

Appendix 11.1

Proposed Natural Heritage Areas Site Synopses

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SITE NAME: AVOCA RIVER VALLEY

SITE CODE: 001748. SYNOPSIS DATE: 23/11/1995

The Avoca River Valley is a large mixed woodland located in the valleys of the Avoca and Aughrim rivers, both of which flow through the site and on towards the estuary at Arklow.

The steep slopes of these deep valleys contain both coniferous and deciduous woodland. The best examples of relatively pure deciduous woods are found around Shelton Abbey, with several other smaller areas throughout the site. Oak (*Quercus petraea*) is the dominant tree species, with Ash (*Fraxinus excelsior*), Beech (*Fagus sylvatica*) and Birch (*Betula pubescens*) locally abundant. In places there is a well developed shrub layer of Hazel (*Corylus avellana*), Holly (*Ilex aquifolium*) and Honeysuckle (*Lonicera periclymenum*). The ground flora is variable and is usually predominated by Wood Rush (*Luzula sylvatica*) or Bluebells (*Hyacinthoides non-scripta*). Other species present include Lords and Ladies (*Arum maculatum*), Wood Sorrel (*Oxalis acetosella*), Wood Anemone (*Anemone nemorosa*) and Wood Sanicle (*Sanicula europea*). Ferns are abundant and include Buckler Fern (*Dryopteris dilatata*), Male Fern (*Dryopteris felix-mas*) and Soft Shield Fern (*Polystichum setiferum*).

A large area of the site consists of broadleaved woods which have been underplanted with a variety of conifers. Here, the understorey is generally similar to the broadleaved woods, but as the conifers become more abundant the ground flora becomes less diverse with Ivy (*Hedera helix*), Brambles (*Rubus* agg.) and some Ferns replacing the other species.

There are a few blocks of commercial conifer plantations throughout the site, managed for forestry. Small areas of wet woodland with Alder (*Alnus glutinosa*), Willow (*Salix atrocinerea*) and Birch (*Betula pubescens*) occur on the lower gradients adjacent to the rivers.

A study on the birds of this area has shown the commonest species to be Goldcrest, Robin, Wren, Coal Tit and Chaffinch. The rare Redstart has also been recorded.

This area has been subject to great disturbance from the mines at Avoca, the planting of conifers and from air pollution emanating from the fertiliser factory downstream, near Arklow. The eastern part of the site has been more affected by pollution than the western end.

It remains however, a site of considerable importance as it contains good examples of deciduous woodland with a typical flora and fauna and some rare species occurring. These areas are remnants of more extensive deciduous woodland coverage throughout these valleys and it is important to conserve this dwindling resource.

SITE NAME: ARKLOW TOWN MARSH

SITE CODE: 001931. SYNOPSIS DATE: 16th February 1995.

This site is now the principal wetland area in Arklow. It is a large marsh located north of the Avoca estuary on the perimeter of Arklow town. A disused roadway bisects the site from east to west.

Much of the site is dominated by Reeds (*Phragmites australis*), with Creeping Bent Grass (*Agrostis stolonifera*) and Valerian (*Valeriana officianalis*) common in places. On the southern side, numerous scattered bushes of Willow (*Salix* spp.) are growing among the Reeds, forming a scrub in places. Drier areas are characterised by large tussocks of Tufted Hair Grass (*Deschampsia caespitosa*). Other plants present include Soft Rush (*Juncus effusus*), Iris (*Iris pseudacorus*), Skullcap (*Scutellaria galericulata*), Lesser Pond Sedge (*Carex acutiformis*) and several other Sedges (*Carex* spp.).

Wet grassy areas with extensive stands of Water Horsetail (*Equisetum fluviatile*) occur on the northeast margin, with Creeping Bent Grass (*Agrostis stolonifera*), Spike Rush (*Eleocharis palustris*), Meadowsweet (*Filipendula ulmaria*) and Rushes (*Juncus articulatus* & *J. conglomeratus*) present.

The scarce Broad-leaved Cottongrass (*Eriophorum latifolium*) has been recorded growing on this site.

Much of the Willow (*Salix* spp.) has been defoliated, possibly due to atmospheric pollution from the nearby fertilizer factory.

The importance of this site is that it is a good example of a relatively large wetland, despite the impacts of atmospheric pollution and its proximity to Arklow town. The presence of at least one scarce plant species increases the interest of the site.

SITE NAME: ARKLOW SAND DUNES

SITE CODE: 001746. SYNOPSIS DATE: 15th February 1995.

This coastal site is located just north of Arklow town and comprises mainly a sand dune system. A low ridge of fore-dunes, stabilized by Marram Grass (*Ammophila arenaria*), runs parallel to the shore. Sea Holly (*Eryngium maritimum*) and Sea Bindweed (*Calystegia soldanella*) are also present.

Behind the low fore-dunes are the larger fixed dunes, which have been vegetated for a long time. In addition to Marram Grass, other grasses are common, notably Red Fescue (*Festuca rubra*). Bracken (*Pteridium aquilinum*) is locally abundant, also Common Restharrow (*Ononis repens*), Kidney Vetch (*Anthyllis vulneraria*), Lady's Bedstraw (*Galium verum*), Pyramidal Orchid (*Anacamptis pyramidalis*), Sheep's-bit (*Jasione montana*) and Eyebright (*Euphrasia* spp.). Burnet Rose (*Rosa pimpinellifolia*) is found on the more mature dunes.

The western side of the sand dune system is bounded by a fairly steep slope which provides an 'amphitheatre-like' backdrop to the dunes and beach. The clay slopes are covered in a low scrub made up mostly of Hawthorn (*Crataegus monogyna*) and Blackthorn (*Prunus spinosa*).

At the southern end of the site is a small, but good example of wet woodland. The main tree is Alder (*Alnus glutinosa*) and there is a well developed ground flora, which includes Water Dropwort (*Oenanthe crocata*), Angelica (*Angelica sylvestris*) and Water Horsetail (*Equisetum fluviatile*).

There is also a transitional grassy area dominated by False Oat (*Arrhenatherum elatius*), which although not of great interest in itself, connects the dune system to the woodland.

Although the site is small and vulnerable to pressures from the adjacent amenity sites, it is important as an example of a sand dune system which is relatively intact and showing the stages of dune development from the early fore dunes to mature fixed dunes.