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Non-Native Plant Species Hotspot Surveillance of the Copper River Basin: Summary of survey findings and recommendations for control of high priority invasive plants along the Richardson and Edgerton highways, Valdez and Chitina

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Introduction

Non-native invasive plant species pose a threat to Alaska's native plants, wildlife, ecosystems, and human livelihoods by outcompeting native plant communities for resources, reducing native biodiversity, and altering ecological functions, such as nutrient flow. Many invasive species are initially established and then spread along transportation corridors, where vehicles, and construction and recreational equipment provide many opportunities for plant propagule dispersal (Mortensen et al. 2009). Invasive plant populations, such as reed canarygrass and white sweetclover, that spread along roadsides or trails initially can then invade more intact ecosystems in Alaska (Carlson & Shephard 2007).

In 2025 the US Fish and Wildlife Service funded the Surveillance of Invasion Hotspots in Southcentral Alaska project, led by the Alaska Center for Conservation Science (ACCS), University of Alaska Anchorage (UAA). This project identified Southcentral Alaska as a geographic 'hotspot' for terrestrial, freshwater and marine invasions given that non-native species often arrive through ports of entry with high human population density or activity. The objectives of this Copper River Basin invasive plant survey were twofold: 1) to provide training opportunities to early career professionals (e.g., a recent graduate from the Prince William Sound College, UAA was hired as a seasonal Research Technician), and 2) to revisit sites from an earlier survey done by the Alaska Natural Heritage Program (former title of ACCS) for the USDA Forest Service, State and Private Forestry in 2003-2004, which established baseline data for non-native species in the Copper River, Matanuska, and Susitna basins (Lapina & Carlson 2004). Over 20 years later, resurveying is necessary to evaluate and monitor distribution changes, identify new hotspots, and recommend management strategies.

This 2025 survey builds on the original study for the Copper River Basin by revisiting 18 survey sites along the Richardson Highway (Hwy) and Edgerton Hwy (surveyed in 2004). Additionally, we focused on new detections of high priority invasive plants as defined by the Copper River Cooperative Weed Management Area (CWMA) and the Anchorage Cooperative Invasive Species Management Area (CISMA), coordinated by the Copper River Watershed Project and Anchorage Soil & Water Conservation District respectively. Also included were species with an invasiveness ranking of 60+ on the Invasiveness Ranking System for Non-Native Plants of Alaska, maintained by ACCS. In collaboration with biologists, land managers, and weed scientists across the state, ACCS developed the invasive plant ranking system to help evaluate the potential invasiveness and impacts of non-native plants to natural areas in Alaska, ranking approximately 170 non-native plant species to date (Carlson *et al.* 2008). This scale assigns species with a number from 0-100 based on aspects such as documented ecological impacts, reproductive capacity, and management difficulty. Species scoring above 60 are considered high priority for monitoring and control. Novel infestations with aggressive expansion since the 2004 roadside survey that are ranked greater than 50 were also included in this survey for remote areas of the Richardson and Edgerton highways.

Notable Findings

- Dense infestations of *Leucanthemum vulgare* (oxeye daisy, LEVU), *Hieracium caespitosum* (meadow hawkweed, HICA10), *Ranunculus repens* (creeping buttercup, RARE3), and *Crepis tectorum* (narrowleaf hawksbeard, CRTE3), which occurred in dense roadside patches in and surrounding Valdez and along the Richardson Hwy.
- *Melilotus albus* (white sweetclover, MEAL2) and *M. officinalis* (yellow sweetclover, MEOF), species ranked among the most invasive in Alaska, recorded in new areas including a scenic pullout on the Edgerton Hwy and the Chitina Airport.

- *Phalaris arundinacea* (reed canarygrass, PHAR3), a species ranked among the most invasive in Alaska – a single infestation was detected in Valdez on a gravel road up toward Mineral Creek. While *P. arundinacea* has been detected in the Valdez watershed since 2010, this infestation has high potential to spread to surrounding areas given its location on an ATV trail.
- *Vicia cracca* (bird vetch, VICRC), several small infestations throughout Valdez, including on an off-road-vehicle trail.
- *Hieracium auruntiacum* (orange hawkweed, HIAU) is widespread in dense infestations throughout Valdez, mostly in private property lawns and adjacent to ditches.
- *Myosotis sylvatica,* the non-native woodland forget-me-not, was a novel detection in Thompson Pass, Copper Basin Watershed.

*Silene chalcedonica (*Maltese cross), an ornamental Eurasian species (AK invasiveness ranking 42) was detected in the Copper River watershed (Cordova) once previously in 2007 (AKEPIC). In 2025, a citizen scientist reported a small infestation in a roadside ditch within a residential neighborhood approximately 200 meters off the Richardson Hwy in Valdez, which was confirmed blooming in August. Data for this species were not captured in the June and July survey efforts. Data was not collected for this detection, but anecdotally it is still worth reporting. These findings highlight the continued spread of invasive plant species in high-traffic areas, and the importance of monitoring sites, establishing best management practices to prevent further spread (e.g., addressing vectors and determining contaminant lines), and enacting control measures.

Methods

The 2025 survey resampled sites via GPS latitude and longitude coordinates from the original 2004 survey, which followed old and current rights-of-ways along the Richardson Hwy (mileposts 4 - 116) from Valdez to Glennallen and the entire Edgerton Hwy out to Chitina (milepost (MP) 30). Historical GPS points were marked on ESRI Field Maps, and surveyors followed these points consecutively along the roadways from Valdez, north to the Edgerton Hwy junction, and then east along the Edgerton Hwy. A couple sites were inaccessible due to unstable trails and roads off of the main hwy, and a few sites were revisited north of the Edgerton/Richardson Hwy junction, but due to limited capacity this section of the Richardson Hwy (MP 116 north to Glennallen) was not prioritized because the Copper River Watershed Project has been monitoring and managing high priority invasive plant infestations between Tonsina and Glennallen annually.

New infestation sites were added opportunistically while driving slowly along the roadways and the passenger noting observed infestations. Once a new priority infestation was observed, the survey crew parked the vehicle in a safe location and surveyed the extent of the infestation. In addition, high-traffic areas in and surrounding the center of Valdez were surveyed, including trailheads identified in the Valdez Summer Trail Map Guide, published by the City of Valdez.

Surveys were conducted from June 28-30 and July 12-14, 2025. Observations were recorded using the ESRI Survey123 app and data updates and quality assurance was conducted post fieldwork via ESRI ArcGIS Online. Data was then submitted to the Alaska Exotic Plant Inventory Clearinghouse (AKEPIC) and further QA/QC was conducted by Justin Fulkerson, Lead Botanist, ACCS. All data is accessible in the AKEPIC data portal, located online: https://accs.uaa.alaska.edu/invasive-species/non-native-plants/.

Species criteria: Because the purpose of this project is to focus on the highest-priority invasive plant species only, all species with AKEPIC ranking of 60+ were surveyed with occasional exceptions for high-density infestations aggressively expanding since 2004 (e.g., *Crepis tectorum,*

Medicago satvia). Lower ranking species (<60) at the reconnaissance sites from 2004 roadside survey were noted for presence only.

Survey Areas: Roadsides, rights-of-way and parking areas were surveyed along the Richardson Hwy from Valdez north to MP 86 at Rocky Creek (northern-most yellow diamond in Figure 1.), and along the entire Edgerton Hwy to Chitina. Areas of high recreation use, including trailheads, campgrounds, and other high-traffic sites, were surveyed in and surrounding Valdez.

Naming Conventions: Historical points were revisited and their original site names were kept. Naming for new sites followed the format: HTSPT-2025-ACCS, with letter identifiers for location: V### = Valdez & Keystone Canyon, P = Thompson pass, E### = Edgerton Hwy & Chitina.

Survey Dates:

- Campaign 1 (June 28-30): Focused primarily on 2004 historical sites, opportunistically added sites on immediate roadsides based on geographic features, mileposts and observed infestations. Began with Valdez cemetery, worked north towards Glennallen, and included entire Edgerton Hwy to Chitina.

- Campaign 2 (July 12-14): Focused on Valdez, including residential neighborhoods, snow lots, high-traffic recreational and construction areas (trailheads, campgrounds, harbors, city dump). Trailhead surveys followed the Valdez Summer Trail Map Guide to ensure all major tourist sites were surveyed.

Roadside surveys were conducted by Rosel Burt, Research Technician, ACCS, and Katherine Schake, Invasive Species Hotspot Coordinator, ACCS. Valdez-area surveys were conducted by Rosel Burt and Joni Johnson, Invasive Plant Program and Pesticide Use Coordinator, USDA Forest Service Alaska Region State, Private and Tribal Forestry. Community engagement and outreach was conducted by Rosel Burt and Kim Holzer, Regional Invasive Species Coordinator, US Fish & Wildlife Service – Alaska Region.

Results

Surveys confirmed multiple invasive plant hotspots across the Copper River Basin and Valdez region of Southcentral Alaska.

Roadside infestations: In Valdez, *Leucanthemum vulgare*, *Hieracium caespitosum*, and *Crepis tectorum* were found in dense roadside patches covering large areas along the road shoulder. This made capturing precise survey extent data challenging, especially when delineating the boundaries of an infestation. The survey crew frequently made judgement calls determining where one infestation started and ended based on geographic features (e.g., streams/rivers, parking areas) and significant changes in density, as we believe this will best assist with any future management and control of the infestations. When possible, we adhered to the AKEPIC recommendation: "*Generally, multiple species or infestations occurring within a 50-meter radius are considered to be one site, such that all species occurring within this zone are assigned the same unique site code* (AKEPIC User's Manual 2020)." The infestations lessened significantly in Keystone Canyon (MP 14-17) and high elevations of Thompson Pass (MP 22-34) had no detections of high priority invasive plants, offering possibilities for containment lines. Populations of *C. tectorum* appeared again around MP 35 and remained sporadic with a handful of plants approximately every ¼ mile, growing immediately adjacent to the roadside (contained to gravel substrate) all the way to the Edgerton Hwy Junction. Because *C. tectorum* is not necessarily a high priority invasive plant

(ranked 56), the survey crew did not capture precise survey data for this species between MP 35-86 of the Richardson Hwy. The Edgerton Hwy was not surveyed for *C. tectorum* due to a lack of time and capacity, and the frequency with which it occurred (similar to Richardson Hwy). *Melilotus albus* was found in patches at a scenic pullout on the Edgerton Hwy (MP 18.5) and at the Chitina airport. These are new areas of infestations since the 2004 survey.

City & Recreational areas: High-traffic sites in Valdez showed high diversity of invasive plant species and high-density infestations, with many sites containing over five invasive species in one area. Recreational traffic and construction seem to be causing new introductions and spread. Plants detected included *Phalaris arundinacea* along a gravel road toward Mineral Creek (numerous detections of *P. arundinacea* date back to 2010 in the Valdez watershed in AKEPIC), *Vicia cracca* (private properties and one off-road-vehicle trail), *M. albus* (single plant was hand-pulled), *Lupinus polyphyllus* (single infestation on public land), and numerous infestations of *Hieracium aurantiacum* on private properties and along ditches. A few plants of Maltese cross (*Silene chalcedonica*) plants were detected but not on public land so no data were collected (there is an older, single AKEPIC record of this species in the region from 2007 by Krause).

Figure 1 (below). Map of total area surveyed including Valdez (MP 1), Chitina (Edgerton Hwy MP 30), and MP 86 of Richardson Hwy (approx. 24 miles south of Copper Center).

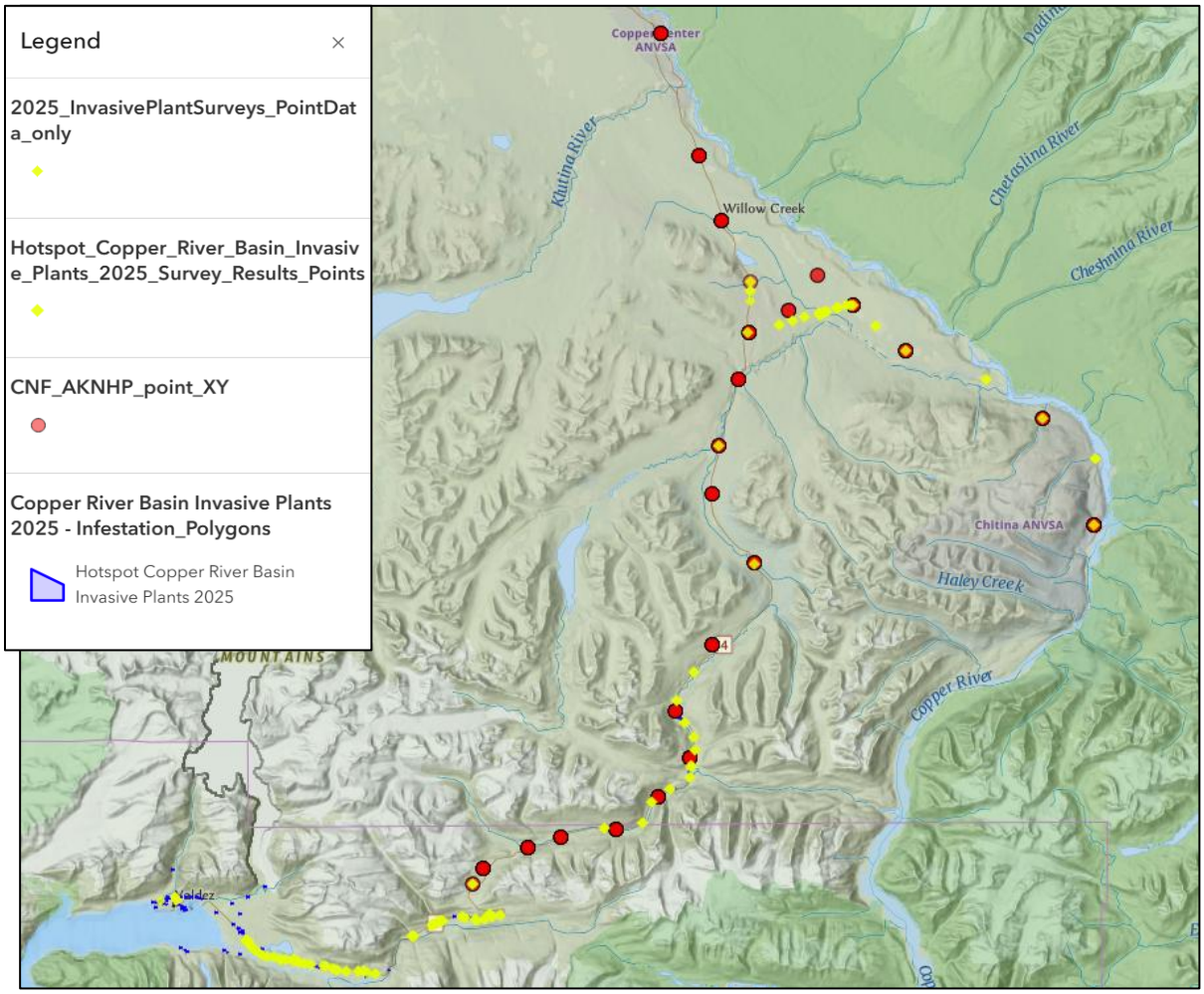


Figure 1 (above). Summary: ArcGIS Online data collection map for the Copper Basin invasive plant surveys. Yellow diamonds = 2025 survey data points; Red circles = 2004 original survey

points; Blue polygons = manually drawn polygons of 2025 surveyed areas. *Note:* if a polygon was drawn in the field using the Survey123 form, the app automatically calculated the center point, but this point is not displayed as a yellow diamond on this map.

Figure 2 (below). Map of Valdez area surveyed including urban area out to Robe Lake and Glacier Lake recreation area.

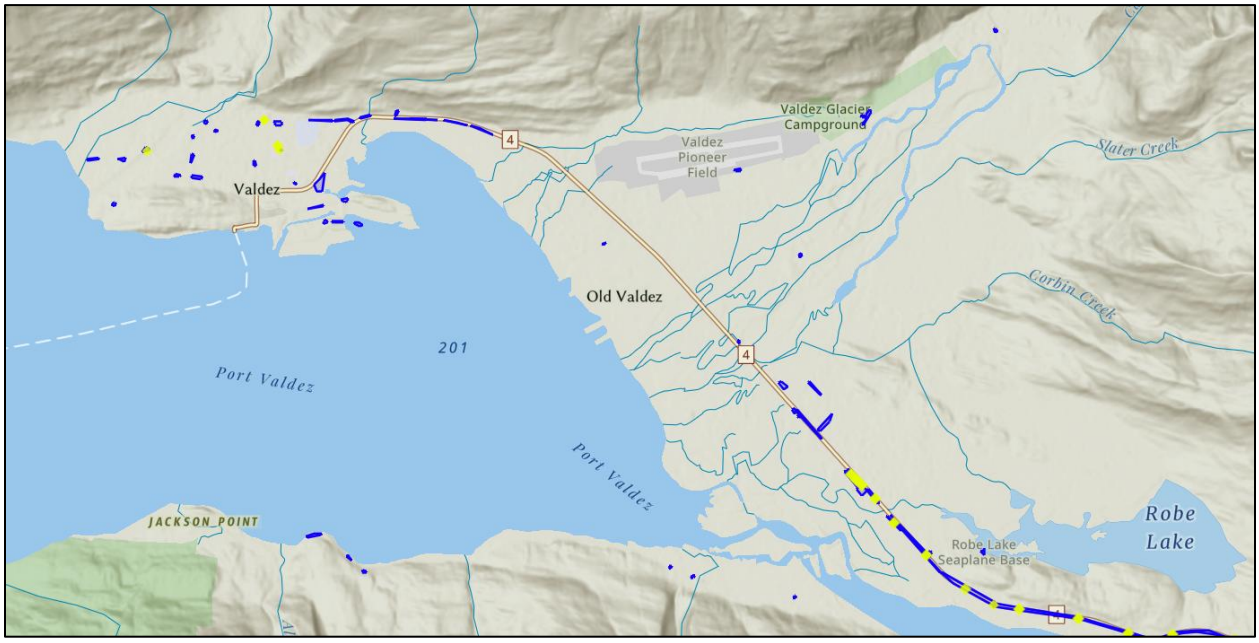


Figure 3 (below). Map of first area surveyed, from Valdez Memorial Cemetery (MP 2) to beginning of Keystone Canyon (MP 13) with dense populations of numerous invasive plants including *Leucanthemum vulgare, Ranunculus repens*, and *Hieracium caespitosum*.

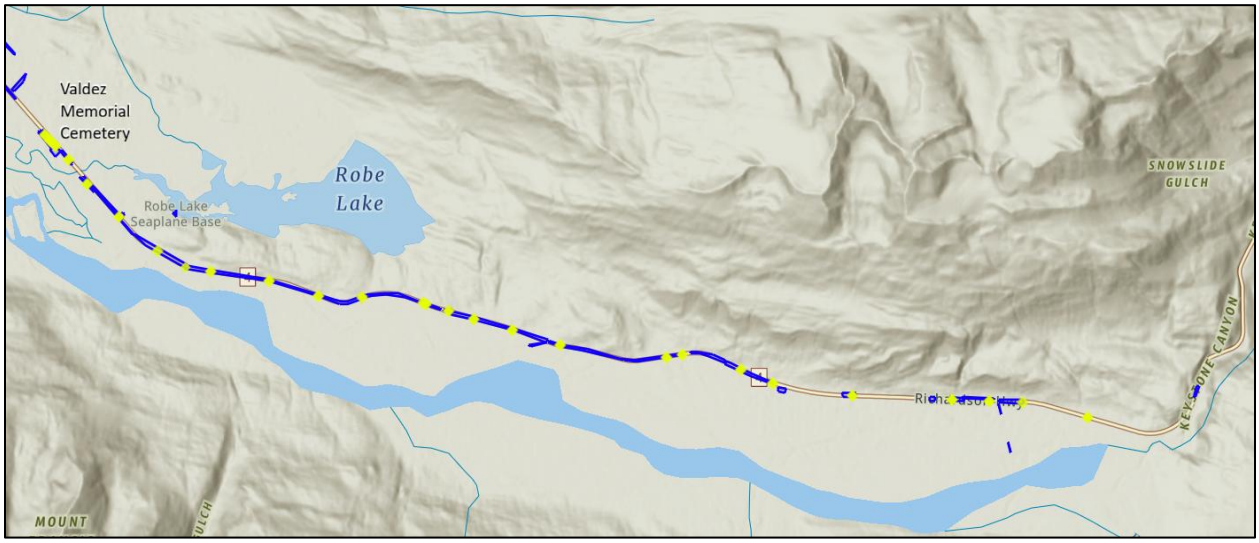


Table 1: Comprehensive List of Non-native Species Surveyed and Years Recorded. Summary: This is a comparison between 2004 and 2025 only. There are numerous additional invasive plant records for the Copper River Basin between 2001 – 2024. This is a comprehensive list that includes all areas surveyed in 2025. The 2004 list only includes species from the 18 sites revisited in 2025.

Scientific name	Common name	Species code	Inv. ranking	Species Survey type	Recorded in sampling year
Alopecurus pratensis	Meadow Foxtail	ALPR3	52	Monitoring Presence/Absence	2004; 2025
Bromus inermis	Smooth Brome	BRIN2	62	Monitoring Presence/Absence	2004; 2025
Cerastium fontanum	Big Chickweed	CEFOV2	36	Monitoring Presence/Absence	2004; 2025
Chenopodium album	Lambsquarters	CHAL7	37	Monitoring Presence/Absence	2004; 2025
Crepis tectorum	Narrowleaf Hawksbeard	CRTE3	56	Monitoring Presence/Absence	2004; 2025
Elymus repens	Quackgrass	ELRE4	59	Monitoring Presence/Absence	2004 only
Hieracium aurantiacum	Orange Hawkweed	HIAU	79	High Priority, Reconnaissance	2025
Hieracium caespitosum	Meadow Hawkweed	HICA10	79	High Priority, Reconnaissance	2025
Hordeum jubatum	Foxtail Barley	HOJU	63	High Priority, Monitoring	2004; 2025
Leontodon autumnalis	Autumn Dandelion	LEAU2	51	Reconnaissance	2025
Lepidium densiflorum	Common Pepperweed	LEDE	25	Monitoring Presence/Absence	2004 only
Leucanthemum vulgare	Oxeye Daisy	LEVU	61	High Priority, Reconnaissance	2025
Lupinus polyphyllus	Bigleaf Lupine	LUPOP2	71	High Priority, Reconnaissance	2025
Matricaria discoidea	Pineapple Weed	MADI6	32	Monitoring Presence/Absence	2004; 2025
Medicago sativa	Alfalfa	MESAS	64	High Priority, Monitoring	2004; 2025
Melilotus albus	White Sweetclover	MEAL2	81	High Priority, Reconnaissance	2025
Melilotus officinalis	Yellow Sweetclover	MEOF	69	High Priority, Reconnaissance	2025
Myosotis sylvatica	Woodland Forget-Me-Not	MYSY	N/A	Reconnaissance	2025
Phalaris arundinacea	Reed Canarygrass	PHAR3	83	High Priority, Reconnaissance	2025
Phleum pratense	Timothy Grass	PHPR3	54	Monitoring Presence/Absence	2004; 2025

Scientific name	Common name	Species code	Inv. ranking	Species Survey type	Recorded in sampling year
Plantago major	Common Plantain	PLMA2	44	Monitoring Presence/Absence	2004; 2025
Poa annua	Annual Bluegrass	POAN	46	Monitoring Presence/Absence	2004; 2025
Poa pratensis	Kentucky Bluegrass	POPR	52	Monitoring Presence/Absence	2004; 2025
Ranunculus acris	Tall Buttercup	RAAC3	60	High Priority, Reconnaissance	2025
Ranunculus repens	Creeping Buttercup	RARE3	72	High Priority, Reconnaissance	2025
Rumex crispus	Curly Dock	RUCR	48	Monitoring Presence/Absence	2004; 2025
Silene chalcedonica	Maltese Cross	LYCH3	42	Reconnaissance	2025
Stellaria media	Common Chickweed	STME2	42	Monitoring Presence/Absence	2004, 2025
Taraxacum officinale	Common Dandelion	TAOF	58	Monitoring Presence/Absence	2004; 2025
Trifolium hybridum	Alsike Clover	TRHY	57	Monitoring Presence/Absence	2004; 2025
Trifolium repens	White Clover	TRRE3	59	Monitoring Presence/Absence	2004; 2025
Trifolium pratense	Red Clover	TRPR2	53	Monitoring Presence/Absence	2004; 2025
Trollius europaeus	European Globeflower	TREU3	N/A	Monitoring Presence/Absence	2004; 2025
Vicia cracca	Bird Vetch	VICRC	73	High Priority, Reconnaissance	2025

Species notes: *Achillea millefolium* and *Potentilla norvegica* were found but not noted because these plants are no longer considered non-native. Several native *Elymus* species were found, but no *Elymus repens* was identified. At higher elevations grasses were just emerging in late June, thus species identification was challenging within Thompson Pass.

Comparison of 2004 with 2025: Overall, composition of non-native plants at revisited sites across 20 years remained similar. Although some species such as *C. tectorum* appear to have spread along roadsides between survey points, and several species such as *Leucanthemum vulgare* and *Hieracium caespitosum* have dramatically spread from the City of Valdez along the Richardson Hwy for approximately 16 miles. Additionally, *Melilotus albus* has expanded south from Copper Center. *Elymus repens* was commonly recorded in 2004, but was absent in 2025, it may have been misidentified by Lapina & Carlson (2004) as native *Elymus* were often present, or it may be more ephemeral than is typically considered.

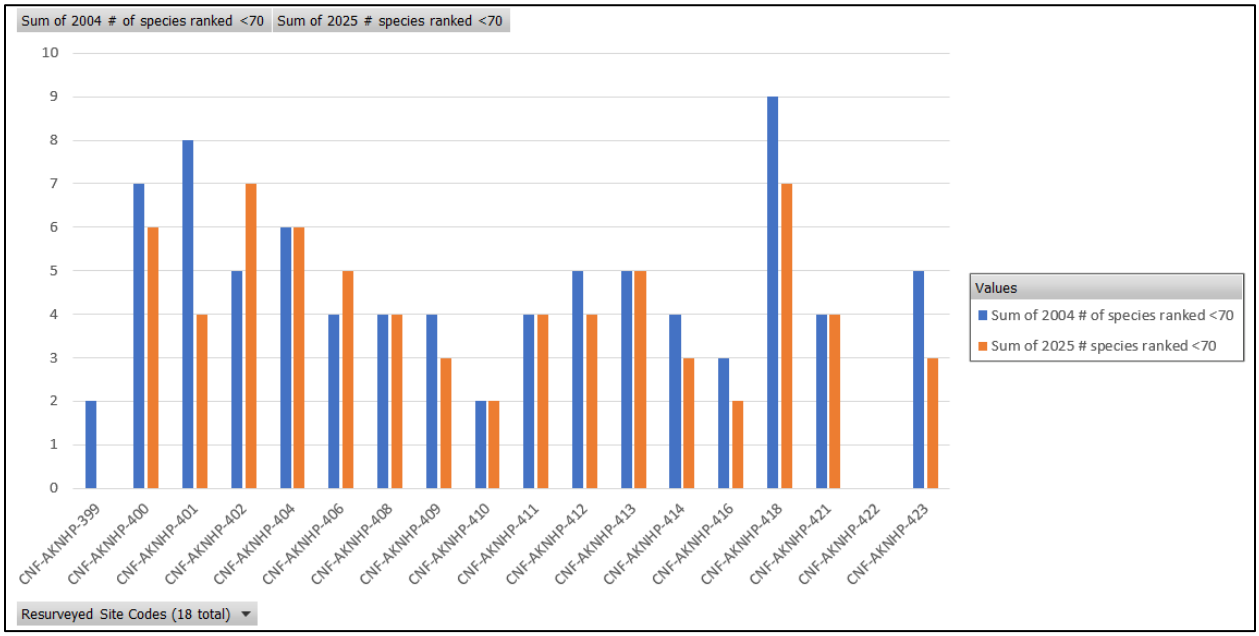
Overall, 18 sites were resurveyed from the 2004 survey and the majority of species detected 20 years ago were ranked low to moderately invasive (e.g., *Trifolium* spp*., Hordeum jubatum, Taraxacum officinale)*. Some geographic footprints of sites surveyed in 2004 have changed, for instance, a paved parking lot at the Worthington Glacier State Recreation Site likely wasn't present in 2004, so the 0.5-acre site that was surveyed in 2025 was along edges and landscaped areas

surrounding the parking area. At all sites revisited, the spatial distribution of the non-native plants from the 2004 survey were restricted to gravel substrate and recently disturbed ground, while healthy populations of native shrubs and trees (e.g., *Alnus* spp*., Populus* spp., *Betula* spp., *and Picea* spp.) were present on the perimeter of these pullouts, trails and roadsides in both 2004 and 2025. Most sites still contained native forb species and grasses (e.g., *Achillea millefolium*, *Chamerion* spp., *Epilobium* spp., *Alopecurus* spp., *Elymus* spp., *Poa* spp.) interspersed and competing with non-native plants. Overall, the non-native plant populations at the 2004 monitored sites haven't expanded much in density, composition, or geographic coverage.

However, at eight of the sites (44% of the 18 resurveyed) there were novel infestations of highly aggressive invasive plants: *Melilotus albus* (seven sites) and *Ranunculus repens* (one site). See Figure 6.

The dramatic expansion of more aggressive invasive plants is originating out of Valdez to the south, and out of Glennallen/Copper Center to the north. These populations of *Melilotus* spp., *Hieracium* spp., *R. repens and V. cracca* have earlier records in AKEPIC, and further analysis could help us understand the rate of spread, expansion, and persistence of these infestations along the roadways, toward Thompson Pass, floodplains, and other vulnerable habitat and remote public lands. There is a risk that *H. caespitosum* and *M. albus* populations will cross the alder and willow native shrub barrier between the roadsides and the gravel river bars, expanding infestations outside of the road corridor.

Figure 5 (below). Comparison of low to moderately invasive plants detected from 2004 to 2025. The highest ranked invasive plants detected in 2004 at the 18 survey sites were *Hordeum jubatum* (ranked 63) and *Bromus inermis* (ranked 62).

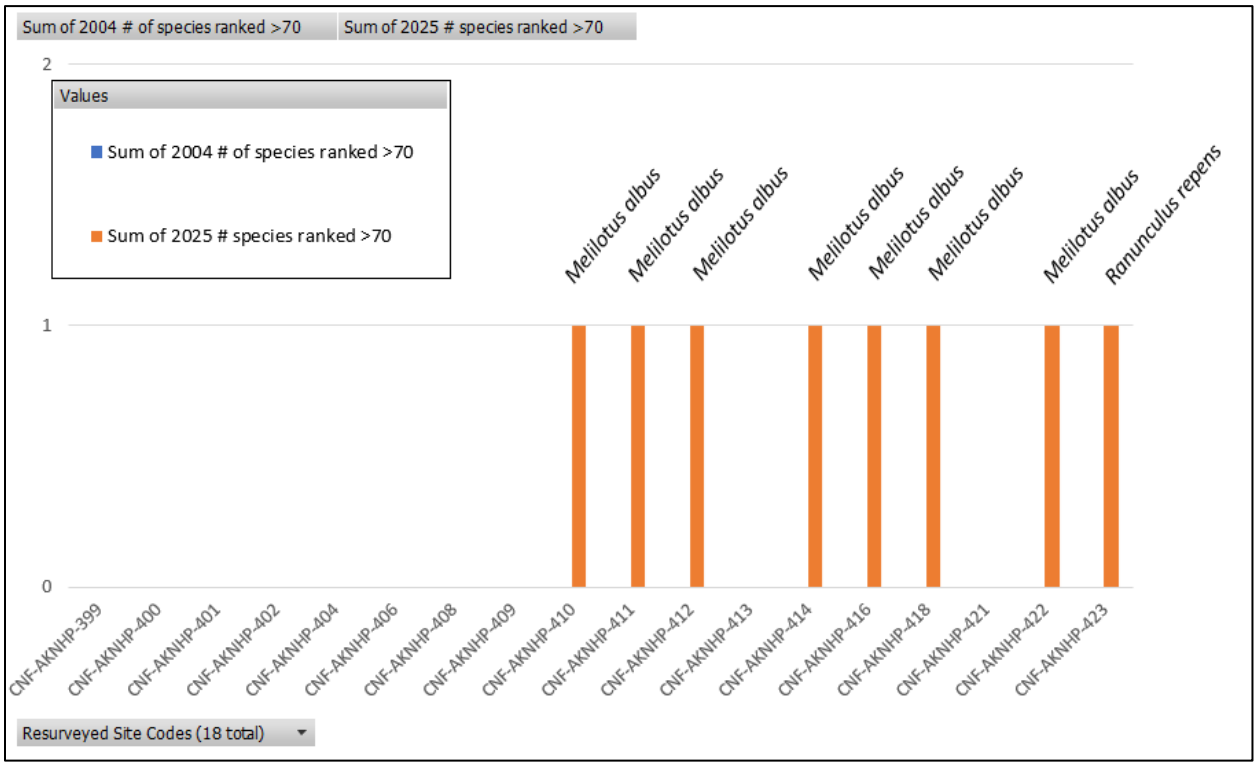


<u>Figure 5 (above). Summary:</u> At nine of the 18 sites revisited, there were more non-native, lower-ranking invasive species detected in 2004 than 2025. This could have been due to the timing of the survey (June) and limited ability to identify species at higher elevations in Thompson Pass due to recent snow melt. Therefore, when there are more non-native species recorded in 2004 than in 2025, consider that no detection means they may not have emerged or been identified. At two of the 18 sites revisited there were more non-native, lower ranking invasive species detected in 2025. At one of the sites, only *Achillea millefolium** was detected in 2004, but this plant is no longer

considered non-native (site "CNF-AKNHP-422"), therefore non-native species detected in 2004 and 2025 was zero. At the remaining six sites, the composition of non-native, lower-ranking invasive species was the same in both years.

**Note:* At the time of the 2004 survey, *Achillea millefolium* and *Potentilla norvegica* were recorded as non-native, but these plants have since been reclassified by taxonomists as native to Alaska. The 2004 data for these two species are excluded from this figure.

Figure 6 (below). Comparison of highly / extremely invasive plants detected between 2004 and 2025.



<u>Figure 6 (above). Summary:</u> The chart depicts non-native plants ranked 70 or greater on the invasiveness scale detected in 2004 and 2025. There were no detections of highly / extremely invasive plants in 2004. However, in 2025, eight of the 18 sites had novel detections of extremely invasive (e.g., *M. albus)* and highly invasive plants *(R. repens*). **This means 44% of the sites resurveyed have been infested by high-priority invasive plants in the last 20 years.**

Recommendations for Control

- White sweetclover (*Melilotus albus*) and yellow sweetclover (*Melilotus officinalis*): Immediate control recommended at all Edgerton Hwy sites including the milepost 18.5 scenic pullout, Chitina airport, and parking area adjacent to Town Lake (intersection of Obrien Creek Rd and Edgerton Hwy). A small team hand-pulling could easily control these infestations in a couple of days, preventing spread into nearby stream and river corridors. The single infestation detected in Valdez was hand-pulled by the survey team. *Melilotus* has long-lived seeds and may have a seed bank at these locations that would require repeat visits to remove recruited seedlings. Maintaining a containment boundary at the

intersection of Edgerton and Richardson highways is recommended to prevent the infestation from spreading south toward Thompson Pass.

- A gravel pit on the Edgerton Hwy is a significant source of *Melilotus* spp. and we recommend it be eradicated as soon as possible. Surveying and controlling invasive plants in gravel pits was not part of this project, but it is recommended that all gravel pits in the region be surveyed and high priority species such as *Melilotus* spp. be eradicated and managed long-term due to the high demand of gravel and the seed viability and success of *Melilotus* when spread via gravel.
- Meadow hawkweed (*Hieracium caespitosum*) and oxeye daisy (*Leucanthemum vulgare*): Containment recommended at Milepost 22 of the Richardson Hwy to contain the infestation spreading from the Valdez area toward Thompson Pass. Dense patches have formed along many roadside areas and some are spreading into disturbed areas within forests and neighborhoods.
- Reed canarygrass (*Phalaris arundinacea*): recommend immediate manual control of the infestation toward Mineral Creek, and a more extensive survey of the watershed in late summer or early fall when the plant is easier to identify.
- Bird vetch (*Vicia cracca*): continue Valdez community outreach and education to encourage private landowners to eradicate infestations on private properties. Monitor high-traffic public areas for future infestations.

Limitations

These surveys covered a large area in a short period of time. Detailed data collection was limited to higher-ranking species rather than all non-native plants. While presence was noted, percent cover and stem count were not consistently recorded for species with an invasiveness ranking of 60 or lower. Surveying was limited to areas accessible by vehicle or within short walking distance of roads and pullouts. Remote areas, full trails, riverbeds, and private property would benefit from more extensive surveys.

Conclusion

The 2025 survey highlights the persistent spread of invasive plant species in the Copper River Basin and Valdez region of Southcentral Alaska. Highly ranked invasive species continue to aggressively expand, particularly in high-traffic areas and the developed area of Valdez, as would be expected. Moderately ranked invasive species (e.g., *C. tectorum*) have expanded significantly throughout the roadways, but plants are constrained to the disturbed gravel road shoulder and pullouts and are currently not invading adjacent intact native plant communities.

The Alaska invasiveness ranking system continues to be a reliable guide for considering invasive plant management. Monitoring for novel infestations of aggressive invaders should continue, especially in the Valdez area since traffic to and from this community serves as a primary vector for the surrounding ecosystems, especially the vulnerable gravel floodplains of the Copper River Basin and the alpine native plant communities in Thompson Pass. Control and hotspot surveillance efforts should continue to prioritize roadside and recreational areas to mitigate the spread of these invasive species and reduce the long-term impacts to the ecosystems.

The Alaska Invasive Species Partnership and associated agencies and organizations who have been monitoring and managing infestations in this region for the past two decades include the ACCS, UAA, Copper River Watershed Project, National Park Service, USDA Forest Service, and US Fish &

Wildlife Service, and community partners. Their past and present collaboration on monitoring and control is indeed making an impact to slow the spread of harmful invasive plants to surrounding intact, native ecosystems.

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Appendix

Appendix A. Priority Invasive Plant List (2024), Anchorage Cooperative Invasive Species Management Area

All data is accessible in the AKEPIC data portal, located online:
https://accs.uaa.alaska.edu/invasive-species/non-native-plants/

Appendix A

Table 1: ANC-CISMA INVASIVE AND NOXIOUS WEED SPECIES CLASSIFICATION (UPDATED December 2023) [1]AKNHP Invasiveness Ranking included

Note: Table 1 is not an all-inclusive list of invasive species, potentially invasive, and established invasive species within the ANC-CISMA geography. Rather, this list reflects partner priorities for treatment actions and awareness at this point in time.

Primary Concern (A list)	Secondary Concern (B list)	Tolerate (C list)	Watch (W list)
Knotweed Species (87) *Fallopia bohemicum; F. japonica; F. sachalinensis*	Reed canarygrass (83) *Phalaris aurundinacea*	Oxeye daisy (61) *Leucanthemum vulgare*	Ornamental jewelweed (82) *Impatiens glandulifera*
Elodea spp. (79) *canadensis, nuttallii*	European bird cherry & Chokecherry (74) *Prunus padus & P. virginiana*	European mountain ash (59) *Sorbus aucuparia*	Eurasian water-milfoil (90) *Myriophyllum spicatum*
Purple loosestrife* (84) *Lythrum salicaria*	White & Yellow Sweetclover (81) *Melilotus alba & officinalis*	Amur chokecherry (45) *Prunus maackii*	Smooth Cordgrass (86) *Spartina alterniflora*
Meadow hawkweed (79) *Hieracium caespitosumpepp*	Orange hawkweed* (79) *Hieracium auranticum*	Butter and eggs* (69) *Linaria vulgaris*	American white waterlily (80) *Nymphaea odorata ssp. Odorata*
Spotted knapweed (86)* *Centaurea stoebe ssp. micranthos*	Creeping buttercup (72) *Ranunculus repens*		Broadleaved pepperweed* (71) *Lepidium latifolium*
Creeping thistle* (76) *Cirsium arvense*	Bird vetch* (73) *Vicia cracca*		Garlic mustard (70) *Alliaria petiolata*
Perennial & Moist sowthistle* (73) *Sonchus arvensis; Sonchus arvensis ssp. Uliginosus*	Common tansy (60) *Tanacetum vulgare*		Tansy ragwort (63) *Senecio jacobaea*
Cheatgrass (78) *Bromus tectorum*	Siberian peashrub (74) *Caragana arborescens*		False spirea (Unranked) Sorbaria sobifolia
Bull thistle (61) *Cirsium vulgare*	Tall buttercup (60) *Ranunculus acris*		Leafy spurge (84) *Euphorbia esula*
Crownvetch (68) *Coronilla varia (*aka *Securigera varia)*	Rampion bellflower (64) *Campanula rapunculoides*		Scotchbroom (69) *Cystis scoparius*
			Mouse ear hawkweed (63) *Hieracium pilosella*
			Taratain honeysuckle (69) *Loncera tatarica*

*Currently listed as a prohibited or restricted noxious weed by Alaska State Statute (11AAC 34.020)

[1]**AKNHP Ranking** is an Alaska-specific invasiveness ranking (a high rank indicates greater invasiveness) provided by the Alaska Natural Heritage Program. Current ranking and methodology available at: https://accs.uaa.alaska.edu/wp content/uploads/Invasiveness_Ranking_System_for_Non-Native_Plants_Alaska.pdf