

Christmas Hill KBA, British Columbia

Tall Woolly-heads (*Psilocarphus elatior*)

Instructions for Reviewers

1. Read through the “Summary of Proposed KBA” section.
2. Answer the survey questions in the Online Review App.
3. For additional information, see:
 - [What are KBAs and how are they assessed?](#)
 - [Instructions for reviewers](#)

Summary of Proposed KBA

Please note that this summary was generated automatically, and as a result there may be species scientific names that are not italicized.

1. **KBA Name:** Christmas Hill
2. **Location (province or territory [mid-point lat/long]):** British Columbia [coordinates unspecified]
3. **KBA Scope:** National
4. **Proposal Development Lead:** Ian Adams
5. **Trigger Biodiversity Element(s):**
 - Species: Tall Woolly-heads (*Psilocarphus elatior*)

6. Site Status Summary:

Christmas Hill is a candidate National KBA for the following KBA criteria:

- National A1a [criterion met by 1 taxon] - Site regularly holds $\geq 0.5\%$ of the national population size AND ≥ 5 reproductive units of a Critically Endangered or Endangered taxon (*Psilocarphus elatior*).
- National B1 [criterion met by 1 taxon] - Site regularly holds $\geq 10\%$ of the national population size AND ≥ 10 reproductive units of a geographically-restricted taxon (*Psilocarphus elatior*).

7. Site Description:

Christmas Hill is a Garry oak ecosystem remnant on municipal land owned by the District of Saanich, just north of Victoria, BC. It "includes diverse assemblages of some of the region's rarest plant communities, including deep-soil Douglas fir and Garry oak woodland, rock outcrop, and vernal pond communities" (Beckwith 2011). The area supports some 250 plant species and numerous animals. "Bedrock formations typical of the geology of this region and an extensive cultural history also have shaped the character of Christmas Hill" (Beckwith 2011).

8. Assessment Details - KBA Trigger Species:

NATIONAL

Taxon	Status*	Criteria Met	# of Reproductive Units	Assessment Parameter	Site Estimate			Year of site estimate	National Estimate			% of National Pop. at Site
					Min	Best	Max		Min	Best	Max	
<i>Psilocarphus elatior</i>	E (COSEWIC)	A1a; B1	1,600 ¹	Number of localities		1 ²	2019	4	4 ³	8	25	

¹Composition of 10 Reproductive Units (RUs): "Tall Woolly-heads is a short-lived annual incapable of clonal growth... Plants are probably primarily self-pollinated" (COSEWIC 2018). Therefore, 10 RUs are 10 mature plants, in flower or seed. Source of RU data: COSEWIC 2018, C. Gibson pers. comm.

²Derivation of site estimate: Mean of multiple surveys. Explanation of site estimate(s): Regular monitoring by Nature Reserve. Source(s) of site estimate(s): C. Gibson pers. comm.

³Explanation of national estimate(s): Historically known from eight verified localities but only four are considered currently extant (COSEWIC 2018). Source(s) of national estimate(s): COSEWIC 2018; BCCDC 2022.

*The threat status displayed is the one that qualifies the species as a criterion A1 trigger under KBA rules, if applicable. Other statuses may exist.

9. Assessment Details – KBA Trigger Ecosystems: None

10. Delineation Rationale:

This KBA is delineated to the entire Christmas Hill Christmas Hill portion of the Swan Lake - Christmas Hill Nature Sanctuary in order to be consistent with management of the relatively small property as a regional protected area. Future monitoring efforts may support other species meeting KBA thresholds within this area.

11. Additional Site Information:

Rationale for site nomination	Tall Woolly-heads (<i>Psilocarphus elatior</i> , COSEWIC Endangered) is a KBA-eligible species found in significant numbers at Christmas Hill. As one of only 4 extant localities for this species in Canada, it qualifies as a National A1a and B1 KBA.
Biodiversity elements that were assessed but did not meet KBA criteria	-
Additional biodiversity at the site	Yellow Montane Violet (<i>Viola praemorsa</i> var. <i>praemorsa</i>) is a Level 1 KBA taxon. It is known to occur at Christmas Hill but not confirmed at threshold levels at this time. Future monitoring may show it meets KBA criteria. Banded Cord-moss (<i>Entosthodon fascicularis</i>) is a Level 2 KBA taxon that is also known from the Christmas Hill. Future monitoring may also show it meets KBA criteria. Other biodiversity at Christmas Hill includes: White-top Aster (<i>Sericocarpus rigidus</i>), Western Bumblebee (<i>Bombus occidentalis</i>)
Customary jurisdiction at site	Douglas Treaty; Within territory of Á,LEÑENEŁ ŁTE (WSÁNEĆ), and Lekwungen/Songhees
Source of customary jurisdiction information	native-land.ca
Conservation	Christmas Hill is managed as a protected area by the non-profit Swan Lake Christmas Hill Nature Sanctuary Society. Their mission is to "Conserve and restore Nature Sanctuary lands and waters while inspiring stewardship through community engagement and collaboration" (SLCHNSS 2022). Their stewardship activities include survey and inventory work for species at risk on their properties.
Ongoing conservation actions	Awareness & communications; Habitat & natural process restoration; Invasive/problematic species control; Resource & habitat protection; Site/area management; Site/area protection; Species management; Species recovery
Ongoing threats	Climate change & severe weather; Human intrusions & disturbance; Invasive & other problematic species, genes & diseases
Conservation actions needed	Awareness & communications; Habitat & natural process restoration; Invasive/problematic species control; Resource & habitat protection; Site/area management; Site/area protection; Species management; Species recovery

12. References:

B.C. Conservation Data Centre. 2022. BC Species and Ecosystems Explorer. B.C. Minist. of Environ. Victoria, B.C. Available: <https://a100.gov.bc.ca/pub/eswp/>

Beckwith, B.R. 2011. Christmas Hill: A Management Plan. Prepared for Swan Lake Christmas Hill Nature Sanctuary Society. Saanich, BC.

COSEWIC. 2018. COSEWIC assessment and status report on the Tall Woolly-heads *Psilocarphus elatior* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xii + 37 pp.

Gibson, C. 2022. email and meetings with I. Adams and P. Soroye.

Swan Lake Christmas Hill Nature Sanctuary Society. Website. Accessed June 16, 2022