



ECO GUIDE TO Post-stratified Samples

What Is a Post-stratified Sample?

If you have decided to conduct a **sample inventory**, you will be collecting data for plots located throughout your study area. In this type of project, you can choose to stratify or subdivide your study area into smaller units that can help clarify differences across the study area. For example, you might stratify your study area by land use, neighborhood, or political boundaries so that you can compare urban forest effects in different strata.

With a **post-stratified sample**, you have chosen to subdivide the study area after you determine the plots and collect your field data. Your Eco results will be estimated for the entire study area as well as by strata. The decision to stratify should ultimately be based on your current and future project objectives and available resources.



Tip

The directions in this guide assume that you are working with an existing Eco project that has already been designed and created as described in the **User's Manual**. See the **User's Manual** for help if you have not completed these steps.

Post-stratified Sample Methods

i-Tree Eco offers a two-step method for post-stratifying your existing Eco project. First, modify the existing stratification schema. Second, reassign strata to your existing plots. To begin post-stratifying your project in Eco, click on your computer's **Start button > (All) Programs > i-Tree > i-Tree Eco v6**.

To open an existing project:

- 1 Click **File > Open Project**.
- 2 Browse to the folder where you saved your project, click on the file name, and click **Open**.



Tip

Before you begin modifying your project for post-stratification, we recommend that you save a copy of your original project. Saving a master copy allows you to go back and view your original results, as well as explore several different post-stratification options.

Modifying Stratification

The **User Defined** and **Project & Strata Area** functions in the **Project Configuration** tab of Eco can both be used to modify your existing stratification schema.



Tip

If you have already sent your data to the server and retrieved your results, the **Project Configuration** tab will be in View-only mode. Switch to Editing mode by clicking on the **Editing Mode** function. You will then be able to modify your stratification.

- 1 Click on the **User Defined** or **Project & Strata Area** function in the **Project Configuration** tab.
- 2 Use the **New** tool in the **Actions** group to create a new stratum.
- 3 For each stratum that you create, enter a brief description, abbreviation, and area in the table.
- 4 When you are satisfied with your strata, click **OK** in the top right-hand corner of the action panel. This will save the edits that you have made to the table.
- 5 Click **Cancel** if you decide to revert to all of the previous values, whether default values or those that you had previously entered manually.



Caution

Strata that have existing plots cannot be deleted from the **User Defined** or **Project & Strata Area** tables. All plots in a stratum must be reassigned to a different stratum before a stratum can be deleted.

Reassigning Strata

After you modify your existing stratification schema to include all of the strata that you want for post-stratification, you need to reassign the strata of your existing plots.



Tip

If you have already sent your data to the server and retrieved your results, the **Data** tab will be in View-only mode. Switch to Editing mode by clicking on the **Editing Mode** function. You will then be able to modify your plot data.

To reassign strata for existing plots:

- 1 Click on the **Data** tab.
- 2 Click on the **Plots** function. The upper table seen in the action panel to the right is where you can enter or edit the plot data that you collected in the field.
- 3 In the table, click in the “Strata” box in the row of the plot that you would like to edit.
- 4 Reassign the strata of the plot by typing the strata name in the box or choosing the strata from the drop-down list.
- 5 Use the **up and down arrows** on the keyboard to move from top to bottom between records.

(Note: Using the arrows on the keyboard is especially helpful if you are reassigning strata for many or all of your plots.)

Once you have reassigned the strata of your existing plots, you will be able to delete strata from the tables in **Project Configuration > User Defined** or **Project & Strata Area** if they no longer have existing plots.

Running the Eco Model

After you have modified your stratification schema and reassigned the strata of your existing plots, you will need to run the Eco model again. Running the Eco model is a two-step process that is necessary in order to view your reports or use Forecast. The first step is to send your data to the i-Tree server where the Eco model will be run. The second step is to retrieve your results from the server.

First, send your data to the i-Tree server:

- 1 Click on the **Reports** tab.
- 2 Click on the **Submit Data for Processing** function.
- 3 Read the i-Tree End User's License Agreement and click **OK** if you consent.
- 4 In the **Contact Information** window, enter your personal information in the spaces provided.
- 5 To confirm your email address, enter the same email address in the spaces labeled "Email" and "Confirm." This information is critical.
- 6 Click **OK**.

Please be patient – model processing time depends on the number of projects that have been recently submitted to the server as well as the size of your project. You can click on the **Track & Retrieve Results** function to track your status in the queue.

When your data have been processed, an auto-generated email notifying you that the results are ready to download will be sent to the email address that you provide in the **Contact Information** window. This email will be from info@itreetools.org; please check your spam folders if you do not receive the email. Likewise, you will be notified of processing errors that require data to be submitted again. If you do not receive your results within 24 hours, please contact info@itreetools.org.

Second, retrieve your results from the i-Tree server:

- 1 Click on the **Reports** tab.
- 2 Click on the **Track & Retrieve Results** function.
- 3 In the **Retrieve Processed Results** window, click **OK**.
- 4 Please be patient while results are downloaded.

If you are unsure whether or not you have run the Eco model, you can check the **Project Metadata** report of the **Reports** tab. This information is especially useful since you may find it necessary to run the i-Tree Eco model more than once throughout the duration of your project.



Caution

If you make changes to your project settings or add or edit your field data, you will need to send your data to the server and retrieve your results again to ensure that your changes are reflected in your reports.