

Aquatic Ecology: Climate Changes To Lake Biological Communities

A number of changes to both weather and climate have been predicted, many physical changes to aquatic ecosystems are expected to result from these changes in global and local patterns. You will be examining a dataset on ice cover on Lake Mendota, in Madison, WI between 1855 and 1998.

Provide an appropriate, general research question that could be addressed by this dataset.

Provide a statistical null and alternate hypothesis that you could address with this dataset.

Use the attached dataset to determine whether ice cover has changed in Lake Mendota between 1855 and 1998. Plot the data, copy your graph into the space below with a trendline.

Using the Vassar Stats site (http://vassarstats.net/) analyze your dataset and report the results, including the predicted relationship (equation), r-squared and p-value.

Equation:

r-squared:

p-value:

Interpret the values above:

Is this dataset consistent with the alternate statistical hypothesis? I	nterpret/explain these results.
Using results from the past year or two years ago and using the follow (http://www.aos.wisc.edu/~sco/lakes/icesum18.html), determine was above has continued. Briefly justify your answer.	•
Sketch a general food web describing feeding relationships within a upload a photo of your drawing or create it in a graphics program a potential effect of changing lake ice cover on a lake and add the direchange on the food web.	nd copy it in). Add at least one