



International Oaks

The Journal of the International Oak Society

Proceedings
8th International Oak Society Conference
October 18-21, 2015

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Cover illustration. Wendy Brockman (*Quercus palustris*).

Photos. p. 9: James MacEwen (Michael Heathcoat Amory); p. 10: Guy Sternberg (8th International Oak Society Conference participants); p. 11: Charles Snyers d'Attenhoven (*Quercus stellata*); p. 13: Béatrice Chassé (*Q. ×fernowii*).

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First International Oak Society Silent Auction



Visiting the Morton's oak collection during the 8th International Oak Society Conference (The Morton Arboretum).

An Audit of The Morton Arboretum *Quercus* Collection

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The *Quercus* collection located on the east side of The Morton Arboretum is one of the institution's most valuable and respected exhibits. It was instrumental in the institution gaining membership into the NAPCC *Quercus* curatorial group, as well as twice serving as the meeting grounds for the Triennial Conference of the International Oak Society. Though relatively large (3.7 hectares) the collection still suffers from space constraints due both to the relatively large size of *Quercus* taxa at maturity and the curatorial interest to exhibit much of the diversity present in such a large and important genus. In order to clearly set priorities for the collection, a full audit of living and legacy accessions was conducted with the goal of removing those considered underperforming or surplus, consolidating maintenance needs, and explicitly setting taxa and populations to target for future acquisition.

AN AUDIT OF THE MORTON ARBORETUM *QUERCUS* COLLECTION

Author: Matthew Lobdell, The Morton Arboretum, mlobdell@mortonarb.org

The *Quercus* Collection

The *Quercus* collection on the East Side of The Morton Arboretum is one of its most valuable and respected exhibits. Based on its oak collection, the Arboretum has become part of the NAPCC Oak Curatorial Group and has twice hosted the triennial conference of the International Oak Society.

Though the area is relatively extensive, the collection still has space constraints. Mature oak trees are often large, and the Arboretum has a curatorial interest in exhibiting more taxa to reflect the diversity of such a broad and important genus.

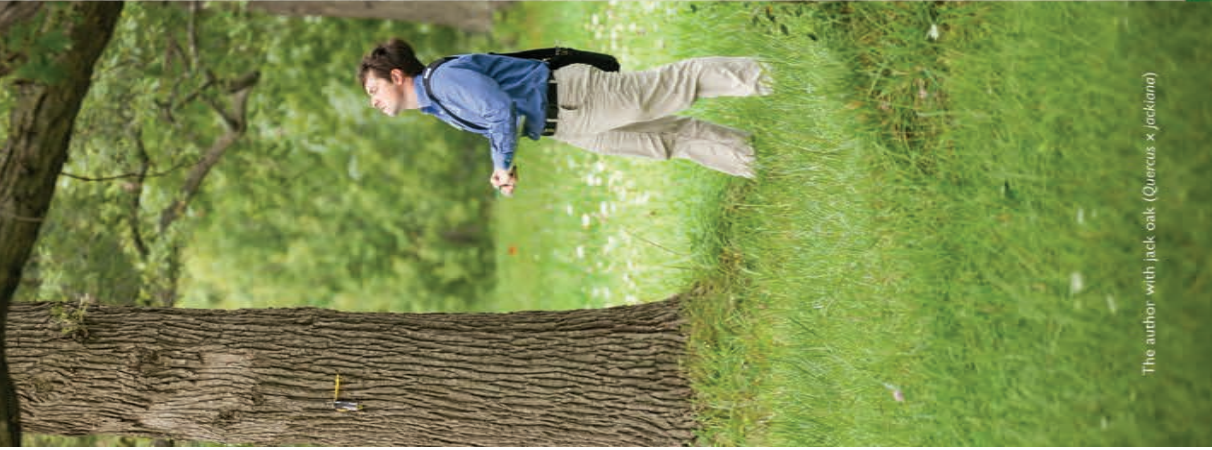
To clearly set priorities for the collection, a full audit of living and legacy accessions was conducted with three main purposes: to remove oaks considered underperforming or surplus, to consolidate maintenance needs, and to specify priority taxa and populations for acquisition.

Collection Statistics

- 3.7 hectares (9.1 acres)
- 304 plants
- 77 taxa
- 62 percent of plants are of documented wild origin.

Audit Procedure and Results

Electronic and archival paper records were reviewed to summarize the acquisition, propagation procedures, and horticultural performance of all *Quercus* taxa included in the Oak Collection since the Arboretum's founding in 1922.



The author with jack oak (*Quercus x jackiana*)



Hill's oak (*Quercus ellipsoidalis*)

Audit Goals

- Summarize all data on the acquisition, collection, and cultivation of *Quercus* species at The Morton Arboretum
- Schedule and perform necessary maintenance
- Document propagation procedures and germination rates for rarely cultivated taxa
- Resolve identification and determination issues
- Determine which taxa are overrepresented and may be removed
- List taxa of conservation concern and set a framework for ex situ collection
- Identify target taxa to bring collection holdings to a goal of 100 taxa



Acorn of bur oak (*Quercus macrocarpa*)

Horticulture and arboriculture staff performed necessary pruning and other maintenance. Underperforming or surplus plants have been removed or are being considered for removal.

All plants yet to be verified as true to name were reviewed by curatorial staff. More than 70 plants were determined as true to name. Plants suspected to be not true or possible hybrids were documented as such.



Post oak (*Quercus stellata*)

Future Goals

- Complete collection expeditions, targeting the following species for ex situ conservation purposes and possible reintroduction efforts: *Quercus acerifolia* (maple-leaf oak), *Q. arkansana* (Arkansas oak), *Q. boyntonii* (Boynton sand post oak), *Q. georgiana* (Georgia oak), *Q. havardii* (shinnery oak), and *Q. oglethorpensis* (Oglethorpe oak)
- Experiment with propagation procedures and site modification to improve understanding of horticultural care for species of special concern
- Attempt taxonomic verification of Arboretum *Quercus* specimens outside the East Side's *Quercus* collection