



## Alberta Conservation Information Management System (ACIMS) Plant, Lichen and Fungi Data Submission Form Help Guide (Nov. 2013, revised Oct 2015)

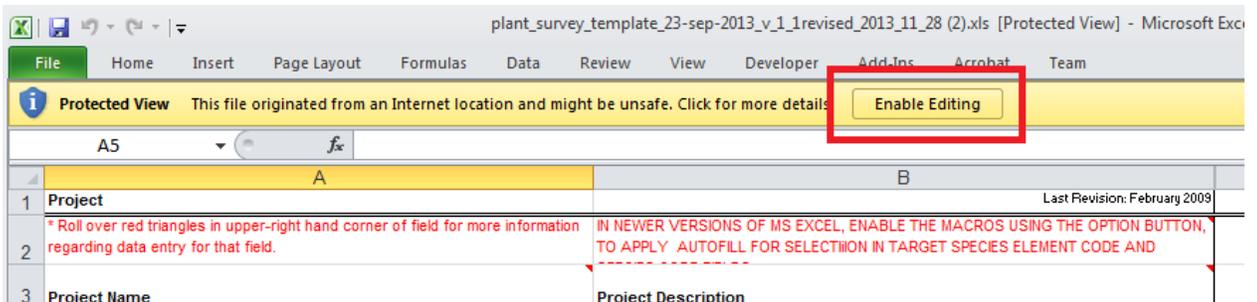
ACIMS collects, continually updates, analyses and disseminates information on species and ecological communities of conservation concern. This guide provides information on how to record data for vascular plant, bryophyte, lichen and fungi species on the new data submission form. This new form will enable the efficient capture and storage of submitted data. The automated upload of data will: increase the accuracy of data transfer process, reduce processing time and increase the speed at which new data can be added to the ACIMS system.

### Submitting data to ACIMS:

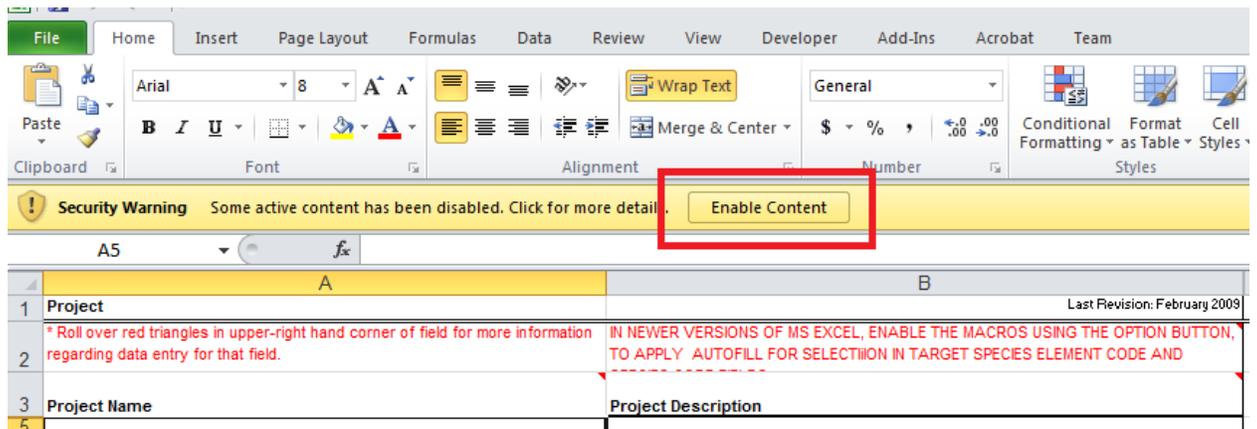
1. The ACIMS Plant, Lichen and Fungi data submission form may be downloaded from the Alberta Parks website by [clicking here](#):

TO USE THE CONVENIENT 'AUTOFILL' FEATURE TO ENTER VALUES IN THE 'TARGET SPECIES ELEMENT CODE' AND 'SPECIES CODE' FIELDS, USERS WITH NEWER VERSIONS OF MICROSOFT EXCEL MAY NEED TO ENABLE THE MACROS CONTENT USING THE OPTIONS BUTTON OR CLICKING "ENABLE CONTENT". A 'DOUBLE CLICK' ON THE CELLS IN THESE FIELDS IS REQUIRED TO ENTER SPECIES CODES USING THE AUTOFILL. USERS MAY ALSO NEED TO 'ENABLE EDITING' AS WELL

### HOW TO ENABLE EDITING:



## HOW TO ENABLE CONTENT:



2. E-mail electronic copies of the completed plant and fungi data submission form as an attachment to :

[acims.data@gov.ab.ca](mailto:acims.data@gov.ab.ca)

Use "Data Submission" as the subject line. Also attach any associated files (maps, shape files, photos, sketch maps, field forms, reports, etc) that may be useful in the mapping process or provide additional information.

### Before you begin:

The data storage system reads the EXCEL data submission forms directly. Therefore, the input must conform to specific database rules. Here are some things to note:

- **It is important not to manipulate the data submission form** (e.g. delete columns, change headings or formats, etc.). Any change will result in a failure for the data to properly load during the automatic uploading process.
- **It is important not to have blank rows separating data entries** within the data submission form. The presence of a blank row will cause the system to stop. Any data following a blank row will not be loaded into the system.
- Drop-down menus are indicated by small arrows on the right side of the cell.
- Help comments may be accessed by rolling your cursor over the red triangles located in the upper right corner of the field names.
- Try to fill out the form as completely as possible
- Gray coloured fields are considered mandatory and should be completed.

## Completing Plant Data Submission Form:

### Project and Reference Worksheet

Project information is documented on this sheet, including:

- **Project Name:** Include a brief name which includes location and year of project
- **Project Description:** An important and mandatory field, which should include a brief overview of the project including: who conducted survey, what was surveyed, where the survey took place, when the survey was conducted and why survey took place.
- **Research License Number:** Include if applicable
- **Documentation of any reference material:** Include if applicable.
- **Survey Area:** If possible, include a track file or pdf of area searched during survey. This will provide valuable null data.
- **Survey Effort:** If possible, include the number of person/hours used to survey the above area

### Survey Worksheet

Collected survey data is entered in the survey worksheet. For easier use of this guide the heading colors presented here reflect the background color of the particular section of the form referenced.

### Survey Project and Parameters Section

The survey fields include general information related to the survey:

- **Survey Type:** This should always be plant, which at this time is used to include vascular plants, nonvascular plants (bryophytes), fungi and lichens
- **Start Date and End Date of the Survey:** Include the first and last day of the specific survey period (e.g. first and last day of a spring survey in particular survey area)
- **Target Species:** Include, if applicable. **'DOUBLE CLICK' ON THE CELL TO USE AUTOFILL.**
- **Sensitivity of the data:** Indicate if data is sensitive. In comments indicate why data is sensitive. **Should be used only for SARA species.**
- **Survey Comments:** Provide any comments pertinent to the survey area ( e.g. wet or dry year, area recently impacted by fire, etc)

- **Type of Survey:** Specify the type of survey - targeted surveys are directed to specific species, general plant surveys focus on all plants of an area, general rare plant surveys focus on any rare species that may be encountered and incidental reflects random observations. If other is used specify survey type in comments.
- **Name of Surveyors:** Include full names of surveyors wherever possible

Survey Project information generally only needs to be entered once per survey, it is not necessary to repeat every row if the information is identical to the row above. In the automatic load process, all data in rows following the survey line are associated with the survey line. For example if spring and summer survey data are being entered, the survey project information only needs to be entered once for each survey followed by the data associated with that particular survey. For example: On the figure below, Project Location and Sample Count data on rows 6 to 11 will be associated with the Survey Project data on row 5.

| 1  | Survey Project             |                          |                        |                        |                      | Survey Parameters | Survey Crew                               | Project Location (Only one of three types of location is required - lat/longs, UTM's, or ATS. Lat/longs or UTM's are |                       |            |                        |         |               |           |             |                 |                  |                      |
|----|----------------------------|--------------------------|------------------------|------------------------|----------------------|-------------------|---|--|-----------------------|------------|------------------------|---------|---------------|-----------|-------------|-----------------|------------------|----------------------|
| 2  | Mandatory fields are grey. |                          |                        |                        |                      | Survey Parameters | Start Point (End Point fields are hidden) |  |                       |            |                        |         |               |           |             |                 |                  |                      |
| 3  | Survey Type Code           | Start Date (DD-MMM-YYYY) | End Date (DD-MMM-YYYY) | Target Species Element | Sensitive Data (Y/N) | Survey Comments   | Plant Survey Type Code                    | Surveyor name(s)   | Location Type         | Polygon ID | Measurement Source     | Datum   | Precision (m) | Latitude  | Longitude   | UTM/TTM Easting | UTM/TTM Northing | UTM/TTM Ref Meridian |
| 5  | Plant-PLANT                | 15-Jul-2010              | 25-Jul-2010            |                        |                      | Poivy             | General Plant                             | Joe Public   | Site-SITE             |            | GPS Specified-C NAD 83 | -5      |               |           |             | 555017          | 5497582          | -111 (Zone 12)       |
| 6  |                            |                          |                        |                        |                      |                   |   |  | Site-SITE             |            | GPS Specified-C NAD 83 | -NAD 83 |               |           |             | 556034          | 5495353          | -111 (Zone 12)       |
| 7  |                            |                          |                        |                        |                      |                   |   | Sue J Forest   | Polygon or Block-BLOC |            | GPS Specified-C NAD 83 | -NAD 83 |               | 43.625789 | -110.219206 |                 |                  |                      |
| 8  |                            |                          |                        |                        |                      |                   |   |  |                       |            |                        |         |               | 43.618576 | -110.219582 |                 |                  |                      |
| 9  |                            |                          |                        |                        |                      |                   |   |  |                       |            |                        |         |               | 43.625639 | -110.230176 |                 |                  |                      |
| 10 |                            |                          |                        |                        |                      |                   |   |  |                       |            |                        |         |               | 43.618651 | -110.230477 |                 |                  |                      |
| 11 |                            |                          |                        |                        |                      |                   |   | Rob River  | Transect-TRANSECT     |            | GPS Specified-GPS      |         |               |           |             | 553713          | 5496757          | -111 (Zone 12)       |

## Project Location Section

This section contains information associated with observation locations:

- **Location Type:** Specify whether the location is a Site (point), a Block (polygon) or transect (start and end points). For point locations only a start point field is required to be filled in. For transects both start and end points should be documented in the start point and end point labelled columns. If the observation is a polygon list all perimeter location points on the data submission form one below the other and indicate the 'Location Type' on the first row associated with the group of related locations as shown above. Provide a copy of the shape files for the polygon, if possible.
- **Polygon ID:** Include if applicable
- **Measurement Source:** Specify how the location data was obtained: GPS, derived from a map, air photo or Alberta Township System (ATS). If this information is unavailable indicate unknown.
- **Datum (NAD83):** The datum defines a reference for placement of a grid (coordinate system) over the earth's surface. The reference for the older NAD27 and the newer

NAD83 system differ resulting in the same coordinates representing different locations. **The system will only accept NAD83.** The WGS84 datum can be used interchangeably with NAD83. Therefore if you are using WGS84 specify NAD83.

- **Precision:** Provides the degree of error for the location specified. Lack of satellite coverage or heavy tree cover will result in decreased precision.
- **Latitude/Longitude:** Specify in decimal degree format with 6 decimal places. Longitude is always negative in Alberta.
- **UTM/TTM Easting/Northing:** Use the NAD83 coordinate system when providing TTM coordinates.
- **UTM/TTM Reference Meridian or Zone:** The UTM system divides Alberta into 2 zones – the easterly zone 12 which ranges 3 degrees on either side of the central meridian -111 and the westerly zone 11 which ranges 3 degrees on either side of the central meridian -117. If using TTM coordinates, enter 115, which covers all of Alberta.
- **Alberta Township System (ATS) Legal Land Description:** see [Alberta ESRD - Alberta Township Survey System](#)

It is important to provide the most accurate location possible, in whatever format you have available. You are encouraged to provide additional location information in the form of pdf maps and shape files to assist ACIMS in the mapping process. When only location data are entered (lat long or UTM) these locations will be associated with the first data (row) on the sheet that includes a location type. For example: on the figure below, Project location data (latitude and longitude) on rows 8 to 10 will be associated with the survey data on row 7.

| 1  | Survey Project             |                          |                        |                        |                        |                 |                        |                  |                        |            | Survey Parameters       |           | Survey Crew   |           | Project Location (Only one of three types of location is required - latlongs, UTM's, or ATS. Latlongs or UTM's are |                 |                  |                |  |  |  |  |  |  |
|----|----------------------------|--------------------------|------------------------|------------------------|------------------------|-----------------|------------------------|------------------|------------------------|------------|-------------------------|-----------|---------------|-----------|--|-----------------|------------------|----------------|--|--|--|--|--|--|
| 2  | Mandatory fields are grey. |                          |                        |                        |                        |                 |                        |                  |                        |            | Survey Parameters       |           |               |           | Start Point (End Point fields are hidden)  |                 |                  |                |  |  |  |  |  |  |
| 3  | Survey Type Code           | Start Date (DD-MMM-YYYY) | End Date (DD-MMM-YYYY) | Target Species Element | Sensitivity Data (Y/N) | Survey Comments | Plant Survey Type Code | Surveyor name(s) | Location Type          | Polygon ID | Measurement Source      | Datum     | Precision (m) | Latitude  | Longitude  | UTM/TTM Easting | UTM/TTM Northing | UTM/TTM M Ref  |  |  |  |  |  |  |
| 5  | Plant -PLANT               | 15-Jul-2010              | 25-Jul-2010            |                        |                        | Polyn           | General Rare           | Joe Public       | Site -SITE             |            | GPS Specified -G NAD 83 | -G NAD 83 | 5             |           |  | 555817          | 5491582          | -111 (Zone 12) |  |  |  |  |  |  |
| 6  |                            |                          |                        |                        |                        |                 |                        |                  | Site -SITE             |            | GPS Specified -G NAD 83 | -G NAD 83 |               |           |  | 556034          | 5495053          | -111 (Zone 12) |  |  |  |  |  |  |
| 7  |                            |                          |                        |                        |                        |                 |                        | Sue J Forest     | Polygon or Block -BLOC |            | GPS Specified -G NAD 83 | -G NAD 83 |               | 43.625789 | -110.219206  |                 |                  |                |  |  |  |  |  |  |
| 8  |                            |                          |                        |                        |                        |                 |                        |                  |                        |            |                         |           |               | 43.618576 | -110.219582  |                 |                  |                |  |  |  |  |  |  |
| 9  |                            |                          |                        |                        |                        |                 |                        |                  |                        |            |                         |           |               | 43.625603 | -110.230176  |                 |                  |                |  |  |  |  |  |  |
| 10 |                            |                          |                        |                        |                        |                 |                        |                  |                        |            |                         |           |               | 43.618651 | -110.230477  |                 |                  |                |  |  |  |  |  |  |
| 11 |                            |                          |                        |                        |                        |                 |                        | Rob Pirer        | Transect -TRANSECT     |            | GPS Specified -GPS      | -GPS      |               |           |  | 553713          | 5496757          | -111 (Zone 12) |  |  |  |  |  |  |

### Count Sample Section for Plants and Fungi

The purpose of this section is to document the species of plants, lichen or fungi observed and the associated habitat at the location indicated in the Project location section of the worksheet. In cases where the 'Location Type' is identified as a polygon and a number of locations entries (utms, latitude/longitude, ATS) have been made on subsequent rows (in the blue Project

Location section), the Count Sample data (green header) is only entered on the first row of the related data (the same row in which 'Location Type' was identified as a polygon) .

- **Surveyors Observation Record:** Optional field for surveyor assigned sample numbers.
- **Observation Date:** The observation date, must be between the Survey Start Date and the Survey End Date. Note: this field must be completed.
- **Species Code:** **'DOUBLE CLICK' ON THE CELL TO USE AUTOFILL** to select the appropriate species from the drop down menu. Please be sure to consider synonyms when documenting the species. If the species is NEW to Alberta and therefore not listed on the species list please send information to ACIMS separately.
- **Count:** When a count was done, insert the number of individuals counted at a site.
- **Abundance Code:** The appropriate abundance code should be used when estimates of number of individuals are made.
- **Phenology:** Select the phenophase which represents the majority of the individuals for the particular species being documented. If more than one phenophase is present, place additional phenology comments in "Identifying Characteristics and Additional Population Comments" column. This is a required field.
- **Health Code:** Indicate condition of plants. Default is 'Alive and Well'. Others that may be used for plants or fungi are: Diseased, Injured – damaged by external source, Malformed and Dead (e.g. if remains of a previous years plant was observed or a late in the season observation was made the health code would be 'Dead')
- **Cause of Death:** Use applicable code if plant is dead. Unknown most likely to be used; however other codes that may be applied include: Avalanche, Disease, Environment (e.g. fire, drought), Contamination, Destroyed
- **Confidence Level Code:** Characterizes the level of assurance that the identification of the species is correct.
- **Evidence of Sample Code:** Indicate how determination of species was made; based on DNA, Collected specimen or Observation of species.
- **Identifying Characteristics and Additional population Comments:** Provide key features utilized to identify species and other details pertinent to the occurrence.
- **Specimen Collected:** Indicate if a voucher specimen was collected.
- **Specimen Disposition:** Specify herbarium or collection in which specimen was or will be deposited.
- **Accession Number:** Specify accession number assigned to specimen by herbarium, if available.
- **Determined by:** Specify the name of the person who identified the species. Note: this is a required field.

- **Photo File Name:** Provide names if photo files are attached. Photos may be important for site descriptions and species identification.
- **Moisture Code:** Record moisture, using the following codes:  
*Very Xeric* – water removed extremely rapidly in relation to supply  
*Xeric* – water removed very rapidly in relation to supply  
*Submesic* – water removed readily in relation to supply  
*Mesic* – water moved somewhat slowly in relation to supply  
*Sybhygric* – water removed slowly enough to keep soil wet for significant part of the growing season  
*Hygric* – water removed slowly enough to keep soil wet for most of the growing season  
*Subhydric* – water removed slowly enough to keep water table at or near the surface for most of the year  
*Hydric* – water removed so slowly that the water table is at or above the soil surface all year.  
*Aquatic*- permanent standing water of some depth
- **Light code:** Specify the appropriate code:  
*Filtered* – sunlight diffused/scattered by overhead canopy  
*Open* – direct exposure to sunlight  
*Partial* – sunlight exposure varies throughout the day  
*Shade* – only reflected, indirect sunlight; no direct sunlight
- **Slope (%):** Provide the site slope in percent (% slope =  $\tan(\text{degrees}) \times 100$ ). A slope of 0 should be recorded for level sites.
- **Aspect (Bearing degrees):** Record the orientation of the slope using compass bearings.
- **Substrate Code:** Specify a substrate code for non-vascular plants, fungi and lichens only – bark, wood, rock, soil or other. If other, explain in comments.
- **Primary Habitat Code:** Specify the appropriate habitat code for the occurrence site. This is a very coarse site description.
- **Community Type:** Provide a more detailed description of the habitat; including dominant species, other tracked species present, specific site characteristics, etc.
- **Management/Conservation/Threats Comments:** Provide comments pertaining to conservation and management needs. Any information pertaining to proposed mitigation, as well as potential threats to the occurrence should also be documented here.
- **Population Extent (m<sup>2</sup>):** Provide areal extent of observation in m<sup>2</sup>. Indicate in previous comments column if it is an estimate.

## Submit to ACIMS by email

Email the completed data submission form as an attachment to ACIMS at [acims.data@gov.ab.ca](mailto:acims.data@gov.ab.ca). Use 'Data Submission' as the subject line. Reports, images (photos, maps, etc.) and shape files associated with the observation data should also be included as attachments.

If you require further information regarding ACIMS checkout the ACIMS website at [http://www.albertaparks.ca/albertaparksca/management-land-use/alberta-conservation-information-management-system-\(acims\).aspx](http://www.albertaparks.ca/albertaparksca/management-land-use/alberta-conservation-information-management-system-(acims).aspx).

If you have further questions regarding this ACIMS data submission form, please contact the ACIMS team at [acims.data@gov.ab.ca](mailto:acims.data@gov.ab.ca).