4.5	**South Slob channel, County Wexford** O.S. T 072 183 O.S. Discovery Sheet 77

Conservation Designation: Wexford Slobs and Harbour pNHA 000712

General description:

Formerly a creek system in mudflats, reclaimed in mid 1800's by construction of a sea wall. The network of creeks joining the large Coal Channel runs through an area of polders and salt marsh. Substrate near the sea wall muddy sand - sandy mud.

Brackish conditions are probably confined to the part of the Coal Channel near the sea wall where landward seepage of seawater occurs, giving a salinity of 2-5‰. Elsewhere water is probably fresh. Excess water is pumped out into Wexford harbour by way of an artificial perimeter canal.

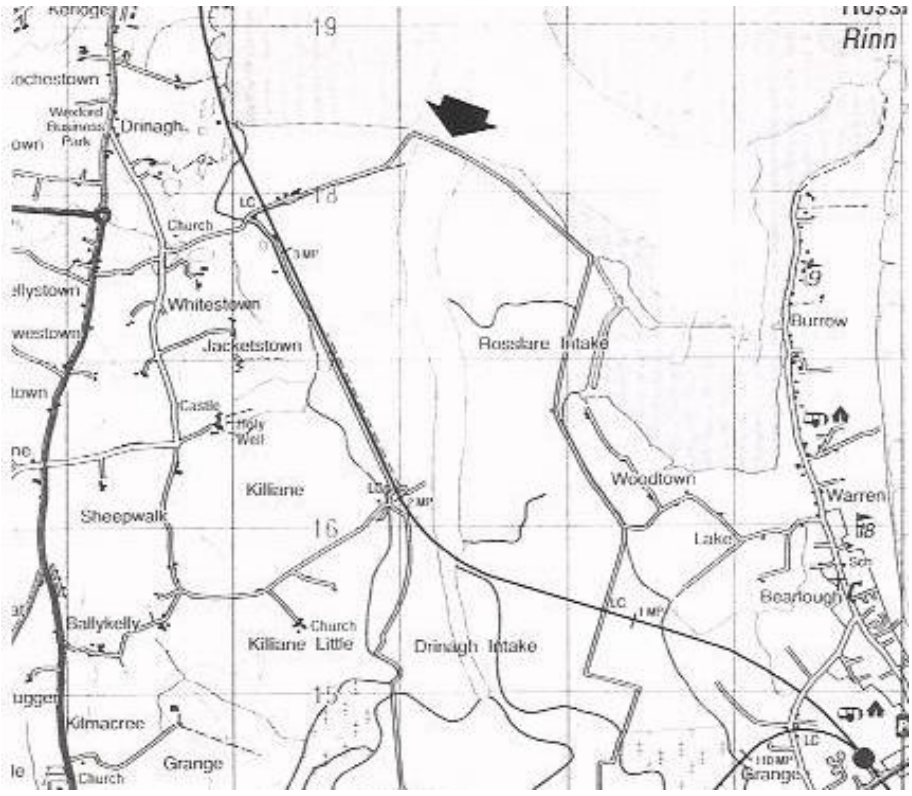

Figure 5.1 Location map of South Slob channel

The South Slob was surveyed in 2002 as part of a PhD study (Oliver 2005) with an additional vegetation survey in 2003 by C. Roden (Roden 2004), and used in a biological classification of Irish coastal lagoons. Four stations were selected for the sampling of aquatic fauna and flora (Figure 5.2, Table 5.1)

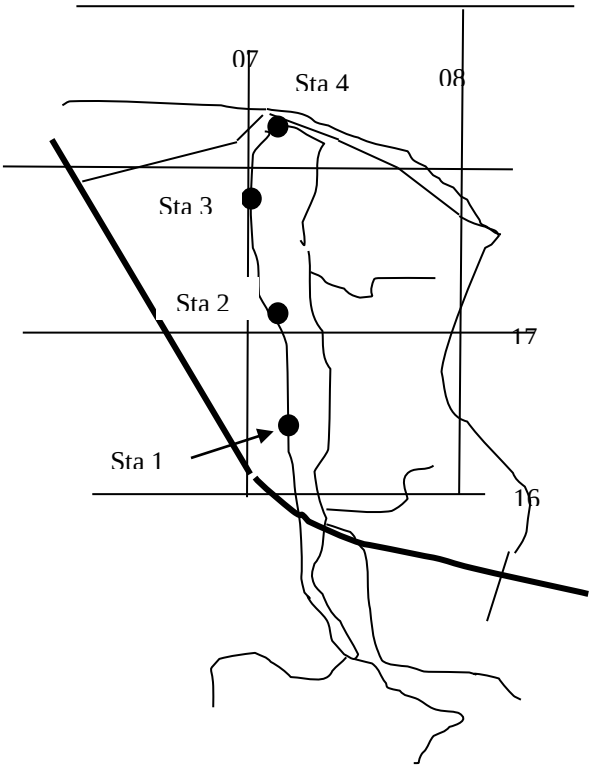

Figure 5.2 Sampling stations used at South Slob Channel

Flora

A total of 11 floral taxa were recorded in the South Slob channel, of which 9 were identified to species (Table 5.1). None of these taxa are regarded as lagoonal specialists or are particularly notable.

A brackish water plant ***Najas marina*** not recorded elsewhere in Ireland was recorded in an unpublished survey by the Eastern Fisheries Board (ERFB report 1989) and ***Ceratophyllum demersum*** was recorded by N.F.Stewart in 1991 but neither species was found during a survey by C. Roden in 2003 (Roden 2004), perhaps due to the plankton bloom and turbidity of the water.

Based on this survey, the site is regarded as of **low conservation value** for aquatic vegetation typical of lagoons.

Table 5.1 Positions of sampling stations in South Slob channel, with sampling date, hydrological variables (salinity, temperature and depth of water), type of substratum and percent cover of vegetation, bare ground and rotting vegetation.

	Station 1	Station 2	Station 3	Station 4
GPS position	T 07178 16588	T 07143 17171	T 07093 17780	T 07199 18259
Sampling dates	06/09/2002	07/09/2002	08/09/2002	08/09/2002
Salinity(psu)	1.8	1.7	1.6	1.7
Temperature	17.4	17.2	15.3	16.5
Depth(cm)	0-200	30-100	10-120	20-120
Substratum	stones on shoreline, to deep soft mud	steep earth banks, muddy sand.	*Phragmites* "scraw"	clean, fine, firm sand
Percentage cover				
Cladophora sp.	5			
Enteromorpha sp.	1			
Lemna trisulca	1		1	
Myriophyllum alterniflora			5	10
Myriophyllum spicatum	30			10
Potamogeton pectinatus	20		10	75
Phragmites australis	15	30	30	5
Ranunculus baudotii	1			5
Scirpus maritimus			1	5
Schoenoplectus lacustris	2			
Zannichellia palustris		2		
Bare ground	50	70	70	10

Fauna

A total of 29 faunal taxa were recorded at the South Slob channel, of which 25 were identified to species (Table 5.2). Only two of these taxa are regarded as lagoonal specialists, but neither is otherwise notable:

Lekanesphaera hookeri is a common lagoonal isopod crustacean, found at 37 of the 87 lagoons surveyed (42.5%).

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.

Based on aquatic fauna, the site is regarded as of **low conservation value.**

Table 5.2 Faunal taxa recorded at stations in South Slob channel on 6-8/9/02. (SWm = mean of 3x 30 second sweeps, Sedm = mean of 3 x 0.005m^2 diameter sediment cores, L.T. = Light trap, **Ab** = overall abundance of all sampling methods including visual searches).r = rare, o = occasional, c = common, a = abundant. Species in bold text are lagoonal specialist or rare species.

		Sampling Stations											
Taxa		SWm	**Ab**	SWm	Sedm	L.T.	**Ab**	SWm	L.T.	**Ab**	SWm	Sedm	L.T.	**Ab**
Turbellaria	*Procerodes littoralis*		o				o							
Hirudinea	*Helobdella stagnalis*	0.3	o	0.3			o				1			2
	Tubificidae indet.											1		2
Crustacea														
Ostracoda	indet.													
Mysidacea	*Neomysis integer*	10.3	o	201.3		260	c	2.3	1450	2	31.3		1000	3
Isopoda	*Asellus acuaticus*	0.7	o	0.3	1.7	0	c	1.7		3				
	Lekanesphaera hookeri	84.3	c	3.0	0.3	540	c	239.7	240	3	146.7		1000	3
Amphipoda	Amphipoda indet	4.0	c	1.3	1.3	1	o	43.7		4	4.3		7	3
	Gammarus duebene	1.0	o	1.3	1.3	1	o	43.7		4	4.3		7	3
	Gammarus zaddachi	3.0	c											
Decapoda	***Palaemonetes varians***	0.3	r	1.0	0.0	5	o		1	1				
Insecta														
Odonata	*Ischnura elegans*	0.7	o	0.3			r							
Heteroptera	Corixidae	22.3	c	8.0		115	o	17	558	3	3.7		1000	2
	Corixa panzeri	9.3	c	3.3		50	o	4.7	450	3			100	2
	Notonecta sp.												1	1
	Sigara dorsalis	4.0	c			9	o	4	100	2			900	2
Coleoptera				1.7		20	c	1	6	2	0.3		2	2
	Haliplus confinis							0.3	2	2				
	Haliplus flavicollis					4	o	0.3	2	2			2	2
	Haliplus immaculatus					12	c	0.3	1	2				
	Helophorus minutus										0.3			1
	Ilybius quadriguttatus					1	o							
	Nebrioporus depressus			0.7			o							
	Noterus clavicornis					1	r		1	1				
Diptera	Chironomidae indet.	0.7	o	0.3	4.3	0	o	1.7	1	2	17.3	1.7		3
Hydracarina	indet.	0.3	o										1	1
Mollusca														
Gastropoda	*Potamopyrgus antipodarum*	121.7	c	15.3	3.3	10	c	0.7	1	2	0.7		4	2
Pulmonata	*Lymnaea peregra*	12.3	c	2.0			o	1		2	4			2
Bryozoa	*Plumatella repens*		o				c			3				
Pisces	*Anguilla anguilla*		o											
	Cyprinus sp.		r											
	Gasterosteus aculeatus	2.7	o	2.0		95	c		2	1	0.7		1	2
	Pomatoschistus microps													
	Rutilus rutilus		c				c							

Summary

The South Slob channel is a large (50ha) **artificial lagoon** with a relatively small number of taxa (11 floral, 29 faunal) most of which are typically freshwater species. Only two lagoonal species were recorded, neither of which is rare. Salinity is measurable (1-2psu) but this site is of no conservation interest as a lagoon, unless the presence of *N. marina* can be confirmed.

Overall Conservation Value = Low

Conservation Status Assessment (from Oliver 2007)	
Impacts	Eutrophication from surrounding farmland. Leisure fishing. Invasion by exotics. Accumulation of organic material.
Conservation Status	Unfavourable-BAD

Further Information

Surveyed by Galvin (1992). Listed as a lagoon by Healy *et al.* 1997, and Healy 2003. Surveyed in 2002/2003 as part of a PhD study (Oliver 2005), with an additional vegetation survey in 2003 by Roden (2004), and used in a biological classification of Irish coastal lagoons and in the Conservation Status Assessment (Oliver 2007).

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