



THE ALASKA INVASIVE SPECIES PARTNERSHIP

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WHAT WE DO

The mission of the Alaska Invasive Species Partnership (AKISP) is to prevent, detect, and manage invasive species in Alaska by facilitating and fostering invasive species awareness, knowledge, information sharing, and collaboration among diverse stakeholders.

We strive to provide credible and unbiased scientific information to promote better management decisions. To share the latest information, research, management practices, and technologies related to invasive species concerns affecting Alaska, we host monthly statewide virtual meetings and an annual workshop for approximately 200 participants. We manage an active social media presence and regularly coordinate outreach campaigns.

WHAT YOU CAN DO

- Pass legislation to create an Alaska Invasive Species Council that will facilitate coordination among state agencies on invasive species prevention and management
- Allocate funding to support state agency management efforts to better protect Alaska's resources from invasive species threats.
- Contact the AKISP Board and your local invasive species experts to learn about species causing problems in your district and how you can help address management challenges
- Support and participate in community efforts to control invasive species
- Get involved with AKISP. To join our listserv, visit alaskainvasives.org



The AKISP in Sitka, 2023, with the theme "Invaders on the Edge". This event rotates location around the state between Anchorage, Fairbanks, and a remote community. Photo: Ashley Lutto, USFWS

Alaskans depend on their natural surroundings for food, work, and fun. The far-reaching effects of **INVASIVE SPECIES threaten the very resources that are fundamental to life in Alaska.**

WHAT ARE INVASIVE SPECIES?

A species is invasive if it is **not native** to an area and **causes harm** to the **environment, economy, or human health**. Invasive species threaten Alaska's natural resources, economy, and ways of life.

WHAT'S THE PROBLEM?

Previous annual economic costs of invasives exceeded \$26 billion¹ in the United States and \$423 billion globally²

Like groceries and gas, the cost to prevent and manage invasive species is higher today than it was in years past. But the cost of responding to these threats must not be a reason to turn a blind eye.

BIOSECURITY should be given the same focus and attention as national security, cyber security, and healthcare. We must invest in **prevention, detection, and response** to protect what we value, including Alaska fisheries, agriculture, recreation, and tourism.

¹ Crystal-Ornelas et al. 2021. *NeoBiota* 67: 485-510.
² IPBES 2023. <https://www.ipbes.net/IASmediarelease>

HOW DO INVADERS MOVE?

Invasive species are a threat to Alaska food security, recreation, and economic viability. Common means of transporting people, goods, and services to and around Alaska can be vectors of invasive species.

In freshwater, watercrafts and floatplanes can transport zebra and quagga mussels and Elodea. A recent study by economists at the University of Alaska estimated potential damages from Elodea to the sockeye salmon fishery in Alaska at \$159 million dollars per year³.

On land, transportation and trade can spread invasive plants and plant pests. Invasive ornamental plants are sold and delivered through the nursery trade, including the once popular bird cherry trees. These trees are now quarantined by the Division of Agriculture. From 2020-2024, the ADNR Alaska Community Forest Program awarded over \$400,000 in grants to remove cherry trees across Alaska. Gravel pits, roadside brushing, and construction equipment can transport thousands of invasive plants seeds, such as white sweetclover and bird vetch.

³ Schwoerer et al. 2019. *Journal of Ocean and Coastal Economics* 6:2.



The USFWS, in coordination with US Customs & Border Protection and ADF&G, operates a seasonal watercraft inspection and decontamination station at the Alcan Land Port of Entry to intercept boats and other conveyances infested with zebra and quagga mussels or other aquatic invasive species. Thousands of boats enter Alaska annually via this checkpoint with about half not inspected prior to arriving⁴. Relying on a single seasonal inspection station is risky. Expanding coverage at other high-risk entry points is essential to protect Alaska's waterbodies.

⁴ Schwoerer et al. 2023. *Marine Policy* 148: 105448 Photo: Aurelia Umholtz, USFWS

Along the coast, commercial ships can disperse invasive crabs and sea squirts across continents in ballast water and on hulls. Mariculture equipment transported from out of state can be a haven for invasive parasites and hitchhiking organisms.

Even some unwanted pets can become invasive when released. Recently, ADF&G eradicated a population of spawning goldfish from Cuddy Pond in Anchorage, some as long as a woman's size 8 Xtratuf boot. In Fairbanks, Elodea was likely introduced into Chena Slough when dumped from an aquarium, then quickly spread.

PREVENTION continues to be the first and best line of defense against invasive species. It is also the most **COST-EFFECTIVE** way to limit introductions.

When prevention doesn't work, **EARLY DETECTION** is critical, followed by **RAPID RESPONSE** to control or remove the species. Whenever possible, **ERADICATION** is the best-case scenario. If that is infeasible, long-term **MANAGEMENT** of the population is often the next step. The goal is always to limit harm to environmental, cultural, and economic resources.

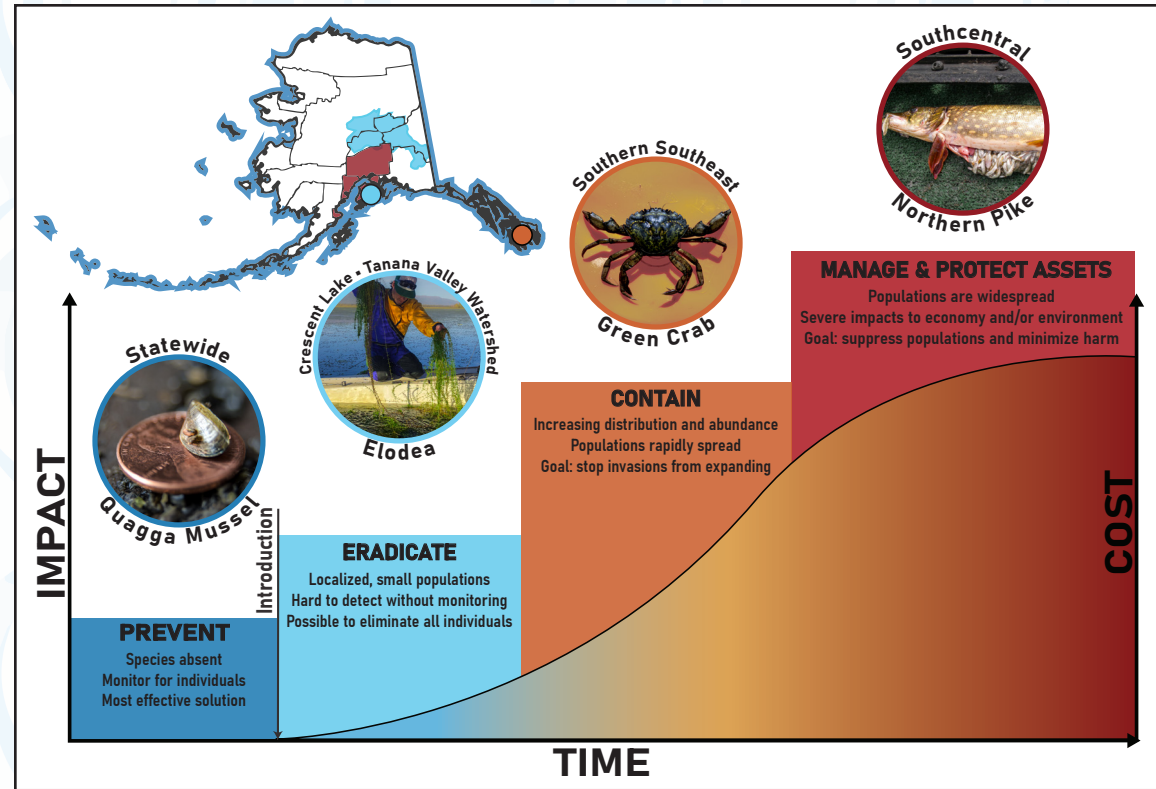
Thanks to collaboration among AKISP partners, Alaska has had some success managing invasive species; however, programs continue to be severely underfunded and are operating with limited staff.

CASE STUDY: ELODEA IN THE MAT-SU BOROUGH

Elodea was discovered in Alexander Lake in 2014. Initially sparse, it rapidly spread, including to nearby Sucker Lake. Elodea is an aquatic invasive plant easily dispersed by floatplanes and boats. Its aggressive growth crowds out native plants, harms fish habitat, and impedes movement of watercraft and floatplanes.

In 2019, agencies collaborated to prevent further spread of Elodea and secured grants to apply treatments in both lakes. The same year, Elodea was found in Big Lake. Consequently, the limited personnel and resources available were diverted to this new infestation. In the absence of treatment funding, Elodea continues to spread throughout the Big Lake system, resulting in a major vector of spread across the state.

Thanks to early detection and response efforts, Elodea has been eradicated in over 17 lakes. This investment is now jeopardized. Big Lake highlights how limited resources hinder invasive species management, degrading aquatic habitat critically important to Alaska's salmon fisheries. Delayed or no action puts freshwater lakes at risk. Alaska is at a critical decision point: eradicating Elodea from the state's freshwater resources is still feasible, but that could slip away.



The invasion curve illustrates the increasing impacts and costs of invasive species over time and options for management at each stage of the invasion. Alaska is currently dealing with invaders at each stage of the invasion curve. Photos courtesy of ADF&G.

AQUATIC ASSETS NEED ATTENTION

A lack of resources is currently impeding the state's ability to respond to the spread of Elodea, on-going management of invasive northern pike in Southcentral Alaska, and the new European green crab infestation in Southeast Alaska.

The impacts from looming invasive species, such as zebra and quagga mussels, can be prevented in Alaska if surveillance, decontamination, and early detection efforts are adequately funded. Rapid response activities focused on southern Southeast Alaska can help prevent green crabs from destroying eelgrass nursery habitat. Early detection, monitoring, and functional eradication

methods to contain populations of invasive green crabs will reduce the impacts to areas where they occur and un-invaded areas. With additional resources to respond to new invasions and address management of existing invasive species, we can protect salmon fisheries and minimize degradation of aquatic habitats.

Alaska was once considered safe from invasive species, but times have changed. **Establishing a state invasive species council** would provide additional financial and administrative support to address invasions. You can help protect Alaska from the harmful impacts of invasive species.