SITE SYNOPSIS

Site Name: Tacumshin Lake SAC

Site Code: 000709

Tacumshin Lake is a shallow coastal lagoon situated on the south Co. Wexford coast, about half way between Kilmore Quay and Carnsore Point, and 15 km south of Wexford town. The lagoon was formerly a shallow sea bay which over time has been separated from the sea by a gravel/sand spit that has extended across the mouth of the bay from east to west, due to long-shore drift.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

[1150] Coastal Lagoons*
[1210] Annual Vegetation of Drift Lines
[1220] Perennial Vegetation of Stony Banks
[2110] Embryonic Shifting Dunes
[2120] Marram Dunes (White Dunes)

At times in the past the spit completely land-locked the lagoon at Tacumshin, and at the end of the 19th century when this situation prevailed for some time the lake was drained by means of a large bore pipe set through the gravel/sand bar. Some of the drained lake bed was used by growing cereal crops. In the mid-1970s the spit again closed off the lagoon from the sea. The water level rose after exceptionally heavy rainfall and flooded several hundred hectares of low lying surrounding farmland. To relieve flooding farmers reactivated the old drainage pipe and installed a second pipe at a lower level. The capacity of these two pipes is insufficient to prevent the lagoon filling up in winter when inflow from streams is greater than the outflow through the pipes. Thus, from about November to May the water level normally reaches the HWM as shown on the 6" O.S. maps, while from May to November the water level approximates to that of LWM as shown on the 6" O.S. maps. To speed the drainage from the lagoon two main drains were excavated leading to the landward end of the pipes.

The spit separating the lagoon from the sea has been built up by tide-borne gravels and wind-blown sand. The patches were formed from water and wind-borne silts and sands, consolidated by saltmarsh vegetation. The lake bed is composed of silt and sand deposited by incoming tides and feeder streams. The surrounding lands are composed of glacial till.

The lagoon bed sediments support extensive areas of glassworts (*Salicornia* spp.) where conditions remain brackish in summer. Other areas support Lesser Sea-spurrey (*Spergularia marina*). The permanent water bodies (including the excavated channels) and the marshy areas associated with stream inlets are colonised by Common Reed (*Phragmites australis*), Sea Club-rush (*Scirpus maritimus*) and Common Club-rush (*Scirpus lacustris*). Tasselweed (*Ruppia maritima*) forms dense stands in the permanent brackish water in the centre of the lagoon bed. Other typical lagoonal plants present include Horned Pondweed (*Zanichellia palustris*) and the rare charophyte *Chara canescens*. The patches have dense Fescue (*Festuca* sp.) swards and patches of Sea Purslane (*Halimione portulacoides*) and Sea Rush (*Juncus maritimus*).

The gravel/sand barrier is in two parts, the eastern one supporting a mature dune system with low-growing herbs and grasses, such as Lady's Bedstraw (*Galium verum*) and Kidney Vetch (*Anthyllis vulneraria*); the western one a developing dune vegetation with the pioneering Sand Couch (*Elymus farctus*) dominating. Marram (*Ammophila arenaria*) is found throughout. Lyme-grass (*Leymus arenarius*) is found here, while the endangered and legally protected (Flora (Protection) Order, 1999) Cottonweed (*Otanthus maritimus*) has also been recorded. Species recorded at this site which are typical of the habitat 'annual vegetation of drift lines' include Sea-holly (*Eryngium maritimum*), oraches (*Atriplex* spp.), Sea Sandwort (*Honkenya peploides*), Sea Rocket (*Cakile maritima*), Sea Mayweed (*Matricaria maritima*) and spurges (*Euphorbia* spp.).

The waterfowl population of the lagoon is exceptionally diverse and the area supports large numbers of birds throughout the year, which is unusual among Irish wetlands. In summer the restricted area of water remaining in the lagoon supports a moulting flock of 300-400 Mute Swans, one of the largest concentrations in Ireland. The area is also an important summering site for non-breeding Black-tailed Godwits. During spring and autumn migration large numbers of waders use the lagoon as a resting and feeding area before continuing on to breeding or wintering grounds. Large numbers of Lesser Black-backed Gulls (up to 1,000) gather at the lagoon for some weeks prior to their autumn migration to Iberia. The lagoon is particularly attractive to vagrant North American and Eurasian waterfowl, especially in the autumn.

As water levels gradually rise in early winter large numbers of waterfowl – Mallard (104), Teal (663), Gadwall (51), Wigeon (3,608), Pintail (278), Shoveler (118), Tufted Duck (122), Pochard (86), Coot (690), Brent Goose (45), Lapwing (5,043), Black-tailed Godwit (131) and Curlew (268) congregate at the lagoon to feed on its rich food resources. The lagoon was formerly used by a large colony of Herring Gull and in 1975, 90 pairs of the rare Roseate Tern attempted to nest on the Little Patch. In autumn the abundant insect life of the dry lake bed and sea-spurrey (*Spergularia* sp.) stands provide food for large numbers of migrating Swallows and martins which also use the reedbeds as a night roosting area, with up to 10,000 individuals being recorded in recent years.

The site is of particular conservation significance for its lagoon, which is an excellent example of a sedimentary lagoon with a gravel/sand barrier. It is also one of the largest in the country. The lagoon supports a wide variety of plants and animals, including many lagoonal specialist species. This habitat, which is both threatened and declining throughout Europe, is listed on Annex I of the E.U. Habitats Directive with priority status. Good examples of four other habitats that are listed on Annex I of this Directive occur within the site, i.e. drift lines, perennial vegetation of stony banks, embryonic shifting dunes and Marram dunes. Tacumshin Lake is also an important ornithological site and has been designated a Special Protection Area under the E.U. Birds Directive. It is nationally important for nine bird species, especially Gadwall and Pintail. The presence of a number of rare or scarce plant species adds additional interest to the site.