
APPENDIX 4 – ECOLOGICAL TARGET NOTES

Target Note 1: Species poor hedgerow forming the boundary between adjacent improved pasture fields. Hedgerow is composed primarily of *Crataegus monogyna* (Hawthorn) with scattered *Ilex aquifolium* (Holly). Understorey is dominated by rough grassland and semi-ruderal species such as *Arctium minus* (Lesser Burdock), *Dactylis glomerata* (Cock's-foot), *Digitalis purpurea* (Foxglove), *Rubus fruticosus* agg. (Bramble) and *Urtica dioica* (Common Nettle). The hedgerow is cut to approximately 2m in places with larger *Ilex aquifolium* (Holly) and *Salix* sp (Willow) between 10 and 15m high.

Target Note 2: Species poor *Crataegus monogyna* (Hawthorn) hedgerow on a raised bank. A flowing ditch lies at the base of the hedgerow. The understorey is composed of rough grassland and ditch bank species including *Dactylis glomerata* (Cock's-foot), *Digitalis purpurea* (Foxglove), *Festuca rubra* (Red Fescue), *Rubus fruticosus* agg. (Bramble) and *Urtica dioica* (Common Nettle). The hedgerow is more gappy than that at Target Note 1 with the large gaps exposing a post and wire fence.

Target Note 3: Hedgerow similar in appearance and composition to *Target Note 2*. There are more substantial gaps present and no ditch at the base. In addition to the hawthorn, the hedgerow is comprised of *Ilex aquifolium* (Holly) and *Quercus robur* (Pedunculate Oak) with an understorey of improved grassland and semi-ruderal species including *Dactylis glomerata* (Cock's-foot), *Rumex obtusifolius* (Broad-leaved Dock) and *Urtica dioica* (Common Nettle).

Target Note 4: Gappy hedgerow comprising a line of larger trees rather than a true hedgerow. A post and wire fence is present to maintain the field boundary. Species present include *Ilex aquifolium* (Holly), *Malus sylvestris* (Crab Apple) and *Quercus robur* (Pedunculate Oak) between 8 and 12m in height. The understorey is composed entirely of the adjacent improved pasture species.

Target Note 5: Flowing ditch similar to that found at the base of the hedgerow at Target Note 2. The ditch is shallow and slow flowing with banks widening to 1m and up to 3m deep in places. The bankside vegetation is dominated by *Chamerion angustifolium* (Rosebay Willowherb), *Hedera helix* (Ivy), *Rubus fruticosus* agg. (Bramble) and *Urtica dioica* (Common Nettle). No aquatic vegetation is present.

Target Note 6: area of woodland dominated by *Betula pendula* (Silver Birch), *Fraxinus excelsior* (Ash), *Ilex aquifolium* (Holly) and *Quercus robur* (Pedunculate Oak). This covers both a proportion of the improved pasture farmland to the west and a steep sided clough. The understorey within the woodland is characterised by both improved grassland within the flatter field margins and steep clough banks vegetated with *Dactylis glomerata* (Cock's-foot), *Pteridium aquilinum* (Bracken) and *Rubus fruticosus* agg. (Bramble). At the base of the clough is a fast flowing stream. Towards its western end, the woodland develops into more scattered scrub vegetation; particularly around ditch banks, pond edges and marshy areas. These areas are characterised by *Juncus effusus* (Soft-rush), *Phalaris arundinacea* (Reed Canary-grass), *Rosa canina* (Dog-rose), *Rubus fruticosus* agg. (Bramble), *Ulex europaeus* (Gorse) and *Urtica dioica* (Common Nettle).

Target Note 7: Marshy area of improved pasture heavily cattle poached. Wetter areas are dominated by *Juncus effusus* (Soft-rush).

Target Note 8: Area of scrub adjacent to woodland and hedgerow and bordering marshy grazing pasture. The area is dominated by *Juncus effusus* (Soft-rush), *Phalaris arundinacea* (Reed Canary-grass), *Rosa canina* (Dog-rose), *Ulex europaeus* (Gorse) and *Urtica dioica* (Common Nettle).

Target Note 9: defunct concrete pond which does not hold water. It is now heavily vegetated by *Phalaris arundinacea* (Reed Canary-grass) and *Salix* sp (Willow).

Target Note 10: Flowing ditch along a field boundary and adjacent to a hedgerow. The ditch is approximately 1m wide and fast flowing. No aquatic vegetation is present. Further downstream, the ditch becomes a stream, flowing down into the steep sided clough within the woodland at Target Note 6. At this point the stream is fast flowing with waterfalls and pools. Again, there is no aquatic vegetation and the bed of the stream is composed of bare rock. The banks of both the ditch and stream are composed of vegetation in adjacent habitats including rough grassland and the clough understorey vegetation including *Dactylis glomerata* (Cock's-foot), *Pteridium aquilinum* (Bracken) and *Rubus fruticosus* agg. (Bramble).

Target Note 11: small field pond within improved pasture. The northern edge of the pond is bounded by an area of scrub and woodland. The pond is generally open with some patches of blanket weed present and an area of *Veronica beccabunga* (Brooklime) at the eastern end. The banks of the pond are characterised by marsh habitat dominated by *Juncus effusus* (Soft-rush).

Target Note 12: Rough grassland border alongside an existing access track. Dominated by *Arrhenatherum elatius* (False Oat-grass) and *Dactylis glomerata* (Cock's-foot) with scattered *Galanthus nivalis* (Snowdrop), *Ranunculus repens* (Creeping Buttercup) and *Rumex acetosa* (Common Sorrel). This area appears to have been mown in the past so that it has a short sward.

Target Note 13: Large square pond at the eastern end of the farm. This is currently used to collect agricultural run off. The pond appears highly eutrophicated with no aquatic vegetation. The base and banks of the pond are constructed from concrete. The surrounding habitat includes the hardstanding and buildings of the farm to the west and improved pasture to the north, east and south.

Target Note 14: Hedgerow composed of *Crataegus monogyna* (Hawthorn) and *Ilex aquifolium* (Holly). The hedgerow is on top of a rough grassland bank dominated by *Dactylis glomerata* (Cock's-foot) with a predominantly dry ditch at the base. The northern end of the ditch contains a small area of open water, approximately 1m wide and 0.1m deep, which appears eutrophicated and is dominated by *Juncus effusus* (Soft-rush).

Target Note 15: large silage heap covered over with black plastic. The eastern end is open.