by Dennis R. Lassuy

Alaskans are "Pulling Together"

"Dithering and endangering are often linked." (Soulé 1986)

hen we hear about "invaders," we often imagine the danger these interlopers pose is obvious and immediate. However, newly introduced species may not become invasive for decades after they arrive. In 1993, biologist W.R. Courtenay warned that "every introduction must be viewed as a potential biological 'time bomb' waiting to explode at some future time." That same year, a national review of invasive species risks and management approaches (OTA 1993) added that "rapid response is essential."

In this story, Alaskans are already pulling together – no dithering here!

Purple loosestrife (*Lythrum salicaria*), an ornamental plant of Eurasian origin, had been known in Alaska for years, but it was not considered problematic because it had not spread beyond cultivation. That changed in October 2005 with the news that Alaska's first wild population of this wetland plant had

been discovered in an Anchorage area stream, Chester Creek.

Whether this invader's newfound ability to spread to the wild was the result of local adaptation or global climate change, a potentially damaging invasion had begun. An initial weed pull was organized less than a week later, and last fall, partners from Girl Scouts to gardeners to state and federal conservation agencies "pulled together" with the Municipality of Anchorage in an attempt to halt the invasion before its impact spread to Alaska's globally important wetlands.

Chester Creek flows from the Chugach Mountains through the heart of Anchorage and on into Cook Inlet, its course connecting mountain to sea and neighborhood to neighborhood. Not so long ago, a healthy population of silver salmon (Oncorhynchus kisutch) could be found in this stream, but their numbers began to decline greatly. By creatively bringing the prevention, rapid response, planning and restoration capabilities of a number of Service programs together with the passion and skills of our partners, we are working to prevent further decline and restore this largely urban watershed to health.

Being able to see the flash of silver salmon, whether along Arctic Boulevard in Chester Creek or in any other of the many streams that pass through city neighborhoods, is the goal of "Salmon in the City," an ambitious partnership involving Anchorage, the Service, and many other government, private business, and individual citizen partners (http://www.muni.org/salmoninthecity).

The mouth of Chester Creek is the site of one of several projects in this watershed aimed at improving life for silver



This stand of purple loosestrife threatened native salmon populations.

salmon and city residents. This project, supported through the Fish Passage and Partners for Fish and Wildlife programs and coordinated with the Southeast Sustainable Salmon Program, Coastal America, and other partners, will help Anchorage deal with troublesome culverts, poor existing fish ladders, and missing stream meanders. A few stream miles and several neighborhoods further up the watershed, another project supported through the Partners and Private Stewardship Grant programs seeks to recreate pools and meanders and restore native riparian vegetation. An intact stream from mouth to headwaters will restore that flash of silver, but only if we do not allow preventable threats from undoing our shared efforts.

And that is how the story of salmon restoration connects to the purple loosestrife invasion. The site of that invasion was between the two stream restoration projects. We could not let this invasion so fully overgrow native vegetation that it would block fish passage and push out native wildlife. So we pulled together.

With support from the Aquatic Invasive Species Program and the Coastal Program, the Service joined the Municipality of Anchorage and Anchorage Parks Foundation to create a Citizen Weeds Warriors campaign, and the purple loosestrife pull was its signature event. This citizen-based campaign resulted in more than 120 volunteers putting in over 200 hours of labor and collecting more than 140 bags of invasive plants.

The Girl Scouts who helped with the pull also studied the value of native biodiversity and learned about other invasive species threats while earning their Invasive Species Patch (which happens to feature purple loosestrife). The Service's Alaska Regional Director Tom Melius and Anchorage Mayor Mark Begich together presented these future conservation leaders with their badges.

Another invader of the Anchorage area is the northern pike (Esox lucius), a voracious species of predatory fish that can wipe out a trout population or a salmon run in short order. The Aquatic Invasive Species Program, again working with the Coastal Program and in collaboration with the Alaska Department of Fish and Game, has developed public service announcements and other outreach tools to prevent its further spread and avoid declines in any other native fish species that might fall prey to this invader.

Maintaining diverse, self-sustaining fish populations capable of supporting



An invasive northern pike devouring a native trout.

recreational and commercial fisheries and a subsistence culture, and providing the nutrients that feed entire ecosystems, are essential to Alaska. Since no single Service program can do this alone, we reach across programs and to our many partners to achieve meaningful and lasting results.

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Volunteers are rehabilitating the riparian zone along this Town Center creek.