

Team Flight: Nesting

- Summary:** Students will observe the nesting habits of the tree swallow (or other species) via a nestbox camera at the Bayer campus that is linked to the Wings of Wonder webpage, and generate questions and investigations.
- Objective:** Students will observe the nesting habits of the tree swallow, learn about nesting cycles, and calculate average nesting period, success rate, and use by various species through the Bayer's nest box database..
- Grades:** Middle School
- Subject:** Biology, Math
- Skills:** math, observation, technology
- Materials:** access to internet, Nesting Logs Field Journal, nest boxes on/near school property (optional)
- Time:** April- beginning of June

Activity

Spring has arrived—the longer days and warmer temperatures also bring a wave of migrants from the south. Food will soon be plentiful, and competition less intense than in their wintering grounds, making the temperate zone an attractive place to raise their young. At corporate site around the country such as the Bayer Pittsburgh campus, the employee wildlife teams monitor nest boxes that are used primarily by the Eastern bluebird and tree swallow. The tree swallow is a long-distance migrant, with some individuals spending the winter in the southern states, and others traveling all the way to Puerto Rico and even Venezuela. In this activity, students will observe on a weekly basis the nesting habits of the species that inhabits a special box outfitted with a web camera.

1. Log onto the Wings of Wonder website weekly (<http://trfn.clpgh.org/wings>) to observe the nesting activity, if any, beginning in April. The box was historically used by a pair of tree swallows, so this is likely the species to claim it once again although not guaranteed. The teacher or an assigned student could be responsible for this to determine the beginning of nesting activity. Eastern bluebirds often begin nesting in March, but the tree swallows arrive from their wintering grounds much later, usually in late April with nesting beginning in May.



2. Once birds begin to enter the box, the entire class should begin to monitor the box weekly. The Team Flight Nesting Log (download from website) contains nest box monitoring forms to record the activity, including notes on nesting materials, number and color of eggs, adult description, and life stage. These should be completed after each “virtual trip” to the box, even if no activity was observed.
3. On the nest box webpage, a link leads to the Bayer nest box database, with information on all boxes on site. Field guide pages follow the monitoring logs which lead students in accessing this information to determine the average length from hatching to fledgling for various species, as well as percentage success and percentage used by different species. Other data can be extrapolated from this database as well, based on students inquiry, and should be encouraged. Results can then shared with the staff at the wildlife area and others in the community.
4. During the spring field visit, students may also have the opportunity to visit active nest boxes for comparisons. Appropriate logs are located in the field guide.

Bayer’s Pittsburgh facility is just one example of a corporate nest box monitoring program. For information on a site in your area, check out <http://www.wildlifehc.org/>, the website for the Wildlife Habitat Council.