

NEW VASCULAR PLANT COUNTY RECORDS FROM BRONX COUNTY, NEW YORK

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ABSTRACT

The submerged aquatic flowering plant species *Potamogeton pusillus* (small pondweed) and *Potamogeton foliosus* (leafy pondweed) are reported from Bronx County, New York, for the first time.

A team from The New York Botanical Garden, the Bronx River Alliance, and the New York City Department of Parks and Recreation surveyed the upper reaches of the Bronx River in August 2014, looking for native and invasive species of submerged aquatic plants. The survey was jointly organized by NYC Parks, NY-NJ Harbor & Estuary Program, the Bronx River Alliance, and representatives from other federal, state, city, university, and community organizations.

Survey methods involved visual inspection from canoe and kayak, collection of herbarium and DNA samples, and detailed data collection, including GPS coordinates, habitat, and plant descriptions. All species were vouchered with herbarium specimens and DNA samples that will be archived in the Garden's William and Lynda Steere Herbarium and publicly available on the internet through the C.V. Starr Virtual Herbarium (2014).

Between Shoelace Park at 219th St and Southern Boulevard, just north of the Garden, the team discovered six species of submerged aquatic flowering plants, four native and two exotic. Two of the native species found, horned waterweed and common pondweed (*Zannichellia palustris* and *Elodea canadensis*, respectively), were documented from the river in 2010 within The New York Botanical Garden and were suspected in this section of the river as well. The other two native species found, small pondweed (*Potamogeton pusillus*) and leafy pondweed (*Potamogeton foliosus*), have never been documented from the river before and are new records for Bronx County. The team also found one small population each of the alien species pond water-starwort (*Callitriche stagnalis*, *Atha et al.* 14843, NY) and curly pondweed (*Potamogeton crispus*, *Atha et al.* 14846, NY).

The discovery of a diverse assemblage of native species thriving in the waters of the Bronx River are a testament to the hard work and dedication of the many groups and individuals who have worked tirelessly over the years to clean up the Bronx River and make it a vibrant, diverse, and healthy cultural and environmental treasure.

Potamogeton pusillus L.

New York. Bronx Co.: City of New York, Bronx River, between 216th St and 219th St, 40.883251 N, 73.867821 W (± 25 m), 16 m, fine silt, banks dominated by *Acer saccharinum*, 18 Aug 2014, *Atha, Feliciano, and Felber* 14838 (NY).

New York. Bronx Co.: City of New York, Bronx River, at about 213th St, 40.880304 N, 73.868945 W (± 25 m), 16 m, fine silt, 18 Aug 2014, *Atha, Feliciano, and Felber 14847* (NY).

This species is native throughout North America (USDA 2014) and occurs in both acid and alkaline waters (Gleason & Cronquist 1991).

***Potamogeton foliosus* Raf.**

New York. Bronx Co.: City of New York, Bronx River, between 216th St and 219th St, 40.883251 N, 73.867821 W (± 25 m), 16 m, fine silt, banks dominated by *Acer saccharinum*, 18 Aug 2014, *Atha, Feliciano, and Felber 14840* (NY).

New York. Bronx Co.: City of New York, Bronx River, at about 213th St, 40.880304 N, 73.868945 W (± 25 m), 16 m, fine silt, 18 Aug 2014, *Atha, Feliciano, and Felber 14845* (NY).

This species is also native throughout North America except Greenland, Nanavut, Newfoundland, and Labrador (USDA 2014). It occurs in streams and ponds (Gleason & Cronquist 1991).

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LITERATURE CITED

- C.V. Starr Virtual Herbarium. 2014. New York Botanical Garden, Bronx. <<http://sciweb.nybg.org/science2/VirtualHerbarium.asp.html>>
- Gleason, H. A. and A. Cronquist. 1991. Manual of Vascular Plants of Northeastern United States and Adjacent Canada (ed. 2). The New York Botanical Garden, Bronx.
- USDA, NRCS. 2014. The PLANTS Database National Plant Data Team, Greensboro, North Carolina. <<http://plants.usda.gov>> Accessed 21 Aug 2014.