



## FOREWORD

# You Reap What You Sow (But Not Always)

Twenty years ago this year we held our first conference at The Morton Arboretum. This marked not only the birth of the International Oak Society but also my entry into the world of oaks. I probably knew quite a few species by then including some unusual ones but here I was thrust amongst the oak giants as someone more curious than anything, interested and wanting to be involved. Looking back to those times it is easy to see how many things have changed. Compared to today there were relatively few oaks in cultivation and few people collected them. With more thorough collecting in the oak-rich countries such as Mexico and China, as well as in Europe and the USA, the number of species in gardens has increased tremendously, as well as the number of oak collections. In 1994 we were learning about oaks that were unheard of by most of us, today the names of many obscure, and even then unnamed, oaks are tripping of the tongue in not so idle conversations.

The growth of knowledge of oaks has been accompanied by a concomitant growth in our publications, both in quality and content. A journal of much more professional appearance now contains articles of a diversity only rivalled by our eponymous genus. *International Oaks*' sister publication, *Oak News & Notes*, has also made great strides and provides an ideal place for shorter, but no less interesting, articles and news items. The piece by Michael Avishai "Mating in Single Oaks" (*Oak News & Notes*, Vol. 18, No. 1, 2014) particularly caught my attention.

Like most of us, I try to ensure oaks are raised from wild-collected seed. We all know, however, that this is often not possible. Collectors can only bring back a limited amount of seed, usually not enough to satisfy the number of hungry mouths waiting for them and the temptation to collect acorns from an unusual species in a garden is usually too great to resist. While our triennial conferences and many of the Oak Open Days provide good opportunities to collect from wild populations, there are always visits to gardens, and you usually find so many more species there. I confess, I have done this myself, and have watched many others avidly picking acorns from cultivated plants in the hope that they

will get “the real thing”. I wonder how many consider the possibility of hybridization, or follow up the results of their harvest? Certainly I have not found many collection holders that can provide information on whether their tree will come true from seed or what it is likely to hybridize with.

There seems to be little information available on this. We might assume that if a group of several plants of a species are planted together they may come true from seed, we might also assume that a single plant of a species will always be pollinated by another species but I do not believe there is evidence to support this. Following my 1994 induction into the world of oaks I started to do a little work on this myself at Hillier Gardens. Although, even then, there was a considerable oak collection, acorns were often not frequent on exotic species. Whether this was due to the climate or to lack of pollinators I cannot say for sure, but I suspect the former. I can say that those I did manage to raise from seed, from plants in the garden, did produce interesting results.

A single tree of *Quercus macrocarpa* Michx. did occasionally produce acorns. The seedlings raised from this tree were all hybrids with *Q. robur* L. which is common in the area. Does this tell us that this species is not self-compatible? I think all it tells us is that it did not pollinate itself on this occasion. It would be very useful to be able to raise a valuable and rare species from seed, so much easier than grafting or cuttings. Several times Hillier Nurseries tried to raise *Q. rysophylla* Weath. from cuttings but this was very slow with a very poor success rate. One year, the famous tree of this at Hillier Gardens produced a few acorns, which gave two plants, both obviously hybrids with another red oak, even though there were two trees at the same location. This species seems to be notorious for producing hybrids and I have come across many of them in different places. Is this unusual, or normal, or is it just because everybody wants it so seed from cultivated plants is often collected?

The Chinese oaks that I grew from garden seed gave different results. Both *Q. longispica* (Hand.-Mazz.) A. Camus and *Q. monimotricha* (Hand.-Mazz.) Hand.-Mazz. grew at Hillier Gardens, at the time as single plants, and both produced seed regularly. To my surprise, both of these came true from seed, not just once but several times, proving that not only are they self-compatible, but also that seed is an effective way of propagating them. However, the situation may not be that simple. Roy Lancaster (who collected both of these species in China) had a plant of *Q. monimotricha* in his garden, which, although it flowered regularly, never produced any acorns. Is it possible that some plants of a species are self-compatible and others not? Since those early days, several more of the Chinese golden oaks have come into cultivation. Will it also be possible to propagate these in the same way? Maybe not, as another plant at Hillier Gardens that I collected in Yunnan as *Q. rehderiana* Hand.-Mazz. may be a natural hybrid with *Q. senescens* Hand.-Mazz.

Michael Avishai’s note highlighted a problem that affects us all. Which oaks, if any, can we propagate with confidence from garden seed? Can any be guaranteed to come true and do any always hybridize, if so with what? While the answers to these questions and to the question of compatibility in oaks may not be available at the moment, we can make some progress. I know most collection holders are not always keen to raise seed of their own plants, but doing this could provide useful information, particularly if from single plants.



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