prevalence and impacts of species invasions. This work was recently recognized with the George Mercer Award of the Ecological Society of America, an award given annually to an outstanding ecological research paper published by an early career scientist. Cascade earned her Ph.D. from UC Davis in 2010 and is now an associate professor of ecology and evolutionary biology at UC Irvine in Southern California.

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Nov. 7-9, 2023

Alaska Invasive Species Workshop

Keynote - Nov. 6

Impacts of species invasions in a changing world

Cascade Sorte, University of California Irvine, School of Biological Sciences

Climate change and species invasions are two of the greatest threats to global biodiversity. Furthermore, these threats may interact, with climate change influencing the rate and impacts of species invasions. In this talk, Sorte will discuss the reasons that climate change may influence invasion risk, particularly in high-latitude regions including Alaska. She also will describe frameworks for anticipating invasion impacts, particularly in light of alterations in impacts under climate change. This work focuses both on introduced, non-native species and on the influx of native species shifting their ranges under climate change (sometimes called "climate invasions.") Overall, the aims of this talk are to synthesize data that relay a cohesive message of what we might expect from species invasions in a changing world and to validate a risk assessment tool that could be used for proactive management of non-native species.

Out of sight, out of mind? The unrealized devastation from invasive northern pike

Parker Bradley, Alaska Department of Fish & 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 over 150 water bodies, and they are continuing to spread. Many of the waters northern pike have spread to 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.

Reed canary grass - ornamental ribbongrass - control efforts along the Metolius River

Michael Curmine, U.S. Forest Service

European green crab state update

Tammy Davis, Alaska Department of Fish & Game

Factors affecting the management and detection of aminopyralid, a persistent herbicide used for invasive plant management in Alaska

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

The persistence of any herbicide is problematic when it impacts desirable vegetation. However, herbicide persistence can also be very useful when extended control of a seedbank is needed. The persistence of aminopyralid has been surprising to some because it is highly mobile in water, indicating it should leach with runoff rather than bind to soils. In subarctic soils, aminopyralid persists for many years after application leading us to wonder if the studies of persistence at lower latitudes were not applicable to Alaska. Our labs recently conducted tests of the ability of aminopyralid to bind to soils from Southcentral and Interior Alaska. We discovered a pH dependence on the ability of aminopyralid to bind to soils, where highly acidic conditions (pH<4) cause aminopyralid to bind more readily to soil particles. Even though Alaska has soils with a generally lower pH, typically in the pH 4-5 range, field tests indicate that aminopyralid remains bioavailable in treated soils for several years after treatment. The pH dependence leads to other hypotheses as to how aminopyralid persists in soils, and some solutions to explore for remediation when persistence is no longer desirable.

Controlled trials with chicken tractors to control orange hawkweed

Casey Greenstein, Homer Soil and Water Conservation District (virtual presenter)

It's well known that chickens will scratch and peck down to bare ground, but there's little documentation of how long it typically takes or what grows back the fastest and most abundantly. This experiment tested different time intervals to compare the impacts chickens have on plant regrowth. Firsthand observations in Homer have shown that two summers of free-ranging chickens successfully eliminated a dense stand of invasive orange hawkweed (Hieracium aurantiacum), while leaving the native fireweed (Chamerion angustifolium) meadow community intact. This project used controlled trials of chickens confined to a smaller space and for shorter duration to see if similar results could be achieved. The presentation will be in the format of a short documentary video.

Should the psyllid, *Aphalar itadori* be used for biological control of invasive knotweeds (Fallopia spp.) in Alaska?

Fritzi Grevstad, Oregon State University

Classical biological control of weeds is an ecologically based and highly cost-effective approach that could be helpful for management of invasive knotweed species (*Fallopia* spp.) in Southwest Alaska. Knotweeds are a complex of three large herbaceous perennial plant species in the Polygonaceae that are native to Japan. They include *Fallopia sachalinensis* (giant knotweed), *F. japonica* (Japanese knotweed) and *F. x bohemica* (hybrid or bohemian knotweed). The knotweeds are invasive throughout much of North America, especially in riparian zones, where they displace native plants, cause erosion, and alter nutrient deposits into streams. The knotweed psyllid *Aphalara itadori* (also from Japan) is a sap-feeding insect that is specialized to knotweeds. The psyllid has been shown to greatly reduce plant vigor and survival in a greenhouse setting. In 2020, following extensive testing and review to confirm that no harm would occur to non-target native and economically important plant

species, the USDA APHIS approved its release as a biological control agent in the lower 48 states. Evaluations of the insect's establishment and effectiveness are ongoing. For Alaska, we recently tested the psyllid on a related Alaska native plant, *Aconogonon alaskanum* (Alaska wild rhubarb) that was not included among the 70 originally tested plants. Results confirm the high degree of host specificity and support extending releases of this insect in Alaska. We review the pros and cons of using classical biological control against knotweeds in Southwest Alaska.

Not in My Backyard: Community-driven invasive chokecherry tree removal on the Kenai Peninsula

Patrick Houlihan, Homer Soil and Water Conservation District

This presentation will discuss the successes and challenges of removing invasive chokecherry trees (Prunus padus and P. virginiana) across the Kenai Peninsula, highlighting efforts in the communities of Seldovia, Homer and Seward. In each of these communities there has been widespread support from the municipalities and community members to remove trees from both public and private lands. While considerable success has so far been achieved, as measured by the number of trees removed, substantial challenges remain if eradication is the ultimate goal. Fluctuant funding, building and sustaining public awareness and participation, locating spreading trees and accepting that some landowners may not remove or allow treatment of their private trees all combine in a complex mixture to create potential barriers for ongoing chokecherry tree removal on the peninsula. Additionally, some comparison of herbicide usage, via frill and cut stump treatments, and mechanical removal of small trees will be made.

Knot in My Backyard: The Juneau knotweed experience

John Hudson, Southeast Alaska Watershed Coalition

Knotweeds (Bohemian, Giant, Japanese, and Himalayan) are perennial herbaceous plants native to Asia and Japan and introduced to North America. In Alaska, exotic knotweeds have been found in Southeast and Southcentral regions, and on Kodiak Island. Most species occupy the top of the state's invasive plant ranking list for terrestrial plants. Knotweeds produce round, hollow stems that grow 6 to over 8 feet tall and form dense monocultures that can persist into October in Southeast Alaska. In addition to outcompeting and displacing native plants, knotweeds alter nutrient cycling, soil chemistry, and invertebrate assemblages, among other chemical, physical, and ecological impacts. More than 400 Bohemian knotweed (Japanese X Giant knotweed hybrid) infestations have been documented in the City and Borough of Juneau (CBJ). Although most infestations are on or near human-disturbed sites, some are spreading rhizomatously to adjacent areas that lack human disturbance, like the banks of salmon streams. Long-distance dispersal is aided by human activities that move whole plants or plant fragments: plant sharing, yard waste disposal, snow plowing, roadside mowing/brushing, and soil dumping. Bohemian knotweed is a priority species for control in the CBJ where efforts to eradicate infestations have been ongoing for 20 years. Control methods have included tarping, herbicide stem injection, and herbicide application using backpack sprayers.

The process of updating Alaska's European green crab response plan: Lessons learned and next steps

Jasmine Maurer, Kachemak Bay National Estuarine Research Reserve

Rapid response to new detections of invasive species is the most cost-effective way to prevent damage to economies, ecosystems and high value resources. At the end of August, several entities came together to consider and discuss a hypothetical rapid response for green crab infestation in Kachemak Bay. Participants examined how to best respond to a potential future infestation event and familiarized themselves with methods specific to European green crab monitoring. A key component of rapid response is preparation through planning and collaboration ahead of new detections. This panel will discuss perspectives from different agencies with diverse roles in invasive species management and early detection sharing the process, lessons learned, and next steps following the collaborative effort over the past three years to update Alaska European green crab rapid response plan and the associated exercise held in August.

Monitoring the phenology and distribution of Japanese knotweed (*Fallopia japonica*) in Sitka, Alaska using citizen science

Alexandra McCarrel, Sitka Sound Science Center

Japanese knotweed (Fallopia japonica) is a prevalent, high-priority invasive species that has taken root in Sitka. Thought to have been initially introduced as an ornamental plant in Southeast Alaska, Japanese knotweed has easily spread and can now be found throughout the Sitka road system. Despite targeted herbicide application every 5-7 years by the University of Alaska Fairbanks Cooperative Extension Service, Sitka's concentrations of knotweed have resisted eradication. Considering ecological impacts of knotweed on the local environment, such as obstructing flow along streambanks, colonizing watersheds, and outcompeting native vegetation, it is important to track the distribution of this invasive plant throughout our community. In order to bring mapping efforts of Japanese knotweed distribution in the Alaska Exotic Plants Information Clearinghouse up to date, we monitored the distribution and phenology of Japanese knotweed from 2021-2023. Monitoring from local volunteers showed a widespread coverage of knotweed spanning the 14-mile road system. Phenological monitoring indicated that it may compete with native vegetation, such as shading out adjacent salmonberry (Rubus spectabilis) attempting to establish nearby. We recommend annual distribution monitoring to better track the speed of its spread, along with continued herbicide application.

Stay flexible: Lessons from the field in Kodiak

Masumi Palhof, Kodiak Soil and Water Conservation District

Masumi Palhof will talk about her experience working for the Kodiak Soil and Water Conservation District. Flexibility is always key, but in 2023 this was especially true. We found creative ways to get our work done with limited funding by partnering with other entities throughout the archipelago. Despite many travel limitations, we were able to do several remote site trips and manage invasive species at a large portion of our critical control sites.

Exploring trap innovation: Evaluating efficacy of modified crab traps in invasive species monitoring

Nicole Reynolds, Kachemak Bay National Estuarine Research Reserve

The European green crab (*Carcinus maenus*) is a highly invasive species that can trigger ecosystem collapse due to their ability to tolerate a wide range of environmental factors, reproduce rapidly, and overtake native competitors. They have invaded many marine environments along the east and west coasts of North America and cost millions of dollars in damages to fisheries and indescribable damage to coastal ecosystems. In August 2022, European green crab were first detected in Alaska by the Metlakatla Indian Community on Annette Island

in Southeast Alaska. As the threat of green crab invasion increases across Southeast and Southcentral Alaska, we seek to investigate if we can increase effectiveness of early detection trapping by modifying existing traps. Based on a study (Bergshoeff et al., 2019), we modified Fukui traps by adding small weights to the openings (known as the "sinker" design) and compared them to unmodified Fukui and hard-wire shrimp traps. We found that the conditions that traps were set in varied, but when compared to unmodified traps, the modified traps had a higher catch per unit effort. In conclusion, we recommend that the trap used for specific locations be based on the location and conditions in the area. Modified Fukui traps are successful when in a low detrital input environment with low marine mammal interference and could be an important resource in early detection and rapid response to European green crab invasion.

An infested powerline corridor intersects a world-renowned salmon stream: Lessons learned from four years managing reed canary grass on the Russian River

Maura Schumacher

Reed canary grass is widespread across the Kenai Peninsula. Since the early 2000s, members of the Kenai Peninsula Cooperative Invasive Species Management Area (KPCISMA) have been trying to understand its distribution; how to successfully manage this highly invasive grass; and how to prioritize efforts at managing known populations and preventing its spread. These efforts culminated in the development of "A Strategic Approach to Managing Reed Canarygrass on the Kenai Peninsula," a management plan for reed canary grass that strategized restoration efforts at the watershed scale. Watersheds on the Kenai Peninsula were categorized into one of three minimum management responses (eradicate, contain, and control) based on factors such as isolation, discreteness, number of river crossings, miles of highway and railroad, and exotic species richness within the watershed. The first iteration of this management plan categorized five watersheds as "eradicate," including the Russian River. The Russian River, a world-class salmon stream and one of the most highly trafficked recreation areas on the Kenai Peninsula, is jointly managed by the Chugach National Forest and the Kenai National Wildlife Refuge, offering this sensitive area increased protections. The area is, however, intersected by a major powerline corridor jointly operated by Alaska Energy Authority and Homer Electric Association, which contains a 15-acre infestation of reed canary grass. After the discovery of this infestation in 2019, members of the KPCISMA joined together to begin some of the largest scale terrestrial herbicide treatments to have taken place on the Kenai Peninsula in order to protect this area and the remote landscapes it connects. Highlights, difficulties, and the ultimate success of the partnership formed through the focus on the protection of this world-famous stream will be discussed.

ANASC interactive training session: How to contribute, view and extract data from the new Alaska Non-Indigenous Aquatic Species Clearinghouse

Kim Schuster, Kachemak Bay National Estuarine Research Reserve

The Alaska Non-Indigenous Aquatic Species Clearinghouse (ANASC) is a database and mapping application that consolidates and centralizes aquatic non-native species data from across the state of Alaska to be easily accessed by managers and policy experts. Based on feedback from its initial release in 2021, a massive overhaul of the ANASC was undertaken beginning in September 2022. An interactive training session will be hosted to assess portal improvements and identify functionality of the clearinghouse as a whole. Participants will be provided with the tools necessary to enter data into the portal, as well as how to best visualize and extract portal data. Feedback collected during the training session will be used to identify next steps in future improvements.

Lessons from two of Alaska's human-mediated dispersal networks for aquatic invasive species

Tobias Schwoerer, University of Alaska Fairbanks, International Arctic Research Center This presentation dives into two datasets collected through statewide surveys with watercraft and floatplane owners, characterizes the two resource users, and analyses network structures that arise from observed transportation patterns. Implications for resource management aimed at prevention, early detection, and rapid response are discussed. The presented results expand and provide broader context to earlier quantitative analysis related to the introduction of aquatic invasive species via the floatplane pathway.

Wildfire and invasive plants in Alaska's boreal forest: state of the science

Taylor Seitz, University of Alaska Fairbanks, International Arctic Research Center

Increasing human disturbance, non-native plant populations, and wildfire have heightened the likelihood of spread of non-native plant species into Alaska's boreal forest. Previous research based on surveys conducted along the Dalton, Parks, Steese, and Taylor highways in 2005 and 2006 identified that propagule pressure, altitude, region, burn severity and age are factors that significantly affect the vulnerability and resistance of boreal forests to infestations of non-native plants. This project aimed to further study the long-term resilience of burned boreal forests and evaluate the status of non-native plants in burned areas. We conducted analyses of non-native plants reported in the Alaska Exotic Plants Information Clearinghouse and other various surveys, from which we identified 77 non-native plant species that have been found growing within burn perimeters. Of those species, three stood out as being particularly common and aggressive in burned soil: narrowleaf hawksbeard (Crepis tectorum), white sweetclover (Melilotus albus), and bird vetch (Vicia cracca). To determine whether infestations persist long-term in the years following a fire, we re-surveyed sites along the Dalton and Parks highways where non-native plants had been observed growing in burned forests. Repeated disturbance events are contributing to continued presence of post-fire infestations. Our data supports the notion that burned boreal forest shows a high degree of resistance and resilience to non-native plant colonization.

Invasive plant seed bank development after wildfire in Alaska's boreal forest

Jessie Skalisky, University of Alaska Fairbanks Climate Scholars Program

As the climate changes, Alaska faces increases in wildfires and invasive species. This past summer, we visited burned areas that had previously harbored invasive plants along the Dalton and Parks Highways. We surveyed the vegetation and collected soil samples to quantify and identify seeds present in the top layers of soil, part of the soil seedbank. During the survey, we found two species of concern, bird vetch (Vicia cracca) and white sweetclover (Melilotus albus). To examine the seedbank from burned land along the Dalton and Parks Highways, we brought back soil samples from the roadside and in the burn. We then set up a greenhouse experiment, where we grew native and nonnative seedlings from the seeds present in the soil. This is, to our knowledge, the first seedbank study looking at nonnatives in burned soils in Alaska's history. This presentation will share preliminary findings of the species present in the seedbank from previously invaded sites, and future directions for this research.

Fresh on the fringe: Finding invasive species on urban edges of Anchorage

Hannah Thompson, Anchorage Soil and Water Conservation District

This year was Anchorage Soil and Water Conservation District's first year stepping into the invasive species world after being restarted in November 2021. ASWCD's Invasive Species Program set out to address the growing invasive species problems within Anchorage. In collaboration with our partners from the Anchorage Cooperative Invasive Species Management Area, we worked to identify and prioritize both invasive species and areas in Anchorage, to gain a deeper understanding of the issues at hand and explore strategic solutions. We were able to secure multiple grants with various partners to kick off our first field season, putting our focus on the fringes of Anchorage: the lands bordering Chugach State Park. Through staff and volunteer efforts this field season, we have looked at over 6,000 acres of land across Anchorage. Our efforts have led to the documentation of 340 infestations of priority species within the Municipality of Anchorage, with 138 of these being European Bird Cherry (Prunus padus). We have also identified over 800 individual trees on both private and public lands. Looking ahead to next year, ASWCD plans to expand our efforts in conducting surveys and implementing treatments for infestations on the edges of Chugach State Park. Additionally, we will be adding another high-priority area to our list: access points to the Anchorage Coastal Wildlife Refuge.

Something old and something new: 2023 early detection and rapid response in Southwest Alaska

Ben Wishnek, U.S. Fish and Wildlife Service

National Wildlife Refuges in Southwest Alaska collectively protect millions of acres that support multiple fish and wildlife species, subsistence, traditional cultures, recreational, and economic interests. Natural processes on many of these landscapes are still relatively intact compared with many other places on the planet and they serve as critically important areas for many fish and wildlife species, cultures, and economies that depend on them. However, incipient populations of invasive species (e.g., white sweetclover, orange hawkweed, and oxeye daisy) have been detected over the last couple of years on and adjacent to Alaska Peninsula/Becharof and Izembek National Wildlife Refuges that have the potential to negatively impact resources of concern on the refuges. Prevention, early detection, and rapid response strategies have been used to respond to these infestations and others that on the horizon and have potential to negatively impact the refuges. Prevention via outreach materials and events for both terrestrial and marine invasive species garnered interest by local partners. Additionally, initial rapid response activities to priority infestations of white sweetclover, orange hawkweed, and oxeye daisy has shown success in reduction in abundance. The 2023 field season saw the start of a new project to collect baseline invasive species data on and adjacent to Togiak National Wildlife Refuge. This data will be used to develop treatment plan recommendations for local partners. Contrasting maps displaying areas surveyed prior to 2023 and after showcase the need for baseline data and subsequent integrated pest management planning in remote communities of Alaska.

On the Leading Edge - European green crab in Alaska 2023

Genelle Winter, Metlakatla Indian Community

A summary of the efforts to monitor for and control the invasion of European green crab on Annette Islands Reserve Alaska, from the first positive confirmation in 2022 to now. This will include the use of eDNA to help inform monitoring efforts, and other innovative efforts to reduce the spread of European green crab in Alaska.

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