

Direct Grazing Trial Update – The First Grazing

On the 5th December 2019, Nick Broad brought in 10 cows with calves for our first direct grazing trial.

Affectionately known as the 'G and T Trial' (referring to the Graze and Trim treatments) on Nick's property, we aim to estimate the volume and value of feed that Tagasaste can produce under a direct graze regime.

Ideally for this type of trial, a much larger area of Tagasaste (several Hectares) on pasture would be managed for cattle feed. This would show the effects of a balanced diet and could be measured by weight gain as a real outcome. Presently we are estimating the feed value to cattle based on feed intake (volume) and nutritional analysis.

The Tagasaste trees are being managed so that cows can reach the whole plant and therefore be able to browse directly. This is different to a labour intensive cut-and-carry option and different to light browsing of larger trees.

For this trial, two groups of six trees were fenced off from one another - the trees were paired up and matched together with one on either side of the fence. One group was left to be grazed by the cattle (G), the other half was trimmed by hand to mimic the amount browsed or eaten from its matching pair (T). The hand harvested material will be dried and weighed to assess the amount and value of feed eaten voluntarily.

On day one of the trial, the cows showed a lot of interest in the rank grass within the trial area but unfortunately only used the trees for rubbing on! There was a little bit of browsing happening, so they were able to get an idea of the new flavour. With the cows now more accustomed to the taste - Nick and Craig had much better results when they put the cows back in the area for grazing the next day.

The main lesson learnt from this initial direct grazing attempt is that cows need to learn about the new feed source, before then being introduced to a larger quantity. Next time, we plan to cut and feed the cows a few branches of Tagasaste during the week prior to grazing the trial. Cows will then get used to the new feed and hopefully then be ready to browse the tree readily.

After this trial concluded, we then cut and trimmed all twelve trees back to their original size - so the new growth will be from the same starting point.

The next grazing trial may be in February depending on the rate of regrowth. We will use cows again as a preference if they are available. Being able to determine the feed volume of Tagasaste to cattle will be greatly beneficial to our project, and we aim to continue with this trial until the end of the funded project in mid 2021.



Each trial tree has an ID (G = Graze, T = Trim)



Graze area - measuring pre-graze feed



Day 1 of trial: cows and calves in graze area