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**Mweeloon pools (2) County Galway O.S. M 335 196**  
O.S. Discovery Sheet 52



**Conservation Designation:** Galway Bay complex SAC 000268,  
SPA 004031, pNHA 000268

**General description:**

Mweeloon Pools are two small (0.5ha) natural “**saltmarsh**” lagoons, situated 9km southwest of Oranmore, Co. Galway, on a peninsula at the eastern end of Galway Bay. The lagoons are shallow (<1m) and separated by the main road running east to Tawin. Salinity at the time of sampling (17-18/10/06) measured 29.7psu in both lagoons.

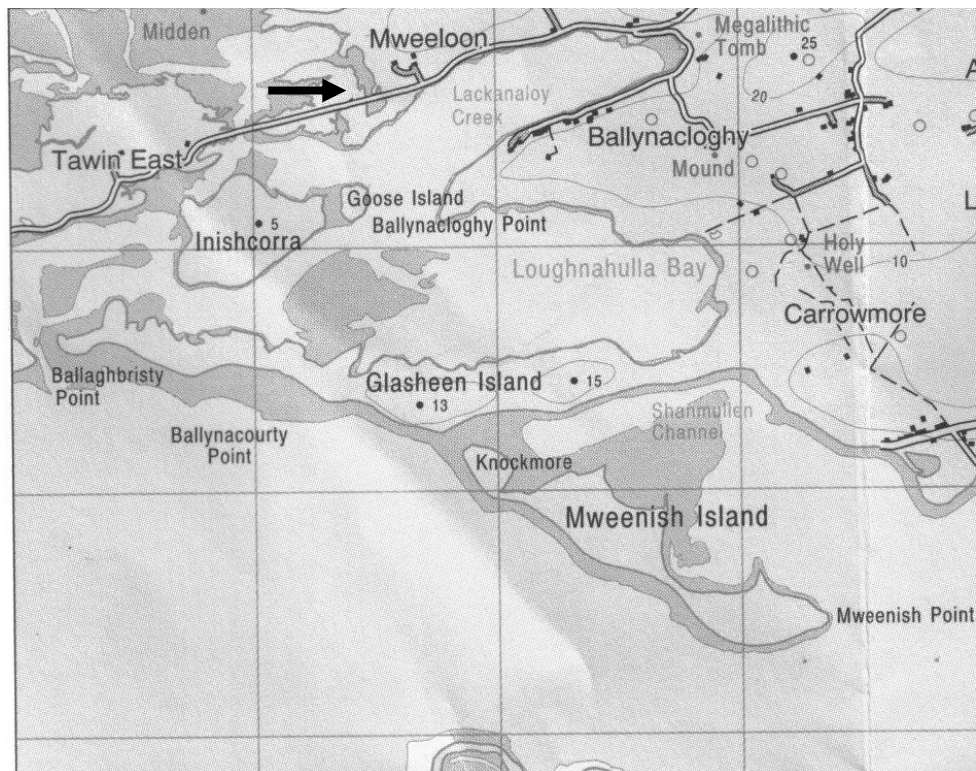


Figure 49.1 Location map of Mweeloon Pools.

Mweeloon Pools were surveyed from 17-18/10/06 for aquatic fauna and flora. The pools are small and each pool was regarded as one sampling station at this time (Figure 49.2, Table 49.1)

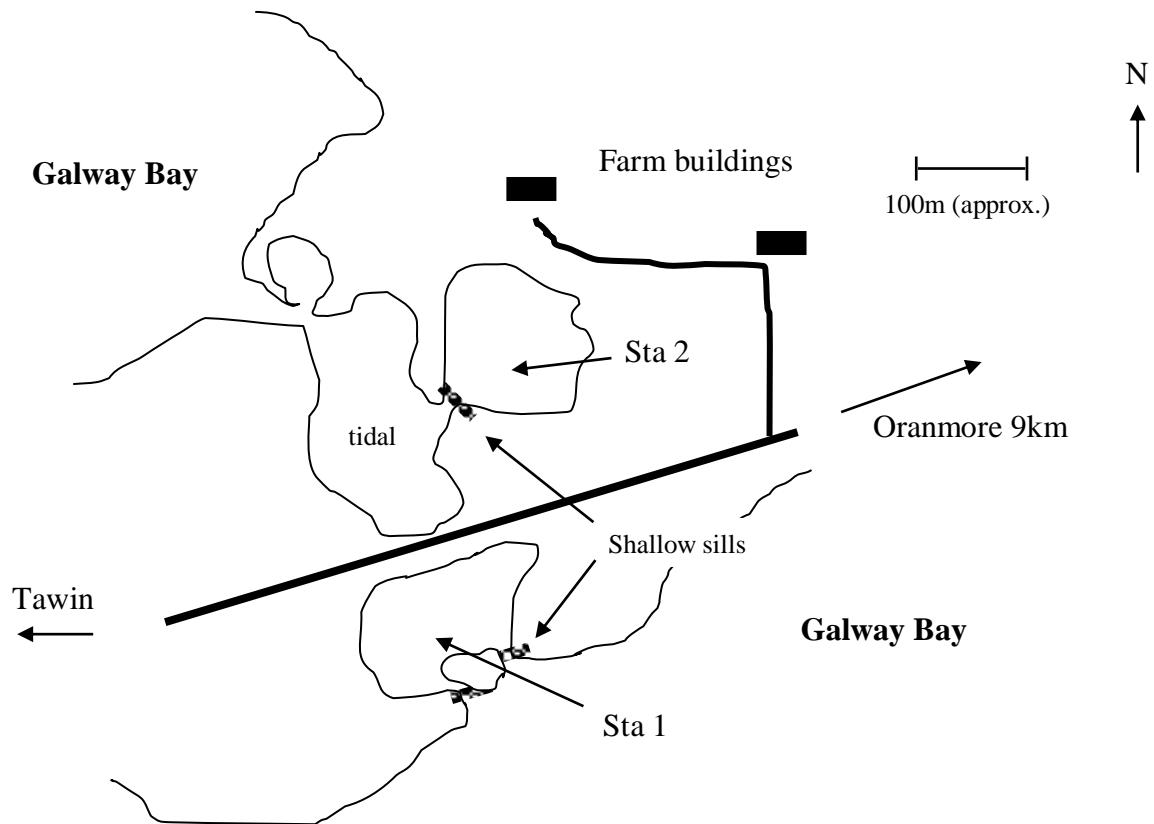


Figure 49.2 Sketch map of sampling stations at Mweeloon Pools from 17-18/10/06.

### Flora

A total of 11 floral taxa were recorded in Mweeloon Pools on 17-18/10/06, most of which are common marine algae (Table 49.1), but two species are regarded as lagoonal specialists:

***Chaetomorpha linum***. There is some doubt about the taxonomic status of the unattached lagoonal form of this species, and it was recorded by Hatch and Healy (1998) as *C. mediterranea*. It is a common, characteristic alga of semi-isolated Irish lagoons, recorded at 49 of the 87 (56.3%) lagoons surveyed.

***Ruppia* spp.** are the most characteristic aquatic plant taxa of Irish coastal lagoons. The species are hard to distinguish when not flowering, and remain uncertain at some sites, but *Ruppia* of one species or the other (*R. maritima*, *R. maritima* var *brevirostris*, *R. cirrhosa*) was found at 62 of the 87 lagoons (71.3%) surveyed, and is one of the most useful indicators of coastal lagoon status. ***Ruppia maritima*** appears to be the more common of the species and was found at 41 of the lagoons surveyed (47%).

The pool north of the road (Sta 2) is the slightly deeper pool with a more interesting flora, with abundant *Ruppia* (30% cover) and a small fragment of *Chara* sp. was found in this pool, but despite a careful search no other charophytes were found. A repeat visit is recommended to search for more of this charophyte which may prove to be a rare species.

The pool south of the road (Sta 1) is a more “estuarine” type lagoon, very shallow with extensive areas of bare mud, but also with rafts of *C. linum*.

Table 49.1 Positions of sampling stations in Mweeloon pools, with sampling date, hydrological variables (salinity, temperature and depth of water) type of substratum and percent cover of vegetation and bare ground and rotting vegetation. Species in bold text are "lagoonal specialist" species.

Date of survey	17-18/10/2006	
	Sta 1	Sta 2
GPS position	M 33474 19611	M 33596 19702
Salinity (psu)	29.7	29.7
Temperature	13.6	12.5
Depth (cm)	0-30	0-60
substratum	soft mud, gravel	gravel, stones, soft mud
<b>Percentage cover</b>		
<b>Algae</b>		
<b>Chlorophyceae</b>		
<i>Chaetomorpha linum</i>	40	20
<i>Enteromorpha</i> sp.	2	2
<i>Ulva</i> sp.	+	+
<b>Phaeophyceae</b>		
<i>Ascophyllum nodosum</i>	+	+
<i>Fucus vesiculosus</i>	2	2
<i>Pelvetia canaliculata</i>	+	+
<b>Rhodophyceae</b>		
<i>Chondrus crispus</i>	+	+
<i>Gigartina stellaris</i>	+	
<i>Gracilaria verrucosa</i>	+	+
<i>Polysiphonia</i> sp.	+	+
<b>Charophyceae indet.</b>	?	
<b>Angiosperms</b>		
<i>Ruppia maritima</i>		30
<b>Bare soft mud</b>	50	30
<b>Stones</b>	10	20

The pools are small but the aquatic vegetation is interesting and characteristically lagoonal. Based on this vegetation the site is regarded as of **moderate conservation value** as a coastal lagoon.

## Fauna

The fauna of these pools is surprisingly rich with a total of 53 taxa recorded (Table 49.2). Most of these are common marine animals and only three are lagoonal specialist species, all of which are common in lagoonal habitats, but the unidentified *Corophium* species is possibly *C. insidiosum* which is another specialist and a rare species.

*Corophium insidiosum* Amphipod crustacean recorded for the first time in Ireland (Oliver *et al.* 2007) at three lagoons in Co. Cork (Rostellan, Cuskinny, Rosscarbery), following Pinkster's prediction (1978) that it would be found in Ireland. Recent unconfirmed record from Raffeen (Co. Cork). Regarded as a lagoonal specialist in England but possibly an introduced invasive species in Ireland.

*Palaemonetes varians* Decapod crustacean listed as a lagoonal specialist in the U.K. by Barnes (1989) and Bamber (1997), but apparently is no longer regarded as such. Although found in estuaries, this species appears to be far more characteristic of lagoons in Ireland, found in 64 of the 87 lagoons surveyed (73.6%) and may require a lagoonal environment for reproduction. Therefore, it remains on the proposed list of lagoonal specialists for Ireland.

*Cerastoderma glaucum* Bivalve mollusc. A common lagoonal specialist found at 30 of the 87 lagoons (34.5%) surveyed.

Table 49.2 Faunal taxa recorded at stations in Mweeloon pools 17-18/10/06  
 r = rare, o = occasional, c = common, a = abundant; species in bold text are lagoonal specialist species.

		Sta 1	Sta 2
<b>Porifera</b>	<i>Halichondria panicea</i>	<b>o</b>	
<b>Cnidaria</b>	<i>Actinia equina</i>	<b>c</b>	<b>o</b>
	<i>Laomedea flexuosus</i>	<b>r</b>	
	<i>Anthopleura</i> sp.	<b>a</b>	<b>c</b>
<b>Nematoda</b>	indet.	<b>o</b>	
<b>Nemertea</b>	<i>Lineus ?viridis</i>	<b>c</b>	<b>o</b>
<b>Annelida</b>			
Polychaeta	<i>Arenicola defodiens</i>	<b>a</b>	<b>a</b>
	<i>Manayunkia estuarina</i>	<b>o</b>	
	<i>Nereis diversicolor</i>	<b>o</b>	<b>?</b>
	<i>Orbinia</i> sp.	<b>o</b>	
	<i>Pomatoceros triqueter</i>		<b>o</b>
	Spionid indet.	<b>r</b>	
	<i>Janua pagenstecheri</i>	<b>c</b>	<b>c</b>
	<i>Spirorbis spirorbis</i>	<b>o</b>	
Oligochaeta	Tubificidae indet.	<b>o</b>	
<b>Crustacea</b>			
Cirripedia	<i>Balanus crenatus</i>	<b>o</b>	<b>o</b>
	<i>Elminius modestus</i>	<b>o</b>	<b>o</b>
Mysidacea	<i>Praunus flexuosus</i>	<b>o</b>	<b>c</b>
Isopoda	<i>Idotea ?baltica</i>	<b>a</b>	<b>o</b>
Amphipoda		<b>c</b>	<b>o</b>
	<b><i>Corophium ?insidiosum</i></b>	<b>c</b>	
	<i>Melita palmata</i>	<b>o</b>	
	<i>Microdeutopus gryllotalpa</i>	<b>c</b>	<b>c</b>
	<i>Stenothoe ?</i>	<b>o</b>	<b>o</b>
Decapoda	<i>Carcinus maenas</i>	<b>c</b>	<b>c</b>
	<i>Palaemon elegans</i>	<b>o</b>	<b>o</b>
	<b><i>Palaemonetes varians</i></b>	<b>c</b>	<b>c</b>
<b>Insecta</b>			
Diptera	Chironomidae indet.	<b>o</b>	<b>o</b>
<b>Mollusca</b>			
Polyplacophora	<i>Lepidochitona cinerea</i>	<b>c</b>	<b>c</b>
Gastropoda	<i>Cerithiopsis tubercularis</i>	<b>o</b>	
	<i>Hydrobia ulvae</i>	<b>c</b>	<b>a</b>
	<i>Littorina littorea</i>	<b>c</b>	<b>c</b>
	<i>Littorina saxatilis</i>		<b>c</b>
	? <i>Pusillina sarsi</i>	<b>o</b>	<b>o</b>
	<i>Rissoa membranacea</i>	<b>o</b>	<b>a</b>
	<i>Skeneopsis planorbis</i>	<b>o</b>	<b>o</b>
Opisthobranchia	<i>Limapontia</i> sp.	<b>o</b>	<b>o</b>
Bivalvia	<b><i>Cerastoderma glaucum</i></b>	<b>c</b>	<b>?</b>
	<i>Modiolula phaseolina</i>		<b>r</b>
	<i>Mytilus edulis</i>	<b>c</b>	
	<i>Tapes decussata</i>	<b>r</b>	
<b>Bryozoa</b>	<i>Bowerbankia gracilis</i>	<b>o</b>	<b>c</b>
	<b><i>Conopeum seurati</i></b>	<b>o</b>	<b>o</b>
	<i>Cryptosula pallasiana</i>	<b>a</b>	<b>a</b>
<b>Echinodermata</b>	<i>Amphipholis squamata</i>		<b>c</b>
<b>Tunicata</b>	? <i>Aplidium proliferum</i>		<b>o</b>
	<i>Ascidiella scabra</i>		<b>o</b>
	<i>Botryllus schlosseri</i>		<b>c</b>
	<i>Ciona intestinalis</i>	<b>o</b>	<b>c</b>
	<i>Clavelina lepadiformis</i>	<b>o</b>	
<b>Pisces</b>	<i>Anguilla anguilla</i>		<b>r</b>
	<i>Gasterosteus aculeatus</i>	<b>o</b>	<b>c</b>
	<i>Gobius niger</i>		<b>r</b>
	<i>Pomatoschistus microps</i>	<b>c</b>	<b>c</b>

*Conopeum seurati* Bryozoan recorded at 49 of the 87 lagoons surveyed (56.3%), but is not listed in a recent review of Irish marine Bryozoa (Wyse Jackson 1991). Either the species is under-recorded or is truly a lagoonal specialist.

The aquatic fauna of these two pools is surprisingly rich for such a small area. Only three of the recorded species are lagoonal specialists, but one other species (*C. insidiosum* unconfirmed) appears to be another specialist which is a rare species in Ireland. Based on this fauna the site is regarded as of **moderate conservation value**.

### Summary

The lagoons referred to as Mweeloon Pools are small and geomorphologically not of great interest but biologically they are relatively rich, especially the northern pool. In total, a large number of taxa were recorded in 2006 with five lagoonal specialists (2 floral, 3 faunal) and another unconfirmed species (*C. insidiosum*) is a rare lagoonal specialist amphipod. A small fragment of charophyte was found and the site should be revisited to look for more evidence of this possibly rare species. Overall, the site is rated as of **moderate conservation value**.

**Overall Conservation Value = Moderate**

### Conservation Status Assessment (from Oliver 2007)

Impacts	Natural eutrophication. Poached by cattle in some areas. Small area of infilling
Conservation Status	Unfavourable-Inadequate

### Further Information

Listed as a lagoon by Healy *et al.* 1997, Healy 2003 and Oliver 2005 and included in the Conservation Status Assessment (Oliver 2007).

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