

Plant and bird phenology and plant occurrence from 1851 to 2020 (non-continuous) in Thoreau's Concord, Massachusetts

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Funding information

Arnold Arboretum; Boston University; Botanical Society of America; Manomet, Inc.; National Science Foundation, Grant/Award Numbers: 0413458, 0842749, 1208989, 1936877, 1950447, 247312, DBI-2027654; Nuttall Ornithological Club

Handling Editor: William K. Michener

Abstract

Concord, Massachusetts, USA has served as an active location for phenological observations since philosopher and naturalist Henry David Thoreau began recording plant and animal occurrence and phenology in 1851. Since that time, numerous naturalists, scientists, and researchers have continued this tradition, creating an invaluable time series of 758 species in a single location. In total, 13,441 phenological records, spanning 118 years, now exist, with observations of many species ongoing. Relative abundance data for an additional 200 plant species is also provided. Thoreau's published journals and records in Special Collections libraries at the Concord Free Public Library, Harvard University, Peabody Essex Museum, and Morgan Library and Museum provide insight into his methods of routinely walking around Walden Pond, through natural areas, and within the town of Concord, seeking the first leaf or flower on plants, seasonal observations of migratory birds, and fruit maturation times. Several amateur naturalists, and most recently the present research group, have followed this method of regularly searching Concord for the earliest signs of seasonal events, visiting many of the same locations including Walden Pond, the site made famous by Thoreau. While Thoreau's observations were initially made out of a curious desire to document the natural world, these data have led to dozens of contemporary studies, addressing timely issues such as climate change, conservation, ecology, and invasive species. This time series of data, initiated by Thoreau and continued by others, has resulted in dozens of peer-reviewed publications, a popular science book, and numerous educational and outreach opportunities. These data grow increasingly valuable with time and as new and creative studies are undertaken with Thoreau's historic records. No copyright restrictions apply to the use of this data set other than citing this publication.

KEYWORDS

climate change; Concord, Massachusetts; conservation; migration; phenology; Thoreau, Henry David

CONFLICT OF INTEREST

The authors declare no conflict of interest.


DATA AVAILABILITY STATEMENT

Data are available as Supporting Information and are also available in Dryad at <https://doi.org/10.5061/dryad.tx95x69z3>.

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SUPPORTING INFORMATION

Additional supporting information may be found in the online version of the article at the publisher's website.

How to cite this article: Ellwood, Elizabeth R., Amanda S. Gallinat, Caitlin McDonough MacKenzie, Tara Miller, Abraham J. Miller-Rushing, Caroline Polgar, and Richard B. Primack. 2022. "Plant and Bird Phenology and Plant Occurrence from 1851 to 2020 (non-Continuous) in Thoreau's Concord, Massachusetts." *Ecology* 103(5): e3646. <https://doi.org/10.1002/ecy.3646>