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Blennerville Lakes (2), County Kerry O.S. Q 806 133
O.S. Discovery Sheet 71



Conservation Designation: Tralee Bay and Magharees Peninsula,
west to Cloghane SAC 002070, pNHA 002070

General description:

Situated 1km southwest of Tralee. Two small (total 3ha) **artificial lagoons** formed behind an embankment of the River Lee, carrying a road and canal from Tralee. Low salinity (5.1-10.3psu) at the time of sampling (20/10/06) and highly eutrophic.

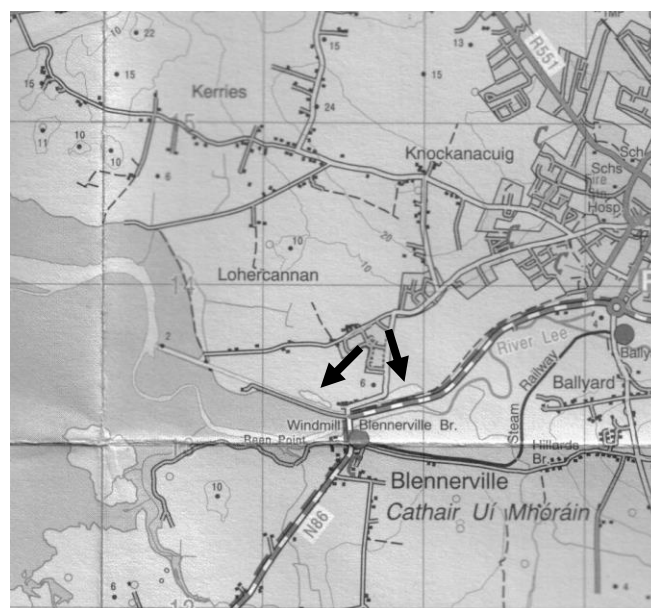


Figure 30.1 Location map of Blennerville Lakes (2).

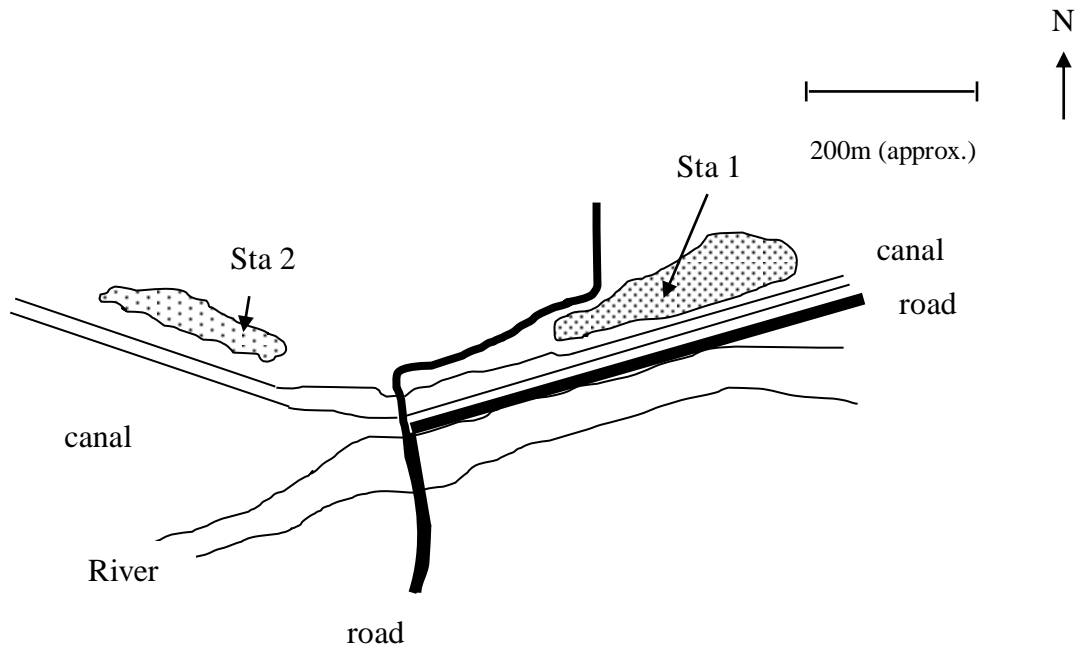


Figure 30.2 Sketch map of sampling stations used at Blennerville Lakes on 20/10/06.

Flora

Only 6 floral taxa were recorded in Blennerville lagoons, of which 4 were identified to species (Table 30.1). One of the species (*Ruppia maritima*) is regarded as lagoonal specialist.

Table 30.1 Positions of sampling stations in Blennerville Lakes, with sampling date, hydrological variables (salinity, temperature and depth of water), type of substratum and percent cover of vegetation and substratum. Text in bold indicates "lagoonal specialist" species.

	Stations	
	Sta 1	Sta 2
GPS	Q 81838 13302	Q 81394 15263
Salinity at surface	8.8	5.1
Salinity at depth	10.3	9.6
Temperature at surface	13.9	16.1
Temperature at depth	14.7	15.3
Depth	0-100	0-100
Substratum	Clay, mud	Clay, mud, stones
<i>Cladophora</i> sp.	10	10
<i>Enteromorpha</i> sp.	+	+
<i>Fucus vesiculosus</i>		Drift?
<i>Phragmites australis</i>	10	+
<i>Ruppia maritima</i>	50	10
<i>Scirpus maritimus</i>	+	20
Leaf litter	50	

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 (*R. maritima* at 41, *R. cirrhosa* at 22 sites).

Ruppia maritima appears to be the more common of the species and was found at 41 of the lagoons surveyed.

None of the other plants recorded are of any special interest. Based on aquatic vegetation, the site is regarded as of **low conservation value** as a coastal lagoon.

Fauna

A total of 15 faunal taxa were recorded in Blennerville lagoons, of which 12 were identified to species (Table 30.2). Three of these species are regarded as lagoonal specialists but none are particularly rare:

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.

Sigara stagnalis Hemipteran insect (water-boatman). A common lagoonal specialist found at 36 of the 87 (41.4%) lagoons surveyed.

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.

Table 30.2 Aquatic fauna recorded at sampling stations in Blennerville lagoons, Co. Kerry on the 20/10/05. r = rare, o = occasional, c = common, a = abundant. Species in bold text are lagoonal specialists.

Taxa	Sampling Stations	
	Sta 1	Sta 2
Crustacea		
Ostracoda	indet.	o
Mysidacea	<i>Neomysis integer</i>	c
Isopoda	<i>Asellus aquaticus</i>	r
	<i>Idotea ?baltica</i>	r
Amphipoda	<i>Lekanesphaera rugicauda</i>	o
	<i>Gammarus zaddachi</i>	c
	? <i>Urothoe</i> sp.	r
Decapoda	<i>Palaemonetes varians</i>	o
Insecta		
Odonata	<i>Ischnura elegans</i>	o
Trichoptera	Limnephilidae indet.	o
Heteroptera	<i>Sigara stagnalis</i>	c
Coleoptera	<i>Gyrinus substriatus</i>	r
Diptera	Chironomidae indet.	r
Mollusca		
Gastropoda	<i>Potamopyrgus antipodarum</i>	a
Bryozoa	<i>Conopem seurati</i>	o

Three of the species of aquatic fauna recorded are lagoonal specialists but none are particularly rare in lagoonal habitats in Ireland. The site is highly eutrophic and based on aquatic fauna, the site is regarded as of **low conservation value** as a coastal lagoon.

Summary

Blennerville lagoons comprise two small (total 3ha), low salinity (5-10psu) **artificial lagoons** which are both highly eutrophic. The species list is low, but a total of four lagoonal specialists were recorded (1 floral, 3 faunal), all of which are relatively common. Based on geomorphology, fauna and flora, the conservation value of these lagoons is rated as low, but potentially could be higher if water quality was improved.

Overall Conservation Value = Low

Conservation Status Assessment (from Oliver 2007)

Impacts	Eutrophication from town effluents and waterfowl (amenity area). Urbanisation. Ind/commercial activities. Dumping. Landfill.
Conservation Status	Unfavourable-BAD

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:

- Bamber, R.N. 1997. Assessment of saline lagoons within Special Areas of Conservation. *English Nature Research Reports* No. 235.
- Barnes, R.S.K. 1989. Coastal lagoons of Britain: an overview and conservation appraisal. *Biological Conservation* **49**: 295–313.
- Healy, B. 2003. Coastal Lagoons. In: *Wetlands of Ireland*. R. Otte (ed). Chapter 4. University College Dublin Press. Dublin. 44-78.
- Healy, B., Oliver, G.A., Hatch, P. & Good, J.A. 1997. *Coastal lagoons in the Republic of Ireland. Vol. 3. Inventory of lagoons and saline lakes*. Report to the National Parks and Wildlife Service, Dublin.
- Oliver, G.A. 2005. *Seasonal changes and Biological Classification of Irish Coastal Lagoons*. PhD Thesis. U.C.D., Dublin. Available on www.irishlagoons.com
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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.