

# Larne Lough

Designations and management issues

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# Designation selection features

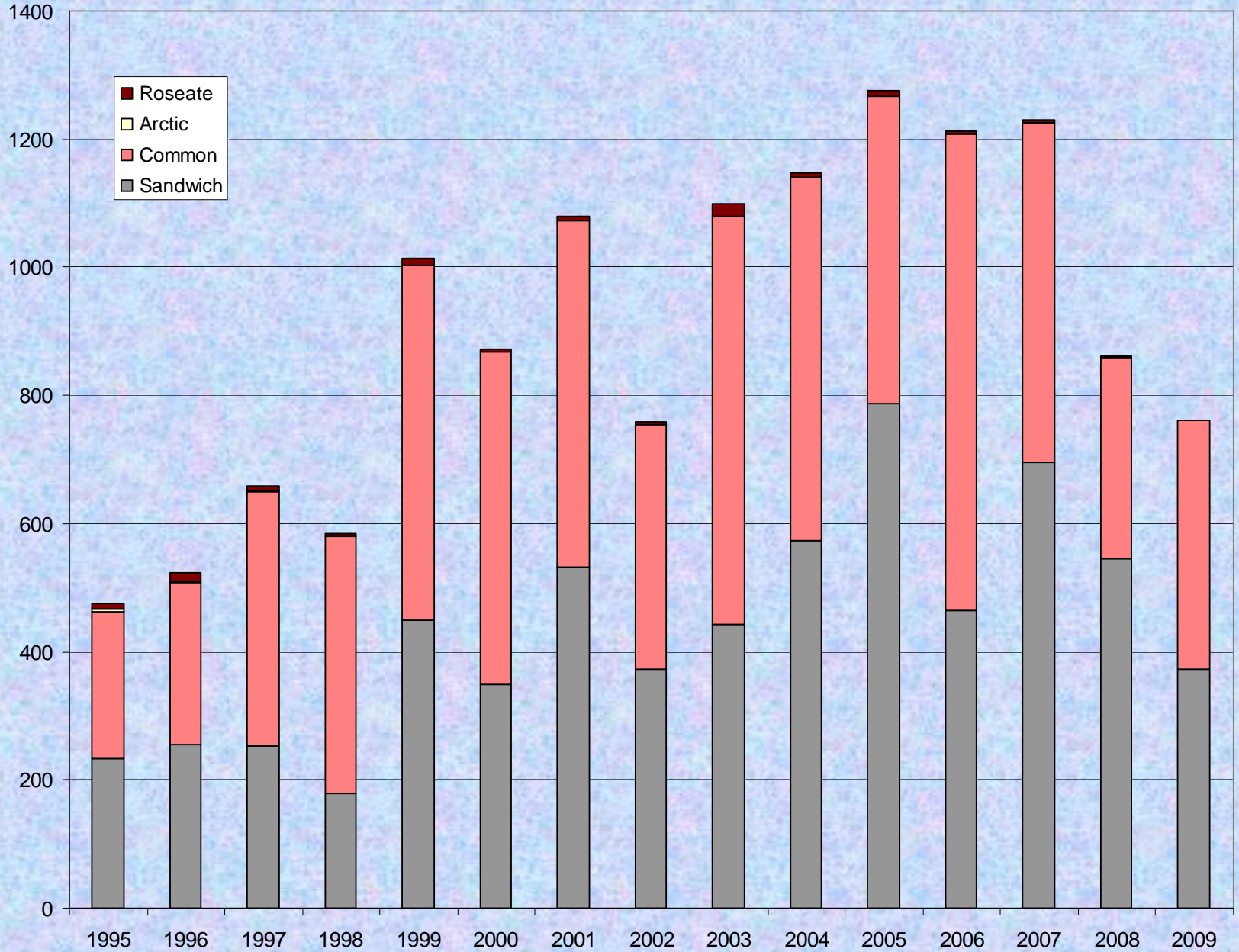
	Site	Feature			Condition assessment
Site Name	Type	Type	ASSI Feature	European Feature (SPA)	2002-2008
Larne Lough	SPA	Species	Common Tern (R)	Common Tern	Favourable: Un-classified
Larne Lough	SPA	Species	Roseate Tern (R)	Roseate Tern	Favourable: Un-classified
Larne Lough	SPA	Species	Sandwich Tern	Sandwich Tern	Favourable: Un-classified
Larne Lough	SPA	Species	Light-bellied Brent Goose (R)	Light-bellied Brent Goose	Favourable: Un-classified
Larne Lough	ASSI	Habitat	Coastal saltmarsh		Favourable: Un-classified
Larne Lough	ASSI	Habitat	Saline lagoons		Favourable: Un-classified
Larne Lough	ASSI	Species	Goldeneye		Favourable: Un-classified
Larne Lough	ASSI	Species	Great Crested Grebe		Favourable: Un-classified
Larne Lough	ASSI	Species	Red-breasted Merganser		Favourable: Un-classified
Larne Lough	ASSI	Species	Redshank		Favourable: Un-classified
Larne Lough	ASSI	Species	Shelduck		Favourable: Un-classified
Larne Lough	ASSI	Species	Breeding bird assemblage		Favourable: Un-classified
Larne Lough	ASSI	Species	Invertebrate assemblage		Favourable: Un-classified

(R) Ramsar qualifying feature

# Larne Lough SPA



# Larne lough Tern 1995-2009



## Larne Lough – breeding tern populations

### **Designation population**

Roseate Tern – 6 pairs

Common Tern – 174 pairs

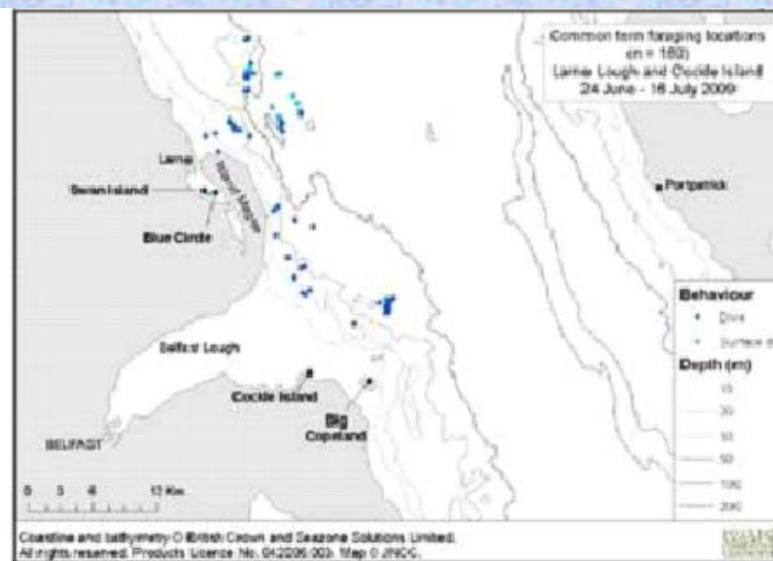
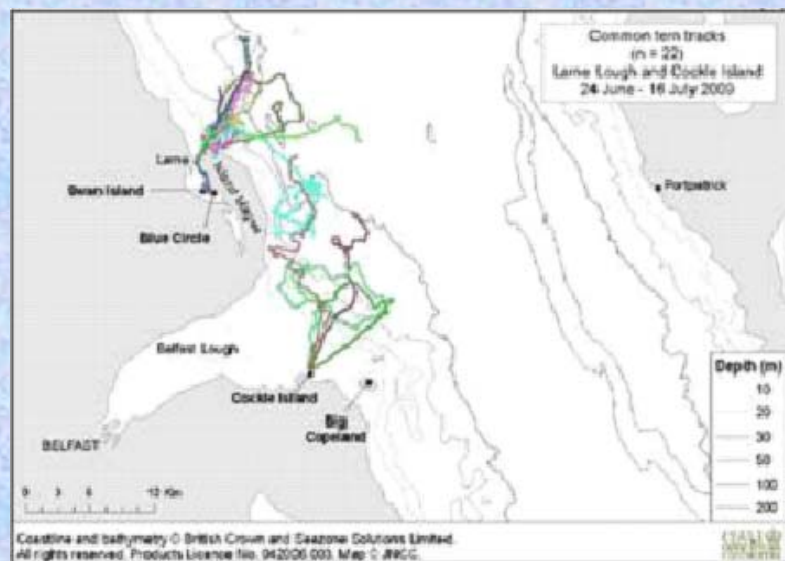
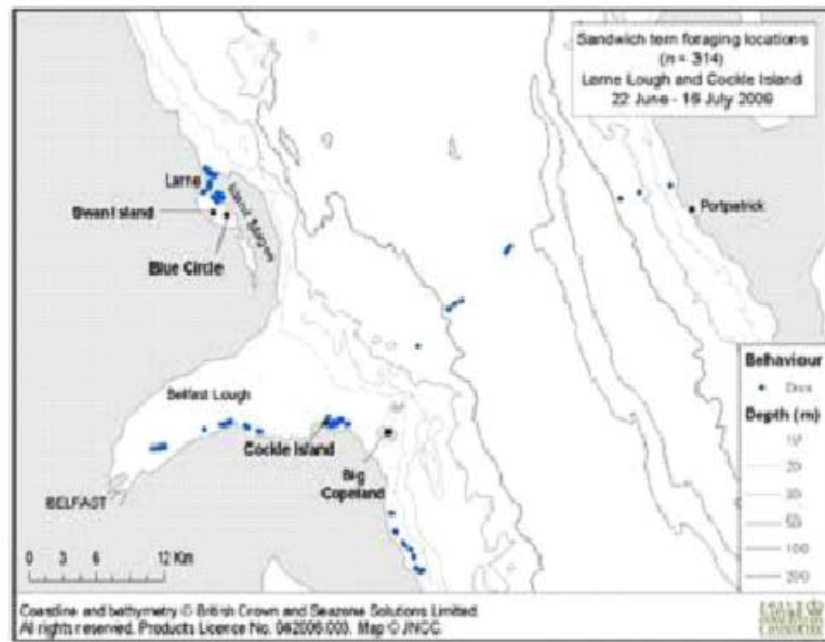
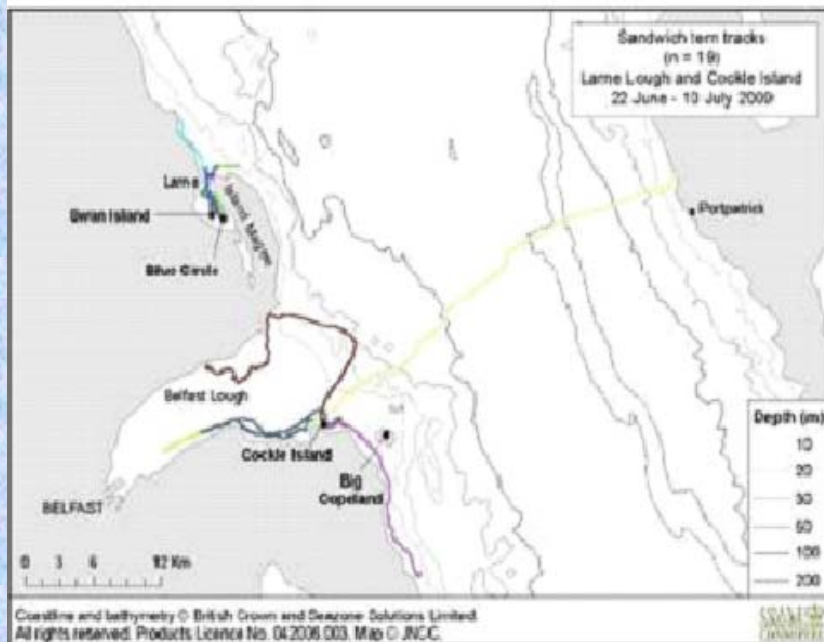
Sandwich Tern – 123 pairs

### **Current population**

2005/09 mean – 4 pairs

2005/09 mean – 490 pairs

2005/09 mean – 573 pairs



# Larne Lough SPA



**Light-bellied Brent Goose**

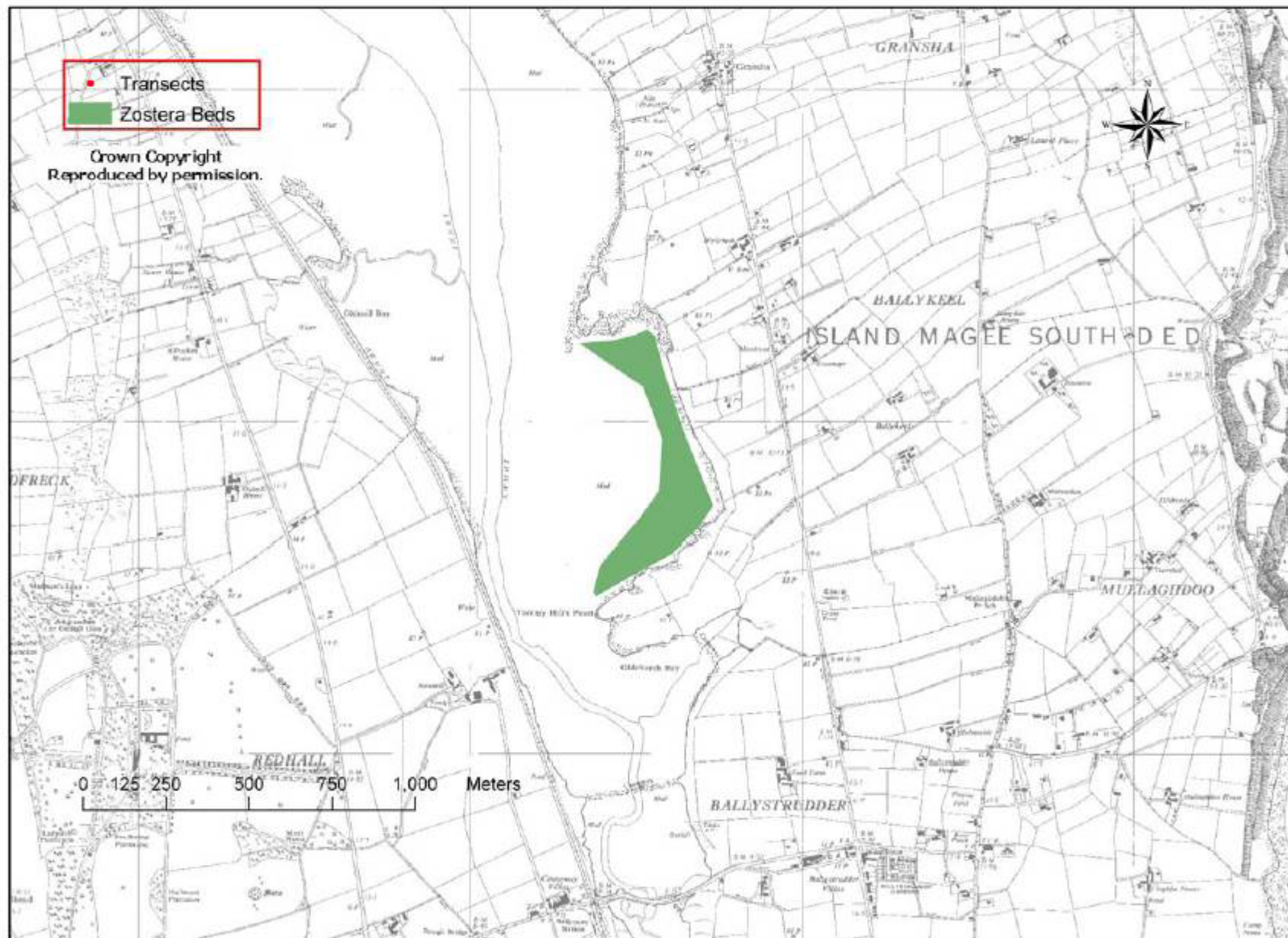
Winter	Annual Max
98/99	218
99/00	253
00/01	266
01/02	235
02/03	139
03/04	235
04/05	254
05/06	218
06/07	256
07/08	369

5 year mean 266

Designation population – 202 birds



**Figure 22:** Distribution of *Zostera* beds Larne Lough.





Seabed and water column

- fish
- seabed and water column invertebrates

Inter-tidal mudflats

- surface and burrowing invertebrates



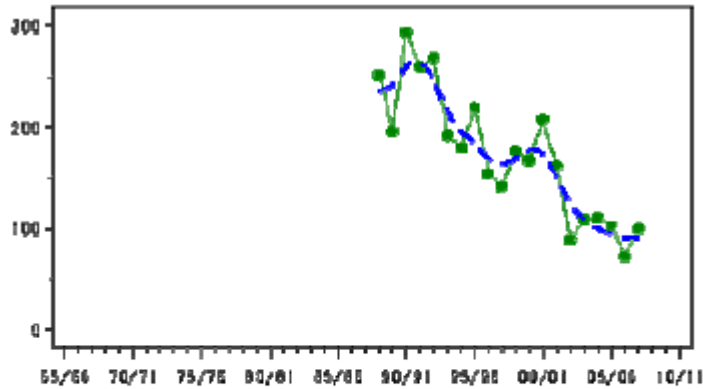
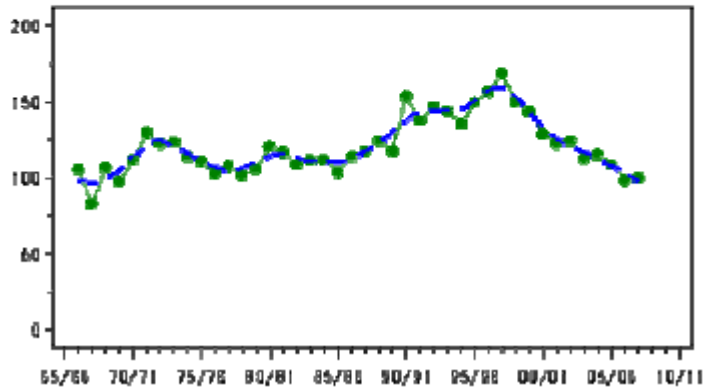
# ASSI bird features

	<b>03/04</b>	<b>04/05</b>	<b>05/06</b>	<b>06/07</b>	<b>07/08</b>	<b>5 yr mean</b>	<b>Designation population</b>
Shelduck	633	808	880	832	486	728	246
Goldeneye	95	73	155	97	89	102	182
Red-breasted Merganser	135	211	151	196	142	167	180
Great Crested Grebe	115	50	56	84	105	82	121
Redshank	356	462	737	379	383	317	415

# Goldeneye

*Bucephala clangula*

GB max: 12,611 Feb  
NI max: 5,156 Mar



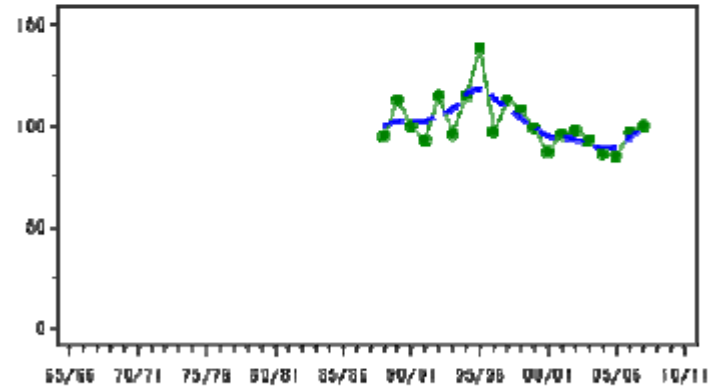
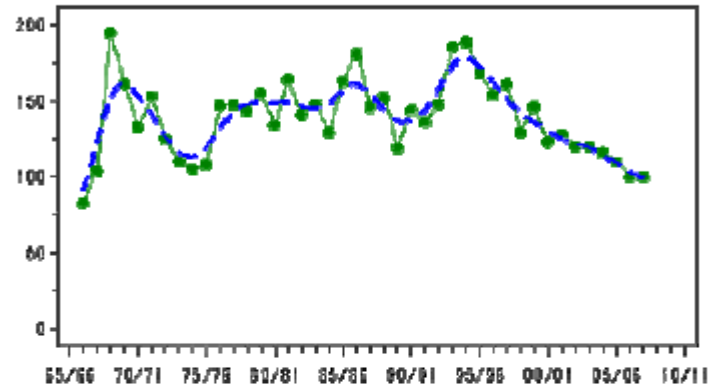
Annual Index  
Trend

Figure 30.a, Annual indices & trend for Goldeneye for GB (above) & NI (below).

# Red-breasted Merganser

*Mergus serrator*

GB max: 3,362 Feb  
NI max: 696 Feb



Annual Index  
Trend

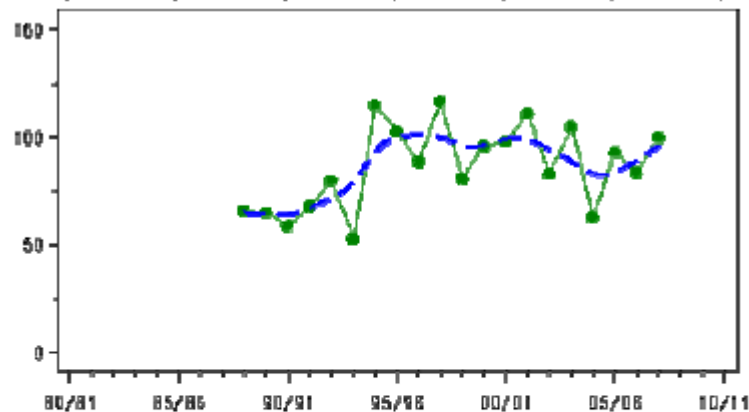
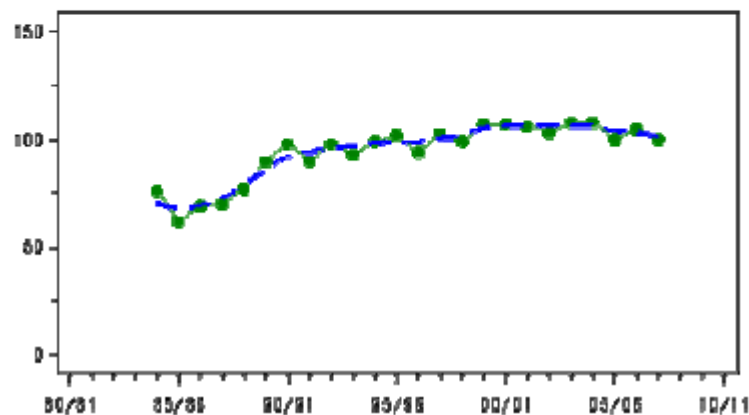
Figure 31.a, Annual indices & trend for Red-breasted Merganser for GB (above) & NI (below).

# Great Crested Grebe

*Podiceps cristatus*

GB max: 7,938 Feb

NI max: 2,919 Dec



Annual Index  
Trend

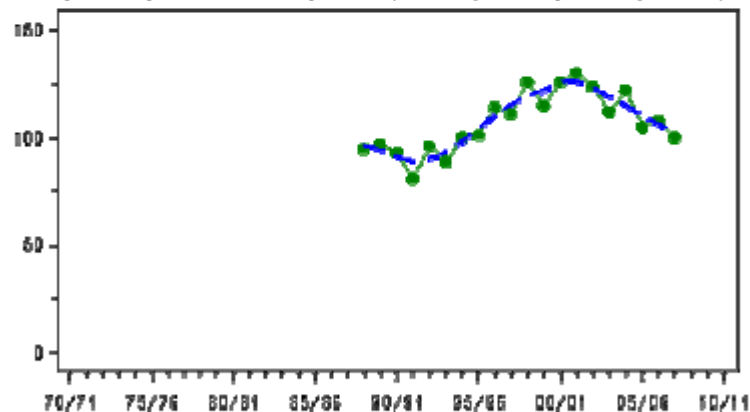
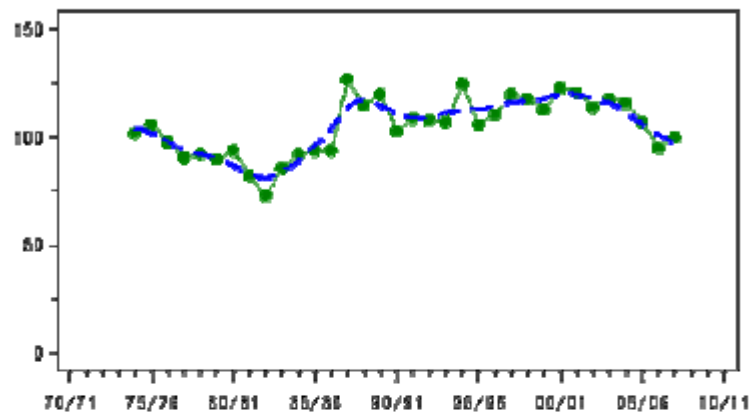
Figure 35.a, Annual indices & trend for Great Crested Grebe for GB (above) & NI (below).

# Redshank

*Tringa totanus*

GB max: 78,595 Oct

NI max: 8,251 Nov



Annual Index  
Trend

Figure 56.a, Annual indices & trend for Redshank for GB (above) & NI (below).





Saline lagoon with Tasselweed  
*Ruppia cirrhosa*





*Cerastoderma glaucum*



*Bembidion assimile*



*Dicheirotichus gustavii*

<b>Feature type</b>	<b>Feature</b>	<b>Management considerations</b>
Species	Common Tern	Nesting habitat, disturbance, feeding (in Lough and beyond)
Species	Roseate Tern	Nesting habitat, disturbance, feeding (in Lough and beyond)
Species	Sandwich Tern	Nesting habitat, disturbance, feeding (in Lough and beyond)
Species	Light-bellied Brent Goose	Eelgrass beds (water quality, sediment regime)
Habitat	Coastal saltmarsh	Water quality, sediment regime, grazing etc.
Habitat	Saline lagoons	Water quality, tidal regime
Species	Goldeneye	Water quality, feeding
Species	Great Crested Grebe	Water quality, feeding
Species	Red-breasted Merganser	Water quality, feeding
Species	Redshank	Water quality, feeding, inter-tidal habitat
Species	Shelduck	Water quality, feeding, inter-tidal habitat
Species	Breeding bird assemblage	Nesting habitat, disturbance, feeding
Species	Invertebrate assemblage	Habitat

# Larne Lough designated site Management processes

## **Key project proposals –**

- Magheramourne
  - Various sewage related activities
  - Gas storage proposal
  - Compressed air storage proposal
  - Possible port expansion
  - Various marina proposals
  - Development at Coal Quays
- 
- Routine land use considerations

## **Management processes**

- Habitat Regulations
- Planning process, statutory and other consultations
- FEPA process
- DARD Fisheries Division licensing consultations
- In conjunction with ASSI compliance monitoring (annual) and condition assessment (every 6 years minimum) programmes

# Larne Lough area

## Triassic – Jurassic site network

### International importance –

- Triassic – Jurassic boundary
- Upper Triassic (Penarth Group) Lagerstätten
- Upper Triassic (Penarth Group) extinction events
- Lower Jurassic (Waterloo Mudstone Formation) extinction events

### Management considerations

- Development – coastal – marine
- Water quality issues
- Sea level change



Waterloo  
ASSI



Gobbins  
ASSI

Cloghfin  
Port ASSI

Whitehead



# Waterloo Bay, Larne, Northern Ireland: A potential Global Stratotype Section and Point (GSSP) for the base of the Jurassic System

Michael J. Simms and Andrew J. Jeram

