Bats at Mount Auburn Cemetery Boston Biodiversity Consortium Spring meeting April 4, 2018

Presented by:

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 - Mount Auburn Cemetery
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Urban Wildlife Refuges

80% of the world's population currently living in urban areas

Models for successful urban wildlife refuges are desperately needed

Cemeteries are an overlooked potential wildlife refuge common to most cities



Mount Auburn Cemetery

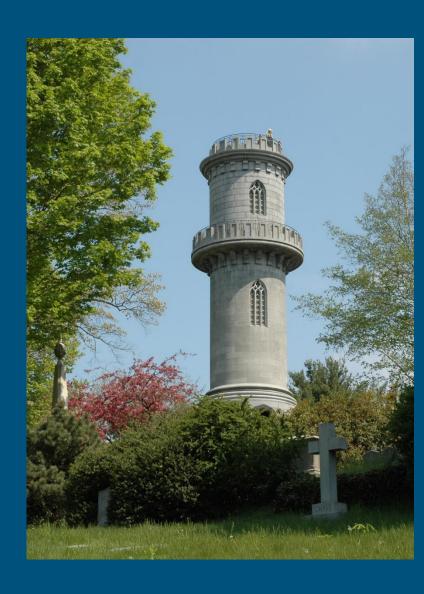
175-acre site

"Silent City": 98,000 people buried or commemorated

Founders envisioned it as a garden cemetery

Unique and iconic urban ecosystem

Commitment to sustainability



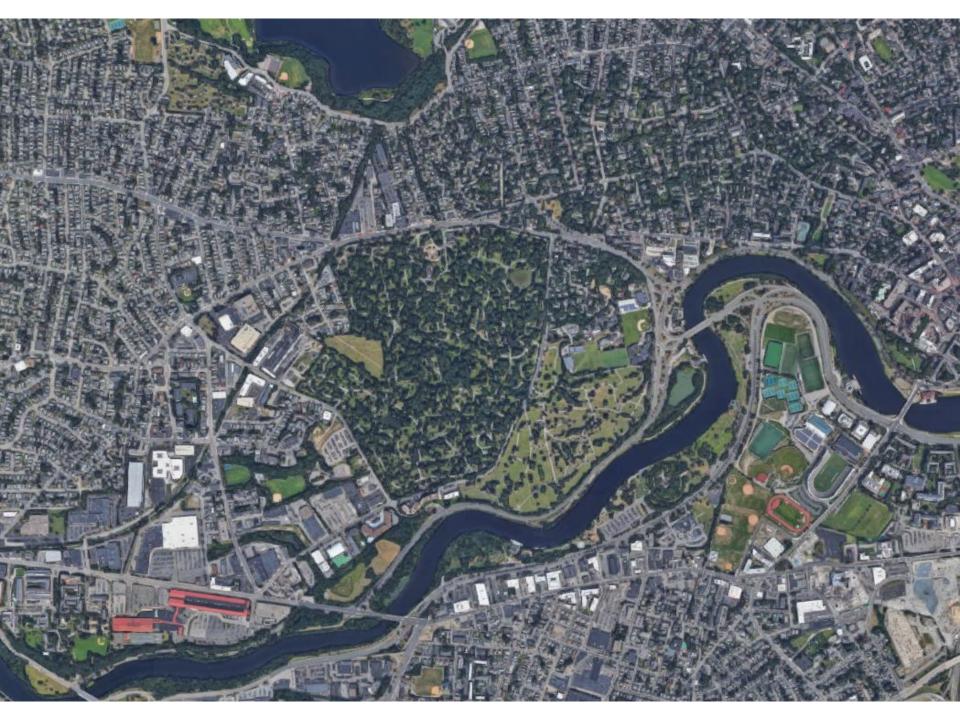
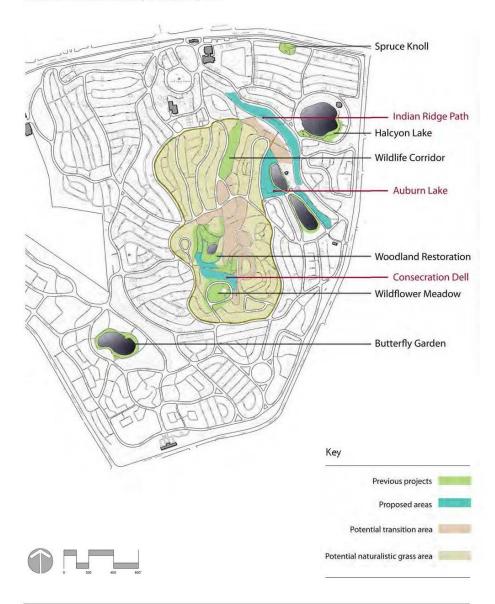


Figure 2.

Previous and potential
habitat enhancement areas, as of June 1, 2014



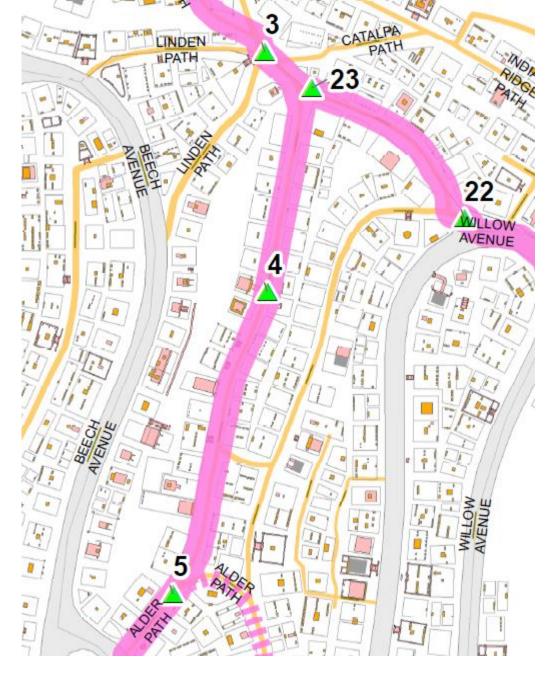
Biodiversity survey: Bats

- Acoustic detection

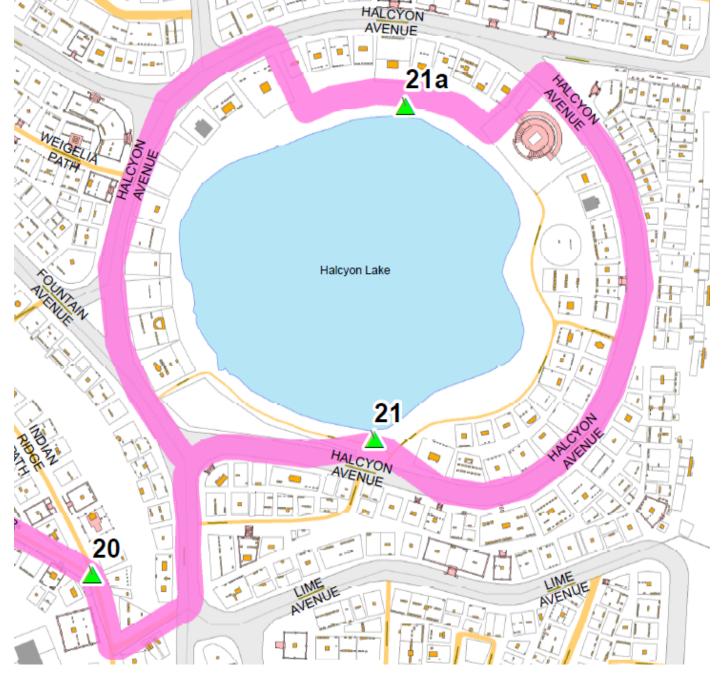
- Mist netting
- Identifying flight corridors



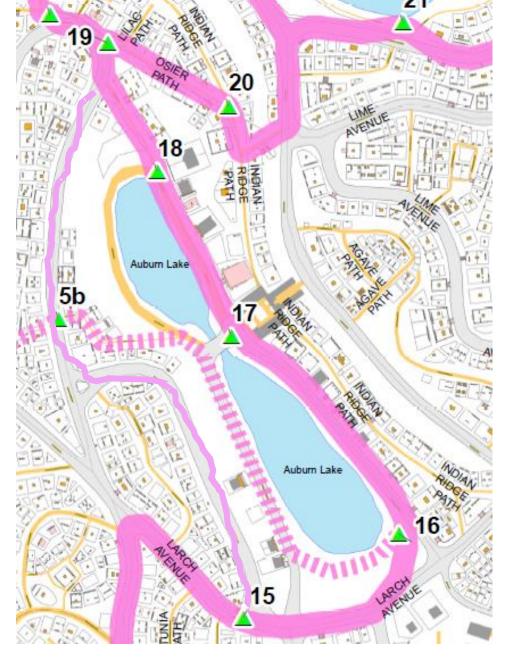




Narcissus Path Landscape Area and Included Sites



Halcyon Lake Landscape Area and Included Sites



Auburn Lake Landscape Area and Included Sites

Mist Net



Evidence of bats at Mt Auburn Cemetery

- Big brown bat: acoustic detection, visual confirmation, live capture
- Eastern red bat: acoustic detection, visual confirmation, almost live capture (once)
- Hoary bat: acoustic detection
- Little brown myotis: acoustic detection



eastern red bat (Lasiurus borealis)





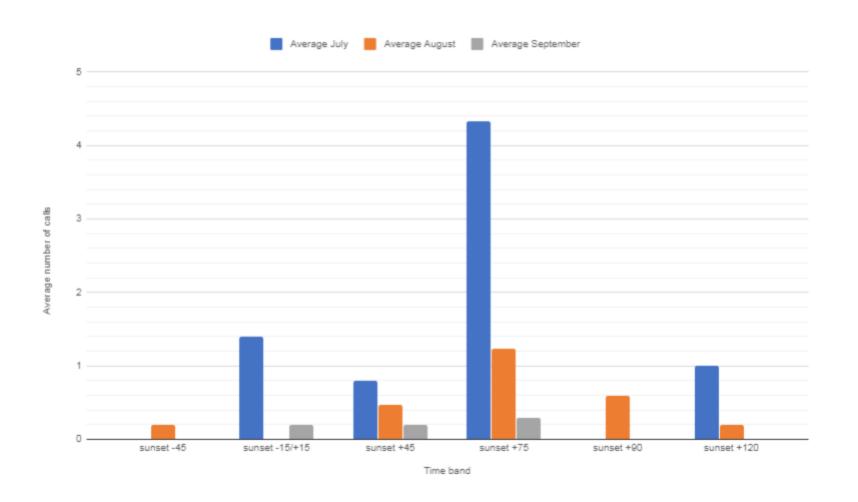
Hoary Bat (Lasiurus cinereus)



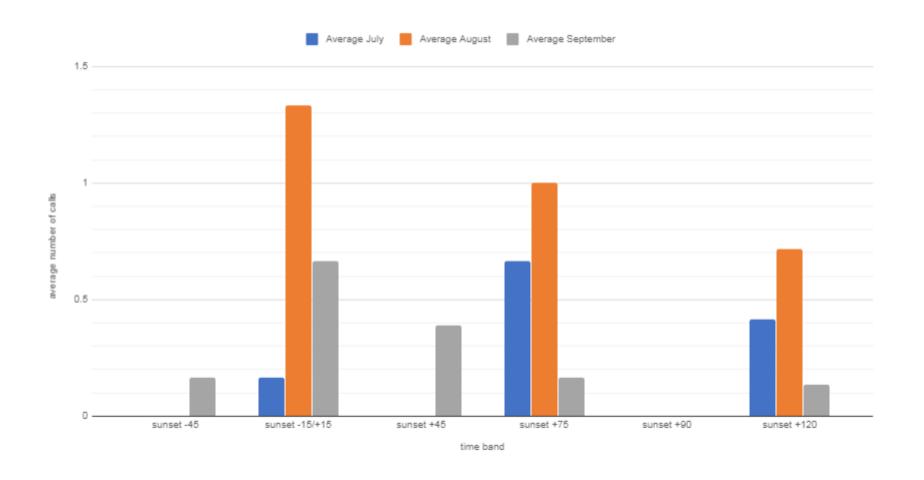
Myotis lucifugus (the little brown myotis)



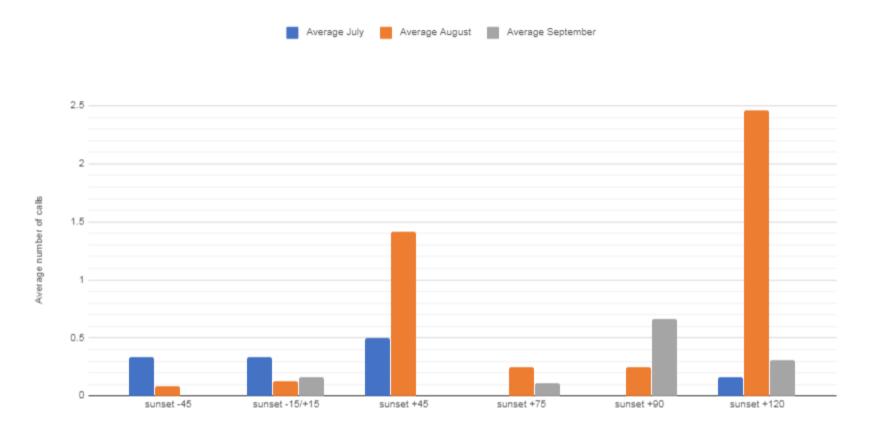
Average Calls per Month by Time Band for All Sites, Narcissus Path



Average Calls per Month by Time Band for All Sites, Halcyon Lake

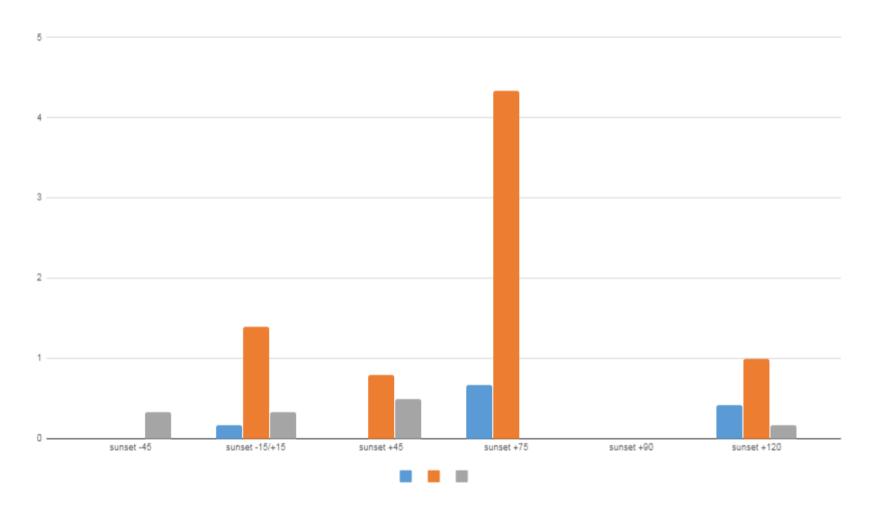


Average Calls per Month by Time Band for All Sites, Auburn Lake



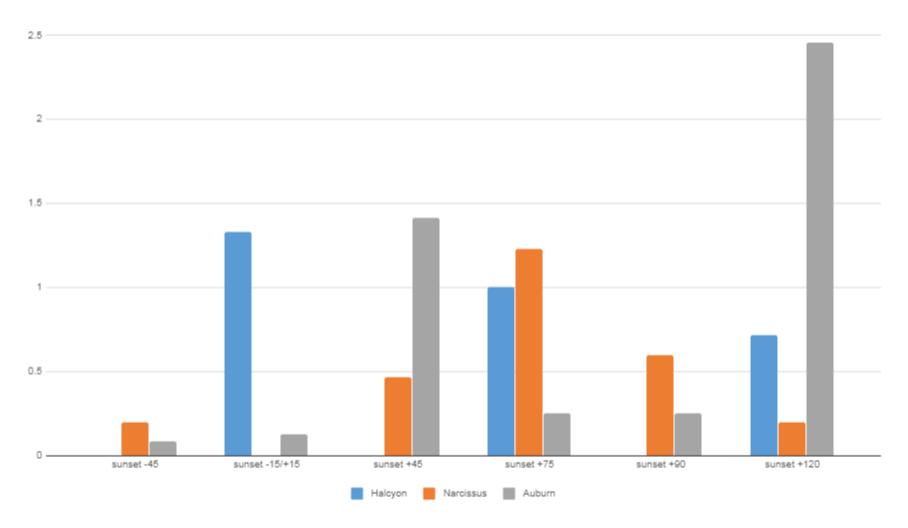
Time band

Average Calls by Time Band for Three Landscape Areas, July 2017



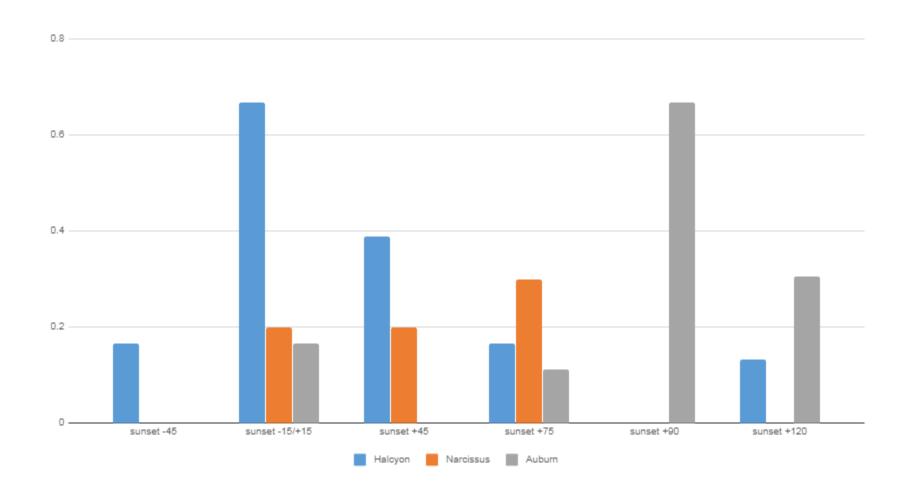
Blue = Halcyon Lake Orange = Narcissus Path Grey = Auburn Lake

Average Calls by Time Band for Three Landscape Areas, August 2017



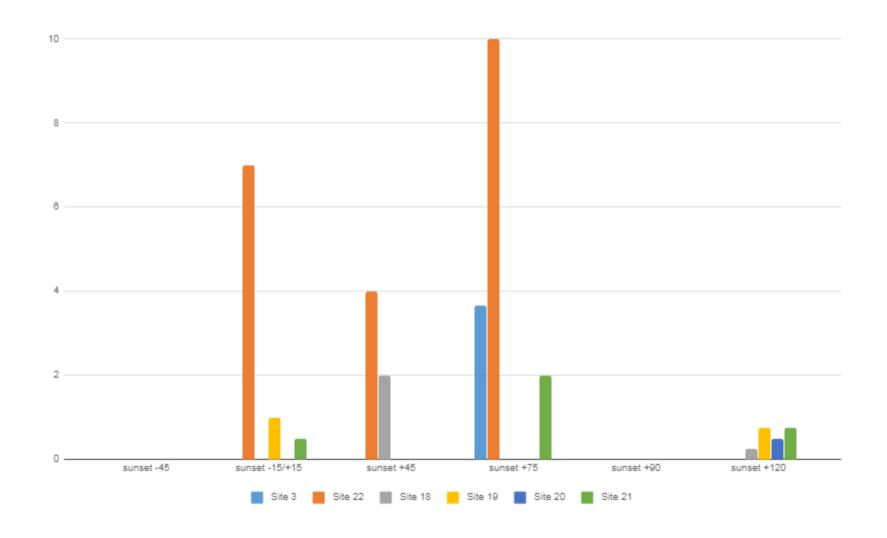
Blue = Halcyon Lake Orange = Narcissus Path Grey = Auburn Lake

Average Calls by Time Band for Three Landscape Areas, September 2017

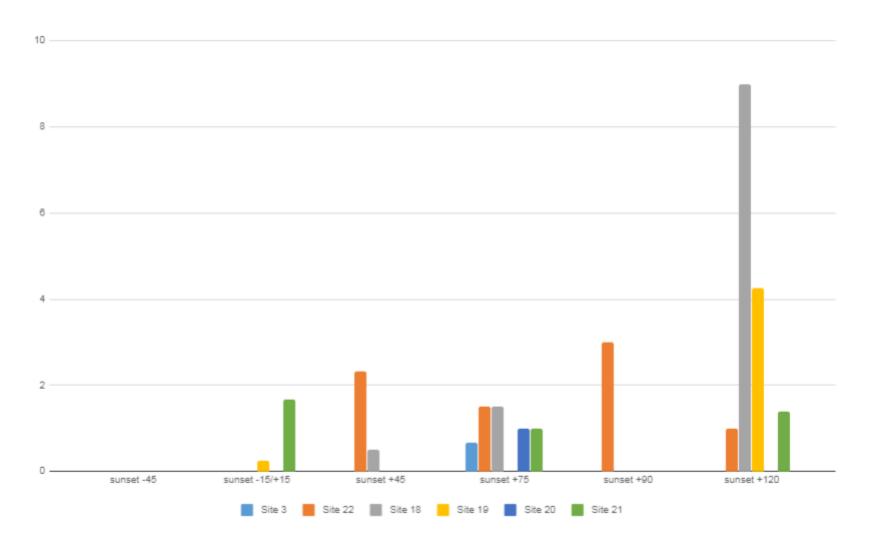


Blue = Halcyon Lake Orange = Narcissus Path Grey = Auburn Lake

Average Calls for Selected Specific Sites by Time Band, July



Average Calls for Selected Specific Sites by Time Band, August



Average Calls for Selected Specific Sites by Time Band, September

