

Natural Inquirer in the High School Classroom

Background: *Natural Inquirer (NI)* articles are written at a middle school level; however, the content, format, and focus on the process of science makes these journals a perfect resource for a high school classroom. *NI* articles are written directly from peer-reviewed journal articles. At the end of each article, a citation is provided to the original article.

Adapted from Heartsill Scalley, T.; Scatena, F.N.; Moya, S.; Lugo, A.E. 2012. Long-term dynamics of organic matter and elements exported as coarse particulates from two Caribbean montane watersheds. *Journal of Tropical Ecology*. 28: 127–139. <http://www.treeseearch.fs.fed.us/pubs/41610>.

54

Freshwater Edition, <http://www.naturalinquirer.org>

Because *NI* articles are based on peer-reviewed research and a citation is provided to the original article, there is a unique learning opportunity available for high school students. Many high school students go to college without any knowledge or experience with reading a scientific journal article. Without any preparation, the first interaction with a scientific journal article can prove challenging and, for some students, overwhelming. Therefore, it is important to help scaffold students in the process of learning about scientific writing and communication. The *NI* articles provide a perfect opportunity to provide that scaffolding for students.

Objective: Students will compare the *NI* article to the original article, which will help students scaffold their understanding of peer-reviewed scientific articles that they will encounter in college and beyond.

Methods:

Choose an article or ask students to choose a *NI* article that interests them. Once they have chosen the article, students should complete Graph Organizer 1. Once Graphic Organizer 1 is complete, students will get a copy of the original scientific journal article, read the original article, and complete Graphic Organizer 2. Students will then compare Graphic Organizer 1 and 2 and conclude the lesson by discussing the Wrap Up questions. Wrap Up questions can either be discussed in small groups, whole group, pairs, or individually.

*Note: The first couple of times students work through this process, you may want them to work in pairs so that they have someone to discuss different items with. Additionally, you may want to consider modeling this lesson to students so they can see an adult work through the two different articles.

Wrap Up: Compare Graphic Organizer 1 and 2. What similarities do you see? What differences? Did the *NI* article cover as much information as the scientific article? If not, why do you think this is the case? Do you think it would be challenging to write a *NI* article? Why or why not?

Extension: Students can choose a peer-reviewed science article of their choice based on personal interest or topics studied in the classroom. Students can read the article and then write their own *Natural Inquirer* article. Students can submit the original article and rewritten article to naturalinquirer@cfaia.org. We may post student examples on our website, <http://www.naturalinquirer.org>.