

Investigating surviving orchards from the 19th Century; how the varieties are remnants of a larger tapestry of varieties that once existed within a region.

For the past number of years, I have been pursuing a project to identify, map and document varieties surviving in orchards from the 19th Century. Using Geohive map viewer I initially surveyed the OSI 1840's maps to locate orchards and Demesne walled gardens, which I compare against 1880's maps and current satellite imagery to find surviving trees. (Available at <https://webapps.geohive.ie/mapviewer/index.html>) To locate landed estate and historic houses on maps houses within a region I use the website Landed Estates.ie (link: <https://landedestates.ie/map> . From visiting orchards, I recorded that walled gardens have unusual and rare old English and European apple varieties. In many places all that survives are the four high dry stone walls of the walled garden, and in some places red brick. Quite a few orchards I visited had plum trees or pear trees surviving against the walls, while the centre of the walled garden would be a green field grazed by cattle. However, some walled gardens had the odd surviving Heritage variety. Many old farmhouses would have a mix of Heritage and varieties promoted in the early 20th century such as Bramley (many strains), Grenadier, Allington pippin, Beauty of Bath, Emneth early, Laxton's Superb, Worcester Pearmain, American Mother, Newton Wonder, and Blenheim Orange, and every now and then Lady Sudeley. Of interest also were Glebe houses which had rare varieties. Anything I couldn't identify I usually graft and catalogue. Many that I didn't have time to take grafts from rooted in the ground till it grew budwood to graft later. Many of the unidentified unusual varieties are like pieces of a jigsaw that you solve over time.



Three images of an orchard in Limerick on Geohive map; 1840's, 1880's and current satellite imagery.

(Below) ancient tree of Sam Young found growing in the above orchard



A friend of mine, the ecologist Fergal Scully joined in the pursuit of old varieties and surveyed orchards in the Laois region last Autumn. He brought me varieties to identify. You would recognise an apple but might not know its name, similar to recognising someone's face but not know their name. He brought some really interesting samples, a number took a few months to identify. Ones which couldn't be identified were grafted with the hope to maybe DNA test a few in the future. There were some real exciting varieties. He narrowed the selection down to 20 varieties which he grafted and plans to plant them back into his locality.

There were some interesting finds based on comparing live samples of fruits between different trees and ones at ISSA. There was a possible Custard scarlet match, I picked one sample off the original ancient tree in Clare and it appeared identical to sample from Laois. Also, from photos the growth habit was the same, with long slender crowded branches and skinny brown purple scion.

In the same orchard as Custard Scarlet in Clare I identified Boston Russet (Roxbury Russet), Brownlees Russet (possible), Lady Sudeley, Bramley, and Cockle Pippin. In Clare I noticed that there are two sports of lady Sudeley, one which has deeper crimson stripes and light red stained flesh.

One apple variety from Laois appeared identical to a self-rooting cider variety in an orchard in Galway, I couldn't identify the apple. The orchard in Galway also contained Mére De Menage (Aherne beauty), Duke of Devonshire, Orleans Reinette, and King of the pippins.

Fergal brought two samples of an apple identical to bloody butcher (unfortunately by the time I had identified it one of the sample orchards was bulldozed out, so the opportunity to get scion was missed). I brought the two samples to compare against the apples on the Bloody butcher tree in Seed Savers and they appeared identical so I was sure we had Bloody Butcher.

The main varieties identified from Fergal were Bramley (many strains), Allington Pippin, Orleans Reinette, Court Pendu Plat, Belle de Boskoop, Adam's Pearmain, White Melrose,

Charles Ross, Ribston Pippin, Loddington, and Catshead. Of native varieties there was Bloody Butcher and Custard Scarlet (possible). There were quite a few others that I couldn't identify but I was convinced that they were unique or Heritage, so we grafted quite a few of those.

Alongside surveying, I've been doing experiments in grafting and growing trees, a few weeks ago I ran out of rootstocks. When visiting an old tree of Irish Pitcher I decided to use cuttings from the burr knots on the old branches. On its own roots Irish Pitcher grows to the height of an M111 rootstock. I matched the size of the cutting to the scion I was grafting. To solve the issue of pots and compost planted trees in lazy beds fertilised with seaweed and will earth up the stems like potatoes to below the graft union. I planted three trees across the ridge. I plan to lift them when they're dormant in winter. I laid fresh seaweed on the ground before making ridges. I will spray the foliage with homemade seaweed feed in July.

Hugh Ermen (1928-2009) undertook studies in growing apple trees on their own roots as well as breeding varieties¹. Similarly, Kevin Dudley of Irish Seed Savers undertook a project of self-rooting varieties in the early 2000's. Old cuttings of Bramley grow well, as well as branching unions with moss. A cutting of a pitcher is a readymade tree, plant as deep as possible to anchor the tree, up to a foot and a half. The pitchers are good to top graft after a year of being planted in the ground. I noticed that a lot more sap flows when top grafting on to a pitcher in the ground and they take well. It can be seen as field bench grafting.

(left) old tree of Irish Pitcher, and graft on cutting from the tree (right); The base will develop roots similar to rootstocks.



¹ <https://elizapples.com/2016/03/27/hugh-ermen-own-roots-experimenter/>

Other observations I made of Pitchers; Ballyvaughan seedling grows to a height of 106 and Hearty is about 26 and has the most vigorous roots.

The following are two obscure varieties that have potential;

Hearty: A very old self-rooting tree that was found growing at an old farmhouse in Scalp, in the mountains above Flagmount. It is a lovely ochre apple with a rusty Autumn appearance. If picked off the tree in September it is inedible and tastes like old cheddar cheese, and similar in texture to golden russet, which is firm crumbly, dry. It's not appealing off the tree and many people disregard it, but it was decorative and I felt it was an unassuming variety that you would need to become familiar with to appreciate it. However, if stored a month or so it mellows and is similar to a dry russet, not very sweet but savoury and delicious. It would go well with cheese in November. The foliage goes deep purple in Autumn and is distinctive in an orchard. It's one of those varieties that reflects the beauty, taste and character of the landscape it came from.

(Below) Image of Hearty tree in Tommy's Self-Rooting orchard



Unknown N: A lovely green cooking apple with a red blush. It is of unknown provenance and grows in Peadar's Research Orchard. It has tough skin, doesn't bruise, stores well, is juicy and not too acid. It cooks well to a puree. It is very disease resistant.

From studying the 1840's maps it is surprising how many orchards survive and it's exciting to imagine what varieties exist within them, however their life is limited, and trees are being destroyed regularly,

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