International Oaks Issue No. 34

Editor Béatrice Chassé
Co-Editor Allen Coombes

Editorial Committee Amy Byrne, Roderick Cameron, Dirk Giseburt, Ryan Russell

International Oak Society Officers and Board of Directors 2022-2025

Officers
President Roderick Cameron (Uruguay)
Vice-President Ryan Russell (USA)
Secretary Dirk Giseburt (USA)
Treasurer Dan Kostka (USA)

Directors
Tim Boland (USA)
Amy Byrne (USA)
Béatrice Chassé (France)
Phil Douglas (USA)

For contributions to International Oaks
contact
Béatrice Chassé
pouyouleix.arboretum@gmail.com or editor@internationaloaksociety.org

Author’s guidelines for submissions can be found at
http://www.internationaloaksociety.org/content/guidelines-authors

© 2023 International Oak Society
Copyright of International Oaks and to articles in the final form as they appear in the publication, belong to the International Oak Society. Copyrights to texts, photographs, illustrations, figures, etc., belong to individual authors and photographers.


www.internationaloaksociety.org
Join the International Oak Society today!
# Table of Contents

—/ 08 —
In Memoriam
Henri de Brem and Allan Taylor

—/ 11 —
Foreword
Coming out of Cryo in Las Cruces
Roderick Cameron

—/ 13 —
Preface
Quercus in the Desert and Beyond
Ryan Russell

—/ 15 —
Introduction
Around the World in So Many Oaks
Béatrice Chassé

—/ 21 —
Conservation Needed for the Fagaceae in Southeastern Taiwan
Yueh-Fong Chen, Kuoh-Cheng Yang, Fu-Che Pan, Ai-Kuang Tung, and Fuh-Jiunn Pan

—/ 29 —
New and Lesser-Known Oak Cultivars 2021-2022
Ryan Russell and Eike J. Jablonski

—/ 39 —
Quercus × sternbergii (Sternberg’s Oak): a New US Hybrid
Allen J. Coombes and Thierry Lamant

—/ 45 —
Innovation and Introgression in the Continental Radiations of Fagaceae
Across the Northern Hemisphere
Paul S. Manos

—/ 59 —
Lessons From 45 Years of Oak Regeneration at Stanford University
Dave Muffly

—/ 65 —
Saving the US Champion Oak from Wildfire
Dr. Timothy Krantz

—/ 71 —
The Rectification of Oak Names
Roderick Cameron
Quercus ilex subsp. balleota Benefits from Juniperus oxycedrus
João P.F. Carvalho

Oak Savanna Restoration in the Willamette Valley, Oregon, USA
Mark Krautmann

Israeli Oaks: a Contemporary Portal to Ancient Knowledge
Amit Raphael Zoran

Ex-Situ Conservation Initiatives for Quercus cedrosensis
Tony Gurnoe

Climatic Niche Evolution of the Cyclobalanopsis
Dong-Mei Jin, Quan Yuan, Xi-Ling Dai, Gregor Kozlowski, and Yi-Gang Song

GCCO Mexico and Central America: Advances and Challenges
Maricela Rodríguez-Acosta and Allen J. Coombes

Time, Space, Function: Biogeography of the Mexican Oaks
Andrew L. Hipp, with Kieran Althaus, Allen J. Coombes, M. Socorro González-Elizondo, Antonio González-Rodríguez, Marlene Hahn, Paul Manos, and Hernando Rodríguez Correa

A New Conservation Program for the Endangered Quercus acerifolia
Mark V. Coggeshall, Ryan Russell, and Amy Byrne

Shoot-Tip Cryopreservation for Oak Conservation
Gillian M. Ross and Valerie C. Pence

Improving Shoot Survival In Vitro Through Ethylene Inhibition
Max Winkeljohn

California’s Oak Habitat for Endangered, Threatened, and Candidate Species
Angela Moskow

Philip M. Crim

Increasing Oak Forest Resiliency in Southern New England
Christopher Riely, Maria Janowiak, Amanda Mahaffey, and Thomas Worthley
The subject of Min Deng’s oral presentation on the sexual reproduction processes in oaks was published in *International Oaks*, Issue No. 33, pp. 63-72.

Papers of the following oral presentations were not submitted for these Proceedings:

1. An Introduction to the Chihuahuan Desert and Its Oak Diversity by Adam Black and Michael Eason;
2. Species Diversity and Conservation Plan for Oaks in Laos by Phetlasy Souldeth;
4. US Navy’s 20-year *Quercus tomentella* Restoration Program on San Clemente Island by Julie Lambert;
5. Taking to the Streets: Program and Technique to Bring Periodic and Summer Drought Native and Adapted Oaks into Standard Use by Sean Hogan;
6. Quantifying Exposure to Introgressive Hybridization and Its Potential Conservation Consequences: the Oak Syngameon as a Case Study by Chuck Cannon.
FOREWORD

Coming out of Cryo in Las Cruces

The 10th International Oak Society Conference is the first of our Triennial Conferences not true to that name: as never before in IOS history, there were four years between Conferences instead of the eponymous three. A pandemic-induced freeze on the Society’s events meant that members had not had the opportunity of meeting together under IOS auspices since our last Conference at UC Davis in 2018. Like reviving a shoot tip after a period of cryopreservation (as described in several papers in these Proceedings), organizing a viable Conference after this period was no easy task, but thanks to the efforts of organizers, sponsors, and participants, it was another successful entry in our 28-year history of Conferences.

Venues for our Conferences are often chosen at the previous Conference, affording three years for preparation. In this case, the 10th Conference had been scheduled to take place in Taiwan, but our Board of Directors was obliged to make an eleventh-hour decision to switch the venue due to COVID risk and limitations on travel; this was the first time the IOS has had to deal with such a situation. Fortunately, Ryan Russell bravely stepped into the breach and took on the daunting task of organizing in a mere eight months a Conference at a hastily (and wisely) chosen new venue in Las Cruces, New Mexico. His first step was to summon a sturdy Conference Committee to deal with the many fronts that organizing such an event presents. Immense thanks are due to the entire Committee (Ryan Russell [Chair], Jeff Anderson, Adam Black, Amy Byrne, Roderick Cameron, Michael Eason, Kevin Floyd, Anna Forester, Dirk Giseburt, Sean Hogan, Darin Jenke, and Michael Meléndrez) as well as to the Doña Ana County Master Gardeners volunteers that lent more than a helping hand. His second step was to reach out to the Global Conservation Consortium for Oak (GCCO) and propose a collaboration whereby the Conference was co-organized by GCCO, and a day of the program was dedicated to presentations coordinated by this institution. That was another wise choice, which enhanced Conference content and harnessed the welcome participation of The Morton Arboretum, the GCCO’s co-leader.

In another first-for-the-IOS, the Conference in Las Cruces was a hybrid event – and no, that does not mean it was devoted exclusively to nothotaxa! It was simultaneously an
in-person occasion for participants who were able to attend the event and a virtual one for many who delivered or watched presentations via video link. Our Society was founded by a group of acorn aficionados who had to wait several days for their letters to reach recipients across continents or oceans. Hardly three decades after our first Conference, presenters at this Conference were rising in the middle of the night on the opposite side of the globe to appear virtually for participants in Las Cruces, while members who were not able to travel to New Mexico could follow the Conference from their homes.

Though virtual participation in an IOS Conference does not compare to the in-person experience (who knows what it will be like when we can interact as holograms!), it has significant potential as a useful tool for a global organization such as ours. In Las Cruces we dipped our toes into this potential: let’s hope we can continue to use it for future Conferences and other events to better pursue our mission and goals.

Following our long-standing tradition, Tours were offered before, during, and after the Conference – one of the few features of the event that was exclusively in-person. The IOS had not been able to get together to explore oaks since the Oak Open Days in the UK in 2019. Coming out of nonevent-cryopreservation was not without its perils, and in fact one of our Tours was impacted by health issues, but the itineraries certainly made the most of the impressively oak-diverse areas within driving distance of Las Cruces. On a personal note, Arizona was an eye-opener: it offers an impressive combination of oak diversity and breath-taking landscapes. There are several theories regarding the origin of the state’s name, but for the quercophile only one is viable: it means “place of the good oak tree”, derived from the Basque settlers’ word for oak, *haritz*.

This Conference recorded a high-water mark in terms of the financial support received from sponsors and donors, and in the name of the Society I would like to thank the generous institutions and individuals listed on p. 276 of this volume. This support brings with it an added responsibility for our Society: to put those resources to good use. This will be our challenge during the interlude before our next Conference. If this is the first IOS Conference Proceedings you have received, I encourage you to stay with us: help us achieve our goals of spreading the good news of *Quercus* and strengthening our involvement with oak conservation and research.

For our next Conference in 2025 we will swap New Mexico the state for Mexico the country and I hope you will join us there, in-person if possible but virtually if not – and better still, either way, bring a friend.

Roderick Cameron
President