

Lamont-Doherty Earth Observatory COLUMBIA UNIVERSITY | EARTH INSTITUTE

A Day in the Life of the Hudson	River (Snapshot Day)
Event Date	

PREDICT-OBSERVE-EXPLAIN

PREDICTIONS SHEET

BACKGROUND: The Predictions sheet is designed to provide richer context to the day of fieldwork at the Hudson River by encouraging students to consider what they might find during their time in the field. Providing this background to your students before you take them out to the river significantly enhances their experience, and their learning, from the Day in the Life event. All participants in this event are strongly encouraged to do the predictions/data sheet.

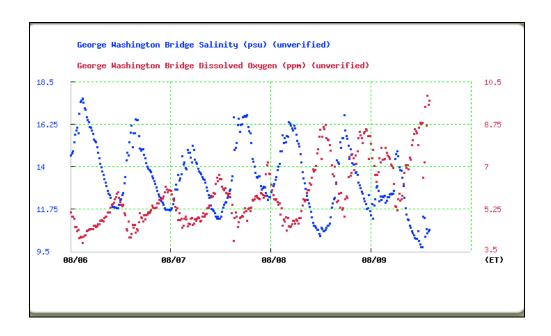
Using the predictions activity will involve your students looking at some data from prior years, and possibly from the HRECOS stations that provide real time data on river conditions. Depending on the age and skill of your student you can either:

- > Involve them in looking up the data and formulating their own predictions
- ➤ Collect the data yourself and provide it to them for review and either individually or in teams formulate predictions
- > Or for very young students you can complete the predictions as a class after reviewing and discussing prior year's findings
- 1. **Predictions Sheet:** The predictions sheet is to be completed prior to A Day in the Life. Working individually or as a class, students complete a prediction sheet after reviewing data from the last year or two of this event for either your sampling site or one close to it. Data is available at the Day in the Life website on the 'Data' page:

http://www.ldeo.columbia.edu/edu/k12/snapshotday/Data.html

Using HRECOS: We encourage students to also review and consider data from the HRECOS real-time environmental monitoring system that has stations located throughout the estuary section of the river. Use the map on the HRECOS website main page to select the site closest to your sample site (http://www.hrecos.org). Select the item(s) you wish to display and look at conditions in the river for the last 3-5 days (i.e. salinity, dissolved oxygen etc.). See the HRECOS graph displayed on the next page.

Depending on the age of your students, and if they have access to the computer, have them locate this data; if you have only a classroom computer you can display the data for the students.



- 2. Stepping Things Up a Bit: You might wish to have your students find another site on the river where they predict that the results will be significantly different call this a 'buddy site'. Encourage them to record WHY they are selecting this site and why they feel it will differ significantly from their own site. After selecting this second site they should complete the same type of background research as for their home site using the data that is posted online, completing a predictions sheet for their buddy site as well.
- 3. **During the Event:** For the day of the life event itself observation and recording is needed. Observing is a key skill in science, especially field science.
- 4. **After the Event:** After the Day in the Life event have the students pull out their 'Predictions' sheet and complete the back side by entering the actual data from the event and explaining. How do their predictions match up with the data? Why do they think their predictions were correct or incorrect? This step involves refection and self explanation.
- 5. **Buddy Site after the event:** Once the Day in the Life results are posted you can compare your buddy site predictions as well. How well did your predictions hold up for the buddy site? Talk about why they think their predictions were correct or incorrect.

Let us know if you have ANY questions.

Chris (chbowser@gw.dec.state.ny.us)
Margie (mkt@ldeo.columbia.edu)
Rebecca (rlhouser@gw.dec.state.ny.us)
Zoraida (ztmalone@gw.dec.state.ny.us)