



# International Oaks

The Journal of the International Oak Society

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

Issue No. 27/ 2016 / ISSN 1941-2061



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

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

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## PREFACE

# From Small Acorns

The importance of trees is so apparent to all who appreciate plants and the ecological values they provide are immense. Added to that are the socioeconomic values of trees that continue to be of huge significance even in our increasingly urbanized world. But trees are often ignored in the biodiversity debate and much more needs to be done to ensure the survival of tree diversity and the survival of tree species that are under threat in the wild.

Some trees evoke a strong, shared response amongst people and, in this regard, oaks are held in particularly special esteem, with their own mythology and symbolism that has provided fascinating stories. The oak serves as the national tree of the US and 15 European countries and oak leaves feature on the coat of arms of Mexico, the country with more oak diversity in the wild than any other. Perhaps we should use this recognition and appreciation of oaks to promote wider concern for trees, crucial as at least 10 percent of all trees are threatened with extinction in the wild. The Global Tree Assessment aims to document the conservation status of all tree species by 2020 using the IUCN Red List categories and criteria. This is a huge undertaking but necessary to ensure trees receive the conservation attention they deserve. Botanic Gardens Conservation International (BGCI) is compiling a baseline list of all tree species with their country-level distributions as an index for the assessment. This is scheduled for completion in 2016 and surprisingly will provide the first comprehensive online list of trees! At the same time tree species are being mapped and information collected on population size and decline, ecology, threats and uses, so that their conservation status can be evaluated.

As part of the global tree conservation inventory work, The Morton Arboretum is taking a lead in updating oak assessments. Already, as a result of their work, over 50 new assessments for oaks were added to the online IUCN Red List in 2015. International Oak Society members are extremely valuable contributors to this process. Of course more resources are still urgently needed to understand the taxonomy of oaks, particularly in diversity hotspots. But it is so encouraging to see how information is being used to prioritize conservation action for oaks, for example in China.

China has over 100 oak species (in sections *Quercus* and *Cyclobalanopsis*), 15 of which are considered to be Critically Endangered or Endangered in the wild. Taxonomic uncertainty remains for 5 of these species and 10 oaks in the hotspot areas of Southwest China and Indo-Burma have been identified as conservation priorities. The threats to these species are habitat loss caused mainly by agriculture and tourism. Climate change adds a growing threat to upland species with limited natural areas of distribution. To improve conservation status there is a need to work with provincial nature authorities to ensure that nature reserves are secure, and to look at areas that are not yet set aside for protection. The importance of oaks needs to be highlighted to local communities alongside the importance of conserving charismatic animals. The Morton Arboretum, for example, is planning to identify collaborative oak conservation with organizations in Mexico building on the IUCN Red List assessments.

Alongside habitat protection, ex-situ conservation of globally threatened oaks provides an important insurance policy against extinction. Overall, only around 25% of the world's most threatened trees are safeguarded by botanic gardens, arboreta or seed bank collections. For oaks, over half of the Critically Endangered or Endangered taxa are currently not known to be in cultivation. Genetically diverse and representative living collections are particularly important for oaks given that acorns are not suitable for conservation in seedbanks.

In the US, 15 gardens with large oak collections formed the Plant Collections Network for the genus *Quercus* in 2007. The network has grown to 20 member gardens in a variety of climatic areas with California, the Pacific Northwest, the Midwest, and the Northeast well represented. One of the goals of the multi-institutional oak collection is to expand membership of gardens in the Southern US and Mexico. Amongst joint actions of the US Plant Collections Network are promoting oak research, raising standards for curation and interpreting the value and importance of oaks to garden visitors. Globally botanic garden collections supporting tree conservation are coordinated by BGCI as part of its Zero Tree Extinctions project.

The International Oak Society brings together a wealth of expertise on every aspect of oaks, connecting experts, enthusiasts and organizations. Attending my first Society Conference in 2015 was an inspirational experience demonstrating how deeply people do care about the future of oak species in their natural environments. The breadth of subjects covered at the Conference and reflected in this publication – from genomics to eating acorns, from the conservation of species with tiny populations to landscape restoration and urban forestry – truly demonstrates the importance and fascination of oaks. The challenge remains to convince a wider audience about why the conservation of oaks and trees in general is so important. The symbolism of oaks representing hospitality, strength and endurance is a great foundation to build on. As the familiar saying states, from small acorns, mighty oaks grow!

**Dr. Sara Oldfield**

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A handwritten signature in black ink that reads "S. F. Oldfield". The signature is written in a cursive, slightly slanted style.