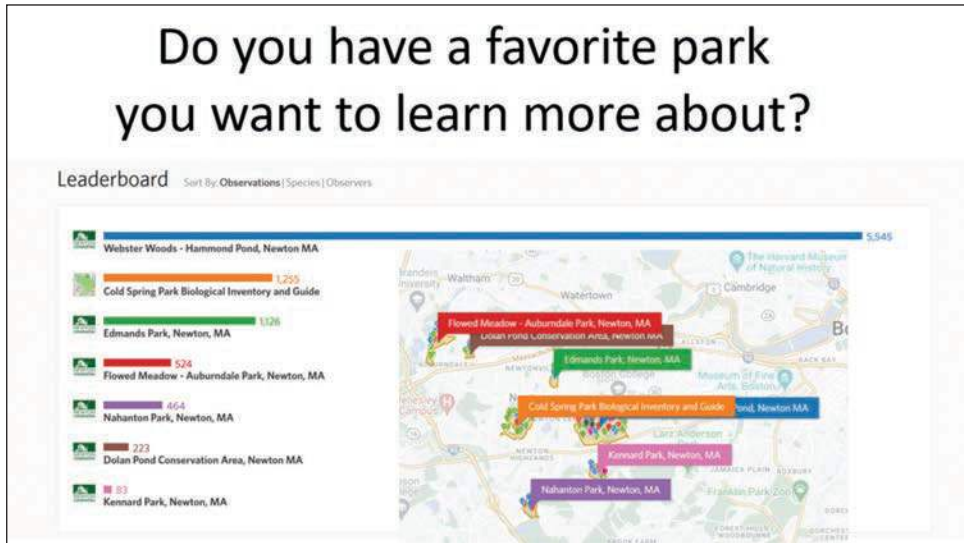


Newton Biological Survey – Surveying Plants and Animals in our Parks and Conservation Lands

(see the special events section of the newsletter)

Newton's parks and conservation lands provide important habitat for a great diversity of plants and animals. While trees such as oak (red, black, and white) are common and relatively well known, other species such as [fingernail clams](#) and the [Rock Harlequin](#), a beautiful wildflower, may be less familiar. How many bird species breed in our conservation lands, or how many ferns can be found there, and how might this change over time in response to climate change or other factors? Some of the plants or animals occupying our conservation lands may be particularly vulnerable to invasive species or require other management to address threats.

Fortunately, 19th century naturalists collected baseline information on the flora and fauna of the woods of Concord and the Middlesex Fells, allowing modern biologists, including Conservators' Advisor Richard Primack to detect changes over time (in studies in [Concord](#) and the [Fells](#)). These changes may include changes in species composition — for example loss of some native species and the introduction of new invasive species, or other changes such as earlier flowering or emergence times in response to climate change. While collecting baseline data to understand the biological diversity and health of Newton open spaces is a key goal of conducting biological inventories, it is not the only goal. Engaging community members and students in surveys and “BioBlitz” events provides a wonderful opportunity to learn plant and animal identification skills and helps to build the next generation of amateur naturalists and conservation professionals. These skills can enhance our understanding of ecology and enrich our outdoor recreational experiences. It is also fun to join with other community members in the field as we work together to identify species and document local biodiversity.



Graphic courtesy of Jon Regosin

With these goals in mind, in 2005, the Conservators began inventorying plants and animals at some Newton parks and conservation lands. That effort pre-dated the availability of modern tools such as the [app iNaturalist](#) and the [Native Plant Trust's Go-Botany](#) online plant

identification resource. iNaturalist can not only aid species identifications but can also serve as a repository for us to store and analyze data and track changes over time. Finally,



Graphic courtesy of Jon Regosin

iNaturalist provides a public-facing, user-friendly interface to immediately make useful information available to open space users. For example, a community member planning a June trip to Nahant Park can easily filter iNaturalist data to see which species have been observed in the park during June, or perhaps during the May-July window.

The Conservators are pleased to announce a series of BioBlitz events that will be taking place around the city this summer and fall to accompany the launch of a [related iNaturalist project](#). Events will include a series of site-specific surveys for plants and animals (no experience is necessary!) listed in the events section of the Conservators' website. In addition we will hold a webinar to explore

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iNaturalist, including the new Newton-based project, on Wednesday, September 13, at 7PM.

If you have any questions about the BioBlitz initiative or are interested in volunteering, please contact Jon Regosin, at

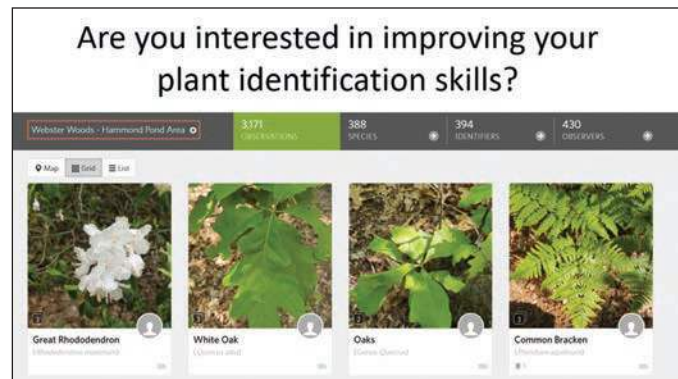
jonathan.regosin@gmail.com. Links to online references and examples mentioned in this article will be provided in the website version of this newsletter. ♦

✉ Jon Regosin

🌀 Newton BioBlitz — Special Events 🌀

Are you interested in learning more about how to identify native plants? Or maybe you are more interested in birds or butterflies? Did you ever wonder how many species of plants and animals inhabit Newton's parks and conservation areas? Maybe you have developed skills identifying ferns or pollinators and you want to share that knowledge with others? Or perhaps you are just curious to learn more about nature in Newton?

If this piques your interest, **join us for an upcoming Newton BioBlitz event!** We will spend a few hours surveying plants and animals, learning, and posting our observations to iNaturalist. You do not need to be an experienced naturalist or expert to participate. Families are welcome. To learn more about the Conservators' Newton BioBlitz, see the newsletter article on page 7.



Graphic courtesy of Jon Regosin

BioBlitz Events:

- Cold Spring Park BioBlitz — Saturday, June 17, 1-4 PM
- Webster Woods (west) BioBlitz — Sunday, July 16, 9-12 AM
- Dipnetting for aquatic invertebrates at Dolan Pond — Wednesday, July 26, 4-6 PM
- Nahanton Park BioBlitz — Sunday, September 10, 9-12 AM
- Late season pollinators and more — Hammond Woods, Saturday, September 23, 10 AM- 1 PM

To preregister for any of these events (encouraged but not required), go to: <https://forms.gle/LPweYr6xqE8DSLhC6>

You can also use this link to volunteer your expertise at these or future events.

iNaturalist	
	
Type of site	Citizen science
Available in	56 ⁽¹⁾ languages
Area served	Worldwide
Owner	California Academy of Sciences and the National Geographic Society
Founder(s)	Ken-ichi Ueda Nate Agrin Jessica Kline
URL	inaturalist.org
Commercial	No
Registration	Optional
Users	▲ 3.2 million registered users (January 2023) ⁽²⁾
Launched	2008; 15 years ago
Current status	Active