

**Research Project Suggestion for the  
Tibor T. Polgar Fellowship Program:  
Investigate the potential of documenting Hudson River population dynamics  
of Chinese mitten crabs (*Eriocheir sinensis*) through larval studies.**

The Hudson River National Estuarine Research Reserve is suggesting a research project on the invasive Chinese mitten crab and seeking a faculty advisor that can sponsor an undergraduate or graduate student to apply for the Polgar Fellowship Program. Deadline for applications is 5:00 pm, Monday, February 23, 2009.

The Tibor T. Polgar Fellowship program is a research program conducted jointly by the Hudson River Foundation and the New York State Department of Environmental Conservation. It provides \$3,800 for summer research on the Hudson River for undergraduate or graduate students. Advisors receive \$500. Application information is available at: <http://www.hudsonriver.org/polgar.htm>

Chinese mitten crabs (*Eriocheir sinensis*) were first found in the Hudson Estuary in summer of 2007. By 2008, evidence of juvenile crabs have been found as far upstream as Catskill Creek (112 miles from the harbor), and in at least ten tributaries. However, the documentation of adults and juveniles is not sufficient evidence to support mitten crab reproduction in the estuary. More information is needed on the zoea and megalopa stages of Hudson crabs. The proposed research would include a literature search of all Hudson River crabs and their larvae in order to distinguish between *Eriocheir sinensis* and others. Larva identification studies would then be conducted, possibly using existing samples from fish larval studies or new samples from plankton tows. This work could potentially be extended to senior thesis or masters' thesis work, with the development of a taxonomic key.

The Reserve is located at Norrie Point Environmental Center in Staatsburg NY, Dutchess County. Students must work independently and must arrange own accommodation, if needed. Lab space and microscope equipment can be provided in Dutchess County NY. For information on the Chinese Mitten Crab research, contact Sarah Fernald at [shfernal@gw.dec.state.ny.us](mailto:shfernal@gw.dec.state.ny.us)

For more information about the Mitten Crab please see the following links:

<http://www.dec.ny.gov/animals/35888.html>

<http://zimmer.csufresno.edu/~briant/Publications.htm>

[http://invasions.si.edu/nemesis/CH-TAX.jsp?Species\\_name=Eriocheir+sinensis](http://invasions.si.edu/nemesis/CH-TAX.jsp?Species_name=Eriocheir+sinensis)

[http://www.serc.si.edu/inside/07\\_mittencrab\\_summer.jsp](http://www.serc.si.edu/inside/07_mittencrab_summer.jsp)