



**BCTS**  
BC Timber Sales  
Skeena

## Standard Operating Procedures INVASIVE PLANTS

May 2010

### **Invasive Plants - Identifying and Reporting Sites and Prevention and Control Practices**

Invasive plants are non-native species that can quickly establish and thrive in new areas and compete with native plant species for sunlight, nutrients and water. Invasive alien plants can also threaten biodiversity and reduce habitat and forage for wildlife and livestock. Forestry activities or operations that could potentially introduce or spread invasive plants include:

- road construction and maintenance
- landing and skid trail construction,
- harvesting related soil disturbance,
- site preparation,
- machine transportation and log hauling.

For any of the above activities, the BCTS project coordinator that is responsible for the activity will use the Invasive Alien Plant Program (IAPP) web based computer application to support the management of invasive plants. The Invasive Alien Plant Program (IAPP) is a database that contains invasive plant surveys, treatments and activity plans for the entire province. This application is located at: [http://www.for.gov.bc.ca/hfp/invasive/IAP\\_01.htm](http://www.for.gov.bc.ca/hfp/invasive/IAP_01.htm). The attached document 'Using the Invasive Alien Plant Program Application' details how to navigate to the IAPP, the use of the Map Display and IAPP data entry.

#### **1. Site Identification**

The Map Display module, within the IAPP application, is a web-based mapping and reporting tool that is hosted by the Ministry of Forests and Range (MOFR). It displays invasive plant inventories and treatment information that have been taken from the IAPP database. BCTS project coordinators will search the Map Display for known invasive plant sites within or adjacent to proposed operations. Coordinators will review all site information including the Site Details, Invasive Plant list and any Plans and/or Treatments that may be recorded. Where invasive plant occurrences are noted, all relevant information will be recorded and copies of the map will be printed for consideration during the operational phases of the proposed project. As of December 2009 BCTS coordinators must also complete an on-line 'Invasive Plant Awareness Training' Module to support the BCTS invasive plant management program.

#### **2. Prevention and Control Practices**

Site management measures are to be designed to prevent the introduction and spread of invasive alien plants and may include the following:

- Keep equipment storage yards free of alien invasive plants using mechanical, cultural or chemical treatments;
- Inspect for and remove any seed or propagules from clothing, vehicles and equipment, both before and after any work is done on site, controlling any dislodged soil, mud or water on site or at sites that may be designated as suitable for control purposes (these sites should be monitored periodically for invasive plant species);
- Do not transport soil known to contain invasive alien plants. Maintain soil, subgrade and surfacing material that is being transported (e.g. during road construction) as free as practicable of invasive weed plants or seeds;
- Re-vegetate disturbed areas adjacent or known to be at risk to invasive alien plant establishment using an appropriate combination of scarification, seeding (Canada No. 1 mix or better), fertilizing and / or mulching. Disturbance may be due to road, landing or skid trail construction, maintenance or deactivation activities. Soil exposure may also occur following debris pile burning or from timber harvesting.

### 3. Site Management

The BCTS project coordinator must review the measures that apply for invasive plants in accordance with the approved Forest Stewardship Plan for the area. For all identified known sites within the area of interest, consider any additional prevention and control practices that may be applied to the activity and sites. Give consideration to the extent of the area of sites at risk, generally including all known sites and the area that may be influenced by the activity of interest (e.g. a planned road in the vicinity of a known site may be considered to be a site at risk of invasion).

The BCTS project coordinator must ensure that any measures or practices that are to be the responsibility of the Contractor are clearly specified in the contract documents and are reviewed during the pre-work conference. Provide all relevant information obtained from the IAPP to the contractor representative. Instruct the contractor representative that they are responsible for identifying and reporting to BCTS the occurrence of any new sites. Provide sufficient training and identification resources to the contractor so that they will be able to identify and manage for the known species of invasive plants and noxious weeds.

Contractors may be provided with identification tools (available from Gail Campbell, the Skeena BA Invasive Plants Coordinator), such as:

- *The Field Guide to Noxious Weeds and other Selected Invasive Plants of British Columbia*, and
- the *BCTS Skeena Invasive Alien Plant Carabineer*.

Additionally, contractors may be provided with best management practices and strategies that can be applied during road construction, road maintenance, harvesting, and silviculture activities. These are available from the Invasive Plant Council of B.C. and include (<http://www.invasiveplantcouncilbc.ca/resources/targeted-invasive-plant-solutions-tips>);

- *Targeted Invasive Plant Solutions (T.I.P.S.) A: Forestry Operations* and
- *Targeted Invasive Plant Solutions (T.I.P.S.) G: Highway Operations* for road work.

The BC Ministry of Agriculture and Lands provides additional resources for invasive plant identification and management (see the References and Further Information section of this document).

#### 4. Site Reporting

For any new sites identified, an IAPP Site and Invasive Plant Survey Record form FS1260 ([http://www.for.gov.bc.ca/hra/Publications/invasive\\_plants/Forms/FS1260.pdf](http://www.for.gov.bc.ca/hra/Publications/invasive_plants/Forms/FS1260.pdf)) is to be completed. This form is to be initiated by the individual that identified the site and will be forwarded to Gail Campbell, the Skeena BA Invasive Plants Coordinator, for completion and entry into the IAPP application. Note: A copy of this form is provided on the next two pages.

#### 5. References and Further Information

- ***BC Ministry of Agriculture and Lands, Weeds BC:***  
<http://www.weedsbc.ca>
- ***E-Flora BC – Electronic Atlas of the Plants of BC:***  
<http://www.eflora.bc.ca>
- ***Field Guide to Noxious Weeds and Other Selected Weeds of British Columbia***, Fifth Edition, 2005.
- ***Field Guide to Noxious Weeds and Other Selected Weeds of British Columbia***, Fourth Edition, 2002  
<http://www.agf.gov.bc.ca/cropprot/weedguid/weedguid.htm>
- ***Invasive Plants Regulation:***  
[http://www.bclaws.ca/EPLibraries/bclaws\\_new/document/ID/freeside/18\\_18\\_2004](http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/18_18_2004)
- ***Invasive Plant Council of BC:***  
<http://www.invasiveplantcouncilbc.ca>
- ***Northwest Invasive Plant Council:***  
<http://www.nwipc.org>



# IAPP Site & Invasive Plant Survey Record




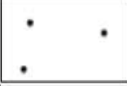
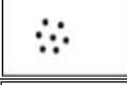






Entered into IAPP (YYYY-MM-DD):	By:	Assigned Site IDs recorded on this form: <input type="checkbox"/>
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<b>Site Created Date</b> (YYYY-MM-DD): *		<b>Invasive Plant Survey Date</b> (YYYY-MM-DD): * (only if different from Site Created Date)		<b>Site ID:</b> (assigned at IAPP data entry)	
<b>Site Details</b>					
<b>Jurisdiction:</b> * (see reverse for choices/codes)		District Lot Nr:		Range Unit:	
Site Paper File ID:		<b>UTM Zone:</b> *		<b>UTM Easting:</b> * (no initial zero)	
<b>UTM Northing:</b> * (7 digits)		Site Soil Texture:		coarse <input type="checkbox"/> fine <input type="checkbox"/> organic <input type="checkbox"/>	
Slope:		Aspect:		Elevation (m):	
<b>Site Location</b> (and directions how to get there):				<b>Site Comments</b> (anything else important /useful):	
<b>Invasive Plant Survey Details</b>					
<b>Survey Agency:</b> *		Employer:		Surveyor(s):	
<b>Invasive Plants</b> *	<b>Area</b> *	<b>Distr. Code</b>	<b>Density Code</b>	<b>Survey Type</b> *	
Species name or code	Dimension or Ha	(see reverse for codes)		Cursory /Operational /Precise	
				C <input type="checkbox"/>	O <input type="checkbox"/> P <input type="checkbox"/>
				C <input type="checkbox"/>	O <input type="checkbox"/> P <input type="checkbox"/>
				C <input type="checkbox"/>	O <input type="checkbox"/> P <input type="checkbox"/>
<b>Proposed Activity</b>					
Man		Chem		Bio	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Site Image Details</b>					
<b>Date taken</b> (YYYY-MM-DD):		<b>Reference No.</b> *		<b>Perspective:</b> * (see reverse for codes)	
Image Comments:					

<b>Site Created Date</b> (YYYY-MM-DD): *		<b>Invasive Plant Survey Date</b> (YYYY-MM-DD): * (only if different from Site Created Date)		<b>Site ID:</b> (assigned at IAPP data entry)	
<b>Site Details</b>					
<b>Jurisdiction:</b> * (see reverse for choices/codes)		District Lot Nr:		Range Unit:	
Site Paper File ID:		<b>UTM Zone:</b> *		<b>UTM Easting:</b> * (no initial zero)	
<b>UTM Northing:</b> * (7 digits)		Site Soil Texture:		coarse <input type="checkbox"/> fine <input type="checkbox"/> organic <input type="checkbox"/>	
Slope:		Aspect:		Elevation (m):	
<b>Site Location</b> (and directions how to get there):				<b>Site Comments</b> (anything else important /useful):	
<b>Invasive Plant Survey Details</b>					
<b>Survey Agency:</b> *		Employer:		Surveyor(s):	
<b>Invasive Plants</b> *	<b>Area</b> *	<b>Distr. Code</b>	<b>Density Code</b>	<b>Survey Type</b> *	
Species name or code	Dimension or Ha	(see reverse for codes)		Cursory /Operational /Precise	
				C <input type="checkbox"/>	O <input type="checkbox"/> P <input type="checkbox"/>
				C <input type="checkbox"/>	O <input type="checkbox"/> P <input type="checkbox"/>
				C <input type="checkbox"/>	O <input type="checkbox"/> P <input type="checkbox"/>
<b>Proposed Activity</b>					
Man		Chem		Bio	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Site Image Details</b>					
<b>Date taken</b> (YYYY-MM-DD):		<b>Reference No.</b> *		<b>Perspective:</b> * (see reverse for codes)	
Image Comments:					

\* indicates mandatory field - this form may be used for 2 sites, with their invasive plant surveys, and site images (if taken).

### Some commonly used codes in IAPP:

Distribution Code		
Code	Reference	Description
1		Rare individual, a single occurrence
2		Few sporadically occurring individuals
3		Single patch or clump of a species
4		Several sporadically occurring individuals
5		A few patches or clumps of a species
6		Several well-spaced patches or clumps of a species
7		Continuous uniform occurrence of well-spaced individuals
8		Continuous occurrence of a species with a few gaps in the distribution
9		Continuous dense occurrence of a species

Density Code		
Code	Reference	Description
1	Low	$\leq 1$ plant/m <sup>2</sup>
2	Medium	2-5 plants/m <sup>2</sup>
3	High	6-10 plants/m <sup>2</sup>
4	Dense	> 10 plants/m <sup>2</sup>

Jurisdiction Codes	
MFR	Ministry of Forests and Range
AH	Alaska Highway
HYDR	BC Hydro
BCR	BC Rail
BCTC	British Columbia Transmission Corp.
BNSF	Burlington Northern Santa Fe
CNR	CN Rail
CPR	CP Rail
DND	Department of National Defense
GL	Grazing Lease
FN	First Nations Reserves
MN	Mining Companies
MOT	Ministry of Transportation and Infrastructure
MOE	Ministry of Environment - <i>except Provincial Parks</i>
MOP	Municipality owned land
PIPE	Oil and Gas Companies
PNG	Pacific Northern Gas
PCAN	Parks Canada
P	Private Land
PP	Provincial Parks
MRD	Regional District owned land
TEL	Telus
TER	Terasen Gas Inc.
TRP	TransCanada Pipelines
WE	Westcoast Energy Inc.

\* indicates mandatory field - this form may be used for 2 sites, with their invasive plant surveys, and site images (if taken).