

## **Uplands Park Invasive Species Removal Work Plan 2007**

Uplands Park is home to an impressive diversity of species at risk and is extremely valuable ecologically: there are 22 plant species at risk and 1 butterfly species at risk. Nine additional plant species at risk have been extirpated and no longer exist in the park. One of the most serious threats facing species at risk in Uplands Park comes from the invasion by exotic plants. Approximately 40% of the species in the park are not native, and some of these species pose serious threats to species at risk.

The District of Oak Bay Parks and Recreation Department has been actively involved in the stewardship of rare plant species in Uplands Park. Parks and Recreation staff have removed invasive species and coordinated volunteer invasive species removal efforts in the park since 1993. However, the scale of the invasion was too great for part time staff commitment and volunteer efforts to control. In 2005/2006 and 2006/2007, the Habitat Stewardship Program (HSP) provided funding to allow the Municipality of Oak Bay to hire a crew and professional botanists, which were assisted by municipal arborists to remove invasive species. In September of both years, invasive species were removed in five meadow areas containing COSEWIC-listed species in addition to provincially-listed species. In 2005, 2.73 hectares were cleared of invasive plants and in 2006, 4.08 areas were cleared or re-cleared of invasive plants. Extreme care was taken to minimize any potential impact to species at risk and all other native species.

Funding has been secured again from HSP for 2007/2008 to remove invasive species around populations of the newly COSEWIC listed plant, Coastal Silverpuffs (*Microseris bigelovii*). Funding is also intended to limit re-invasion into cleared areas by removing seed sources adjacent to cleared areas and consolidate gains made in the past. The removal of exotic shrubs will increase habitat quality and reduce competitive stress on species at risk found in the park.

### **Prioritization of Locations for Invasive Species Control**

Locations for invasive species were based on a priority list developed in the Management Plan for Invasive Plant Species in Uplands Park (Maslovat 2005)

The list was developed based on the following criteria:

- Areas with species at risk, especially those with higher urgency ranking were given the highest priority.
- Areas with species at risk most directly threatened by invasive species were given higher priority than species at risk that are indirectly threatened
- Meadow habitats with high quality native species composition were given higher priority than wooded areas and degraded areas.
- Invasive species were prioritized for removal based on level of impact, reproductive and competitive capability, ease of control through management, practicality of management techniques/ resource availability and urgency. Priority

was given to invasive species in edge areas, low-density areas or new “satellites” where invasions are just beginning and can be more easily controlled.

The following table prioritizes locations for invasive species removal in 2007 and includes the species at risk and the invasive species present in each location. Areas where work was completed in 2005 and 2006 have been placed on a lower position on the list. Each location is mapped in Figure 1. The list of priority sites is a guideline only: it is not possible to strictly complete each site in order because of logistical considerations and the part time availability of the municipal arborists.

**Table 1. Priority Locations for Removal of Invasive Species in Uplands Park**

<b>Map Number</b>	<b>General Area</b>	<b>Species at Risk</b>	<b>Dominant Invasive species<sup>1and 2</sup></b>	<b>Person Responsible</b>
18	West point of Cattle Point, outside of loop	Coastal silverpuffs, Purple sanicle, Poverty clover, Bearded owl-clover, Winged water star-wort	<b>Broom</b> (2)	Botanist to remove broom next to species at risk. Crew to remove broom in adjacent areas
10	East point of Cattle point, outside of loop	Bearded owl-clover, Coastal silverpuffs, Poverty clover, Winged water star-wort	<b>Broom</b> (1), single plant of <b>blackberry</b> (2)	Botanist removed broom in 2006. Botanist to remove any invasive species that were missed or resprouted
9	North of East Point, Cattle point	Coastal silverpuffs, Purple sanicle, Bearded owl clover	<b>Broom</b> (1,2), English ivy (3), daphne (1)	Botanist removed broom in 2006. Botanist to remove any invasive species that were missed or resprouted.

<sup>1</sup> **Invasive species in bold are targets for removal.**

<sup>2</sup> Numbers correspond to Morbin and Jennings (2004) age class or density codes (listed below):

Broom: (1) Maintenance (less than 3 yrs old/ large broom removed), (2) moderate cover, (3) dense cover

English hawthorn: (1) Individual trees or shrubs, (2) thickets

Gorse: (1) colonizers, (2) dense patch

European ash: (1) seedling patches, (2) saplings, (3) mature saplings, (4) trees

Himalayan blackberry: (1) colonizers, (2) dense patch

Daphne: (1) individual shrubs/small patches, (2) shrub patches

English ivy: (1) colonizers, (2) moderate cover, (3) dense cover

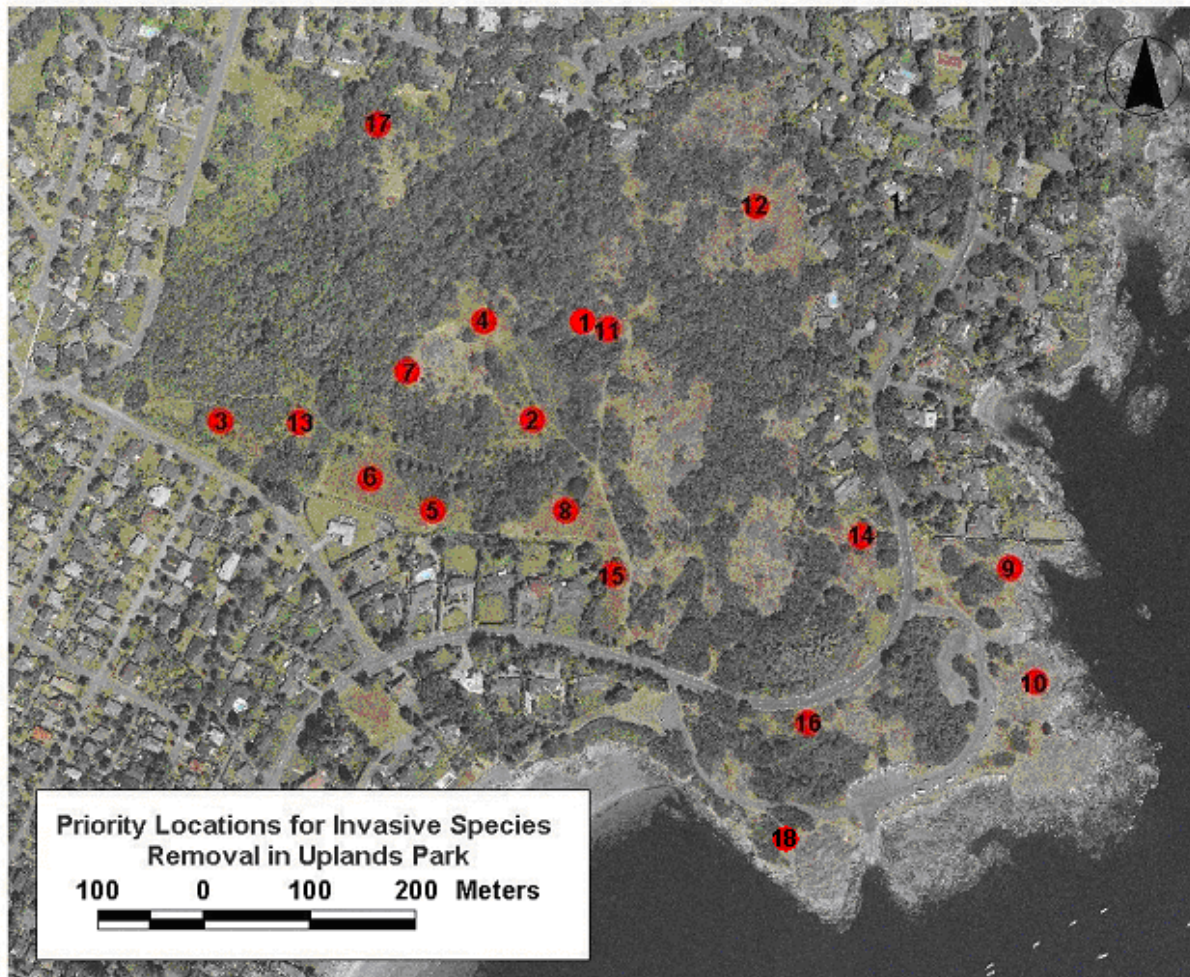
Norway maple: (1) saplings or young trees, (2) mature trees

Map Number	General Area	Species at Risk	Dominant Invasive species <sup>1and 2</sup>	Person Responsible
1	Southeast of eastern meadow	Yellow montane violet, Foothill sedge	<b>Giant hogweed</b>	Application of herbicide by arborist to remove resprouting hogweed shoots.
4	Central meadow (northern section)	Chaffweed, Heterocodon, Kellogg's rush, Mountain sneezeweed, Muhlenberg's centaury, Spanish clover, Tall woolly heads, White-top aster Winged water star-wort	<b>Broom</b> , (1). Both <b>English hawthorn</b> (2) and <b>daphne</b> (1) are at the edge of meadow. Remove where they occur in the meadow.	Monitor plants cut in 2005 and 2006. for resprouting. Remove any invasive species that were missed.
2	Central meadow (southern section)	Water-plantain buttercup, Elegant rein orchid, Foothill sedge, Heterocodon, Mountain sneezeweed, Tall woolly heads	<b>English hawthorn</b> (1), <b>European ash</b> (2), <b>broom</b> (1, 2), <b>blackberry</b> – single plant (1), <b>gorse</b> – 2 plants (1), crow garlic (1)	Monitor plants cut in 2005 and 2006 for resprouting. Remove any invasive species that were missed.
7	West side of large rock outcrop (west of central meadow)	Poverty clover, Yellow montane violet	<b>Blackberry</b> (2) removed to reroute trail, <b>snowberry</b> , <b>broom</b> (1, 2), <b>Norway maple</b> (2), crow garlic	Monitor plants cut in 2005 and 2006 for resprouting. Remove any invasive species that were missed. Resprouting snowberry and blackberry should be re-cut next to rerouting of trail.
8	Large rectangle of gorse already removed	Elegant rein orchid	<b>Gorse</b> (1,2), crow garlic	Most gorse plants removed in 2005 and 2006. Field crew to remove any gorse plants missed. Treatment of gorse seedlings.
5	South of	Foothill sedge,	<b>Gorse</b> (2), <b>English</b>	Most gorse plants

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	central meadow	Elegant rein orchid, Tall woolly heads	hawthorn (1,2), crow garlic	removed in 2005 and 2006. Field crew to remove any gorse plants missed. Treatment of gorse seedlings.
15	South of central meadow, close to Beach Drive	None Restoration required	<b>Gorse</b> (2)	Treatment of gorse seedlings required.
16	South of Beach Drive, within Cattle Point loop	Elegant rein orchid	<b>English holly</b> “satellite”, <b>broom</b> (1), daphne (1,2), crow garlic	Arborist to cut holly and use herbicides as necessary. Field crew to remove older broom.
14	Eastern meadow close to North end of Cattle Point loop	Elegant rein orchid	<b>English hawthorn</b> (1), broom (1). English holly, daphne (2), blackberry (2) are at the edge of meadow. Remove where they occur in the meadow.	Monitor plants cut in 2005 for resprouting. Remove any invasive species that were missed.
11	Southeast of eastern meadow	Foothill sedge, Tall woolly heads, Winged water starwort	<b>Broom</b> (1,2), <b>blackberry</b> (2), crow garlic	Monitor plants cut in 2005 and 2006 for resprouting. Remove any invasive species that were missed.
6	Southwest section of the park	Tall woolly heads	<b>English hawthorn</b> (1), <b>European ash</b> (2), <b>broom</b> - at edges (2), crow garlic	Monitor plants cut in 2006. Remove any invasive species that were missed.
3	Southwest corner of park (200m west of central	Water-plantain buttercup	<b>English hawthorn</b> (2), crow garlic (3)	Monitor plants cut in 2006. If time permits, remove any invasive species that were

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	meadow)			missed.
13	Small meadow in southwest section of park	Heterocodon	<b>English hawthorn</b> (1), <b>European ash</b> (2, 4), <b>broom</b> (2), <b>daphne</b> (1), <b>Pyrocanthus</b> , crow garlic	Monitor plants cut in 2006. Remove any invasive species that were missed.
12	Eastern meadow	Spanish clover, Foothill sedge	<b>Broom</b> “satellites” (2,3), <b>English hawthorn</b> (1,2), English ivy (3), daphne (1), blackberry (2)	Monitor plants cut in 2005 for resprouting. If time permits, remove any invasive species that were missed.

**Figure 1. Locations of Priority Sites for Invasive Species Control**



**For more information refer to:**

- Collier, R. 2005. Invasive Species Management Plan: Uplands Park, Oak Bay, B.C. Unpublished report prepared for the Municipality of Oak Bay, Victoria, BC. Available online at: <http://www.oakbaybc.org/parks/Uplands%20ISMPlan.pdf>
- Collier, R. Spenser and J. Miskelly. 2004. Uplands Park Stewardship Plan. Unpublished report prepared for the Municipality of Oak Bay, Victoria, BC.
- Fairbarns, M. 2004. Uplands Park and Cattle Point: Managing Rare Plants. Unpublished report prepared for the Municipality of Oak Bay, Victoria, BC.
- Maslovat, C. 2005. Management Plan for Invasive Plant Species in Uplands Park Unpublished report prepared for the Municipality of Oak Bay, Victoria, BC.
- Maslovat, C. 2005. Progress Report: Invasive Species Removal and Habitat Restoration in Uplands Park. Unpublished report prepared for the Municipality of Oak Bay, Victoria, BC. Available online at: <http://www.oakbaybc.org/parks/uplands%20progress%20and%20workplan.htm>
- Maslovat, C. 2006. Uplands Park Invasive Species Removal Work Plan 2006. Available online at: <http://www.oakbaybc.org/parks/Uplands%20Work%20Plan%202006.htm>
- Maslovat, C. 2006. Progress Report: Invasive Species Removal and Habitat Restoration in Uplands Park. Unpublished report prepared for the Municipality of Oak Bay, Victoria, BC. Available online at: <http://www.oakbaybc.org/parks/Uplands%20Park%20Progress%20Report.pdf>