Rubus Nivalis: Rationale for Discontinuing Protocol (May 2012)

Introduction
BC Timber Sales (BCTS), Strait of Georgia (SoG) Business Area (BA) developed an Interim Management Protocol for Rubus nivalis (Snow Bramble) in November, 2007. This protocol was established as a result of an element occurrence within a proposed cutblock in the Mount Elphinstone area, in the Sunshine Coast Forest District (SCFD). At the time, Rubus nivalis was red-listed by the BC Conservation Data Center (CDC), and had a NatureServe conservation status of S2. In addition, the distribution of Rubus nivalis was not well documented, and a proportion of the documented locations were within the BCTS SoG operating areas (Symon 2007).

The original protocol identified the Ecological Baseline Information as being very restricted within the SCFD. With more focus on this species throughout the SoG since the protocol has been in place, it is becoming apparent that the Ecological Baseline Information is much wider than originally observed (see G:\BCTS\Timber Sales Office\Planning\Species at Risk\2012 Documents\Rubus Nivalis). With the wider spread documentation of the Rubus nivalis, the down listing in the status information, and the costly and time consuming detailed surveys currently required in the protocol BCTS SoG has concluded it reasonable to move away from using a detailed protocol to manage Rubus nivalis. This move is consistent with the BCTS SoG Species at Risk Management Guide (Ecologic Consulting 2011), and the focus-list method we use to manage all other species at risk in our BA.

Status Information
The following is a summary of the status information of Rubus Nivalis at the time the protocol was developed, as well as the current status:

<table>
<thead>
<tr>
<th></th>
<th>November, 2007</th>
<th>March, 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Status</td>
<td><strong>G4</strong> - Apparently Secure - Uncommon but not rare; some cause for long-term concern due to declines or other factors.</td>
<td><strong>G4?</strong> - Apparently Secure - Uncommon but not rare; some cause for long-term concern due to declines or other factors. ? denotes inexact numeric rank</td>
</tr>
<tr>
<td>Provincial Status</td>
<td><strong>S2</strong> – Imperiled - Imperiled in the jurisdiction because of rarity due to very restricted range, very few populations, steep declines, or other factors making it very vulnerable to extirpation from jurisdiction.</td>
<td><strong>S3?</strong> – Vulnerable - Vulnerable in the jurisdiction due to a restricted range, relatively few populations, recent and widespread declines, or other factors making it vulnerable to extirpation. ? denotes inexact numeric rank</td>
</tr>
</tbody>
</table>
### CDC Status

**Red-Listed** - Includes any indigenous species and subspecies that is extirpated, endangered, or threatened in British Columbia. Extirpated elements no longer exist in the wild in British Columbia, but do occur elsewhere. Endangered elements are facing imminent extirpation or extinction. Threatened elements are likely to become endangered if limiting factors are not reversed.

**Blue-Listed** - Includes any indigenous species and subspecies considered to be of special concern (formerly vulnerable) in British Columbia. Elements are of special concern because of characteristics that make them particularly sensitive to human activities or natural events. Blue-listed elements are at risk, but are not Extirpated, Endangered or Threatened.

### COSEWIC Status

Unlisted

### BCTS SoG Species at Risk Management

In accordance with the BCTS Species at Risk Management Guide (*Ecologic Consulting 2011*), SoG BA manages species at risk by creating a focus list for animals, plants, and plant communities. These focus lists get reviewed and updated annually by a professional biologist. They provide a narrowed down list of species at risk that BCTS is legally required to manage, has committed through Sustainable Forest Initiative (SFI) Certification to manage, and has chosen to manage based on both provincial (CDC) and federal (COSEWIC) specific status ratings. The initial lists include the following (showing as existing in SoG operating areas as per *BC Species and Ecosystems Explorer*):

<table>
<thead>
<tr>
<th>Status</th>
<th>Legal</th>
<th>SFI</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDC Red-list</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>COSEWIC E, T, SC</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Global G1, G2</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>SARA Schedule 1 species</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRPA Identified Wildlife</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wildlife Act listed species</td>
<td>✓</td>
<td></td>
<td></td>
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</tbody>
</table>

Once the initial list is generated, it is subsequently trimmed according to the following criteria:

- Exclude species whose ranges do not overlap with BCTS Tenures (e.g. alpine species, marine species).
- Exclude species occurring in habitats, which are minimally or not impacted by forestry operations.
- Exclude species whose habitat requirements are too broad (generalists).
- Exclude species, which are protected under the existing riparian management legislation (e.g. freshwater fish, species preferring riparian habitats, wetlands, etc).
- Exclude species (plants) that have a very low probability of being identified in the field due to their physical attributes, life cycles, and/or habitats.
- Exclude species already covered by higher level plan (HLP) requirements.
This trimming results in a smaller focused list of plants, animals, and plant communities which BCTS has the potential to impact through forest operations. It therefore provides us with a focus list on which we can provide annual training to staff, field cards and more focused management where the impact will be the greatest.

At the time of the protocol, *Rubus Nivalis* would have been included on the initial list (it was red-listed), but with the ratings which it currently has, it is not considered to be within BCTS species at risk management programme. Please refer to the BCTS SoG Species at Risk Management Guide for more detailed information.

**Activities while protocol in place**
During the time since the *Rubus Nivalis* protocol was put in place, BCTS has been conducting the following activities:

- Annual training to inform field staff on identification and management of *Rubus nivalis*
- Identifying and recording *Rubus nivalis* occurrences on any proposed cutblock locations
- Annual reporting to the Conservation Data Center of any observed occurrences of *Rubus nivalis*
- Retaining *Rubus nivalis* populations in reserve areas (as per protocol recommendations) where possible
- Monitoring *Rubus nivalis* where it occurred in harvested cutblocks to observe survival in regenerating stands
- Transplanting populations from proposed harvest areas to retention areas

**Rationale for discontinuing Protocol**
BCTS SoG has determined it appropriate to discontinue this protocol for the following reasons:

- *Rubus nivalis* is much more widespread than originally anticipated
- The CDC status of *Rubus nivalis* has been downgraded from red to blue-listed
- The NatureServe Status of *Rubus nivalis* has been downgraded from S2 to S3?
- *Rubus nivalis* no longer falls within the focus list of species at risk being managed by BCTS SoG.
- BCTS post harvest monitoring shows anecdotal evidence that although *Rubus nivalis* appears to exhibit signs of decreased vigour (red-purple leaf colouration, reduced leaf size) immediately following harvest (or after canopy cover/light change), it recovers and regains vigour within a few years once the brush cover fills in (see attached field review summaries).
- It is very costly to conduct detailed surveys in all areas where *Rubus nivalis* is identified.

**Future Management of Rubus Nivalis**
*Rubus nivalis* continues to be vulnerable, so it is important that BCTS continues to be mindful when it comes to managing this plant. There is still little documented information available in terms of how it responds to logging. For these reasons, though the specific protocol will be discontinued, BCTS remains committed to continuing to manage *Rubus nivalis* in the following ways:

- Where identified in the field, retain a subset of occurrences in retention patches where possible.
• Record all occurrences or groupings of occurrences and annually report to the CDC.
• Where occurrences are part of the logged area, monitor a subset of the populations to assess survival and vigour post harvest.
• Review the need for a *Rubus nivalis* specific protocol on an annual basis through the focus list process outlined in BCTS SoG Species at Risk Management Guide and the findings of the post harvest monitoring of *Rubus nivalis*.
• Retain the *Rubus nivalis* field identification card.
References:
www.env.gov.bc.ca/cdc/


