

**Friends of French Creek
Conservation Society**



**2024 Invasive
Species Report**

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Friends of French Creek Conservation Society 2024 Invasive Species Report

This is a brief non-technical report with discussion comments on work undertaken in 2024 by the Friends of French Creek Conservation Society (FFCCS) volunteers removing invasive plant species within the French Creek watershed riparian area. At the time this report is being written, FFCCS volunteers logged 750 hours of time removing invasive plants within the watershed in 2024. We expect to put in approximately 100 additional hours planting native species plants in the heaviest of the treated areas, some which had up to 98% invasive species present in the understory ground cover layer before the year is over .

Plants specifically targeted were Giant hogweed (*Heracleum mantegazzianum*), lamium – aka Yellow archangel (*Lamium galeobdolon*), Himalayan Blackberry (*Rubus armeniacus*), ivy (*Hedera helix* L.), holly (*Ilex aquifolium*), Creeping buttercup (*Ranunculus repens* L.), Reed Canary grass (*Phalaris arundinacea*), and isolated patches of ornamental nursery plants that had been dumped and established themselves. Each has it's own assigned removal technique. Giant hogweed was given priority over all other invasive species because of the dangerous nature of the plant to both humans and wildlife and because of it's extremely prolific ability to regenerate and spread.

FFCCS's Invasive Plant Eradication Program was developed with the intention of eradicating all invasive plant species within the riparian area of French Creek and it's tributaries and estuary. It is the society's policy to use only manual means to address the invasive plant problem. We are against the use of chemical treatment, especially within the riparian zones. All seeds, flowers and roots are disposed of according to best practice guidelines.

Hogweed (*Heracleum mantegazzianum*)

Hogweed has a history of being present in the French Creek watershed since the early 1900's when it was intentionally planted as an ornamental plant in the Coombs area. A major patch was also established in the Barclay Road area about 30 to 40 years ago. Both of these areas received extensive treatment in 2023 and the Coombs area has received continuous treatment for decades.

During 2024, FFCCS was able to greatly expand our hogweed eradication efforts to include much of the creek riparian area located between the Coombs locations and the downstream Barclay Road site.

Biology: Hogweed seeds may take several years to germinate and are viable in the soil for up to 15 years. During the first year, the plant produces a rosette of leaves up to 1 m high. After 2-5 years, the plant produces flowers. As giant hogweed grows, a large root, thick hollow stems, and large lobed leaves are formed.

Barclay Road Site (non-hogweed eradication update at Barclay Road site follows hogweed section of this report)

Last year, volunteers removed hundreds of semi-mature hogweed plants, several thousand seedlings and several hundred thousand hogweed seeds from the Barclay Road site. Concentration of seedlings in 2023 for spots that had gone to seed in 2022 were up to a density of 15 plants per square inch (2nd photo below) as 7 mature plants had gone to seed.

This year hogweed removal at the Barclay site was restricted to removing emerging cotyledon plants, seedlings and rhizome plants. In all about 80 rhizome and two to three thousands seedlings were removed in the 7 expected spots where adult plants had gone to seed in 2022. Hogweed detection and removal occurred weekly at this site from mid-March until October 2024. Work undertaken in 2023 is deemed to have been very effective based on this year's numbers.



The Barclay Road site is now also deemed under control for hogweed and weekly monitoring of the site will continue throughout 2025 to ensure that it stays so.



Hatchery to Trestle Bridge Segment

The stream segment from the hatchery to the upstream side of the trestle bridge over French Creek was treated on several occasions throughout 2024.

The area around the trestle bridge resulted in roughly 150 hogweed plants being removed from the right bank in early spring. The areas that received treatment in 2023 had very few new emergent plants (about 30) but a new batch of about 75 larger plants were discovered and eradicated near the top of the trestle, higher up by the actual tracks.

Upstream of the hatchery on the left banks two new batches of hogweed were located and eradicated. Roughly 40 plants had matured and gone to seed but all were addressed before any seed were fully matured and dropped. Now that this site has been identified regular follow up monitoring any required treatment will occur.

Photo from this particular stream segment:



Virginia Road Trail Access

This site was visited early July and roughly 35 plants up to 1.5 metres in height were removed. Many of the plants were less than a metre in height on that date. The two images below are from the July Virginia Road visit.



The Virginia Road access site is scheduled for regular visitation for about the same time of year in 2025.

French Creek Valley Farm Area

The majority of time spent removing hogweed this season was at the French Creek Valley Farm location. Two major concentrated clusters of hogweed were found to exist and, dispersed scattered hogweed plants existed on both banks between the major clusters.



The area marked 1 in the photo above contained the greatest number of hogweed plants. Well over 400 plants were there and, several were over 12 feet tall and had gone to seed when work first started. Due to the density and the life stage of plants present, the first step was to remove all the seed heads and dispose of them. A total of nine full garbage bags of only seeds was removed the first day of work spent on the site. Root systems were very well established. All seeds and roots were removed and disposed of according to best practice guidelines. The following photos were taken at site 1.





Plants at site one were discovered to be quite dense when first visited.



Root systems were extremely well developed and difficult to remove.



Umbrella type seed heads were first carefully cut, placed on tarps, and then carefully reduced and bagged to eliminate any loose seeds being spread. The body of the plant was next chopped up and piled for decomposition. The entire root system was then carefully dug up so that no part of the root remained. Many of the roots had rhizome plants that were growing from the same root.



Density of hogweed at Site 1 was approaching corn field density. When started volunteers were able to remove 7 or 8 mature plants without moving from their starting position. Volunteers worked the site one day each week for 7 weeks. At that point, the patch was 80% complete regarding eradication. Work immediately adjacent to the creek was done first. All plants within 15 metres of the stream were removed manually. At that point two people from

the Invasive Species Committee were able to finish off by chemically treating the remaining 20% of the patch using 1% Roundup Pro Weather diluted solution. The same day, several plants not immediately adjacent to the creek were chemically treated at site 2 in property image. Plants immediately adjacent to the creek at Site 2 were removed manually.

Site 3 on the property is immediately downstream of the private bridge that separates the two fields, on the flood flats above summer flow levels, first corner below the bridge. An estimated 200 plants, mostly chest high were located there. FFCCS volunteers were able to remove about 85% of the patch before terminating efforts. Capacity and required timing dictated that crew time was needed to address planting and restoration efforts on previously worked sites downstream.

Note: There is a healthy 18 foot holly tree near the centre of this site that should be removed in 2025.



Site 3 hogweed density.

Next year, hogweed eradication on the property will recommence much earlier in the year now that we are more familiar with the property and the current hogweed management status.

Romney Creek Site:

Although Romney Creek is not part of the French Creek watershed, a major patch was found to exist right where the Coombs bike trail crosses the creek. This area was discovered and addressed in 2023 but about 14 upstream plants had already dropped their seeds by the time discovered. The larger of the two patches is about 75 metres upstream of the bike trail. Romney Creek hogweed plants were removed early July. Many of the plants were growing right in the stream bed. The creek usually dries up about early August. Photo below of the site was taken from above on the bike trail.



French Creek Estuary

The site at the estuary where about 35 hogweed plants were eradicated was revisited 3 times in 2024 as a mature plant had gone to seed in 2020 or 2021. Only eleven new emergent seedling plants required removal this year.

Barclay Creek Community Park – Non-hogweed Species

As noted in the hogweed section, the Barclay Community Park area is presently clear of hogweed and 2024 treatment of hogweed was limited to removing emerging seedlings and cotyledon stage plants when the site was monitored on a weekly basis. That said there was no shortage of other invasive species that combined covered 98% of the understory layer.

Since all the hogweed and Himalayan blackberry present at this site was removed in 2023, the size of the site treated was expanded to be at least five times the size to address the other invasive species. One very large patch of lamium, holly, creeping buttercup, Canary reed grass and re-emergent Himalayan blackberry were the main culprits that were removed.

A particularly good win for the creek was made as FFCCS volunteers were able to re-establish a mini wetland that had been completely filled in with Himalayan blackberry bramble and large woody debris to a depth of over four feet.



One of the few existing natural wetlands that existed on the creek was filled in with bramble.



June 29,2024

Over two tip-truck loads of bramble required removal from the filled in wet land area.



October 21, 2024

This wetland is recovering extremely quickly since it was rehabilitated.



Since restoration began, several green frogs have moved back into the wetland.



A snail species of special concern and unique to Vancouver Island is being verified. At least six of these snails were observed on various sections of French Creek. Two were located at the Barclay Road work site.

Lamium was very dense at the Barclay Road site. Of the estimated 450 hours spent on the site this year probably half of that time was spent removing lamium.



April 21, after 60% of the lamium patch had been removed.



Part of the crew at work.



May 10, 2024

A surprising number of young holly trees were also removed from far end of the site. As noted

copious amounts of creeping buttercup and Canary reed grass were removed. Reed Canary grass immediately adjacent to the creek was left in place to maintain bank stabilization during the high winter water flows.

Restoration planting planned for last October at this site has been delayed due to lack of capacity as volunteers planted at several different areas along the creek. Approximately 50 plants were installed fall 2023 and approximately 100 new ones will be spring planted in 2025 with the caveat that periodic watering will be required.

Barclay Bridge Ivy Patch

Barclay Bridge location is truly an epicentre for invasive species. The only things separating this very large dense patch of ivy and Site 1 immediately downstream are two houses and the pedestrian bridge. Most of this patch is 100% ivy. Work on this site was curtailed mid-October due to concerns of high water event erosion in the next few months. About 25 salmon berry and 5 thimble berry cuttings were planted. Two large Oregon grape cuttings were also planted. Additional planting of the site including low understory coverage will be following in the next few weeks and early spring.



August 16, 2024

All of the ivy behind the first property upstream of the bridge was removed by October 15, 2024 and planting was done October 20 and 21.



October 23, 2024.

Note that the ground cover is freshly fallen giant maple leaves. No ivy is present in the cleared area although fresh emergent plants are absolutely expected. Treatment will continue in spring 2025.

We wish to extend heart felt thanks to all of the volunteers to have made the FFCCS 2024 eradication efforts possible.

