INVASIVE WEED AWARENESS COALITION (IWAC)

Ousting Orange Hawkweed in Kodiak National Wildlife Refuge

In 1941, Franklin D. Roosevelt set aside 1.9 million acres of the Kodiak Archipelago in southwest Alaska as a safe haven for wildlife. Named the Kodiak National Wildlife Refuge, the area provides habitat for Kodiak brown bears, salmon and other wildlife. The surrounding scenery is beautifully diverse with rugged mountains, miles of shoreline, lakes and meadows. However, in 2002 a non-native, invasive weed appeared in this spectacular landscape.

Within the refuge is Camp Island, a 58-acre isle where Kodiak officials discovered more than three acres of orange hawkweed *(Hieracium aurantiacum)*, a plant with an attractive vibrant orange color. The plant was initially brought to the U.S. from Europe by flower enthusiasts that were attracted to its stunning color. However, beauty is only petal-deep in this case; as invading orange hawkweed had replaced much of the native meadow habitat on Camp Island. The invasive weed has extensive stolons that create a dense mat of hawkweed plants, nearly eliminating all other vegetation.

The infestation threatens native forbs that are an important part of the Kodiak brown bear diet. Although Kodiak officials are unsure of how bears react to orange hawkweed, they believe native vegetation is more desirable for the bears, so keeping the weed from spreading into other areas of the refuge and eliminating other forbs is paramount.

Challenge:

Following extensive research of control options available for orange hawkweed, Kodiak officials decided to use a herbicide which is nontoxic to fish and wildlife. After developing an integrated pest management (IPM) plan and a pesticide use proposal, as well as obtaining permission from the landowner, a regional Native corporation, spraying began in spring 2003.

Control efforts in the Kodiak National Wildlife Refuge have eradicated some orange hawkweed patches. Camp Island is a healthier habitat for wildlife in the refuge.

The greatest challenge for Kodiak officials occurred after the initial treatments. With the success of the first application, native plants came back to the area – obviously the desired result. However, the native plants began to cover and hide remaining orange hawkweed seedlings, making it difficult for crews to see the remaining weed.

Solution:

The ability for orange hawkweed to "hide" under native vegetation made it all the more evident to Kodiak officials that continued vigilance and monitoring were keys to controlling the weed. Remaining orange hawkweed occurrences on Camp Island continue to be sprayed each June and September. Crews use biodegradable flagging to mark sites to be sprayed. Manual control has also been part of the control effort.

Result:

Many orange hawkweed patches on Camp Island have been eradicated as a result of the herbicide treatments. The refuge effectively used an IPM approach to reach their goal, while minimizing any impact to the refuge and the private lands surrounding Camp Island. And, outreach associated with the project provided the impetus for cooperative invasive plant management across the Kodiak Archipelago.

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NATIONAL INVASIVE WEED AWARENESS WEEK

Learn More:

Bill Pyle
(907) 487-2600
Bill_Pyle@fws.gov

NIWAW Information:

Gina Ramos, Bureau of Land Management (BLM)
(202) 452-5084
gina_ramos@blm.gov

Lee Van Wychen, Ph.D.
National and Regional Weed Science Societies
(202) 408-5388
lee.vanwychen@weedscienceorgs.com

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