

Introduction

This tutorial will assist you to learn the fundamentals of the **Airphoto Inventory** web application (version 1.2). This application is one of many sites accessible from <http://maps.gov.bc.ca> (**Public Mapping Sites**). Airphoto Inventory utilizes Internet Mapping Framework (IMF) version 4.06.11.

Clients new to Internet Mapping Framework web based applications should take a few minutes to familiarize themselves with the basics, which teaches you how the various sections of the window are organized, as well as use of the **Function Bar**, **Toolbar**, how to navigate, etc. Click [here](#) to visit the Ministry of Sustainable Resource Management Internet Mapping Help & Tutorial System.

Functions and Tools

The Airphoto Inventory **Function Bar** and **Toolbar** are shown below. When you mouse over each **Function**, **Button** or **Tool**, a flyout **Identify** will briefly appear telling you what that **Function**, **Button** or **Tool** will do.

For a full explanation, click on **Help**  in the upper right hand corner of the application window.

Function Bar



Layers: The available layers will be visible in the *Information Panel* on the right hand side. Open up the folder to display the layers and turn on (by clicking in the box) or off as desired, or make them active and then click *Refresh Map*. **Note:** For the *Airphoto* layers, searches for multiple years of coverage for an area of interest are not possible at this time.

Find Location: This is a handy way to zoom to an area of interest. Most popular will be by *Latitude-Longitude Coordinate*, *Mapsheet* (use a 1:50K NTS map number such as 92G/11 or a 1:20K BCGS map number such as 92G.053) or *Place Name* (such as *Prince George*). Enter the criterion for whatever method you select, then click *OK* to zoom to your area of interest (**Note:** For *Place Name*, there may be more than one result returned).


Themes: With this release, *Themes* will be the predominant method to search for a single year of air photo coverage for an area of interest. By default, the specific year layers for *Airphoto Operation Areas*, *Flight Lines*, *Airphoto Centres* and *Airphoto Footprints* will already be turned on when using *Themes*. After clicking a *Theme*, additional *Themes* for the years available in that decade will be displayed.

Toolbar

Below is the **Toolbar** that is used for Airphoto Inventory.



Here are some of the **Button** (initiates immediate action when pressed with the mouse) and **Tool** (sets mode for the map cursor to perform some action when you click or drag the mouse on the map) icons that will be used frequently:

 **Full Extent (button):** Zooms to the full extent of the Province of British Columbia.



Zoom In (tool): The *Zoom In* tool allows you to window into your area of interest on the map by either clicking a point on the map (2x zoom in) or left click on your mouse and drag to create a rectangle around your area of interest and then release the mouse button. Continue in this fashion until you see the map extent you desire. Use the *Zoom Out* button if you have windowed in too far.



Zoom Out (tool): Clicking the map with the *Zoom Out* tool active causes the map to back out so you can see approximately 2 times more with each mouse click. The map will be centred at the point clicked.



Pan (tool): The *Pan* tool enables you to move the area shown in the map window in any direction. Left click the mouse and move the mouse cursor over the approximate centre of the map and then, keeping the left button depressed, drag the map window until the adjusted area of interest is displayed. Release the mouse button.




Zoom Previous (button): Click this to change the map extent to the extent that it was before the last extent change (similar to a browser *Back* button).



Print (button): Click this to create a scaled map in Adobe pdf format suitable for printing.



Email (button): Click this to email the index as an attachment (jpg or Adobe pdf) with your comments to anyone with a valid email address. You can markup the index with graphics or text () prior to sending.



Save Session (button): Saves the current map settings so you can restore it later. You can *Add to Favorites* (bookmark the Session URL) or email the link to anyone with a valid address.



Drill Down Identify (tool): Click this to identify information about each visible layer at the map position clicked. Just click the map and view the results in the *Information Panel*.



Identify (tool): The *Identify* tool is used for reporting. When you click on the map with an identify layer active, the features at the location selected will be displayed in a pop up window. This is a valuable tool to report on the attributes of a single *Airphoto Centre*. The name of the active identify layer is displayed in the status bar under the map. To set a different identify layer, open the layer folders window using the *Layers* tab, and click the *Identify* icon beside the layer that you want more information about.



Select (tool): The *Select* tool is used for reporting. When you click on the map with a select layer active, the features at the location selected (you can also left click your mouse and drag to create a rectangle around a number of features) will be displayed in a pop up window. This is a valuable tool to report on the attributes of multiple *Airphoto Centres*. The *Airphoto Centres* selected will also be highlighted in a different colour. The name of the active select layer is displayed in the status bar under the map. To set a different select layer, open the layer folders window using the *Layers* tab and click the *Select* icon beside the layer that you want more information about.



Location (tool): When you click anywhere on the map, the coordinates at that location will be displayed.

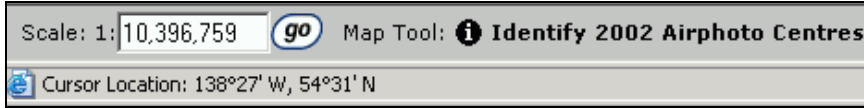



Clear (button): Click this to clear the selected features (such as *Airphoto Footprints*) or markup graphics that you have placed on the map.




Upload Shapefile (button): Uploads a shapefile (attribute [dbf] file and spatial [shp] file) in Albers projection that will be visible to you as a layer (make sure you do not name it the same as any other existing layer on the site). The information panel will enable you to browse for the files from your disk (note allowable file sizes).

Status/Scale Bar



This is located under the map display and identifies the scale of the current extent as well as the active layer and the active tool (**Note:** In the **Toolbar**, the active tool will have a red square around it ).

You can also change the scale of the map extent on the fly by entering a number (such as 50000) and click .

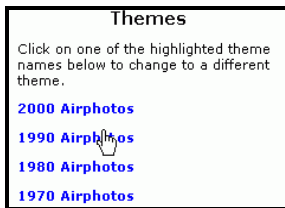
Demo Search

Now that you are familiar with the **Function Bar** and the **Toolbar**, you will be in a position to search for available airphoto inventory for an area of interest. The majority of clients need the most recent coverage, however on occasion, there is a requirement for historical air photos.

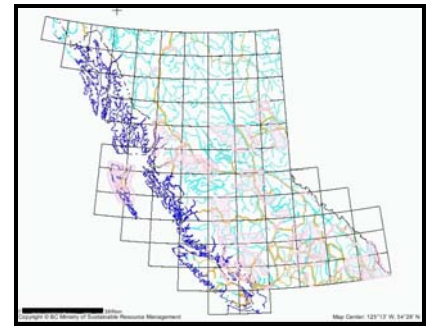
The area chosen for a demonstration airphoto search is located in the city of **Prince George**. You are already aware that there is colour coverage from 2002 (you have copies of **BCC02010/64, 65**), however you require coverage from 1994. The series of screenshots that follow will take you through a typical search and offer tips along the way. Rather than show the entire application window, only the relevant portion will be shown here.

When the application is first launched, by default the map display window will show the most recent year of coverage that is loaded as *Airphoto Operation Areas* in the Land and Resource Data Warehouse.

To display the coverage's for British Columbia that are available for the year that is required, click the *Theme* for **1990**, then click the *Theme* for **1994**. The map display window will automatically refresh and display the *Airphoto Operation Areas* for **1994**.





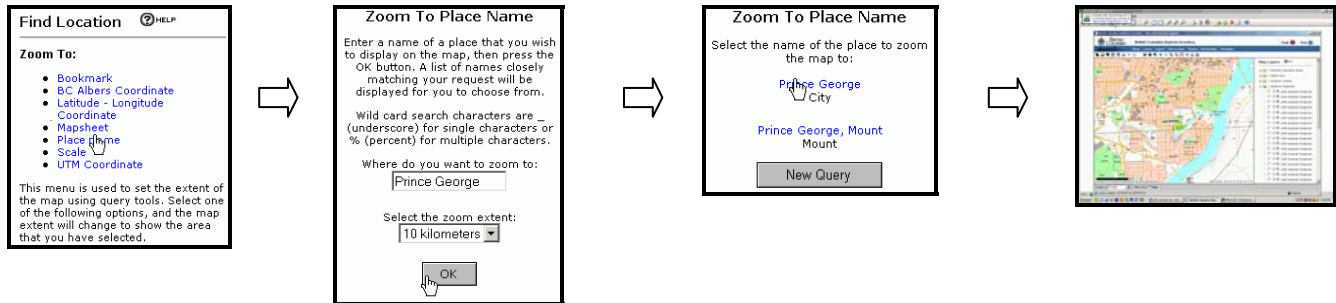
Tip: Each of the main *Themes* represents a decade or up to ten additional *Themes*.



Note: Each year is represented graphically using a different colour.

The map display window shows that there is most likely coverage of the **Prince George** area in **1994**. To confirm this, we need to zoom to the area of interest. Click *Find Location* from the *Function* bar. You can use any of the listed methods, for this tutorial we have chosen *Place Name*. Click *Place Name*. For *Zoom to Place Name*, enter *Prince George*. Accept the zoom extent of 10 kilometres or select another option from the drop down list. Click *OK*. For *Zoom to Place Name*, two results are returned. Click *Prince George City*. The map display window will automatically refresh and zoom to the area of interest. *Airphoto Centres* for **1994** are displayed.


Use the *Zoom In* tool  to window further into the area of interest. Use the *Pan* tool  to centre your area of interest as necessary.

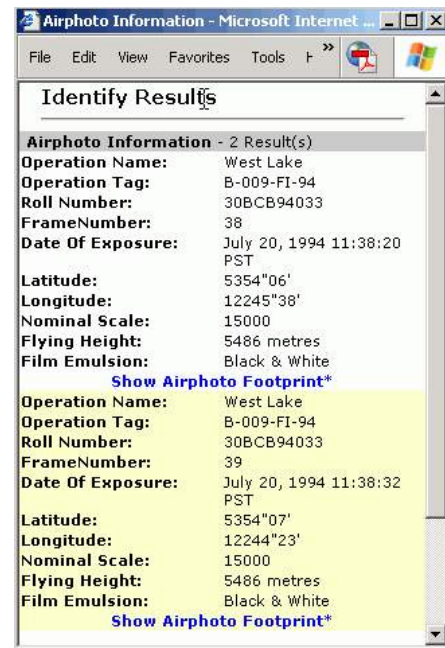
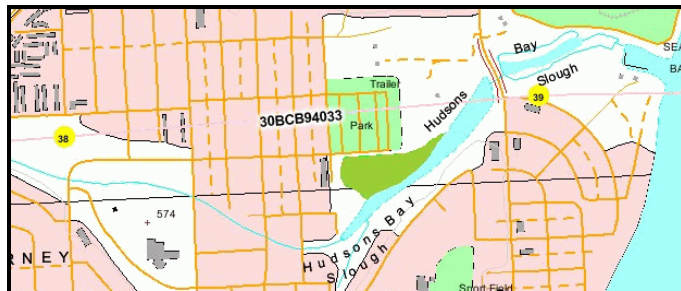


When you click *Refresh Map*, you will see the following (the time that it takes to reload the map will vary, depending on your internet connection):



Our exact area of interest is **Hudsons Bay Slough** and stereo coverage is required (**Note:** the standard forward overlap for airphotos along a *Flight Line* is about 60%, if coverage is required from a different *Flight Line* in order to provide complete coverage, the standard lateral [side] overlap is about 30%).

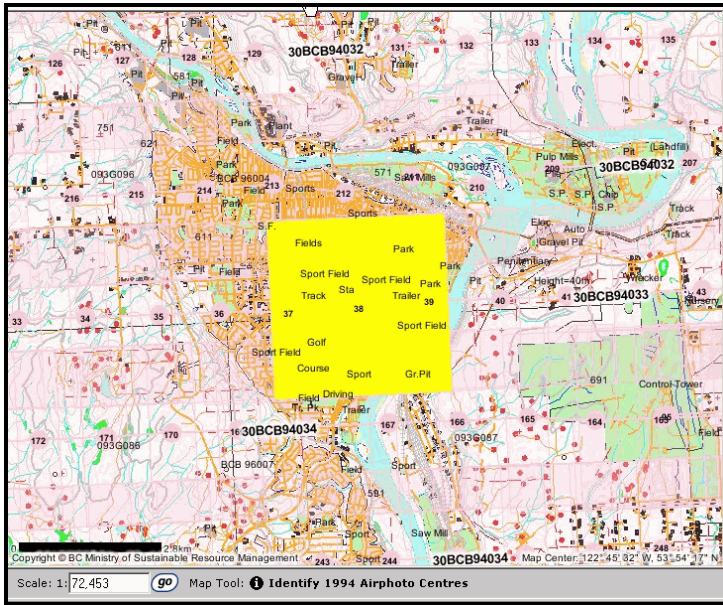
From the map display window, it appears that roll **BCB94033**, frame numbers **38** and **39** will be the airphotos required. Using the *Select* tool  (and drawing a rectangle around the *Airphoto Centres*) we can find out the attributes of these airphotos. The airphoto attributes will popup in a separate window.



Note: The circles representing the *Airphoto Centres* will change colour to yellow.

Tip: Make note of the **Roll** and **Frame** numbers to cover your area of interest as the *Air Photo and Lab Services Section* require these to make airphoto prints for you.

We will now display the *Airphoto Footprint* of **BCB94033 – 38**. For the purposes of this demo, we have zoomed out to an extent that will show the *Airphoto Footprint* in relation to adjacent *Airphoto Centres*. Click [Show Airphoto Footprint*](#) from the airphoto attribute (*Identify Results*) window.

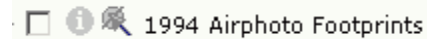


Tip: In order to display the *Airphoto Footprint*, it may be necessary to minimize the airphoto attributes (*Identify Results*) window or move it.

Note the disclaimer (*) about the *Airphoto Footprint* indicated in the *Identify Results* window.

Basemap details (except for some text) are not visible beneath the solid yellow square showing the *Airphoto Footprint*. This will be addressed in a future release.

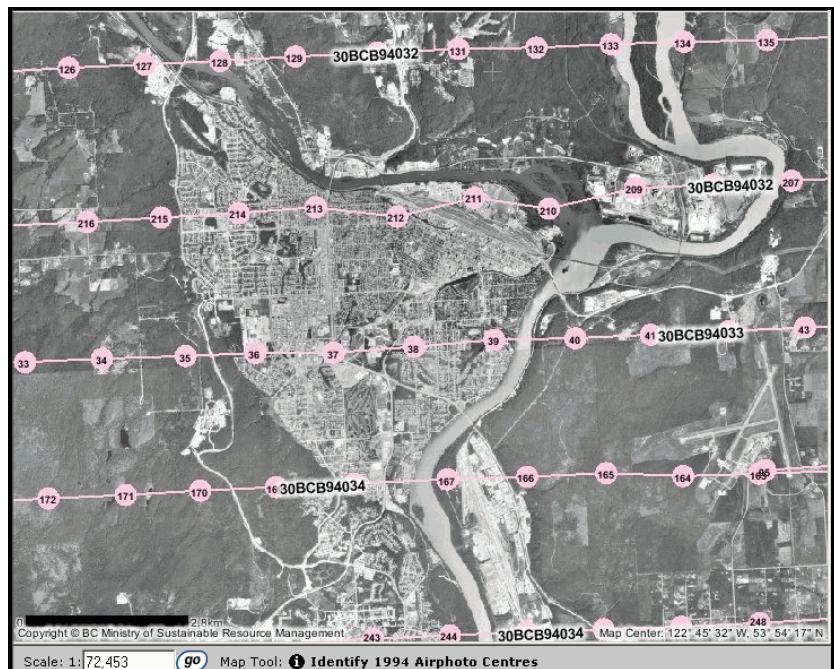
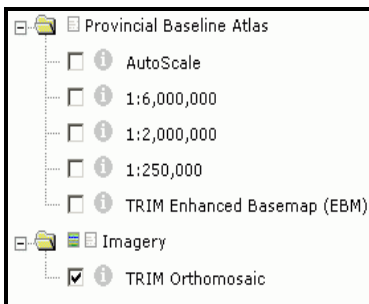
Tip: To turn off the *Airphoto Footprint* (yellow square), use the Clear tool. To turn off the graphics for adjacent *Airphoto Footprints*, click *Layers* from the *Function* bar, then open the folder for *Airphoto Footprints*. Uncheck the box to the left of *1994 Airphoto Footprints*. Click *Refresh Map*.



As a final exercise, we will display the *TRIM Orthomosaic* layer for our area of interest. **Note:** Not all areas of British Columbia have coverage's for *TRIM Orthomosaic* at this time. The **Prince George** area does have coverage.

To do this, click *Layers* from the *Function* bar. Open the folder for *Provincial Baseline Atlas* and turn off (uncheck) the *Autoscale* and *TRIM Enhanced Basemap (EBM)* layers.

Open the folder for *Imagery* and turn on (check) the *TRIM Orthomosaic* layer. Click *Refresh Map*.



Note: The *TRIM Orthomosaic* layer has been created from airphotos taken within the last 10 years.

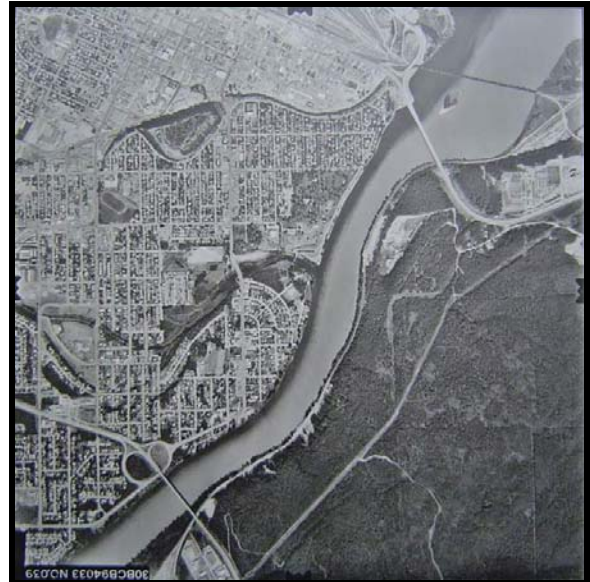
Tip: If your area of interest does not display the *TRIM Orthomosaic* layer, turn back on (check) the *Autoscale* and *TRIM Enhanced Basemap (EBM)* layers.

In summary, for this demo we have determined that the stereo pair to cover our area of interest (**Hudsons Bay Slough**) from **1994** is roll number **BCB94033**, frame numbers **38** and **39**. These are black/white air photos. See below to see what the actual airphotos cover (oriented north-south). **Note:** The images cannot be viewed using Airphoto Inventory.

BCB94033 - 38



BCB94033 - 39



If you need to find additional years of coverage for an area of interest, click the *Theme* for that year. If coverage is available for that year, the *Airphoto Centres* will be shown in the map display window. Previously displayed *Airphoto Centres* (if any) will be cleared. **Note:** Searches for multiple years of coverage is not available for version 1.2, this is a planned future enhancement.

How to Order

The **Airphoto Inventory** application displays the geographical location and attribute data of Aerial Photography in the Provincial Air Photo Archive. Each numbered photo centre represents the theoretical centre of a frame on a numbered roll of film. A roll number and frame number together indicates a unique photograph.

All numbered black/white flight lines will have a prefix of **BCB**. All numbered colour flight lines will have a prefix of **BCC**.

Now that you have ascertained the required **Roll** and **Frame Number(s)** to cover your area of interest, orders can be placed in the following ways:

- [LandData BC](#), which requires registration with [BC OnLine](#);
- [Prepayment](#) to Base Mapping and Geomatic Services Branch;
- Via selected [BC Government Agents](#);
- Via [Private Air Photo Agents](#).

To access the Base Mapping and Geomatic Services Branch Product Price List, please click [here](#).

We hope that you enjoy using this new way to search for airphoto inventory.