

The Wildlab Uses eBird API

With the WildLab, an innovative science curriculum, teams of students use an iPhone, binoculars, and their brains to see their local environment in a new way. Launched October 2009 in New York City schools, the five-day science curriculum engages students in real field science, by identifying and logging birds seen in city parks and streets. The technology makes collecting rigorous bird data easy and fun, focusing students on the ecological questions. The pilot program was funded by the MacArthur Foundation Digital Media and Learning Competition.

Over 500 students have collected thousands of bird sightings in the field with their phones, which are used more as mobile computers and have restrictions placed on their use. Each sighting contains date, time, weather, latitude, and longitude. Back in the classroom, students reflect on and analyze the data they collect, which are available in their classroom's WildLab account. On their account's map, students can see where they saw birds, relate habitat and weather conditions to sightings, and develop their own lines of inquiry. At the end of the program, classrooms submit their data to the Cornell Lab of Ornithology; researchers use the Lab's historical bird data to answer questions regarding global warming and biodiversity. Sightings are also "tweeted" to the WildLab's Twitter account, creating a real-time, searchable database.

The inquiry-based curriculum encourages questions. After sighting numerous pigeons on the way to a park, one student asked, "Where do pigeons go to die?"--an apt question, given the preponderance of the species. Last week, one student guessed there were only three species of birds in Brooklyn; within that class, she sighted more than that, and found out there are actually hundreds of species that fly through New York City every year.

With the phone application, students identify the habitat and bird silhouette, and then are given a list of birds, ordered by likelihood for that location and time of year. They can listen to the birds' songs and look at range maps and photos of the species to confirm their IDs. Students have already been able to correctly identify more subtle species, like a White-throated sparrow. Analytics embedded in the app help assess the performance and features of the app, as well as how the students are using the phones in data collection. Students also are able to share sightings via Facebook with their friends. The WildLab Edu app for iPhone and iPod Touch was launched in the iTunes app store on May 9, 2010 and is available for free; associated curricula are available on <http://thewildlab.org>. An Android version is also in the works, and an SMS citizen science protocol is available for those without smartphones.