

NPWS

**Castlemaine Harbour SAC (site code 343)
Conservation objectives supporting document-
woodland habitats**

Version 2

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Introduction

Castlemaine Harbour SAC includes the River Laune and its tributaries. The river flows from Lough Leane westwards through the fertile lowlands to the north of the McGillicuddy's Reeks, with most of the tributaries flowing north from these mountains. There are numerous small woodlands situated along the river and its tributaries that become more extensive upstream. While only five have been surveyed, most woodlands are low-lying and likely to be subject to flooding. However, some occur in incised valleys so that only the sections in the valley bottoms are alluvial and the valley sides are covered with either of sessile oak or ash woodland.

The information below is based largely on Perrin et al. (2008) with some additional information from internal NPWS reports (Cross 2000, 2001). The sites surveyed are Whitefield (site code: 1755), Ardagh wood (1759), Brennan's Glen (1760), Farrantooreen (1791) and Ballymalis (1915) in Perrin et al. (op. cit).

Woodland types

There are three principal native woodland types present within the SAC: alluvial woodland, old oak woodland and ash woodland. In addition there are mixed deciduous woodland, usually with abundant beech and/or sycamore, and conifer plantations. Only alluvial woodland (Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-padion, Alnion incanae, Salicion albae as listed in Annex I of the Habitats Directive) is of qualifying interest under the Habitats Directive.

Alluvial woodland is a generic term for a number of different woodlands. In the Castlemaine Harbour SAC the principal type is the alder- bramble sub-type of the alder-meadowsweet woodlands. This is a community of wet, gleyed soils, pH mostly around 5.5 but locally higher. The soils are either frequently inundated or have a permanently high water table.

The canopy of the woodlands is dominated by alder (*Alnus glutinosa*) with grey willow (*Salix cinerea*) a frequent associate. Ash (*Fraxinus excelsior*) and birch (*Betula pubescens*) also occur and crack willow (*Salix fragilis*) is present in Farrantooreen, the site most subject to tidal influence. The shrub layer is mostly poorly developed in these woods although there is a little hawthorn (*Crataegus monogyna*). Bramble (*Rubus fruticosus*) dominates the field layer but with a variety of species associated with wet ground, e.g. meadowsweet (*Filipendula ulmaria*), remote sedge (*Carex remota*), opposite-leaved saxifrage (*Chrysosplenium oppositifolium*), creeping buttercup (*Ranunculus repens*), soft rush (*Juncus effusus*), water drop-wort (*Oenanthe crocata*). Locally, there are well developed stands of tufted sedge (*Carex paniculata*), which form a very distinctive community.

Old oak woodland within the SAC occurs on the steep slopes of some of the upper tributaries. The principal community is the bramble-hazel sub-type, which is associated with more fertile but still relatively nutrient poor, acidic soils. Sessile oak (*Quercus petraea*) dominates but there is some ash and the shrub layer is dominated by hazel (*Corylus avellana*). Woodrush (*Luzula sylvatica*), bramble and ivy dominate the field layer with some bluebell (*Hyacinthoides non-scripta*) and various fern species, e.g. hard fern (*Blechnum spicant*). Locally, oak woodland is replaced by ash woodland with a more species-rich flora.

Area

Within the five sites surveyed alluvial woodland covers about 18ha. However, the total area within the SAC is unknown but is considerably larger.

Ancient woodland

Two sites within the SAC - both oak woodland adjacent to alluvial woodland - are recorded as having been present in part or full on the 1st edition OS maps (1840s). These may therefore be considered as potentially ancient or long-established woodlands. The alluvial woodland sites all appear to be of relatively recent origin.

Structure and function.

The alluvial woodlands are mostly 10-12m in height, locally up to 18m. The shrub layer, where present, is poorly developed and mostly < 3m in height. The herb layer is well developed, sometimes luxuriant, up to 1m in height.

Dead wood

The amount of dead wood varies depending on age structure and management. Older woods naturally tend to have more coarse woody debris, although the amount will depend on management which will vary with the landowner and factors such as accessibility, theft. There is little dead wood in these woodlands, reflecting their probable young age and the small size of the trees.

Veteran trees

These woods are largely devoid of large, old trees although one site, Ballymalis, contains a stand of very large old oaks on a ring fort.

Species composition

Details of the characteristic species composition of the woodlands can be found in Perrin et al. (2008).

Future Prospects

Hydrology

Periodic flooding is essential for the maintenance of alluvial woodland. This river system has not been drained and flooding is a regular feature.

Invasive alien species

The principal invasive alien species is sycamore (*Acer pseudoplatanus*), which is regenerating freely in some sites. Skunk cabbage (*Lysichiton americanus*) and Japanese knotweed (*Fallopia japonica*) occur in one site.

Grazing

Within the woodlands in the Castlemaine Harbour SAC grazing pressure varies. Deer appear to be ubiquitous and horses and cattle occur in some sites causing considerable damage. The exception is Farrantooreen which, perhaps because of its location between a busy road and the river, appears to be ungrazed.

Forest Management

These woodlands are mostly unmanaged and by their nature are probably likely to remain so.

Impact of Agriculture

Threats from agriculture may be direct or indirect. The principal direct threat is clearance and uprooting resulting in destruction of the woodland. Indirect threats include fertiliser drift, which may increase the trophic status of the wood but as these

woods all occur on relatively nutrient-rich sites this is not considered to be a major threat. Clearance for grazing land is probably not a threat.

Urban and infrastructural development

These are a threat principally around towns. Part of Farrantooreen, which lies just outside Killorglin, has been infilled but in general the sites are remote and inaccessible and are probably not under serious threat.

References

Perrin, P., Martin, J., Barron, S., O'Neill, F., McNutt, K. & Delaney, A. (2008) National Survey of Native Woodlands 2003 – 2008. A report submitted to the National Parks & Wildlife Service. Botanical, Environmental & Conservation Consultants Ltd. Dublin.

Perrin, P.M. and Daly, O.H. (2010). A provisional inventory of ancient and long-established woodland in Ireland. Irish Wildlife Manual No. 46. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin, Ireland.

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