



Invasive Species

A Growing Threat to Alaska's Ecology and Economy

Issue

Invasive species are a relentless problem. These harmful, non-native plants, animals and microorganisms impact our economy and environment. The economic impact of invasive species in the U.S. is estimated be over \$137 billion¹ per year.

In Alaska, invasive species threaten native fish, plants and wildlife and their subsistence users as well as our resource-dependent industries, including agriculture, tourism, forestry, hunting, and fishing. Alaska has so far experienced fewer invasions than many other states, but we are at a critical point. Human-mediated mechanisms for introduction are increasing, raising the risks of invasive species reaching Alaska's shores and lands.

Alaska's vast size and the varied management of Alaska's public and private lands and waters demands collaborative efforts to ensure effective prevention, early detection, monitoring and management if we are to reduce duplication of efforts and increase our overall effectiveness.

Almost half of all states in the US have a formalized group to address strategies for managing invasive species. Alaska does not yet have a unified forum under which invasive species are managed. However, in the Fall of 2006, twenty state, federal, tribal and non-governmental organizations did sign a Memorandum of Understanding (MOU) to create the Alaska Invasive Species Working Group (AISWG) as a means to improve our collective ability to slow the pace of invasion and its impacts in Alaska.

One of the key goals of this newly formed AISWG is to help the State of Alaska establish an Alaska Invasive Species Council with a formal structure for continued collaboration, cooperation and communication to minimize invasive species impacts in Alaska.

AISWG cooperators are already working actively on improving communication by maintaining a listserv, website, sharing information and holding monthly statewide conference calls. As a means of enabling efficient collaboration, cooperators are also identifying their respective jurisdictional authorities for invasive species management and looking for



20 agencies have signed the AISWG MOU



Purple loosestrife along Chester Creek in Anchorage². This species was popular with some gardeners, but can severely impact natural wetland ecosystems. Each plant can produce as much as 2 million seeds and sterile plants can hybridize and reproduce with non-sterile plants. This species has recently been banned from sale in Alaska.

how these authorities can be used and improved in a complementary way.

The AISWG is also set to host a first ever all-taxa statewide invasive species conference in Fairbanks in the fall of 2007.

Facts

- Alaska is not immune from invasion, and in the face of climate change and expanding international trade is in fact likely to see even greater invasion pressure in the future.
- Some invaders (rats, green crabs, knotweeds, purple loosestrife, and others) are threatening or already dramatically altering Alaska's native ecosystems.
- Because invading species do not recognize private or political boundaries, a coordinated and collaborative effort is needed to prevent, detect, and control invasion.
- Alaska is the only West Coast state that DOES NOT have a formal all-taxa state invasive species council.
- State of Alaska agencies increasingly recognize the importance of managing invasive species. In recent years, the Alaska Department of Fish and Game has produced an Aquatic Nuisance Species Plan, an Invasive Pike Plan, and the Invasive Rat Plan is near completion. The Department of Natural Resources has proposed expanding the list of plants considered noxious within Alaska.

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“...Idaho’s programs have been likened to a “patchwork quilt”, where each “patch” represents an individual program or effort. So long as the patches connect, the quilt is useful, but if they do not, then there are gaps in the coverage through which undesirable species can enter.” -- Idaho’s Action Plan for Invasive Species

- Federal agencies, non-governmental organizations, universities, private industries, native groups, and individual citizen partners of the State are increasingly working together to help stop the spread of invasive species through a variety of institutional, group and volunteer efforts.
- The AISWG is committed to collaboration, cooperation and communication to minimize invasive species impacts and to helping the State of Alaska to improve the viability and capability of cooperative efforts by forming an all-taxa invasive species council.

Alaska — Priority List

1. Establish an Alaska Invasive Species Council or other formal structure for coordinating the management of invasive species.

Formation of a unified Council for invasive species management is an important step in coordinating existing resources within Alaska and for improving our capacity for effective collaboration well into the future.

2. Support funding of a prevention and early detection/rapid response system.

Prevention and timely management is important for controlling the detrimental impacts of invasive species. Early detection programs and rapid response plans can help to cost-effectively mobilize resources from participating agencies.

3. Enhance existing and initiate new research and public awareness campaigns.

Coordination between the organizations and agencies in Alaska is vital to identify shared priorities and avoid duplication of efforts, to promote compatibility of the collected research data, and to enhance the education and outreach activities associated with invasive species.

4. Negotiate standards to limit invasive species pests arriving in Alaska.

The State of Alaska and its partners can more strongly support regulation and enforcement efforts to protect our vital natural and economic resources. The recent actions of the Department of Natural Resources and Department of Fish and Game toward regulating such invasive species as rats, freshwater fish (non-native pike), and detrimental plant species (purple loosestrife and orange hawkweed) are



Rat on rope (left), and a rat cache on Kiska Island (right)³. Most rats on Alaska’s islands are there as a result of “rat spills” from wrecked ships. Rats really do flee a sinking ship! In one rat cache on Kiska Island, researchers found over 100 least auklets⁴. Rats pose a serious threat to our globally important seabird populations.

positive steps toward invasive species prevention. Effective prevention is both economically and ecologically efficient, and often more practical, than eradicating species after introduction has already occurred. Improved monitoring, inspection, and enforcement along all pathways for invasion into Alaska are needed.

Summary

Alaska is in a unique position to avoid the enormous costs associated with the widespread introduction and establishment of invasive species. Early intervention in Alaska can prevent the deterioration of the state’s ecological and economical resources.

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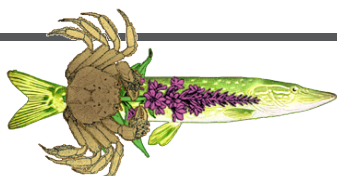
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2. Photo taken by Michael Shephard, US Forest Service
3. www.stoprats.org
4. Alaska Science Forum, June 24, 2004, Rats and birds clash on volcanic island Article, #1704, by Ned Rozell. <http://www.gi.alaska.edu/ScienceForum/ASF17/1704.html>



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