Teacher Overview of Citizen Science and JellyWatch

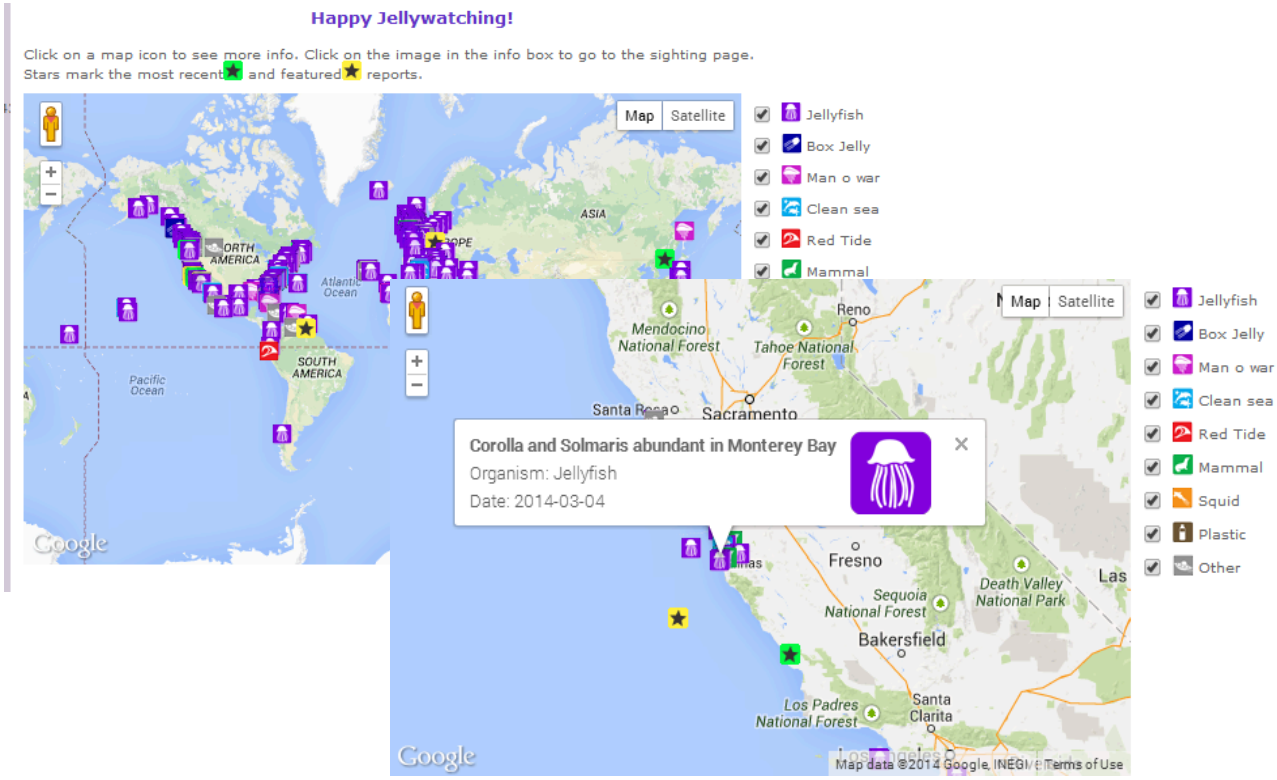
Procedure for teacher:

1. Follow this link: http://www.jellywatch.org/ to the JellyWatch homepage and begin your exploration of the magnificent world of jellies.

Notes:

- There is a background PowerPoint for both an introduction to Citizen Science and also a reference for the jellies.
- Students will need access to JellyWatch on their computers. They will also need to have access to the free JellyWatch App (best option would be for them to download it to a smartphone or other device).

An interactive map is on the homepage that allows students to see where jellies have been observed. You may zoom in or out of the map. Clicking on an icon will display the observation date, location and name (if identified) of the sighting.



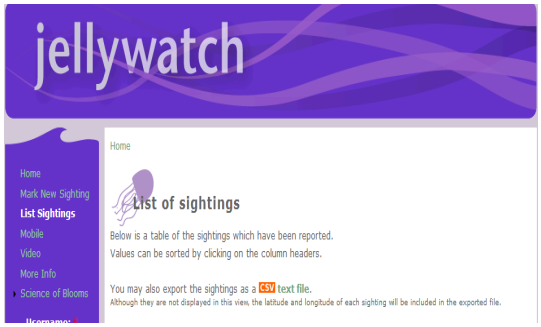
Note: This is a large and growing database. It is highly suggested that it not be printed out. Even the Excel Modified Jellyfish.org Data Set is huge, thus it would be best if students had access to it on a computer. Directions titled "Modifying JellyWatch Data Instruction Sheet" are available if you would like to change the parameters of data to be used. For the rest of this activity, you and your students will be using the Excel Modified Jellyfish.org Data.

To determine where the data comes from, locate "List Sightings" in the upper left menu bar on the JellyWatch homepage and click this link.

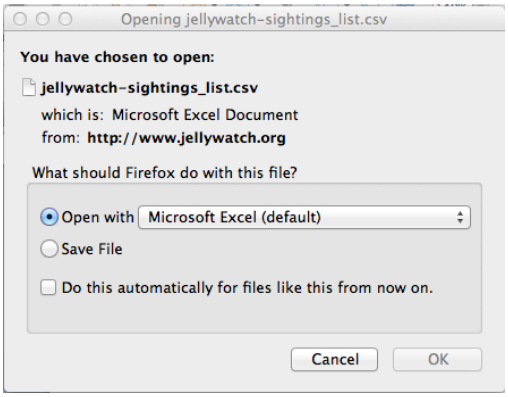


Locate and select this link (CSV) to export the "jellywatch-sightings_list.csv" to an EXCEL spreadsheet. The large Excel file will download to your laptop.

Windows PC



MAC



2. Hand out the *Student Reflection and Procedure Sheet*.

3. Using the Citizen Scientist PowerPoint (or other background information), lead a class discussion about the importance of Citizen Scientist projects, especially JellyWatch. After the discussion, have students answer Reflection Questions #1 and 2.

4. Allow students to access the Modified Jellyfish Data available on their computers. Next, have them answer Student Reflection Questions #3, 4 and 5.

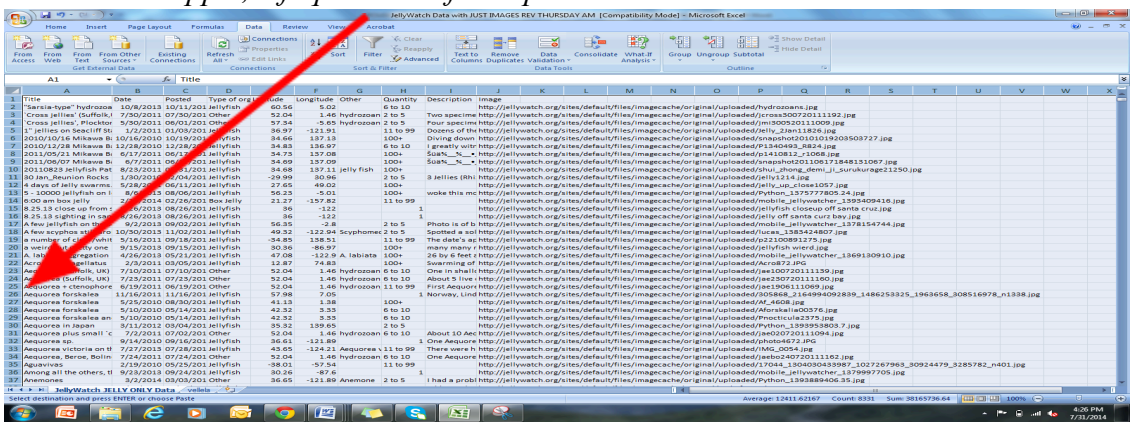
5. Have students get in groups and share their responses for questions 1-5. Then have them examine the data table for inconsistencies and record what they find (for example *Velella* is listed under both columns A and J and also under a Man o' War).

6. Have students gather in groups and examine the data table, then have them answer Student Reflection Question #6.

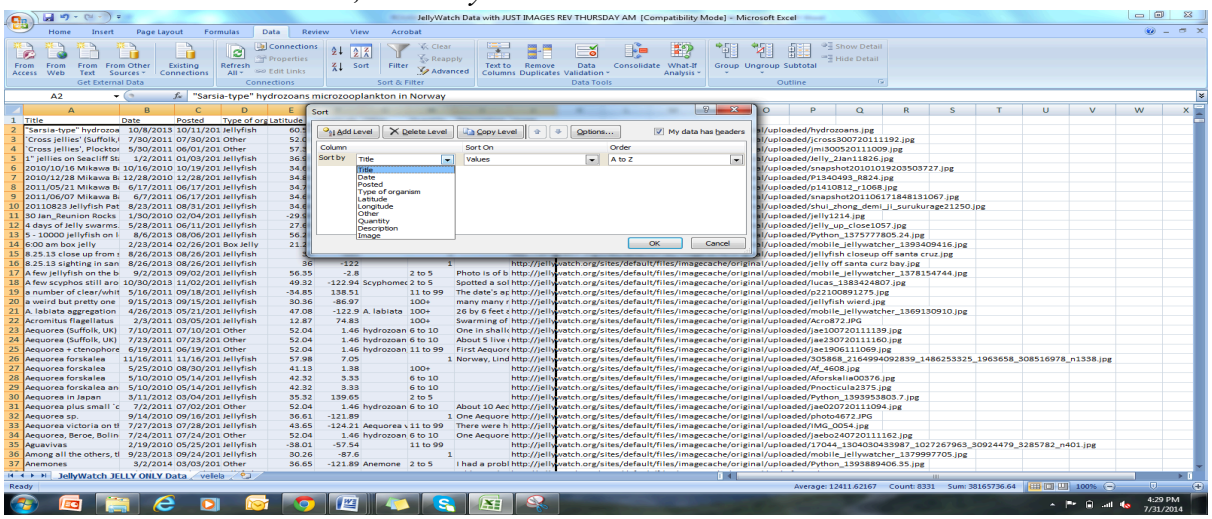
7. Have student groups compare the fields of entry for the web page versus the app (they can do this by comparing the Adding a Sighting to JellyWatch Web Page and Adding a Sighting to JellyWatch App). Have students answer the Student Reflection Question #7

8. Students (either individually or in a small group) will pick or be assigned a jelly. They need access to the Modified JellyWatch Data. The Student Directions are below, and also on the *Student Reflection and Procedure Sheet*. They will answer questions highlighted below.

From *Student Reflection and Procedure Sheet*.
Now you will select or be assigned a species of jelly/ctenophore.
Open the Modified Data Set on your computer. Highlight the entire spreadsheet by clicking your cursor in the upper, left quadrant of the spreadsheet

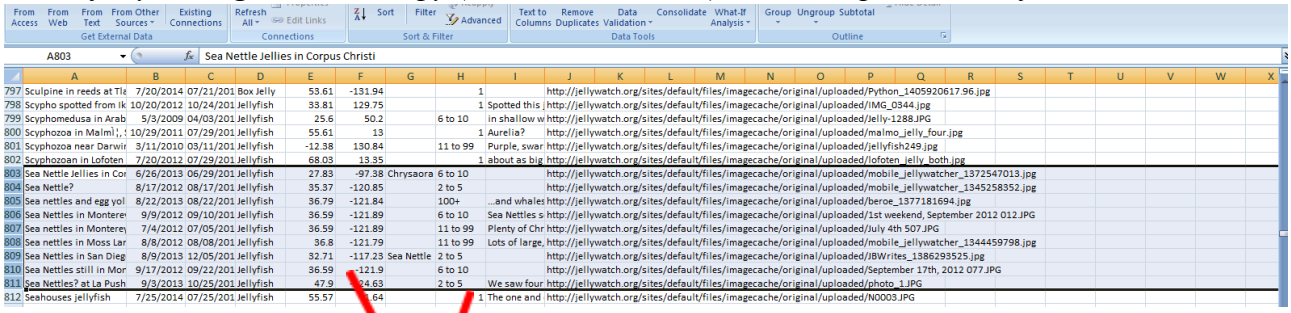


Then while in the DATA tab, SORT by "Title" Column A and hit OK.

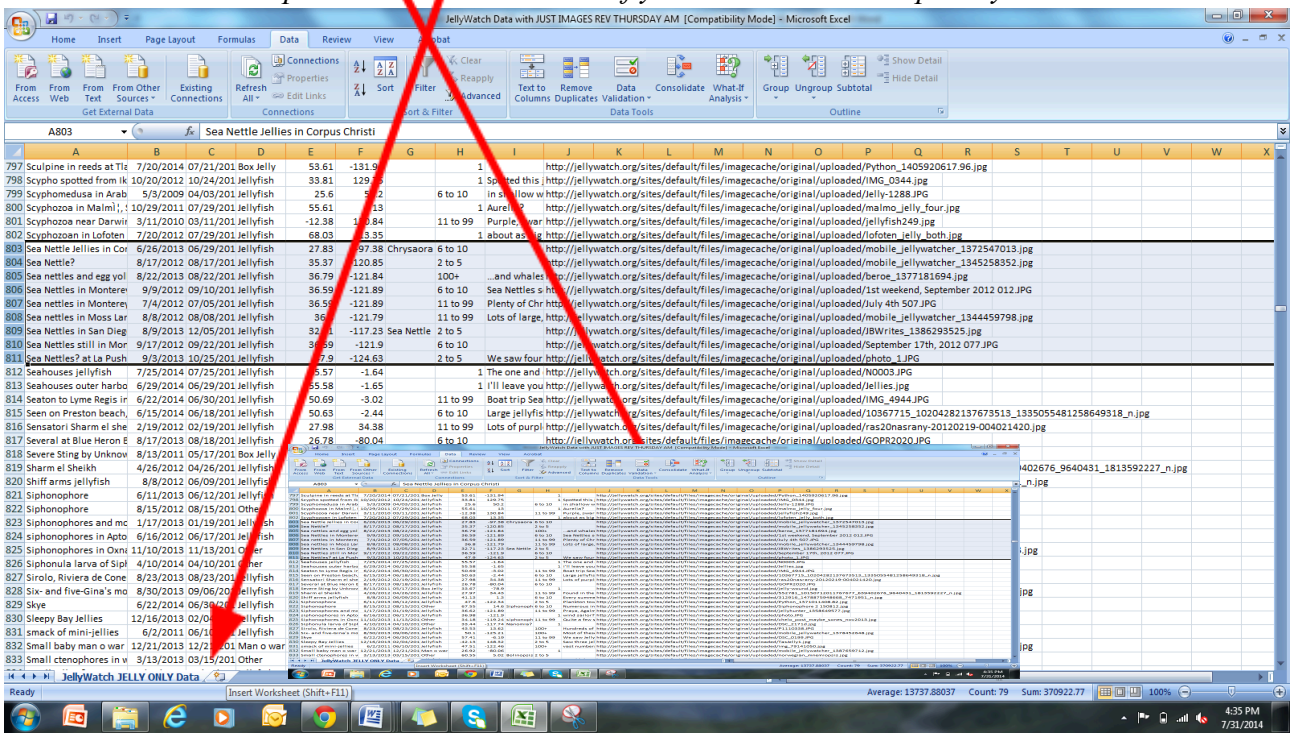


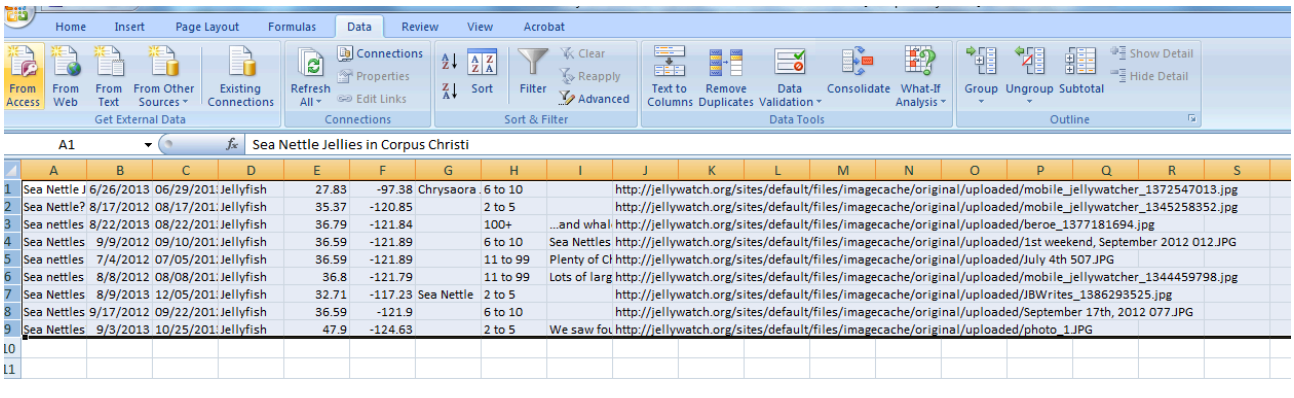
jellywatch.org what's in your ocean?
EARTH

Now the names will be in alphabetical order. Scroll down to your organism name, highlight all entries for your organism and copy (Control-C on a PC). The example below is for sea nettles.



Then click on a New Spreadsheet at the bottom of your Excel sheet and paste your data.





Because the organism may not be correctly identified in Column A (Type), you will need to SORT and FIND, Copy and Paste (to your new spreadsheet) from Column G (other) as well.
Use your new spreadsheet for the following parts.

jellywatch.org what's in your ocean?
EARTH

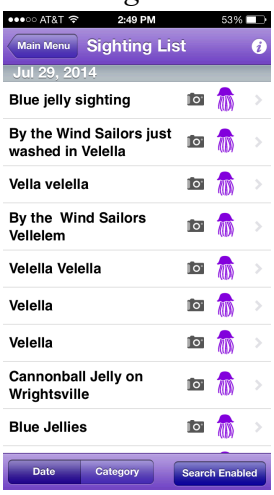
SORT your data for Column E (latitude) and record the range of your organism.
*Range*_____

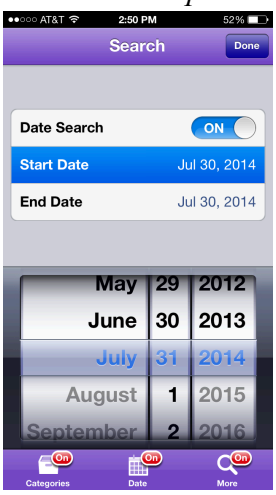
Now verify this range found on JellyWatch with a reputable source (check with your teacher). Explain if the JellyWatch Data is verified?

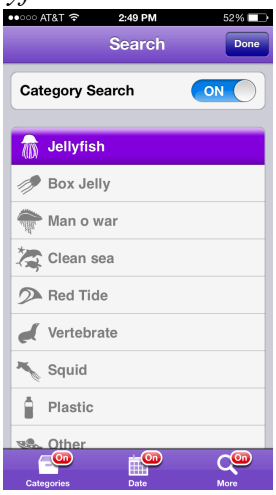
Now use the JellyWatch App and find all of the sightings of all jellyfish since August 1, 2014.

To do this go to the JellyWatch App homepage and Click on LIST. Then click SEARCH ENABLED then change the date range then CATEGORIES and pick Jellyfish.









Using this data, which species/organism is most common in our area or (for those not on an ocean) a favorite coastal vacation spot?

9. Students will construct an infographic on their assigned/chosen jelly based on the Infographic Rubric (there is also an example available).