

New Observation Beehive

This summer an exciting new addition was installed in the science wing of Hingham High School: a classroom observation hive of honey bees. Along with the greenhouse, recycling/composting system, and many Green Team initiatives that earned us the national Green Ribbon Schools award, the observation hive highlights Hingham's commitment to preparing students to understand and address global sustainability issues.

The hive is located in Ms. Beaupre's Integrated Science classroom, Room #129. Before moving to the classroom it was in a beekeeper's home and will return there during the summer. Its use in education was inspired by the hive inside Boston's Museum of Science and its design was modified for a classroom environment through a collaboration with the nonprofit organization Classroom Hives, which has worked with several other Boston area schools. Installation and after-hours maintenance is coordinated by our main beekeepers: HHS teacher Jacqueline Beaupre (3 years of beekeeping experience), Cambridge observation hive expert Jeff Murray (41 years of experience), and Hingham resident apiarist David Hayden (54 years of experience). The new student Beekeeping Club, Green Team, Biology Club, HHS Science Department, and Plymouth County Beekeepers Association funded the hive and will help answer student questions, host learning activities, and observe hive health weekly to inform beekeepers.

The hive design has proven to be structurally safe; design modifications developed by Classroom Hives resulted in 0 structural failures over a combined 19 years of its hives in classrooms. ***The hive is securely anchored to the building and bees cannot enter the classroom from the hive***; bees only have access to the outdoors via a tube through the wall opening into a courtyard (necessary for food foraging and bathroom trips). When not being used, the observation windows are covered by insulating foam. Due to the high number of food allergies and the presence of native insects, the school nurse's office conducts annual EpiPen/Auvi-Q training for all staff and maintains a shared updated list of students and staff with severe allergies. There are also specific protocols to address "concerning" (but actually harmless) bee behaviors such as bearding, in which the bees hang in a clump at the hive entrance to cool off, and swarming, in which half of a successful colony leaves to start a new hive. Early signs of the more significant events, such as summer swarming, will be closely monitored so routine beekeeping interventions can be taken following our specific protocols and/or the hive moved to its summer home earlier.

Given the massive population decline of these major crop pollinators in recent decades, due in part to Colony Collapse Disorder, a greater scientific understanding of the role of pollinators and their health is urgently needed. The hive is a resource for the whole community to experientially, but safely, learn about pollinators' important contributions to our local ecosystem, agriculture, and economy. We invite you to learn more about the observation hive design at www.classroomhives.org and contact Ms. Beaupre (jbeaupre@hinghamschools.org) with any questions, comments, or appointment requests to visit the hive.

Honey bee and example observation hives in Boston Public Schools:

