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| **iLearn BI 101**  **Procedures** | **Food Web Assessment:**  **Habitable Planet Food Web Ecology** |

Now is your opportunity to demonstrate what you have learned about food webs. After completing this activity and question set you will be submitting a report for grading through the course website. Upon completion of this assignment with the minimum required score, you will have completed the Food Web module.

The details on the grading and submission process can be found on the course website. You will need one additional document, which can be found in the course module:

**Habitable Planet Ecology Lab Report**: As you complete the activities for this assignment as outline below, you will answer the questions in this report. This report is to be submitted through the submission page on the course’s website.

**Introduction:**

This assignment is based on an online lab simulation activity that can be found at the following website:

<http://www.learner.org/courses/envsci/interactives/ecology/index.php>

There are two lessons: one titled “The Producers” and one titled “Food Web”. Each of these lessons has three parts to them. Open the link above and familiarize yourself with the components of the Ecology Lab web page.

**Lesson 1: The Producers**

This lesson introduces you to the simulator that you use to will predict how two plant species will interact in a newly colonized habitat, as well as design a complete food web in the second lesson.

**Lesson 2: Food Webs**

This lesson challenges you to create a food web that allows all the organisms in your simulated habitat to survive. This is a high challenge activity that may take some time to find the perfect balance between each of the trophic levels in your food web. You can consider this lesson complete when you successfully create a food web that supports all the organisms, i.e. none of the populations go extinct over time.

**Procedures:**

In the window that opens from the link given in the introduction, you should note two parts of the web page. In the upper right hand corner you will see a link “OPEN SIMULATOR”. (Pictured below)



Towards the left hand side of the page, you will see an outline of the lessons contained within the activity. The steps of each lesson are links that you will click on as you go through the online activity.

(Pictured below)



Follow the instructions below to start the lab simulation:

1. When first opening the window you should start on the overview page. If not, click on “Overview” towards the left hand side of the screen.
2. Open the simulator by clicking the link in the top right hand portion of the page. This should open in a new window (Pictured below). You may have to revise your browser security settings to allow pop ups if the simulator does not open immediately.
3. Download the Data Table by clicking on the Word document icon towards the bottom of the page. You will not be submitting this document for assessment, but it will aid you in completing the simulation lessons.
4. You are now ready to go through the lessons as described on the website. Start by clicking on “The Producers”. Read and follow all instructions before continuing to the next page “Step 1”. Read and follow all the instructions on this page. Once completed, you will answer the questions posed in your report document.
5. Now click on “Step 2” and continue working your way through the simulation as you did for Step 1. For the most accurate results, it is important that you reset the simulation and restart at time 0 every time you run a new simulation. Once Step 2 is completed, click on “For Your Consideration”.
6. Your task is to complete both lessons in the manner described above, and answer all questions that are in the Habitable Planet Ecology Lab Report. (Don’t forget to reset the simulator before each run as you try to build the perfect food web). If you are struggling to understand the concepts of this unit, you may explore some of the units and lessons that are linked throughout these web pages, but it is not part of our curriculum or required.

