

# E-Station to Station

*...from our home to yours*

[www.kbs.msu.edu](http://www.kbs.msu.edu)

May 2011

## May Events

- Thu 5** [Garden Education Day](#)  
**Time:** 8:30 a.m.-3 p.m.  
**Fee:** \$40, Includes continental breakfast and lunch  
**Contact:** Kellogg Manor House
- Sun 8** [Mother's Day Brunch](#)  
**Time:** 11 a.m. and 1 p.m.  
**Fee:** \$25/adult, \$20/senior citizen and \$15/child  
**Contact:** Conference Center
- Wed 11** [Birds and Beans](#)  
**Time:** 8:30-10 a.m.  
**Fee:** Members, free; Non-members, general admission  
**Contact:** Bird Sanctuary
- Wed 11** [Kellogg Farm Dairy Center Tour](#)  
**Time:** 3-8 p.m.  
**Fee:** Free  
**Contact:** Farm and Dairy Center
- Tue 17** [Garden Tea](#)  
**Time:** 3-5 p.m.  
**Fee:** \$25/adult; \$15/child  
**Contact:** Conference Center

## Garden Education Day

### Sponsored by the W.K. Kellogg Manor House Rose & Thistle Garden Club

Spring will soon be here—time to start preparing for summer gardens. If you are interested in learning about gardening, plan to attend the Garden Education Day on **Thursday, May 5** from 8:30 a.m. to 3 p.m.

Participants may choose four sessions from a variety of workshop topics, including all season color, container gardens, curb appeal, daylilies, garden design, Michigan birds, Michigan shrubs, rain gardens, tree and plant pruning and water fountains.

All sessions will be held at the KBS Academic Center and led by local experts from Leila Arboretum, KBS, River Street Flowerland, Wenke Greenhouses and Wildbirds Unlimited.

Cost is \$40 (includes light continental breakfast and lunch). Pre-registration is required by Thursday, April 28.

For additional information, contact 269-671-2160 or e-mail [manorhouse@kbs.msu.edu](mailto:manorhouse@kbs.msu.edu).



## Relay for Life Plant Sale—Thurs., May 5 & Fri., May 6 from 9 a.m.- 4 p.m.

Support the Richland Area Relay for Life by purchasing annuals, perennials and vegetable plants at the Kellogg Manor House. (Sponsored by the KBS Relay for Life Team)

## Garden Tea at the Kellogg Manor House

Enjoy delicious garden inspired foods and learns tips and tricks to make gardening a fun lifelong activity on Tuesday, May 17 at 3 p.m. Sherri Snyder of Gull Lake Landscape Co. will discuss how you can grow your own fruits and vegetables without dedicating large spaces of your yard to traditional gardening.

Cost is \$25 for adults and \$15 for children 2 through 12 years. Pre-paid reservations are requested. To reserve a table, call 269-671-2400 or e-mail [manorhouse@kbs.msu.edu](mailto:manorhouse@kbs.msu.edu).

## Summer Day Camp Adventures at Kellogg Bird Sanctuary

This summer, venture outside to learn about ecology, science and the environment. Beginning July 11, the Bird Sanctuary will offer three one-week summer day camp sessions. The three sessions are: **Critter Quest**, July 11-15; **Aquatic Adventures**, July 18-22; and **Winged Wonders**, July 25-29. Sessions are Monday-Friday from 8:30 to 3 p.m., with an early drop-off option at 8 a.m.

Camp is open for children 6 to 12 years (6-year-olds must have completed kindergarten).

Register before May 14 and receive a \$15 early bird discount—\$105 per child/per session for Sanctuary members and \$115 for non-members. After May 14, camp fees are \$120 for members and \$130 for non-members.

Download registration forms at [www.kbs.msu.edu/birdsanctuary](http://www.kbs.msu.edu/birdsanctuary). For more information, call 269-671-2510 or e-mail [birdsanctuary@kbs.msu.edu](mailto:birdsanctuary@kbs.msu.edu).



## When Good Rhizobia Go Bad: The Evolutionary Consequence of Nitrogen Fertilization

Nitrogen enters natural ecosystems through a symbiotic relationship where legumes exchange sugar for nitrogen with soil-living bacteria called rhizobia. In many human-altered ecosystems, fertilization artificially augments nitrogen levels. Theoretically, the overabundance of nitrogen should disrupt this symbiosis because nitrogen provided by the rhizobia is no longer required by the legume, and both species should evolve uncooperative forms.



To test this prediction, KBS Postdoc Dylan Weese inoculated clover with rhizobia strains sampled from experimental plots that either received 20 years of nitrogen fertilization or plots that were not fertilized.

As predicted, plants grown with rhizobia from fertilized plots were smaller than genetically similar plants grown with rhizobia from unfertilized plots. These results reveal how rapid evolutionary change can influence crucially important ecosystem processes.

To learn more, please visit: [www.msu.edu/~jenlau/people.html](http://www.msu.edu/~jenlau/people.html)

## For More Information

**Bird Sanctuary** 269-671-2510  
**Community Relations** 269-671-2263  
**Conference Center** 269-671-2400  
**Farm and Dairy Center** 269-671-2360  
**Kellogg Manor House** 269-671-2160  
**Land & Water Unit** 269-671-2412

[birdsanctuary@kbs.msu.edu](mailto:birdsanctuary@kbs.msu.edu)  
[communityrelations@kbs.msu.edu](mailto:communityrelations@kbs.msu.edu)  
[conference@kbs.msu.edu](mailto:conference@kbs.msu.edu)  
[pasture.dairy@kbs.msu.edu](mailto:pasture.dairy@kbs.msu.edu)  
[manorhouse@kbs.msu.edu](mailto:manorhouse@kbs.msu.edu)  
[landandwater@kbs.msu.edu](mailto:landandwater@kbs.msu.edu)