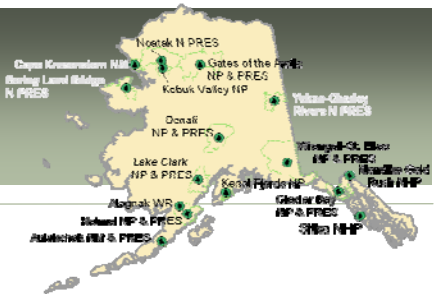
Alaska

Exotic Plant Management Team



Partner Parks: *Alagnak WR, Aniakchak NM & PRES, Bering Land Bridge N PRES, Cape Krusenstern NM, Denali NP & PRES, Gates of the Arctic NP & PRES, Glacier Bay NP & PRES, Katmai NP & PRES, Kenai Fjords NP, Klondike Gold Rush NHP, Kobuk Valley NP, Lake Clark NP & PRES, Noatak N PRES, Sitka NHP, Wrangell-St. Elias NP & PRES, Yukon-Charley Rivers N PRES*

In its fifth year, the Alaska EPMT (AK-EPMT) grew to its largest size and most effective efforts yet to keep invasive plants from becoming a major problem in Alaska's National Parks.

2007 Accomplishments	
Inventoried Acres	691
Gross Infested Acres	1,292
Infested Acres	336
Treated Acres	24
Monitored Acres	2,459
Retreated Acres	20
Restored Acres	3.6

Eleven employees and five interns inventoried, controlled, and monitored infestations in nine of Alaska's ten parks with documented invasive plants. We educated visitors, local residents, and park staff about both problems and solutions through presentations and publications. While EPMTs in other regions are treating large infestations; the AK-EPMT is able to thoroughly search for, map, and control small infestations so that large infestations never develop.

To bolster our early detection and rapid response program, the AK-EPMT has developed a sophisticated data collection, processing, and storage protocol. In the field, we compiled nearly 3,000 precise data records in 2007, each representing an infested or uninfested area that was inventoried, treated, monitored, retreated, or restored. The precision of the GPS units enables us to revisit virtually every known infestation in Alaska parks each summer and evaluate the effectiveness of our efforts to within a meter change in patch shape. As a result, we know what is working and when to change strategy using an adaptive management approach.

For controlling large infestations, two Tribal Civilian Community Corps teams assisted our seasonal staff for over two months of control work. They traveled the vast distances between Alaska parks from rainforest to tundra and worked to help us remove the few large infestations we have. Of equal benefit, the young adults learned about park resources, issues, and management and came away knowing that their work prevented the development of future problems. Many other volunteers assisted our efforts throughout the summer, contributing thousands of work hours toward keeping invasive plants at bay in Alaska parks.

Nothing is more cost-effective in the long run than early eradication of arriving invasive plants, and this year we had plenty: 35 infestations of 13 different invasive plant species were eradicated in Alaska parks by previous years' treatments. Examples include yellow toadflax in Sitka National Historical Park, quackgrass in Wrangell-St. Elias National Park and Preserve, common burdock in Glacier Bay National Park and Preserve, and bird vetch in Denali National Park and Preserve. Our GIS database and GPS protocol dramatically simplify the tracking of each individual infestation.

Figure 15. Alaska EPMT members learn GPS data collection at the seasonal training.

For better coordination across the NPS 54 million acre Alaska Region, a comprehensive Invasive Plant Management Plan was developed this year. The plan was prepared through public, interagency, and NPS participation in evaluating the current situation and strategizing best

management for the future. A companion Environmental Assessment is in process and will be finalized in 2008. The unified direction of this plan complements the field efforts and data management of the AK-EPMT to complete a holistic invasive plant management program for Alaska.

Special Project

The Tribal Civilian Community Corps (TCCC) is an AmeriCorps program of the Tanana Chiefs Conference of Interior Alaska and provides development and leadership opportunities for Native Alaskan youth. In 2007, TCCC provided two work teams for over a month each to assist our seasonal employees in controlling large infestations. They worked in many of Alaska's parks, including Denali, Glacier Bay, Katmai, Kenai Fjords, Klondike Gold Rush, Sitka, and Wrangell-St. Elias, and learned about the varied cultural and natural resources across the region. A common theme was the recognition that this partnership is a model for building relationships between parks and rural Alaska communities.

Figure 16. The Tribal Civilian Community Corps rids Sitka National Historical Park of invaders.

In total, the TCCC teams controlled over 300 infestations of 15 invasive plant species, the largest and most threatening ones in Alaska parks. The TCCC teams complement the work of our seasonal employees, who generally work alone or in pairs, by providing the labor needed for our few infestations that are difficult to control. With one or two work weeks in midsummer, the TCCC teams can knock out the infestations that have been prioritized earlier in the summer, and after the teams leave, we sweep the area and monitor the control effectiveness for the rest of the summer and beyond. This partnership between the Alaska EPMT and the TCCC program provides mutual benefit by educating our future stakeholders and enabling them to make a difference by helping parks fight this problem in a cost-effective way.

Collaboration

Because Alaska still has the opportunity to prevent invasive plants from irreparably damaging its natural resources, collaboration is a mainstay of the AK-EPMT. In particular, we work closely with other agencies and organizations through the statewide Committee for Noxious and Invasive Plants Management to address invasive plants before they arrive in parks from elsewhere in the state. In addition to serving a leadership role on the Committee, this year the EPMT Liaison collaborated with partners to revise its strategic plan, plan for its annual meeting, and prepare recommendations for an Alaska state invasive plant program.

In collaboration with NASA and the University of Alaska Fairbanks (UAF), we are midway through a 3-year project to model the spread of invasive plants onto burned lands in Interior Alaska. Massive areas of the region have burned in recent years; multiple invasive plant species are poised to invade these lands from adjacent roadways. This year, we worked cooperatively with UAF to develop a sampling strategy that they implemented to determine what species are invading burns and what habitats and burn severities are most susceptible to invasion. The modeling will answer important management questions about how to prevent the most widespread dispersal of invasive plants in Alaska to date.

Finally, we collaborated with local Cooperative Weed Management Areas in several regions of Alaska to coordinate on-the-ground activities with other landowners and managers. Projects include collaborative surveys and control of white sweetclover to keep it away from the Copper River, orange hawkweed across the Kenai Peninsula, and purple loosestrife in an Anchorage wetland at its only known wild infestation in Alaska.