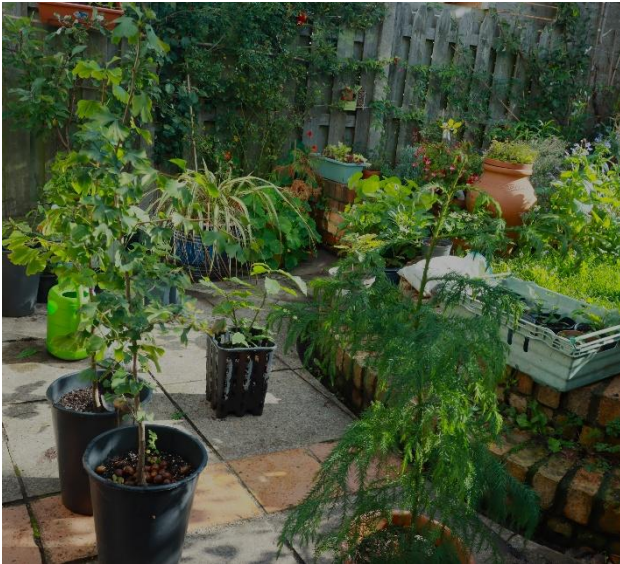


GROW A DOMESTIC-SCALE TREE NURSERY IN BRAY, CO. WICKLOW FOR COMMUNAL BENEFIT

**A simple system for propagating and producing a diverse tree stock for sharing
with local schools and communities**

By Aidan J. ffrench, landscape architect, advocate and consultant in
Urban Forestry, Nature-Based Placemaking –

Introduction



Two years ago I embarked on an small, but ambitious nursery project, growing small numbers of native and non-native trees from seed and whips/transplant in my modest suburban garden. An ongoing experimental initiative it uses a garden patio in an efficient manner, adopting best praxis following a scientific approach. While not especially innovative, it is the kind of progressive-oriented project that readers may find inspiring and thought-provoking. I would welcome feedback from readers.

Background and Context

My long interest and commitment to trees goes back being involved in Tree Council (1998-2002), and its mission to foster a tree culture in Ireland. I'm also a longstanding, loyal member of CRANN-Trees for Ireland, the leading e-NGOs for trees in Ireland, founded in the mid-1980s. More recently, as project manager/lead author for dlr County Council's 10-year Urban Forestry Strategy (A Climate for Trees), I and colleagues adopted (from Greater Lyon's Tree Charter, France) and promoted an ethical philosophy based on genuinely respecting trees as "**Living Organisms**" (see CRANN magazine 2024) calling for a lifestyle and professional encounter of co-habitation with non-human species. Living that philosophy in practical ways informs my advocacy and activism, including how and why we produce trees for planting in urban landscapes. Taking account of their biological and other needs at all stage is foundational to that ethic.

Approach

The exemplary work of the Native Woodland Trust (www.nativewoodlandtrust.ie), of which I'm an active volunteer member, was an initial spur to developing my domestic nursery. At its small nursery near Annamoe, County Wicklow, the NWT stores, sows and grows a stock of trees for planting in its forests in Wicklow. The production systems applies best arboricultural and plant husbandry practices in terms of bio-security, provenance, growing media and data management. I simplified and adopted that approach in my domestic setting. hat you might call a learning 'on-the-tree job' series of trials. Other learning resources included YouTube training

and webinars, as well as publication such as the TCoI's Our Trees: A Guide to Growing Native Trees (Millennium 2000), and Tree Grower's Guide – starting a Community Tree Nurseries (U.K Tree Council 2022).

What to Grow - avoiding 'natives absolutism' and 'lolly-pops'

The somewhat contentious and adversarial debate in Ireland about 'Natives vs. 'Non-native' is an unnecessary distraction, but can't be ignored. It must be maturely-informed by recent and ongoing scientific research. My approach might be called '*leafy-ecumenism*', countering the seeming fundamentalist zealotry that is wedded to promote a "Natives ONLY" '*TreeOlogy (!)*', too often espoused by well-intentioned, but misinformed. By being scientifically '*Tree-mindful*', we can shift to being conscious of the need for true diversity in form, species, variety and beauty. **In Urban Forestry, professional best practice is increasingly unambiguous** : we need to adopt what I call an 'ecumenically'-inclusive approach that is proactive and prudential in terms of tree selection. A member of the European Forum on Urban Forestry, I attended its 2023 conference and that of the World UF Form (Washington DC) where tree diversity and equity were key topics. Critically, in Europe, researchers are discovering that some native species are struggling and that certain resilient, non-native tree species can better handle the negative impacts of Climate Change (heat, storms, droughts etc.).

In terms of diversity of form, unsurprisingly, the public probably perceive the ubiquitous planting of standard, 'lolly-pop' trees as the only way trees can be planted(!). But trees don't naturally grow as 'lolly-pop' form; it's an artificial form used in tree nurseries; necessary for certain design and management reasons (e.g. spatial constraints in street verges). We need to diversify specified tree forms for different planting locations.

So, running in parallel with growing-from-seed, I developed a simple system of growing to a larger sizes of a selection of trees grown from transplants of Maidenhair Tree [Gingko biloba], Canadian Serviceberry [Amelanchier canadensis], Japanese Cedar [Cryptomeria japonica], American Sweetgum [Liquidambar styraciflua], and Silver Birch [Betula pendula], including multi-stemmed forms, all in 5-litre and 7-litre air-pots. More designers are specifying air-pots as they've a distinct advantage over bare-root and root-balled trees: they can be planted at any time of the year, making immediate visual impacts.

Seed Collection, Stratification and Germination



Several seed sources have been used, all in south County Dublin and north county Wicklow, including Marlay Park (Rathfarnham), Knocksink Nature Reserve (Enniskerry), Kilruddery (Bray), Newtownmountkennedy; so all are primarily of local provenance. Species collected: natives, Pedunculate Oak, Turkey Oak (*Quercus cerris*), Holm oak (*Quercus ilex*), Horse Chestnut and non-natives such as Sweet Chestnut. Quality control was focused on healthy, undamaged and larger seeds (e.g. Beech and Sweet Chestnut).

Viability checking was done using the commonly applied indicative Rule-of-Thumb “float test”. Stratification was mainly by way of fridge storage in sealed zip-lock plastic bags (source leaf-litter/compost, horticultural sand). My main specie , Oak had a rate of 80-90% ‘chitting’ and germination prior to potting.

Containers and Potting-on

Initially, I used small 4-inch plastic containers recycled from garden centre purchases, as well as



large cardboard coffee cups. Recently, I’ve switched the acorns to commercial root-trainers that I use for vegetable peas and Sweet Peas. Trainers are ideal for Oak as they provide a lengthy compact container that encourages fibrous root development. They can be re-used repeatedly, after the young Oak seedlings are transferred to final potting in air-pots. Air pots are the optimal solution for the final phase prior to planting (I also tried 5L. florist’s rose buckets, but they don’t have drainage holes). I procured two types of air-pots (3L. square and 5L.

round) from an online horticultural supplier in the Czech Republic. As Irish commercial tree nurseries have discovered, air-pots have distinct advantages. In my experience, they are best for domestic scale and community nurseries, for five reasons: space efficiency, nurturing of well-developed fibrous root-balls, facilitate summer planting, ease of transplanting to final positions and readily re-useable in the production cycle.

Growing-on Whips / Transplants

I also set aside a smaller area for a selection of mostly non-native species to be grown to advanced, multi-stem and feathered specimens, as feather or special amenity trees. These are



usually sourced from Van der Wel Ltd., Aughrim, Co. Wicklow a reputable, long-established family nursery business. The diverse range and excellent quality of tree stock is a testament to skilled plantsmanship. Typically, I buy whips and transplants (approx. 50-80 cms.) as bare-root lifted in late-October / early-November.

I am trialling four lesser-known, and lesser-grown species - Japanese Cedar/Redwood (*Cryptomeria japonica*), Dawn Redwood (*Metasequoia glyptostroboides*), Black Locust (*Robinia pseudoacacia*), and Tulip Tree (*Liriodendron tulipifera*), aware that the last three perform well the Irish urban environment.

Distribution – Sharing locally

So, whence all this effort?! The overall aim is to promote communal and educational actions for trees in urban areas, emphasising their role in Placemaking for beauty, biodiversity and co-habitation. To date I have supplied Oak trees to Wesley College, Ballinteer, Co. Dublin where the science teacher expressed a strong interest in teaching his pupils about trees.



Soon, I hope to collaborate with Bray Tidy Towns – of which I’m a member - in identifying suitable planting sites, such as residential greenspaces, local schools and colleges. That will involve mapping TPOs (Tree Planting Opportunities), using traditional hard-copy maps in combo with a digital app. And photography. Decision-making will be determined by the mantra **“Right Tree – Right Place – Right Reasons - Rightly (correctly) Planted”**: an professional best practice I recommend to readers.

Scaling-up: Community Tree Nurseries



In the long term, I hope to explore the feasibility of establishing an urban Community Tree Nursery in partnership with interest parties and partners as a first in Ireland. There’s a burgeoning activism by Irish citizens, where in tidy towns groups, residence association, community and allotment gardeners. Conceivably, it would mitigate the reliance and costs of voluntary groups on Coillte and commercial tree nurseries, while deepening the diversity of species. Community Tree

Nurseries are well-advanced in the U.K with the Fellowship of the Forest establishing the Community Tree Nursery Collaborative (CTNC) in 2021. We can learn much from their practical experience and methodologies. See this video:-

www.youtube.com/watch?v=PtmRdzb5UdQ&list=PLZ0IJXvmkibkL1AANIfpPP2AAu_sBZ1O

THE AUTHOR WELCOMES COMMENTS, FEEDBACK BY EMAIL

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