Are invasive plants affecting post-harvest forest regeneration in the Tanana Valley State Forest?





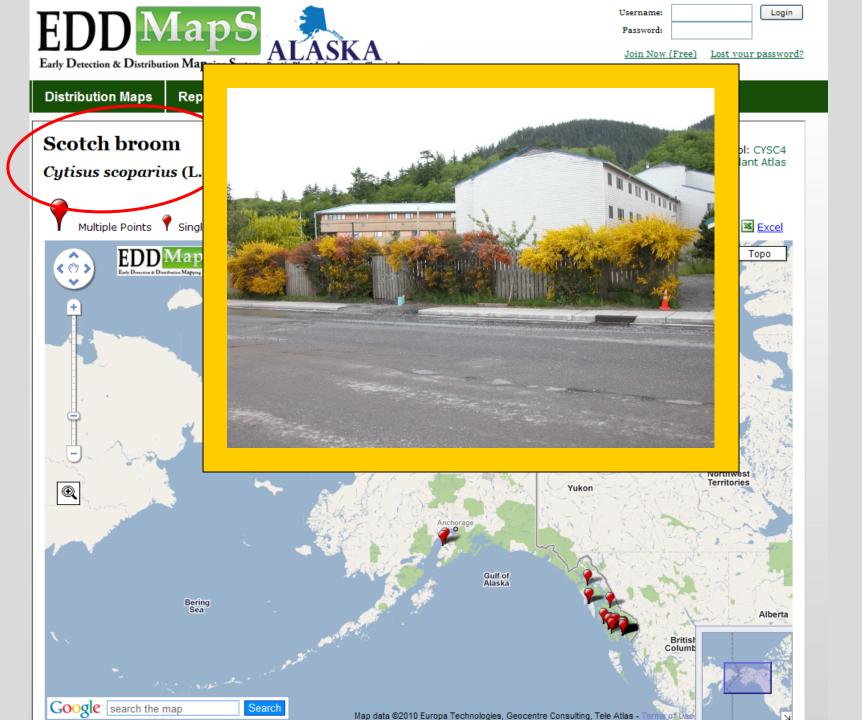
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Scotch broom (*Cytisus scoparius*)

- Introduced as an ornamental, 1860s
- Naturalized in British Columbia by 1900
- Interferes with re-establishment of conifer seedlings on harvested lands
- Estimated to cost \$40 million annually in Oregon alone, due to lost timber production and cost of control efforts





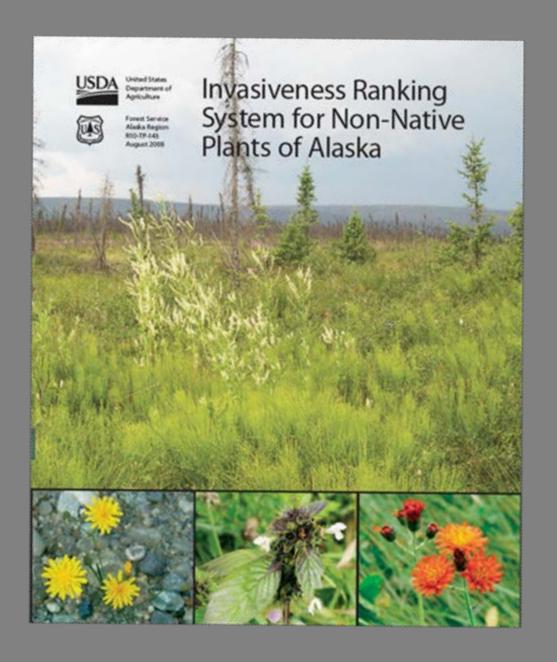




We visited seven sites...

Unit	Location	GPS Coordinates
NC-1013-1	Cache Creek Road	64° 52' 46.106N 146° 43' 52.115W
NC-1131-1	Cache Creek Road	64° 53′ 38.701N 148° 16′ 54.177W
NC-1206-1	Parks Ridge Road	64° 39′ 39.632N 148° 38′ 46.963W
NC-1332-1	Parks Ridge Road	64° 40′ 05.248N 148° 37′ 33.879W
NC-0975-1	Road on north side of	
	Harding Lake	64° 26′ 08.982N 146° 43′ 52.115W
NC-0875-1	Standard Creek Road	64° 48' 04.649N 148° 15' 47.217W
NC-1078-1	Standard Creek Road	64° 47′ 16.454N 148° 19′ 12.112W

Invasiveness ranks from 1 - 100



We found seven non-native species within the harvest units....

Common name	Latin name	Invasiveness ranking
Foxtail barley	Hordeum jubatum	63
Common dandelion	Taraxacum officinale	58
Field bindweed	Convolvulus arvensis	56
Yellow hawksbeard	Crepis tectorum	54
Common plantain	Plantago major	44
Lambsquarters	Chenopodium album	37
Pineapple weed	Matricaria discoidea	32

...none of which are likely to cause problems with forest regeneration

Common name	Latin name	Invasiveness ranking
White sweetclover	Melilotus albus	81
Bird vetch	Vicia cracca	73

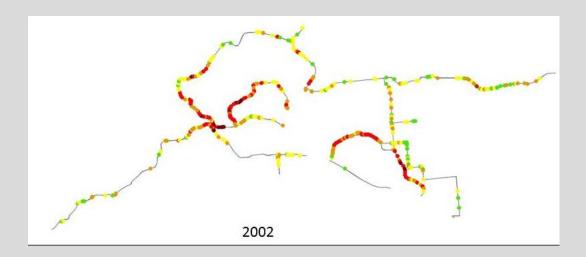
...we found one clump of bird vetch on Parks Ridge Road and 19 distinct patches of it on Bonanza Creek Road











Nolen surveyed 107 miles of roadside and found vetch in 39% of the sites he sampled

Andy Nolen's 2002 survey of bird vetch in Fairbanks area

Invasive Plant Issues



Control of bird vetch (Vicia cracca)

by Gino Graziano, Ashley Grant and Trish Wurtz





PMC-00341



Background: Bird vetch (Vicia cracca) spreads rapidly; it reproduces by seed and vegetatively through spreading rhizomes. Once established, bird vetch is able to flourish in a range of conditions and it is tolerant of fire and drought. Unlike many invasives, bird vetch is also capable of invading undisturbed areas. Bird vetch is a frustration to home gardeners and is a concern in natural areas, small grain fields, vegetable gardens and small fruit orchards.

Bird vetch was first introduced to Alaska as a forage crop; it grows aggressively and is palatable to livestock. In hay fields bird vetch is not likely to outperform timothy or brome; however, it may reduce yields if allowed to smother other forage crops.

Control: If you find a small amount of bird vetch, do not delay. Bird vetch is challenging to control. If new infestations are allowed to become established, it can take years of effort to control them.

Bird vetch produces abundant seeds, but they are relatively short-lived, surviving about five years in the soil. Regular mowing or hand pulling throughout the growing season, before the seeds mature, prevents the plant from producing seeds and also gradually diminishes the infestation. Managing bird vetch with repeated pulling may keep it in check, but given a chance, the infestation will come roaring back. Herbicides or covering are necessary to completely control bird vetch.

Impacts of bird vetch:

- · Escapes areas of cultivation to roadsides, power lines and adjacent habitat
- · Displaces beneficial plants
- · Climbs into the lower branches of trees and shrubs
- Reduces hay yields
- Will take over gardens



Identification:

- · Numerous purplish blue flower clusters are arranged on one side of a stalk.
- · Leaves are composed of many pairs of narrow leaflets, with coiling tendrils at the tip.
- · Native look-alikes have winged stems.



For more information regarding invasive plants, contact UAF Cooperative Extension Service at 1-877-520-5211 or visit www.uaf.edu.ces.