Urban Biodiversity Inventory Framework

Web Interface Tool "How To" Guidelines

General User

Site Access

User access and logging in

1. Go to www.ubif.us and click on your city
2. Under the login area select "Create New Account"
3. Enter a Username and Email address then click the "Create New Account" button. This sends an automatic email to you verifying the request and to the City Site Manager notifying them of your request.
4. Once you have been authorized by the City Site Manager you can use the user and password created to log into the site. From here you will be able to access the following functions:

City Home Page

Welcome information and Important Documents

Individual cities will choose to post their own welcome information on the home page. Additionally access to city specific species monitoring protocols & other important documents   will be posted on the city homepage under "Documents." The User Menu (to the left) includes options for adding data to the site, while the top bar menu includes summary data tables and data downloads. These features are described in detail below.

Adding Data - Web Forms

Computer or mobile device compatible

Inputting data through web forms can be done with links found in the User Menu section to the left of the city homepage. Three different categories of data entry are available: Add Data Collector, Add Land Use, Add Species detection.

Add Data Collector

A Data Collector is a person and their associated organization that is responsible for collecting the data that will be entered later under the Add Species Detections page. The Data Collector should be able to answer questions about the data and how it was collected, as well as serve as a long term contact. For example, if a graduate student collected the data they should be mentioned in the "Additional Information" section. However, the advising Professor should be the Data Collector contact.

Adding Data

Click the Add Data Collector link in the User Menu. Fill out the form fields with the appropriate information under name, organization, phone number, email and   additional information. When finished click the "Save" button at the bottom. After saving a confirmation screen will show the data entered and provide the opportunity to edit or delete the record (using the Edit tab) if a mistake was made.

Add Land Use Data

Land use data is a measure of available habitat area within the city. The time that input data was measured should be entered into the Date field. For example, if the calculation of percent greenness/openspace and percent protected area was conducted using land area values from July 7, 2008, then the data of data collection would correspond to that date.

Percent greenness/openspace should be calculated as a proportion of the city boundary area (greenness/openspace divided by total city area x 100). Greenness and openspace are two possible ways to measure potential habitat areas within the city (such as vegetation cover or undeveloped area). It is up to individual cities to decide exactly what parameter(s) will be used. Whatever the choice, it is critical that the method is consistently applied each time a value is generated. This information should be described and added to the "Documents" section on the city homepage. Similarly, percent protected area should be calculated as a proportion of the city boundary area (protected area divided by the total city area x 100). Protected areas include parks and natural areas that are not at risk of development.

A table of the land area values for greenness/openspace, protected area and city area boundary should be maintained and saved in the "Documents" section on the city homepage for reference. These data are particularly helpful to reference for interpretation of data as city boundaries expand over time, altering proportion calculation results.

Adding Data

Click the Add Land Use link in the User Menu. Here you will find data fields for Date, Percent Greenness/Openspace and Percent Protected Area. Following guidelines above on the types of information that should be entered and how to generate proportion values enter the appropriate values into the data fields and click the Save button. After saving a confirmation screen will show the data entered and provide the opportunity to edit or delete the record (using the Edit tab) if a mistake was made.

Species Detections

This data entry form includes fields needed for Track 1, Track 2 or Track 3 data collection methodologies. Track 1 data includes opportunistic species records and the inclusion of partner data from other agencies or organizations that are collecting biological data within the city. Track 2 and 3 data require cities to make certain decisions before data collection can begin, including the selection of surrogate species based on habitats of interest, reference and city sites to conduct monitoring and specific monitoring protocols to be used. Your city contact person will provide the appropriate guidance on species, monitoring locations and selected protocols. Track 2 data collection involves monitoring sites for presence/absence of surrogate species and Track 3 methodology measures the relative abundance of surrogate species. Depending on the taxa group and species selected, different monitoring protocols should be considered.

Relative abundance calculations for Track 3 data and selected monitoring protocols should be described and added to the "Documents" section on the city homepage. The same methods should be followed each time data is collected to ensure consistent and reliable results.

For more detailed information about Track 1, 2 and 3 methodology see the full Framework document posted on the homepage at http://ubif.us and linked in the heading description on the Create Species Detection page.

Adding Data

Click the Add Species Detection link in the User Menu.
Note: If adding data on a mobile device, the user will need to allow the site permission to "know your location" as this will allow coordinate data to be added automatically. When accessing the "Add Species Detection" section a pop up box will ask for this permission. Click "Allow" to enable the feature.

Here you will find data fields for date, organization, data collector, location name, habitat of interest, taxonomic group, species, location (lattitude and longitude), reference or city site, presence/absence and relative abundance. Required data fields are starred with an asterix (*). These fields coincide with Track 1 data collection. If the data being entered is following the Track 2 methodology then the additional fields of reference/city site and presence/absence should also be completed. If the information entered is basic Track 3 data (i.e. minimum requirements for Track 3) then additional data fields to be completed include reference/city site and relative abundance.

Following the guidelines above and with direction from your city contact as well as information provided in the recommended monitoring protocol sheets, appropriate decisions can be made on the types of information that should be entered. Once the appropriate values have been entered into the data fields, click the Save button. After saving, a confirmation screen will show the data entered and provide the opportunity to edit or delete the record (using the Edit tab) if a mistake was made.

Editing Records

As data form entries are completed there is an immediate review screen and edit option for each record. Additionally through summary tables "edit" options are available for records authored by the user in the Operations column.

Uploading Data (csv) - Species Detection Import

Batch uploads of previously collected data

The ability to input data by uploading a .csv file are found on the User Menu of the page. Before attempting to upload a .csv file certain formatting guidelines must be followed to ensure a smooth merge of the new data:

1. Columns should be listed in the following order on the .csv to be uploaded: Organization name, Contact name, Date of data, Location Name, Latitude, Longitude, Ecosystem/habitat of interest, Taxonomic Group, Species, Presence/Absence, Reference or city site, Relative Abundance.

2. Organization name and contact name should already exist in the database. If the Organization and contact name has not been previously entered it should be added at the Add Data Collector sidebar menu before the .csv file is uploaded.

3. Be sure that dates in the .csv file are entered in the "n/j/y" format. For example data collected on August 3rd 2009 should be entered as 8/3/09. *Note: .csv files will sometimes default back to the mm/dd/yyyy format when the file is closed and reopened. Highlight the date of data column, right click and select "format cells". Under the "Category" section click on "Date". In the "Type" section click the example with the appropriate format "3/14/01" then click the "Okay" button at the bottom of the window. Save the file and attempt to upload again.* In order to limit typos and duplicate information, any new data categories (i.e. Location names, species names, taxa groups etc) will have to already exist in the online database for the table to merge properly. This can be done ahead of time by the City Site Manager (see Content Categories (Taxonomy) section).

Once the .csv file is in the proper format, click on the "Species Detection Import" link in the User Menu. Here you click the "choose file" button, navigate to the .csv file on your computer, select the file and click "open", then click the upload and import button.

Data Summary Tables

The data summary tables can be found along the top bar menu of the site. These tables display columns of information based on the input data forms and shows rows of data from each record that has been created. Individual tables are available for each data form: Data Collector, Land Use and Species Detections.

Data Collector Table

This table summarizes the information that has been entered under the "Add Data Collector" sidebar menu. The first column titled "Author" is the login name of the person who logged into the site and created the record(s). The following columns of information, Person's name, Organization, Phone number, Email and Additional info, reflect previously entered values.

The "Operations" column provides links to edit or delete data rows. You will only have access to edit or delete records you have created. Other users data can only be edited by a City Site Manager.

The column data can be sorted alphabetically or numerically in ascending or descending order by clicking on the column title. For example by clicking on "Organization" these data will be sorted from A to Z, if "Organization" is clicked again, the data will then sort from Z to A.

Land Use Data Table

This table summarizes the information that has been entered under the "Add Land Use" sidebar menu. A date range of one year and 20 records per page is displayed as default when first viewing the Land Use Data Table page. In order to view data from previous years and/or more records per page, you must change these values. This can be done by editing the "Date From" and "Date To" boxes and changing the "Items per Page" drop down list at the top of the page, then clicking the Apply button.

The "Operations" column provides links to edit or delete data rows. You will only have access to edit or delete records you have created. Other authors data can only be edited by a City Site Manager. The "Author" column is the login name of the person who logged into the site and created the record(s). The following columns of information, Date of Data, Percent greenness/openspace and Percent protected area, reflect previously entered values.

The column data can be sorted alphabetically or numerically in ascending or descending order by clicking on the column title. For example by clicking on "Percent protected area" these data will be sorted from smallest to largest value, if "Percent protected area" is clicked again, the data will then sort from largest to smallest.

Species Detection Table

This table summarizes the information that has been entered under the "Add Species Detection" sidebar menu. A date range of one year is displayed as default when first viewing the Species Detection Table page. In order to view data from previous years, you must change these values. This can be done by editing the dates in the "Date From" and "Date To" boxes at the top of the page, then clicking the Apply button.

Data in the table can also be filtered by one or more species detections. All species are selected by default. By clicking on a species name in the "Species" box at the top of the page and then clicking the Apply button, only those species records (for the date range selected) will display in the table below. Multiple species can be selected by holding the control key (PC), or command (MAC) and clicking multiple species names.

The "Operations" column provides links to view, edit or delete data rows. You will only have access to edit or delete records you have created. Other authors data can only be edited by a City Site Manager. The "Author" column is the login name of the person who logged into the site and created the record(s). The following columns of information, Organization name, Contact name, Date, Location, Latitude, Longitude, Ecosystem/habitat of interest, Taxonomic Group, Species, Presence/Absence, Reference or City site and Relative abundance, reflect previously entered values. This table has many columns and so you will likely need to use the scroll bar at the bottom of the table to see all the data.

The column data can be sorted alphabetically or numerically in ascending or descending order by clicking on the column title. For example by clicking on "Taxonomic Group" these data will be sorted from A to Z, if "Taxonomic Group" is clicked again, the data will then sort from Z to A.

Downloading Data (csv) - Land use and Species detection tables

Land use and species detections data tables can be downloaded in csv format for manipulation and calculation in excel, input to a spatial geodatabase and/or upload to statistical software such as R or other applications.

Land use data

Go to the "Land Use Data Table" in the top menu bar.
Scroll to the bottom of the table and click the .csv button. After a few seconds a box will appear allowing you to choose where to save the .csv file. Select the location and click the "Save" button.

Species detection data

 Go to the "species Detection Data Table" in the top menu bar.
Scroll to the bottom of the table and click the .csv button. After a few seconds a box will appear allowing you to choose where to save the .csv file. Select the location and click the "Save" button.

City Site Manager

All functions accessible by a General User are available to a City Manager plus the following:

User Permissions & Access Control

An auto generated email is sent to the City Manager when a new user requests access on the city homepage. Notifying the City Site Manager that the user needs to be granted site permissions. New and existing users are displayed in a table under the "People" link at the top of the page.

Columns include:
- Name (username and email)
- Domain (aka city)
- Active (yes/no)
- Role (User (aka General User), City Manager (aka City Site Manager), Power Manager (aka Site Manager), Admin)
- Last access date
- Operations (edit/cancel account options)

The "Edit" link found under the Operations column allows the City Manager to edit user details, change passwords, activate or deactivate the account and add extra permissions (to City Site Manager level) for the given user.

City Homepage & Important Documents Editing

The City Site Manager is able to edit the city homepage including changing the text, adding pictures etc. These functions are accessed through the Edit tab in the body of the city homepage. Once updates are complete there are options to "Save" "Preview" or "View Changes" to the site. For final edits to display on the page, click the "Save" button.

The "Add Document" link in the User Menu allows the City Site Manager the ability to upload documents to the site providing a record of protocols and important information associated with the Urban Biodiversity Framework and makes those documents accessible for General Users. After clicking "Add Document" the Create Document page provides a "Name of document" box. This will be the display name of the document on the home page. Then click the "choose file" box to navigate your files to find the document you wish to upload. Select the file, click open, then the Upload button to add the document to the site.

Editing Data Records

While viewing the summary tables (as described under the General User section above), the "Operations" column will provide "edit" options for all records. When edits are completed click the "Save" button at the bottom of the page to update the record.

Content Categories (Taxonomy)

The ability to add/edit terms that populate the data entry fields on the site are accessible from the "Taxonomy" link at the top of the page. On the Taxonomy page a table with "Vocabulary Name" and "Operations" columns is appears. By clicking the "list terms" link in under the "Operations" column a new page appears where the fields can be edited directly. ****Caution** currently all categories are shared across all cities so be careful not to erroneously edit a category belonging to another city.** Click the "Save" button at the bottom of the page when finished editing. When a new term is added or edited it will then be displayed in the dropdown menus when entering data.

Data form content categories available
- Ecosystems/habitat of interest - examples: oak woodland, chaparral, vernal pools
- Taxa groups - examples: birds, land snails, plants, butterflies, bees
- Species names - examples: Tufted titmouse, Rana draytonii, Castor canadensis
- Location - examples: Gateway Park, Forest Park, Oaks bottom natural area
- Organization - examples: Unversity of Pennsylvania, Presidio Trust, City of Portland