



**BRITISH  
COLUMBIA**

The Best Place on Earth

**Invasive Alien Plant Program**

# **REFERENCE GUIDE**

## **Part 2**

**Introduction & Module 2.1**

**Prepared by Range Branch**

**Ministry of Forests and Range**

**June 2010**



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## PART 2 - INTRODUCTION

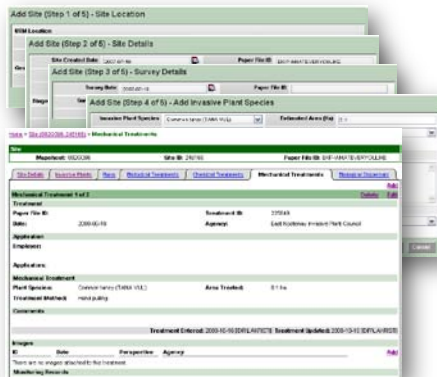
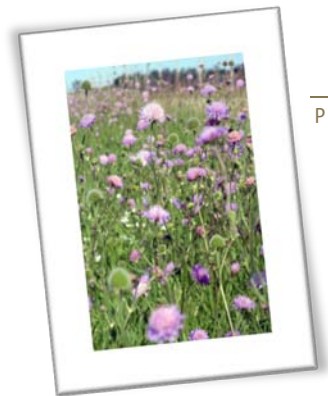
Part 2 of the Invasive Alien Plant Program Reference Guide is devoted exclusively to the IAPP Data Entry application.



Recall that there are four parts to this reference guide:

- Part 1:** Understanding the business of invasive plant management;
- Part 2:** Using the Invasive Alien Plant Program (IAPP) application Data Entry module;
- Part 3:** Using the IAPP application Map Display module; and
- Part 4:** Appendices.

**PART 1** deals with details on the general management of invasive plants and the accompanying activities that take place in the field, whereas Part 2 explains and illustrates the tasks required to enter the gathered field data into the IAPP Data Entry application. This ensures the consistent entry of data in the IAPP database, which may then be viewed spatially in the IAPP Map Display module. If you have not examined Part 1 of the Guide, you may find it helpful do to so now.



**PART 2** of the reference guide is intended for organizations and stakeholders interested in invasive plant management; its target audience is all those individuals who are using the IAPP Data Entry module. It provides explicit instructions on how to access and use the program to its full potential for entering, querying, and reporting on attribute data. It explains and illustrates the functionality of the IAPP application, with a focus on:

- details of the application: who can use it, how to access it, and other important information;



- step-by-step instructions for entering data; and
- step-by-step instructions on the various methods for extracting data.

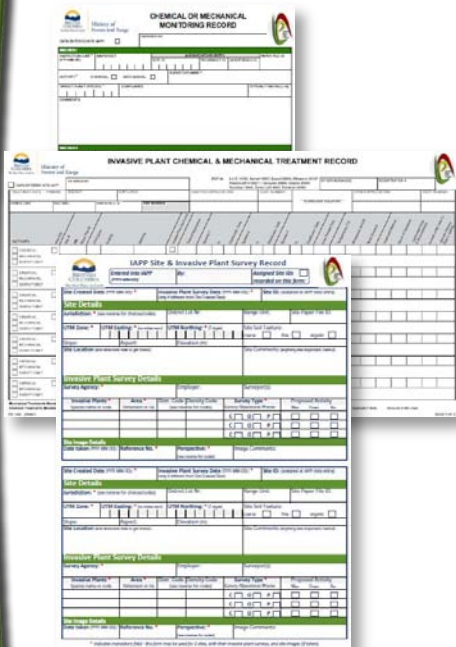
**PART 3** explains how to ensure maximum benefit and optimal information gathering through the use of the IAPP Map Display module, including its built-in Report-A-Weed tool. The focus is on:



- Access - availability to the general public via the Internet;
- Instructions on the use of the Map Display features to display various layers and data;
- Instructions on the use of the Report-A-Weed tool;
- Explanation of data that is displayed and/or available;
- Explanation of all the program's tools, including the highlight query abilities.

**PART 4** contains a set of appendices that include:

- Useful code tables,
- Forms,
- Additional reference materials.



The Reference Guide is structured to be a useful "on-the-job" resource. All the parts and modules of the Reference Guide are available for download as a PDF document from the Ministry of Forests and Range Invasive Alien Plant Program home page:

<http://www.for.gov.bc.ca/hra/Plants/application.htm>



# MODULE 2.1

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## UNDERSTANDING THE IAPP APPLICATION DATA ENTRY MODULE

The IAPP application is a web-based, centralized database that houses comprehensive information on invasive plant infestations across B.C. Since its launch in the spring of 2005, IAPP has continued to introduce new features and upgrades regularly, often based on user feedback. It will continue to evolve to meet the needs of its growing user community.

### PURPOSE OF THE IAPP DATA ENTRY APPLICATION

IAPP is designed to receive, store, co-ordinate, and report data derived from activities undertaken by various agencies to eliminate, or minimize the spread of, invasive plant species in British Columbia. It is the key database for all invasive plant data in B.C. and includes information pertaining to:

- site details;
- invasive plant inventories and surveys;
- plans for future activity;
- treatment methods and data;
- treatment monitoring data; and
- biological agent dispersal data.



By sharing information through this centralized database, agencies involved in invasive plant management can plan and co-ordinate their surveys, treatments, and other related activities. This is important to avoid overlap or any conflict of activities by the different agencies conducting invasive plant management on the land base. Co-ordination is essential to avoid multiple applications of treatments and duplicate efforts, and to protect all invasive plant management investments.

IAPP is a powerful management tool that specifically allows users to:

- identify and track the incidence and dispersal of known invasive species;



- track and manage invasive species treatments;
- better understand how invasive plant populations are spreading, and investigate vectors for dispersal; and
- assist with early detection and rapid response mechanisms.

Multi-agency use of the IAPP application enables users to:

- minimize the chance of inadvertent duplicated efforts;
- facilitate more efficient development of regional species management plans; and
- improve co-ordination between jurisdictions.

### THE IAPP APPLICATION—USERS AND ACCESS



The IAPP Data Entry application can only be used by IAPP agencies, which includes provincial government ministries, committees, and organizations. Agencies manage invasive plant species on the land base for which they are responsible, and are authorized to enter data into IAPP. All agencies wishing to enter, extract, or view data in the IAPP application must, therefore, be authorized users of the program.

Details on registering as a new agency can be obtained from the Invasive Alien Plant Program home page: <http://www.for.gov.bc.ca/hra/Plants/application.htm> or by navigating directly to the electronic access application page by clicking the [click here](#) link in the "**Access to the Invasive Alien Plant Program (IAPP) Application**" section on the above home page.

Samples of current IAPP agencies include:

- Ministry of Forests and Range
- Cariboo Regional District
- Ministry of Transportation and Infrastructure
- North West Invasive Plant Committee
- District of Central Saanich
- BC Hydro



## DATA INTEGRITY



Data integrity is the process of ensuring that all information entered into the IAPP application is correct. Because each agency stores, retrieves, extracts, and secures its data, the Agency field must be completed in all cases where records are saved. This enables correction of any apparent input errors. As well, since access to the IAPP Data Entry module is secured through a required username and password,

the log-on process informs IAPP of which agency the user represents, along with the user's privileges. The Agency field will then be automatically populated whenever the user saves a record, and cannot be altered.

IAPP agencies therefore own their data within IAPP. This achieves the dual purpose of providing both data accuracy and security, because the agency that owns the data holds responsibility for data integrity and any editing, whereas other agencies can only view those data.

Each agency must assign a **Data Manager**, who is responsible for:

- registering the agency for access to IAPP;
- maintaining a current list of the agency's users who have access to the application (i.e., each individual's name and user role);
- managing and keeping current the usernames (their IDIRs or BCellIDs, which will be explained later); and
- ensuring the integrity and quality of the data entered on the agency's behalf, which includes ensuring training for data entry staff as well as field staff who identify invasive plant species.



## UNDERSTANDING AND ADHERING TO THE ELECTRONIC USER AGREEMENT

All users will be required to agree to an Electronic User Agreement the first time they access the IAPP application. This agreement includes a **Freedom of Information warning** and a **Data Share Agreement**. All users, regardless of their roles, must agree to this User Agreement before initial access will be granted.



## ACCESSING THE IAPP APPLICATION

Entering data requires belonging to an IAPP agency (see above). Obtaining individual access is a two-step process that involves obtaining a username (BCeID or IDIR), and then applying for access to the IAPP application database.

## WHAT IS A BCEID AND AN IDIR?

The BCeID is an electronic pass that gives non-government organizations, and the people who are authorized to work for them, access to provincial government databases, including the IAPP application. To apply for a business BCeID, visit the Invasive Alien Plant Program home page — <http://www.for.gov.bc.ca/hra/Plants/application.htm> — and in the section entitled "**Access to the Invasive Alien Plant Program (IAPP) Application**" click the appropriate link.

If you belong to an agency other than a provincial ministry — such as a Regional District, Regional Weed Committee, or corporate business — and you want to access the IAPP application, your agency needs to have a business BCeID account and then apply for your BCeID.



**NOTE:** ALL IAPP USERS SHOULD HAVE THEIR OWN BCEID OR IDIR, WHICH THEY MUST **NOT** SHARE WITH OTHERS.

Provincial government employees will already have an IDIR. If you are a contractor performing work for a provincial government ministry, your ministry contact will apply for an IDIR for you.

Once you have a business BCeID or an IDIR, you may apply for access to the IAPP Data Entry application by completing the electronic form in the "**Access to the Invasive Alien Plant Program (IAPP) Application**" section of the Invasive Alien Plant Program home page:

<http://www.for.gov.bc.ca/hra/Plants/application.htm>.

Your employer is:	Step 1: Obtain an ID	Step 2: Request access to IAPP
<b>A B.C. government ministry</b> (staff or contractor)	Staff already have an IDIR. Contractors without an IDIR should ask the contract manager to obtain an IDIR for them.	<u>Go</u> to the electronic access application form via the <u>click here</u> link in the ' <b>Access to the IAPP Application</b> ' section of the IAPP home page— <a href="http://www.for.gov.bc.ca/hra/Plants/">http://www.for.gov.bc.ca/hra/Plants/</a>



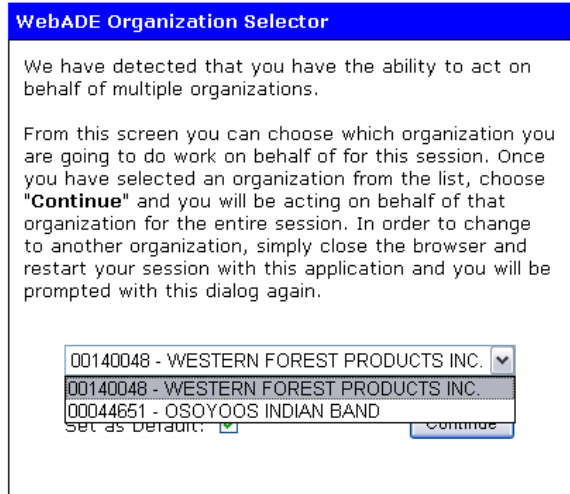
		<a href="#">application.htm</a> —and fill in the required fields. (Note: the <b>Data Manager</b> user level is listed on this page by its old name, Program Manager)
<b>Any non-government organization</b>	Your agency's Data Manager will provide you with a BCeID or may direct you to apply for one at the BCeID website. Go to the <a href="#">click here</a> link in the ' <b>Access To the IAPP Application</b> ' section on the IAPP home page: <a href="http://www.for.gov.bc.ca/hra/Plants/application.htm">http://www.for.gov.bc.ca/hra/Plants/application.htm</a> .	Using your BCeID, request access to the IAPP application on the electronic access application form (see above). <b>NOTE:</b> It is the responsibility of the Ministry of Forests and Range district manager to ensure the agency's IDIR or BCeID accounts and passwords are accurate and up to date. For further information, please visit: <a href="http://www.for.gov.bc.ca/hra/Plants/application.htm">http://www.for.gov.bc.ca/hra/Plants/application.htm</a>



If you encounter problems with your BCeID, contact [BCeID@gov.bc.ca](mailto:BCeID@gov.bc.ca) or phone their helpdesk at **1 888 356-2741**

### MEMBERS OF MORE THAN ONE AGENCY

If you enter invasive plant data into IAPP for more than one IAPP agency, you will be presented with the "**WebADE Organization Selector**" screen, which will prompt you to select the agency you wish to represent for the duration of your IAPP session. If you want to enter data for Agency B, after you have finished your tasks for Agency A, simply log off by closing your browser completely. Then restart the browser and log onto IAPP again. When the WebADE screen appears, choose Agency B.



**NOTE:** IF YOU ARE NOT ASSOCIATED WITH MORE THAN ONE AGENCY, THIS WEBADE SCREEN WILL NOT DISPLAY. YOUR AGENCY WILL AUTOMATICALLY BE SELECTED FOR YOU UPON LOGON, AND YOU WILL BE SENT DIRECTLY TO THE IAPP APPLICATION HOME PAGE.



## DATA OWNERSHIP AND AGENCY ASSOCIATION



Ownership of a record is important since it determines whether a given user can edit the record (see the User Roles and Privileges table in the next section). The owner of a record is the user that created the record, coupled to the agency on behalf of which the user entered the data. This ensures that a direct association can be established between the record and the agency.

The agency is the primary association; the user-creator association is secondary. This means that:

- Users who work for only one agency will, by default, own all the records they create and be able to edit all of the records during one session.
- Users who are able to enter data for multiple agencies will be considered the owner of a record they created for the agency under which they are currently logged on, and can edit only those records during the current session. Therefore, records created by this user on behalf of another agency can be edited only after logging off and logging on again under the other agency.

## TRACKING AGENCY DATA WITH THE PAPER FILE ID

Nearly all screens in the IAPP application include an optional Paper File ID field. These fields reflect how an agency stores and retrieves its paper field forms. The Paper File ID allows the agency to continue using an existing filing system in addition to the unique record identifiers (Site ID, Treatment ID, Monitoring ID, etc.) provided by the IAPP Application. It is possible to enter any alpha-numeric combination, up to a maximum of 20 characters, into a Paper File ID field.

All site, survey, treatment, and monitoring records can have their own Paper File ID. All of these records, except surveys, can be searched by this individual ID, which allows individual agencies and their contractors to quickly identify the records they are seeking. In addition, the Paper File ID fields are displayed in all the Extracts (extracts deliver the results of the many available IAPP 'canned queries'; these queries may utilize a wide selection of criteria, and are delivered to the user in the format of an Excel spreadsheet).



Sorting an extract on the Paper File ID column allows agencies and contractors to track their data, and filtering out only the required data (*see also Module: 2.11: Searches, Extracts, and Reports*).



**FOR EXAMPLE**, agency "ABYZ" may identify a chemical treatment record as ABYZ-2008-CH-CON-025, which could indicate name of agency–year of treatment–type of treatment–name of contractor–name of treatment area, respectively. The naming protocol is entirely up to the agency user; therefore, the Paper File ID is an extremely valuable field.

The intended use of the Paper File ID field is under the discretion of the agency. Any use by an employee or contractor should be discussed first with the agency’s Data Manager.

### IAPP USER ROLES AND PRIVILEGES

Many different users need to access the IAPP application, but not all of them will need to use all of the database’s available features and functions. Therefore, various security levels (i.e., user roles) have been established, which allow specific users to:

- access the functions and features of the database they may need; and
- retrieve the data that they may require.

The following table outlines the privileges associated with each user role:

User role	Privileges
<b>Viewer</b>	<ul style="list-style-type: none"> <li>• Can view all records, but protected biological agent data will be marked "Protected"</li> <li>• Cannot create or edit any records</li> </ul>
<b>Data Entry</b>	<ul style="list-style-type: none"> <li>• Can view all records, but protected biological agent data will be marked "Protected"</li> <li>• Can create all record types, except Invasive Plant Plans</li> <li>• Can edit only the records they created</li> </ul>
<b>Biological Agent Manager</b>	<ul style="list-style-type: none"> <li>• Is identical to the Data Entry level, except that a Biological Agent Manager has full access to all information regarding biological agents (primary agents)</li> </ul>



	<ul style="list-style-type: none"> <li>• Can run Reports</li> </ul>
<b>Data Manager</b>	<ul style="list-style-type: none"> <li>• Can view all records, but protected biological agent data will be marked "Protected"</li> <li>• Can create and edit all record types including Invasive Plant Plans</li> <li>• Can edit all records owned by their agency but cannot delete records</li> <li>• Can run Reports</li> </ul>
<b>Administrator</b>	<ul style="list-style-type: none"> <li>• Has full access to all features of the IAPP application, regardless of agency</li> <li>• Is the only user who can delete entire records and sites</li> <li>• Restricted to Ministry of Forests and Range staff</li> </ul>
<b>Multi-User</b>	<ul style="list-style-type: none"> <li>• Refers to a user who is assigned more than one role (a common combination is Data Manager and Biological Agent Manager)</li> </ul>

### PROTECTED DATA

Confidential data in the database have certain restrictions applied. These data consist of specific information about biological agents that are currently classified as "primary agents" (i.e., still in the research stage), and other research and collection records associated with primary biological agents. Only users with specific access—Administrators and Biological Agent Managers—are able to fully view and work with these data.

### STRUCTURE OF THE IAPP APPLICATION DATA ENTRY MODULE

The structure of the IAPP application Data Entry module is based on invasive plant sites, each of which has a unique 6-digit identification number known as its **Site ID**.

IAPP uses a site record, which has a unique Site ID, as a geographic location only. Once the site has been created, invasive plant occurrences (infestations) can be added to it, provided that at least one survey exists for each invasive species.



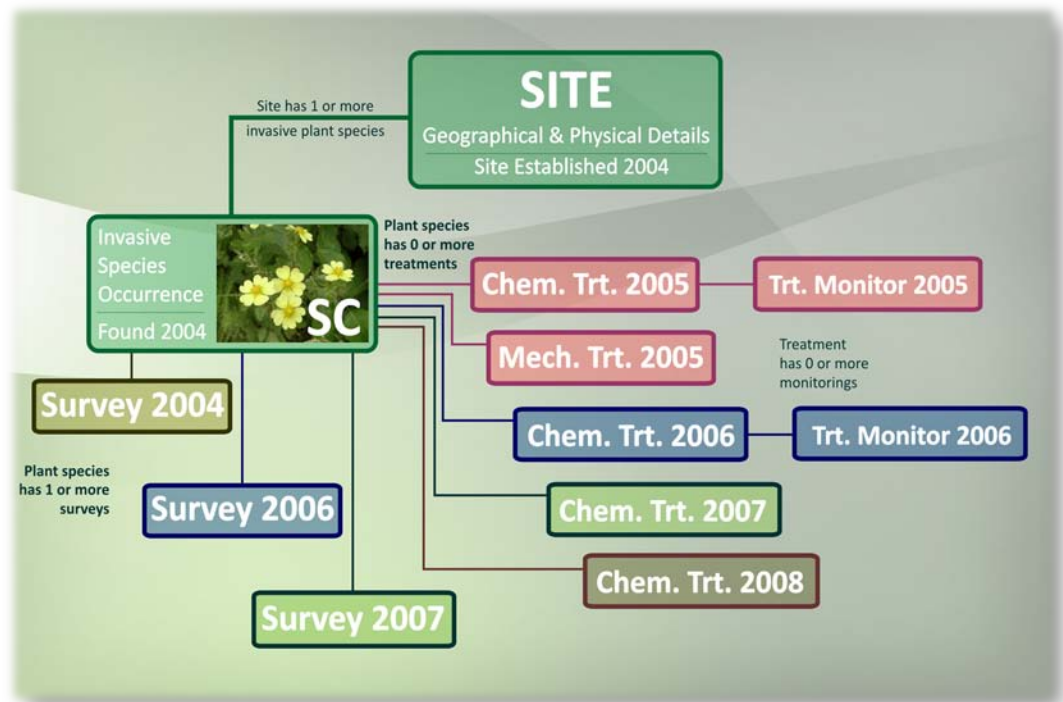
**NOTE:** ONCE A SURVEY HAS BEEN ENTERED, ANY NUMBER OF TREATMENTS FOR THAT PLANT MAY BE ADDED. IT IS NOT NECESSARY TO ENTER A SURVEY EVERY TIME A SITE IS TREATED. SURVEYS ARE CUSTOMARILY ENTERED NO MORE THAN ONCE ANNUALLY.



The illustration below shows how a site may be established in the IAPP application, and how subsequent records may be added later:

1. The site is established in 2004,
2. The occurrence of the invasive species, sulphur cinquefoil, is added when the site is established,
3. The first survey for sulphur cinquefoil is then added.
4. Mechanical, chemical or biological treatment records are added when needed; these records are "attached" to the invasive plant occurrence in the IAPP structure.
5. Monitoring records are added directly to the treatment that they are monitoring.

Steps 2 and 3 are always performed within the same data entry screen, which gives the impression you are creating one record. In reality, the entry of the plant occurrence and the subsequent survey creates two separate records in the IAPP tables. This is important to know, since it explains why an invasive plant species cannot be changed once it has been entered.



When creating a new site, the "Add New Site Wizard" goes through a simple five-step process that:



- creates a site; and
- adds one or more invasive plants and surveys to the site.

All subsequent activity records, such as dispersals, treatments, and planning, "hang off" the invasive plant occurrence with which they are associated, whereas monitoring records are tied to treatments.

As depicted in the previous illustration, an IAPP site includes:

**SITE DETAILS RECORD:** One record is established. This "Parent" record lists the site's physical and spatial properties (e.g., UTM co-ordinates, mapsheet, biogeoclimatic information, slope, elevation, location, directions). The Site Details record is the only record in IAPP that does **not** belong to any agency. This record is created only once.

**ONE OR MULTIPLE INVASIVE PLANT SPECIES:** One record is established for each invasive plant species on the site. This record is created only once, since it merely establishes the occurrence of a species on the site.

**INVASIVE PLANT SURVEY(S):** Each species on the site (e.g., spotted knapweed) may have one or more survey records; species are often surveyed repeatedly over time in order to track infestation spread, changes in distribution and density, etc.

If an invasive plant infestation on a site has undergone a change in size, distribution, or density, this is recorded with a new survey for that species. There is no need to enter the species again.

**TREATMENT RECORD(S):** One record is created for every treatment (chemical, mechanical, or biological) performed on any invasive species on the site; therefore, there may be zero, one, or multiple treatment records.

**MONITORING RECORD(S):** One record is created every time a treatment is monitored; therefore, there may be zero, one, or multiple monitoring records. Note that IAPP monitors treatments, not invasive plant infestations. Data pertaining to the state of an infestation are recorded as a survey.

It is quite possible, and sometimes common, that Agency A will establish a site and survey a plant species, while Agency B will monitor a treatment that was applied by Agency C. These are all separate activities; therefore, each



agency may enter its own activities in the application and will own the records for those activities.

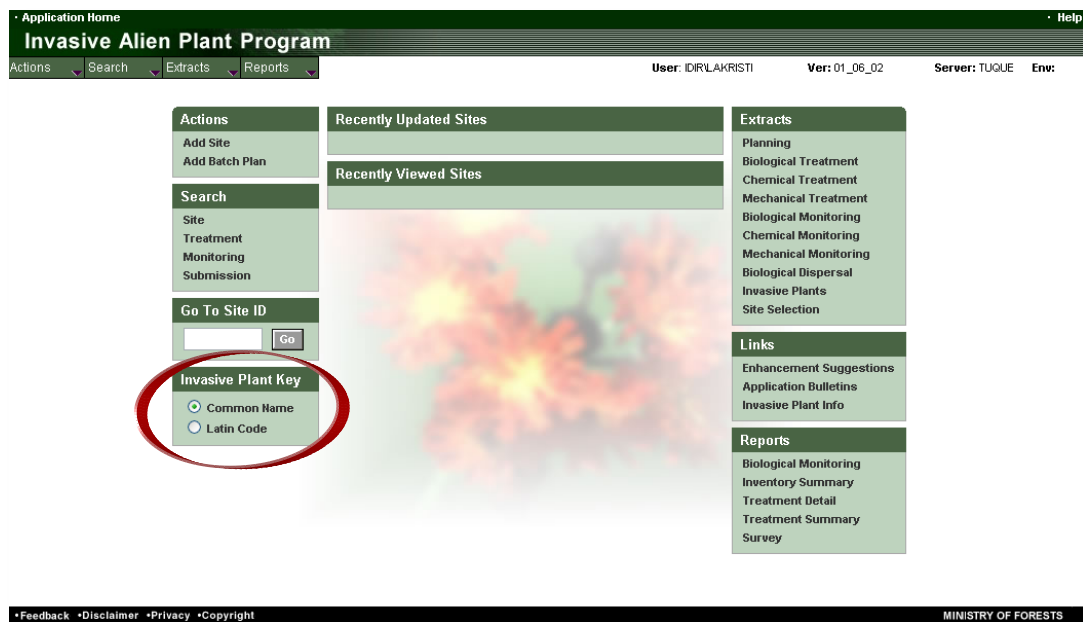


## GETTING AROUND IN IAPP

The IAPP Reference Guide was designed to help users navigate through the IAPP as easily and effectively as possible. As you begin with the home page below, please use these instructions to help you work with IAPP as easily as possible.

### THE HOME PAGE

The home page is the first thing you see when you log onto the IAPP application. It has been designed for quick and intuitive navigating. The visible items on this screen will depend on your user role. If you do not have the appropriate security privileges to view or access a menu item, that item will not be visible to you. For example, Viewers, Data Entry users, and Biological Agent Managers do not see the Add Batch Plan, nor can they see any of the Reports items. See the previous topics "User Roles and Privileges" and "Protected Data" for additional information.



The **Invasive Plant Key** toggle lets you set your display preference for the invasive plant lists. You can use either:



- the common name, followed by the Latin genus and species abbreviations (e.g., orange hawkweed [HIER AUR]); or
- the genus and species abbreviations, followed by the common name (e.g., HIER AUR [orange hawkweed]).

Once selected, the IAPP will remember your preferred setting; however, you may change your preference at any time.

If you are looking for a plant species by its common name and cannot find it in the list, it is a good idea to switch the Invasive Plant Key to Latin name and search for the plant that way. Often there is more than



one common name for a plant species, whereas the Latin name is always unique. For example, *Impatiens glandulifera* is listed in the IAPP as "policeman's helmet" but is also commonly known as "Himalayan balsam."

The **ACTIONS**, **SEARCH**, **EXTRACTS**, and **REPORTS** items in the menu bar in the top left corner of the screen are always visible from anywhere within IAPP. These items, including their submenu items, are also displayed on the home page. The Actions, Search, Extracts, and Reports items are discussed in detail later in this part of the reference guide.

**LINKS** directs you to additional resources outside of IAPP. "Enhancement Suggestions" lets you send an email to the program Administrator with your suggestion(s) for improving the IAPP application. Clicking on these links will open a new web browser window and will not disturb your data entry process.

To visit a site you have viewed or edited before, you may click a link displayed in the **RECENTLY UPDATED SITES** or **RECENTLY VIEWED SITES** sections:

- The Recently Updated Sites bar lists up to 24 sites that you have recently added or updated. This is extremely helpful if you need to return to the site to add or modify data.



- These site lists are based on "cookies" that are placed on your computer during an IAPP session, and are associated with your User ID. Therefore, if a different user logs onto your computer, they will not see the same sites.
- If you clear your "cookies" using your web browser, these sites will no longer display in this section until you open them again.
- The Recently Viewed Sites bar lists up to 24 sites that you have recently viewed but have not modified in any way.
- The same situation regarding "cookies," described above, applies to this section.



If you know the Site ID of the site you want to view or edit, type it in the **Go To SITE ID** box and click **Go** or press **Enter**, which will take you directly to the record set for that site. For example, if you type 246266 in the Go To box, the following Site Details record will appear:

Page | 17

Application Home Invasive Alien Plant Program

Actions Search Extracts Reports Administration User: IDIR\LAKRISTI Ver: 01\_06\_02 Server: TUQUE Env:

[Home](#) > [Site \(092L056-246266\)](#) > **Site Details**

Site		
Mapsheet: 092L056	Site ID: 246266	Paper File ID: DEMO: 09/01.A08LK

Site Details [Invasive Plants](#) [Plans](#) [Biological Treatments](#) [Chemical Treatments](#) [Mechanical Treatments](#) [Biological Dispersals](#)

[Admin Areas](#) [Delete](#) [Close](#) [Edit](#)

**General**

Site Created Date: 2008-09-19    Mapsheet: 092L056    Site ID: 246266  
 Paper File ID: DEMO: 09/01.A08LK    Jurisdiction: Ministry of Forests and Range  
 Range Unit ID:    District Lot:

**UTM**

Zone: 9    Easting: 647250    Northing: 5605766

**BiogeoClimate Class**

Zone: CWH    Variant: 1    Site Series:  
 SubZone: vm    Phase:     Overridden:

**Site Characteristics**

Slope: 2%    Aspect: 165    Elevation: 14 m

**Site Location Details:**  
 Hwy 5, Barriere, 9km east on Barriere Lakes Road, site is 2.1km past TNRD landfill on north side of road down trail 850m.

**Site Comments**  
 Massive boulders obstruct entry, use quad or walk in.

Site Entered: 2009-01-08 [DIR\LAKRISTI] Site Updated: 2009-01-08 [DIR\LAKRISTI]

**Images**

ID	Date	Perspective	Agency	<a href="#">Add</a>
There are no images attached to this site.				

Feedback Disclaimer Privacy Copyright MINISTRY OF FORESTS

(Delete links are visible only by users with Administrator user level)

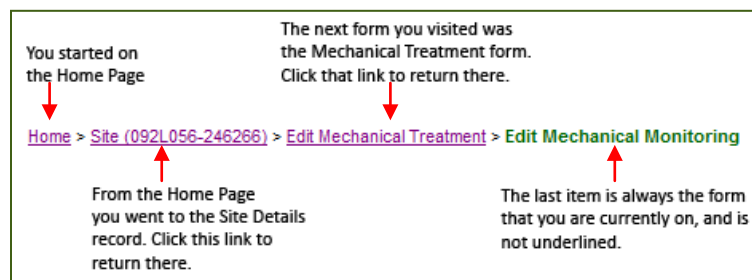
### NAVIGATING THE SITE TABS

Each site is divided into a number of screens that appear as a series of hyperlink tabs:



Click on the hyperlink on any tab to see the corresponding screen. The tab you are on is shown in white (in the case above, the Site Details screen would be visible); the non-active tabs are grey, showing their titles as links. Hyperlinks are always underlined throughout the IAPP.

The "breadcrumb trail" at the top of the screen displays the path you took to get to the screen you are currently using:



Here is a list of the tabs you will see:

- **SITE DETAILS** – You will automatically be on this tab once you have selected your site. It provides you with detailed information about the site. This is the only screen where you will **not** see an Agency field; recall that the Site Details is the only record not owned by an agency.
- **INVASIVE PLANTS** – This tab allows you to view, enter, and edit inventory (survey) data for each invasive plant species found on the site.
- **PLANS** – Within this tab, you can view, enter, and edit planning and priority information on the various plants on the site.
- **BIOLOGICAL TREATMENTS** – This tab allows you to view, enter, and edit details of biological treatments of invasive plants on the site. Details of biological treatment monitoring can also be viewed, entered, and edited from this tab (monitoring records can be added to the bottom of the treatment record).



- **CHEMICAL TREATMENTS** – Within this tab, you can view, enter, and edit details of chemical treatments applied to invasive plants on the site. Details of chemical treatment monitoring can also be viewed, entered, and edited from this tab (monitoring records can be added to the bottom of the treatment record).
- **MECHANICAL TREATMENTS** – This tab allows you to view, enter, and edit details of mechanical treatments applied to invasive plants on the site. Details of mechanical treatment monitoring can also be examined, entered, and edited on this tab (monitoring records can be added to the bottom of the treatment record).
- **BIOLOGICAL DISPERSALS** – If a biological control agent has been found on the site but was never released there as part of a biological treatment, then you can use this tab to view, enter, and edit dispersal information about the agent.

## OVERVIEW OF THE ON-SCREEN FORMS

All forms/screens contain mandatory fields that must be filled before the record can be saved. The following table gives an overview of the common screens used. Mandatory fields are shown in **bold red**:

Screen	Description and Mandatory Fields
Site Details	<ul style="list-style-type: none"> <li>• View, enter, and edit the site’s geographic and physical details</li> </ul> <p><b>Site Created Date, UTM Zone, UTM Easting, UTM Northing, Jurisdiction</b></p>
Invasive Plants	<ul style="list-style-type: none"> <li>• View, enter and edit invasive plant survey information for inventory purposes</li> </ul> <p><b>Invasive Plant Species, Survey Date, Agency, Estimated Area</b></p>
Plans	<ul style="list-style-type: none"> <li>• View, enter and edit site planning and priority information for the site (access limited to Data Managers and Administrators)</li> </ul> <p><b>Plant Date, Agency, Invasive Plant Species</b></p>
Chemical Treatments (incl. monitoring)	<ul style="list-style-type: none"> <li>• View, enter and edit details of invasive alien plants that have been chemically treated</li> <li>• <b>At the bottom of this screen is the link to View / Add Monitoring records that pertain to that treatment</b></li> </ul> <p><b>Treatment Date, Application Time, Agency, Plant Species, Area Treated, Temperature, Wind Speed,</b></p>



	<b>Herbicide, Product Application Rate, Amount of Mix Used, Treatment Method</b>
<b>Mechanical Treatments (incl. monitoring)</b>	<ul style="list-style-type: none"> <li>View, enter and edit details of invasive alien plants that have been mechanically treated</li> <li><b>At the bottom of this screen is the link to View / Add Monitoring records that pertain to that treatment</b></li> </ul> <b>Treatment Date, Agency, Plant Species, Area Treated, Treatment Method</b>
<b>Biological Treatments (incl. monitoring)</b>	<ul style="list-style-type: none"> <li>View, enter and edit details of invasive alien plants that have been chemically treated</li> <li><b>At the bottom of this screen is the link to View / Add Monitoring records that pertain to that treatment</b></li> </ul> <b>Treatment Date, Application Time, Agency, Plant Species, Area Treated, Temperature, Wind Speed, Herbicide, Product Application Rate, Amount of Mix Used, Treatment Method</b>
<b>Biological Dispersals</b>	<ul style="list-style-type: none"> <li>If a biological control agent is found on the site, but was not released there as a treatment, then view, enter and edit this data in this screen</li> </ul> <b>Inspection Date, Agency, Biological Agent Code</b>

Entering data in the on-screen forms is easy once the field forms have been accurately and completely filled out, and you remember the mandatory fields.

- **DATA ENTRY FORMS**, on which you create new records or edit existing ones, have a dark green top bar and a light green background. All entry fields are white boxes, and you can use the TAB key to move from one field to the next.
- **VIEW SCREENS**, which display when you click on the hyperlinked tabs, have a white background where the text shows in read-only format.

## ONLINE APPLICATIONS—FEATURES AND CAUTIONS

### FEATURES

The IAPP is built on the robust Oracle 10g platform, which allows for long-term growth and expansion of both data inventory and the application’s capabilities. IAPP resides on a secure web server at the Ministry of Forests and Range, and is available to users throughout British Columbia via the Internet. This has a number of advantages:



- System updates can be done on the server, which makes them instantly available to all users.
- Users do not need to load any software onto their individual PCs.
- Application maintenance and updates are funded by the ministry, and registered users may access the application at no cost.

### CAUTIONS

There are a few things to should keep in mind when using any web-based application, including IAPP:

- **Do not open more than one instance of the IAPP database.** Although this may be convenient for quickly toggling between different sites, there is a possibility that your entered data will not save to the database from any of the open instances.
- It is best **not** to try to open other websites from documents, or email, while you are working in the IAPP application. The site may open in the same window where the database is running, which could terminate your session.
- The **Back** and **Forward** arrows on your web browser navigation bar are not compatible with the IAPP. Instead, use the navigation tools within the database to find your way around (for example, use the breadcrumb trail).
- Use the Tab key on your keyboard to move from field to field. The Enter key should not be used for this function since it may have undesired results.
- IAPP does not have spell-check capability. If you need to enter a large amount of text, type it in Word first, spell-check it, and then cut and paste it into the database. (It is possible to use the CTRL + C key and CTRL + V keystrokes to cut and paste data, respectively, into IAPP.)
- The IAPP does not have a 'Log Off' link or button. The safest way to exit and securely close **any** web application is to close your browser application—not just the browser window the application is running in, but the entire browser application (e.g., Internet Explorer, Mozilla Firefox).

