



**Are you looking for a unique and engaging way to teach science next fall?**

## **Aquaponics: Dynamic Science for the K-8 Classroom, July 6-8, 2010**

**Aquaponics** is the cultivation of plants and aquatic animals in a re-circulating environment. A combination of aquaculture and hydroponics, aquaponics pairs fish and plants in one integrated system. Using Herring Gut's unique small-scale commercial aquaponics facility as your laboratory, you will:

- Learn about aquaponics as a commercial enterprise and its role in feeding our growing population.
- Explore the many ways aquaponics can be easily integrated into your science classes to meet content standards.
- Participate in hands-on lessons and experiments that use aquaponics to demonstrate water and nitrogen cycles, plant biology, fish anatomy, math, chemistry and ecology to your students.
- Set up and take home your own classroom aquaponics kit – a complete re-circulating aquaculture system with tank, filters, pumps and planting media that will change the way you teach science.

Your instructor will be **Sara Rademaker**, Aquaculture Specialist and Teacher at Herring Gut Learning Center. Sara instructs middle and high school students in oyster aquaculture and aquaponics classes, for which she has developed an extensive curriculum of hands-on lessons that incorporate science, math, business, and language arts into hatchery and greenhouse management. Her background includes a bachelor's degree in Fisheries and Aquaculture from Auburn University with three years working in Auburn's fish disease lab, and an internship in Uganda teaching new skills and methods to local fish farmers.

**Cost:** \$600 includes optional on-site housing in an historic farmhouse on the Herring Gut waterfront campus in Port Clyde, breakfast and a bag lunch each day, curriculum materials and a complete classroom aquaponics kit. 2.5 CEU's through the University of Southern Maine or proof of professional development hours are available.

**Space** is limited to 6 residential and 4 day participants. Classes and activities will be balanced with time to enjoy the village and surrounding area. Restaurants, art galleries, a lighthouse, kayak tours and the boat to Monhegan Island are all within walking distance of the campus.

**FMI and to register:** [www.herringgut.org/teachertraining.html](http://www.herringgut.org/teachertraining.html) , info@herringgut.org or call (207) 372-8677