

**4.48** **Doorus Lakes (3), County Galway O.S. M 357 117**  
**O.S. Discovery Sheet 52**



**Conservation Designation:** Galway Bay complex SAC 000268 pNHA 000268

**General description:**

Doorus Lakes are a group of small **karst** lakes situated 2km northwest of Kinvarra, Co. Galway. Three of these, L. Fadda, L. Namona and a small un-named pool are brackish and regarded as lagoons. All others in the area are believed to be freshwater and were not surveyed. However, this is a difficult area to survey due to undulating topography and difficult access across small fields with high overgrown stone walls, and other lagoons may have been overlooked.

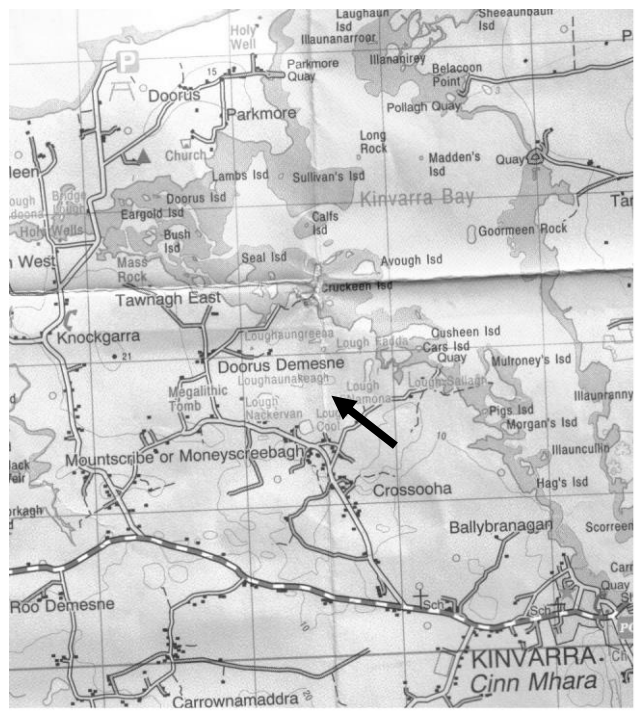


Figure 48.1 Location map of Doorus Lakes.

Doorus Lakes were surveyed on 22-23/7/06 and 18-19/10/06 for aquatic fauna and flora. Four stations were selected for sampling at this time (Figure 48.2, Table 48.1)

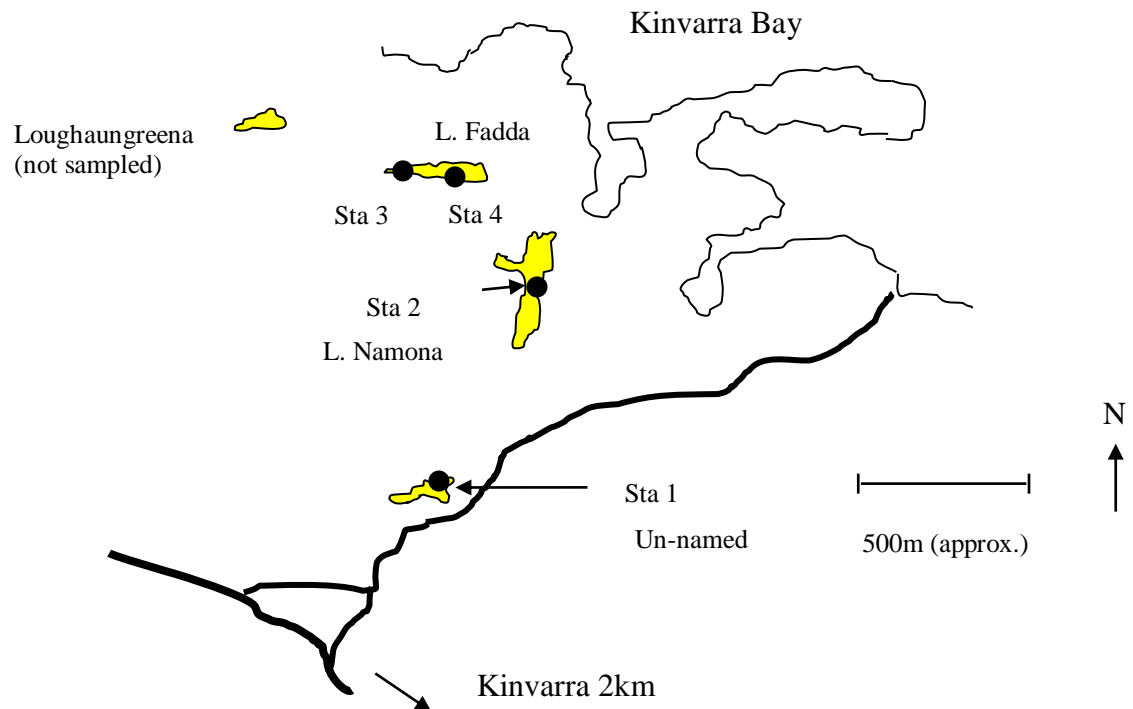


Figure 48.2 Sampling stations used at Doorus Lakes on 22-23/7/06 and 18-19/10/06

### Flora

Only five floral taxa were recorded in the three pools sampled in 2006, although all three pools are quite different from each other.

The small pool beside the road un-named on the O.S. Discovery map (Sta 1) is very shallow and is almost (90%) bare, very soft marl, with a fringe of *Schoenoplectus lacustris* and a few decaying plants of what may have been *Ruppia*. It was rather surprising to find that this pool was brackish and may have been more interesting in the past, but it now appears to be threatened by encroaching marginal vegetation, nutrient enrichment from domestic waterfowl and deliberate infilling.

Lough Namona (Sta 2) is the most interesting site with dense growths of *Ruppia maritima* and it is somewhat surprising that no charophytes were found at this site. This lagoon appears to be eutrophic and is poached by cattle along most of the shoreline.

Lough Fadda is similar to the small pool by the road except that it is larger, but is mostly bare very soft marl with a dense growth of *Schoenoplectus lacustris* around the margins. It is also very shallow and may dry out almost completely in the summer.

*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%).

Based on vegetation, apart from the fact that one pool is dominated by *R. maritima*, Doorus Lakes are not botanically interesting, and as coastal lagoons, they are rated as of **low conservation value**.

Table 48.1 Positions of sampling stations in Doorus Lakes, with hydrological variables (salinity, temperature and depth of water) type of substratum and percent cover of vegetation, bare ground and rotting vegetation. Species in bold text are lagoonal specialist species.

	L. Namona		L. Fadda	
	Sta 1	Sta 2	Sta 3	Sta 4
GPS position	M 35745 11540	M 35819 11887	W 35546 12031	W 35004 12017
Salinity (psu)	1.6	16.2	6.4	8.5
Temperature	20.6	23.3	13.7	13.6
Depth (cm)	10-20	0-40	0-50	0-100
Substratum	soft mud, marl	soft mud in centre, stones & limestone pavement	soft mud in centre, stones & limestone pavement  (may dry out in summer)	soft mud in centre, stones & limestone pavement  (perhaps anoxic in summer)
Percentage cover				
Algae				
Chlorophyceae				
<i>Cladophora</i> sp.		5	60	
<i>Enteromorpha</i> sp.	+		+	
Angiosperms				
<i>Juncus</i> sp.			30	20
<b><i>Ruppia maritima</i></b>	?	70		
<i>Schoenoplectus lacustris</i>	10		60	
Bare soft mud	90	20		70
Rotting vegetation		5		

## Fauna

A total of 28 faunal taxa were recorded at Doorus Lakes, of which four species are lagoonal specialists (Table 48.2), but all of these are relatively common in lagoonal habitats. Somewhat surprisingly, the “lagoon prawn” *Palaemonetes varians* was found in the small pool beside the main road (Sta 1). The water boatman *Sigara stagnalis* was found in L. Namona and L. Fadda. Small shells of *Cerastoderma glaucum* were also found in L. Namona, as were small patches of the bryozoan *Conopeum seurati*.

*Palaemonetes varians* is 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.

*Sigara stagnalis* A common lagoonal specialist found at 36 of the 87 (41.4%) lagoons surveyed.

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

*Conopeum seurati* 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.

Table 48.2 Faunal taxa recorded at stations in Doorus Lakes 2006.

r = rare, o = occasional, c = common, a = abundant . Species in bold text are lagoonal specialist species.

		Sta 1	L. Namona Sta 2	L. Fadda Sta 3	Sta 4
<b>Annelida</b>					
	Polychaeta	<i>Nereis diversicolor</i>	<b>o</b>		
	Oligochaeta	Tubificidae indet.	<b>o</b>		<b>o</b>
<b>Crustacea</b>					
	Ostracoda	indet.	<b>o</b>	<b>o</b>	<b>o</b>
	Copepoda	Calanoida indet.		<b>a</b>	
		Harpacticoida indet.		<b>o</b>	<b>o</b>
	Isopoda	<i>Idotea</i> sp.	<b>o</b>		
	Amphipoda	<i>Gammarus duebeni</i>	<b>o</b>		<b>o</b>
	Decapoda	<b><i>Palaemonetes varians</i></b>	<b>o</b>		
<b>Acarina</b>					
		indet.	<b>o</b>		
<b>Insecta</b>					
	Trichoptera		<b>r</b>		<b>c</b>
	Heteroptera	<i>Notonecta</i> sp.	<b>r</b>		
		<i>Sigara lateralis</i>	<b>o</b>		
		<i>Sigara nigrolineata</i>	<b>c</b>		
		<b><i>Sigara stagnalis</i></b>	<b>a</b>	<b>o</b>	<b>o</b>
	Coleoptera	<i>Helophorus fulgidicollis</i>	<b>o</b>		
		<i>Hydrobius</i> sp.	<b>o</b>	<b>o</b>	
		<i>Hydroporus</i> sp.	<b>o</b>	<b>o</b>	
		<i>Hygrotus</i> sp.	<b>a</b>		
		<i>Noterus clavicornis</i>	<b>o</b>	<b>o</b>	
	Diptera	Chironomidae indet.	<b>c</b>		
		Syrphidae indet.	<b>o</b>		
<b>Mollusca</b>					
	Gastropoda	<i>Hydrobia ulvae</i>	<b>r</b>		
		<i>Lymnaea peregra</i>	<b>o</b>		
		<i>Potamopyrgus antipodarum</i>	<b>c</b>	<b>o</b>	<b>o</b>
	Bivalvia	<b><i>Cerastoderma glaucum</i></b>	<b>Spat shells</b>		
<b>Bryozoa</b>					
		<b><i>Conopeum seurati</i></b>	<b>o</b>		
<b>Pisces</b>					
		<i>Gasterosteus aculeatus</i>	<b>c</b>		

Doorus Lakes are interesting brackish pools with a total of 4 lagoonal specialist species, but all of these are common in lagoonal habitats in Ireland. As coastal lagoons, they are rated as of **low conservation value**.

### Summary

The lagoons of Doorus Lakes are interesting natural **karst lagoons** but they are small and largely impacted by nutrient inputs and poaching from cattle. Biologically, they again are interesting, with five lagoonal specialists (1 floral and 4 faunal species), but all of these are common in lagoonal habitats in Ireland. These lagoons may have been more interesting in the recent past, and perhaps may improve, but based on results of the survey in 2006, they are rated as of **low conservation value**. However, some of the beetle species remain to be identified and a repeat visit may reveal greater conservation value.

**Overall Conservation Value = Low**

<b>Conservation Status Assessment (from Oliver 2007)</b>	
Impacts	Moderate eutrophication in shallow lagoons. Cattle poaching in some areas. Very low water levels in dry summers.
Conservation Status	<b>Unfavourable-Inadequate</b>

#### **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).

#### References:

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- Barnes, R.S.K. 1989. Coastal lagoons of Britain: an overview and conservation appraisal. *Biological Conservation* **49**: 295–313.
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- Wyse Jackson, P.N. 1991. Distribution of Irish marine Bryozoa, together with biographical notes relating to the chief researchers in the group. *Bulletin of the Irish Biogeographical Society*. **14**: 129-18.