

Report on Borough Council of King's Lynn and West Norfolk

tree plantation at Lynnsport

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The Borough Council of King's Lynn and West Norfolk [planted 6000 trees](#) at Lynnsport in King's Lynn, reportedly in May 2022, with the claim that these would absorb 149,500 kg carbon/year. Following reports that many of the planted whips were [already dead](#) within the month, we visited the site on 4th August 2022 to systematically ascertain the health of the planted trees.

We established 15 sample plots across the whole of the site, and sampled 10 whips in each plot, for a total of 150 trees tested. We found 15 whips showing some signs of life, and 135 whips which were dead, giving a survival rate of 10%. However, all 15 of the surviving whips were in very bad condition, so their survival to date is no guarantee of their continued survival through the summer. All but one of the surviving whips were birch and hawthorn.

Most of the site was very dry, with parched, brown grass and the soil baked hard (Fig. 1). However, one area at the in the north-east of the site retained patches of green grass, and of the 15 surviving whips, one-third were found in the plot we established in that area (survival rate in that single plot was 50%). This may suggest that only the north-east corner of the site was suitable for planting in spring.



Fig. 1 Planting at Lynnsport showing parched grass and a number of knocked-over tree guards

Of the dead trees, we found that 15.3% were not properly planted in the ground: some were loose, having been placed in slit trenches and not subsequently tamped down, some had only the tips of the roots in the ground but most of the roots exposed (Fig. 2), and some had not even been planted in the soil but were merely placed inside the tree guard (Fig. 3).

Although some tree guards had been knocked over, we found little evidence of vandalism or damage by deer. Given their very dry condition, we also believe that most of the dead whips were probably already dead before the record heat of 18-19 July 2022. We therefore attribute the deaths of the whips primarily to:

- 1) planting taking place at an inappropriate time of year.
- 2) very poor planting practices.
- 3) a lack of effective follow-up care and management.

Despite the mowing carried out on site, we also recorded a number of wildflower species growing amongst the planted whips, including *Centaurea nigra* (common knapweed), *Knautia* sp. (probably field scabious), *Achillea millefolium* (yarrow) and *Lathyrus pratensis* (meadow vetchling), all of which are indicative of old species rich lowland grassland. Since such grasslands are a rarer habitat nationally than deciduous woodland, it is likely that the tree planting has had a significant negative impact on biodiversity. In addition, the planting may have triggered significant carbon release from the soil, turning an existing carbon sink into a carbon source. In terms of both biodiversity and carbon sequestration, the best course of action for this site would probably be to remove all dead trees and tree guards, and restore it to grassland.



Fig. 2 Example of an improperly planted whip at Lynnsport. The roots should have been buried up to the point indicated by the hand, but instead only the tips of the roots were in the soil.



Fig. 3 Example of an improperly planted whip at Lynnsport. This whip was not buried in the soil but simply placed inside a tree guard.