

**HABITAT COUPLING BETWEEN FRESHWATER AND TERRESTRIAL ECOSYSTEMS
WITH NAKANO AND MURAKAMI**

This reading and homework are designed to get you thinking about the sources of energy for stream and riparian food webs. Nakano was a young Japanese scientist who tragically died in a boating accident after publishing this paper.

Read: *Nakano, S., and M. Murakami. 2001. Reciprocal subsidies: dynamic interdependence between terrestrial and aquatic food webs. Proceedings of the National Academy of Science 98: 166-170.* The pdf of this reading is available on the class website.

Respond to the following questions for class (Nov. 18):

1. What does the title of the paper mean?
2. Fig. 3 shows connections between consumers and their prey resources. What are the units? In other words, what measurements went into this figure.
3. Do you think the results would have been different if this study was performed on a stream with an evergreen canopy (e.g., redwoods). If so, how?
4. This paper mentions that these subsidies could be disrupted by human impacts such as destruction of stream banks. What are some other ways that human impacts could alter these subsidies?
5. This study was observational. Describe one experiment that you would like to do that would provide insight into the importance of habitat coupling.
6. Write a question you have about the work presented in the paper.

WHEN AND HOW TO SUBMIT YOUR ANSWERS

When: Tuesday, Feb. 19, at the beginning of class.

Where: At the classroom.

How: Bring a hard copy of your answers. Please don't forget to write your name at the top of the first page.

This assignment is 3.75% of your final grade. Let us know if you have any questions.