

# Lydney New Grounds

## Desk based review of bird assemblages in relation to the Severn Estuary Special Protection Area

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Commissioned by Forest of Dean District Council



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## Lydney New Grounds (FODDC Survey)

February 2017

### Report Scope

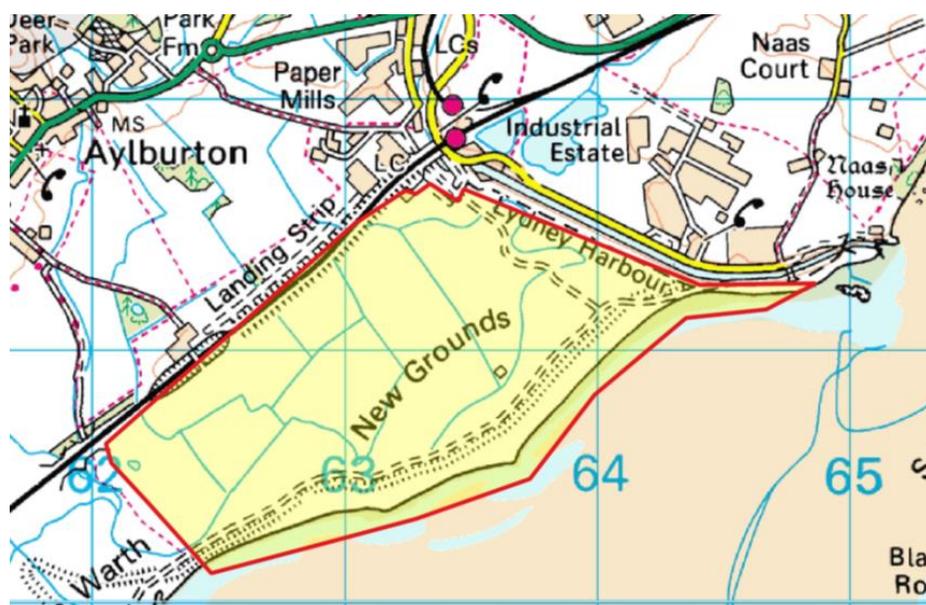
The Forest of Dean District Council requested B Mills and M Smart to undertake a desk review of bird data in relation to the Severn Estuary nature conservation designations for the New Grounds area at Lydney. The review will form part of an assessment to consider the potential for recreational impacts on Severn Estuary birds as a result of optional increases in recreational visits to the Lydney harbour as a result of development.

The objectives of the desk review were:

- i. To establish a clear understanding based on existing data, evidence and experience of the historical use (Minimum 5 years) of the survey area by bird species listed in the Severn Estuary designations.
- ii. To identify any areas or factors within the study area where there are substantial limitations or gaps in understanding
- iii. Based on historical evidence to identify where bird assemblages in the study area could /or may approach 1% of the population(s) of bird species referred to in the Severn Estuary Designations.

Barrie Mills and Mike Smart are ornithologists who carry out bird surveys up and down the Severn estuary and have been undertaking survey visits in the Lydney area including the New Grounds for a number of years.

Desk Review area



## Introduction

The area under study comprises the Lydney New Grounds which is situated near the town of Lydney, Gloucestershire, with a western border running along the main Gloucester – South Wales railway line, the eastern border the River Severn, the northern border the Lydney Canal and the southern border the Warth Brook.

The Severn Estuary qualifies as a Special Protection Area (SPA) for its wintering waterbird assemblage, and for the presence of wintering:

- Greater White-fronted Goose *Anser albifrons albifrons*,
- Bewick's Swan *Cygnus columbianus bewickii*,
- Common Shelduck *Tadorna tadorna*,
- Gadwall *Anas strepera*,
- Dunlin *Calidris alpina alpina*, and
- Common Redshank *Tringa totanus*.

The site is also a Special Area of Conservation (SAC), designated for a range of estuary habitats and fish species and a Ramsar site.

The designated feature includes aggregations of non-breeding birds that generally congregate in the wintering months (Oct – Mar) but also includes passage birds, occurring mainly in spring (March to May) or autumn (late June to September).

It should be emphasized that the Severn Estuary SPA is an unusually large site for an SPA (24,700ha), covering the whole of the estuary from just below Gloucester to the River Parrett in Bridgwater Bay on the east bank, and from just below Gloucester to Cardiff Bay on the west bank. The total number of birds found in the Severn Estuary SPA is very large, and such concentrations will never be seen together. The SPA splits up into several ecological units e.g. the Slimbridge/Awre Basin, the Lydney/Chepstow Basin, Axbridge, Bridgwater Bay, Peterstone and Wentlooge Levels. Lydney New Grounds is part of the Lydney/Chepstow Basin ecological unit, comprising both banks of the river between the Lydney/Sharpness narrows and the northern Severn motorway bridge. Water birds normally tend to remain within this unit, moving across the river from one bank to the other, and exploiting fields inside the flood defence wall (like the Lydney New Grounds) when they are wetter in winter; this is particularly true of wintering Curlews, the water bird that occurs in the most significant numbers in the Lydney/Chepstow basin; the first returning Curlews arrive in the area as early as late June, and remain until the following spring.

“WeBS” (the Wetland Bird Survey) was originated in the UK in the 1940s (at Slimbridge!), and involves monthly counts of water birds at wetland sites; practically all major wetlands in the UK are covered, mainly by volunteer observers, and the scheme is now administered by the British Trust for Ornithology. WeBS is the British contribution to the International Waterbird Census, which now covers practically the whole world. The results of the census are used to calculate the size of bird populations, and to identify the major sites where they concentrate; they have been essential to the definition of SPAs in the past. Counts are normally carried out at high tide, when the focus is on obtaining accurate counts of birds as they concentrate at high tide roosts; in recent years, some counts have also been carried out at low tide (“Low Tide Counts” or LTCs) in order to ascertain where the birds are feeding at low tide, on the Severn in particular in connection with the possible construction of tidal barrages which could affect feeding areas. In the Severn Estuary between

Lydney and Chepstow, there are four WeBS sites along the west bank: WeBS site 15408 (Severn: Lydney Marsh) includes the whole of Lydney New Grounds; other sites further downstream are: 15404 (Severn: Aylburton to Guscar); 15405 (Severn: Wibdon Warth); and 15407 (Severn: Beachley to Pillhouse Rocks); Lydney Harbour Pools are counted as a separate site (15203). Site 15408 has been covered regularly in recent years by one of the authors (BM); coverage of all these Gloucestershire sites has been particularly good in the last two winters (2015/16 and 2016/17), because of work carried out by teams from BTO itself and also by a team (including the authors) working under contract to Natural England. (It should be added that BM carries out summer surveys, under the BTO's "Breeding Bird Survey" in the Lydney New Grounds, and that data from this survey has been used in the present report). Data from BTO WeBS counts and BBS have been widely used in the present report.

Natural England advises on potentially damaging activities and looks at likely significant effect on bird species that may be contributing to 1% of their estuary's total population (See tables 1 & 2 below).

Table 1 Five year Mean peak counts for the Severn Estuary SPA (2010/11 to 2014/15), used to identify Primary Roost sites.

<b>Species</b>	<b>Five Year Mean Peak (Severn Estuary SPA)</b>	<b>1% Severn Estuary SPA</b>
Bewick's Swan	222	2
European White-fronted Goose	289	3
Shelduck	3570	36
Wigeon	7220	72
Gadwall	208	2
Teal	6182	62
Mallard	2847	28
Pintail	560	6
Shoveler	483	5
Pochard	471	5
Tufted Duck	793	8
Grey Plover	318	3
Ringed Plover	1315	13
Lapwing	10485	105
Curlew	3654	37
Whimbrel	192	2
Dunlin	25220	252
Redshank	3995	40
Spotted Redshank	10	1

(WeBS Report : Frost, T.M., Austin, G.E., Calbrade, N.A., Holt, C.A., Mellan, H.J., Hearn, R.D., Stroud, D.A., Wotton, S.R. and Balmer, D.E. 2016. Waterbirds in the UK 2014/15: The Wetland Bird Survey. BTO/RSPB/JNCC. Thetford.

<http://www.bto.org/volunteer-surveys/webs/publications/webs-annual-report>)

Table 2 Five year Mean peak counts for the Severn Estuary SSSI and for two additional species (Golden Plover and Black-tailed Godwit) (2010/11 to 2014/15), used to identify non-SPA Primary Roost sites.

Species	Five Year Mean Peak (Severn Estuary SPA)	1% Severn Estuary SPA
Turnstone	464	5
Knot	2104	21
Snipe	165	2
Black-tailed Godwit	643	6
Golden Plover	3666	37

(WeBS Report : Frost, T.M., Austin, G.E., Calbrade, N.A., Holt, C.A., Mellan, H.J., Hearn, R.D., Stroud, D.A., Wotton, S.R. and Balmer, D.E. 2016. Waterbirds in the UK 2014/15: The Wetland Bird Survey. BTO/RSPB/JNCC. Thetford.

<http://www.bto.org/volunteer-surveys/webs/publications/webs-annual-report>)

The area is largely agricultural under the management and control of the Lydney Park Estate and currently comprises improved and semi-improved grassland and crops for fodder for two milking herds totalling approximately 800 Jersey x Friesian cows. Some of the cows from each herd are out-wintered on deferred grazing<sup>1</sup>, and the rest are housed. Lydney Park Estate is moving away from out-wintering as the Farm Manager thinks it's hard on both soils and the workforce. Pre-2010 there was much more land put down to arable crops.

Additional game crops (maize, wild bird mix and natural regeneration) and game cover is provided for the Pheasant and Red-legged Partridge breeding programme. Game bird feeders are strategically positioned around the inland areas of the estate and regular shoots take place throughout the shooting period in the study area.

The area is criss-crossed by a network of deep ditches which drain into the River Severn at various points along the foreshore. Maintenance of the main ditches is carried out by the Internal Drainage Board on an infrequent basis or alternatively if requested to do so by the Estate.

In the North Eastern section of the study area the estate has created a number of small wet scrapes as shown in the photograph below.

<sup>1</sup> Grass last grazed around October time the previous year and not cut right down (shaved). This means that grass is available around February time of a suitable height (150mm) for the cows.



The New Grounds area

The New Grounds are protected from ingress by the River Severn with a defensive rock boundary running the entire length of the study area. Inland from this is a short stretch of intertidal saltmarsh and then an artificial embankment. To the west of this is the Estate farmland.

Over the last 5 years there has begun to appear erosion of the rocks along the entire length of the river foreshore running along the New Grounds boundary and the saltmarsh has started to slough in places. Rock erosion is at its most significant at the Lydney Harbour end where entire sections of rock are missing (see photographs 1 & 2). The area between the inner embankment and the river rock defences at SO626003 has also become much wetter in the last 3 years (see photographs 3 & 4), the reason for this is unclear.



Photographs 1 & 2 – Sea wall erosion near Lydney



*Photographs 3 & 4 –Wetter areas at SO626003*

The Estate is a participant in the UK Gov. Higher Level Stewardship scheme. Field margins and wildlife (unproductive) areas are some of the initiatives undertaken as part of this scheme. (See photograph 5)

The area of foreshore between the river with its rock reinforced defences and the mean high tide water mark approaching the inner embankment is designated as an SSSI.



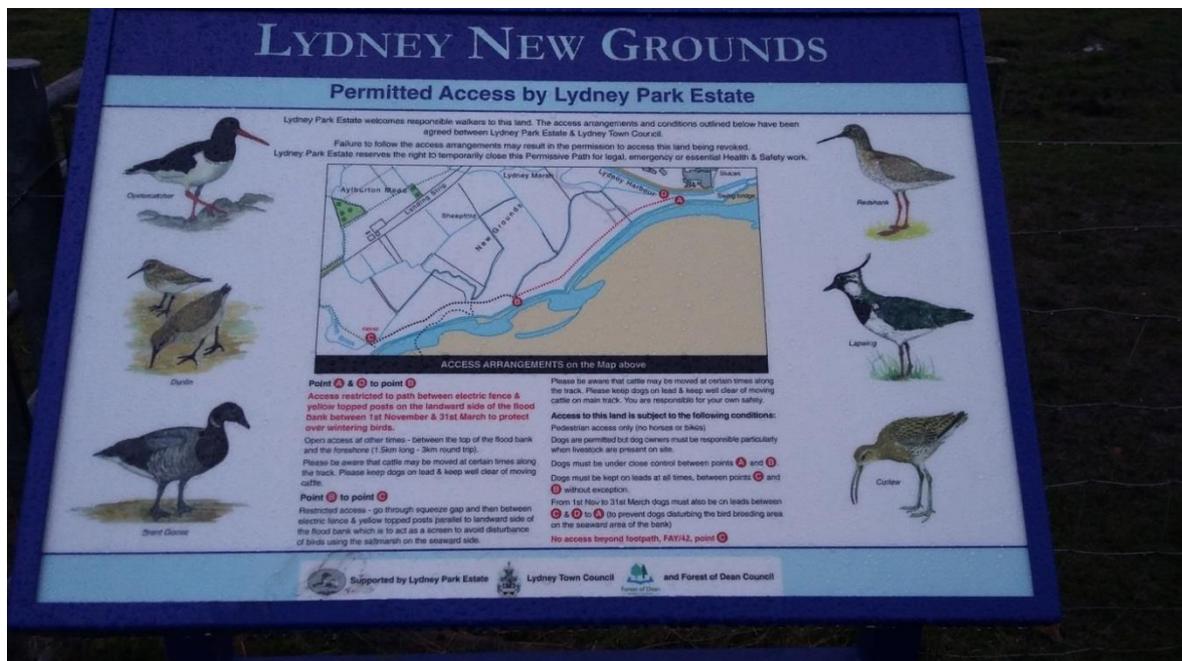
Photograph 5 – Wildlife Area – Reed Buntings breed here.

## Disturbance

The area has up to now been relatively undisturbed by the public along the foreshore, with the largest incursions being local dog walkers who traverse the embankment from the Lydney Docks end for approximately 1 -2 Km down river. They have also been observed walking between the sewage works and the foreshore along the farm access track with occasional incursions via the fields. On one visit off-track cyclists had gained access at Lydney Harbour and were cycling towards Aylburton.

A new permissive access way has now been sign-posted (January 2017) along the river foreshore from the Lydney Harbour end through to Warth Brook and new access gates have been installed at either end. The access is restricted to an out and back walk totalling approximately 3Km. Signs (see photograph 6) have been erected stating restrictions. Despite the stated restrictions this is likely to increase disturbance over time, and with the area being relatively open and flat, birds are easily moved on when they see people and dogs walking along the foreshore or on top of the embankment. This is probably a lot more relevant in the winter than in the summer breeding season when roosting birds are easily spooked from quite long distances (see photograph 7). This would apply to Shelduck, Lapwing, Golden Plover, Curlew, Redshank and Dunlin in particular. On a visit on Saturday 25 February two groups comprising 6 people and 3 unleashed dogs were seen, which is more than one of the authors has seen in the last several years; however it remains to be seen whether numbers increase and what affect this has.

Large numbers of milking cows graze throughout the fields, particularly in the spring and summer seasons and are confined to specific areas by the use of electric fences and natural boundaries.



Photograph 6 – New Sign Boards



Photograph 7 - View across the Lydney New Grounds from the top of the inner embankment

## Species Accounts:

### **Severn Estuary Special Protection Area (SPA) Species:**

The conservation objective for the species listed under the SPA is to maintain internationally important populations of these birds and their supporting habitats when a number of conditions are met – e.g. aggregation of birds at feeding or roosting sites are not subject to significant disturbance; 5-year peak mean population sizes are met; and mudflats, sandflats, habitat and vegetation are maintained. Refer to The Severn Estuary European Marine Site – Natural England and the Countryside Council for Wales’ advice given under Regulation 33(2)(a) of the Conservation (Natural Habitats & c.) Regulations 1994 as amended – Section 4.2 for a full list of all the conditions.

Reference to Estuary Designations Bird Assemblages are present in Appendix A for further information see Joint Nature Conservation Committee website (<http://jncc.defra.gov.uk/>)

The review focusses on records between 2010 and up to spring 2017 unless otherwise stated. Additional information is presented in Tables 1 - 3 and Maps 1 - 5.

#### **Bewick’s Swan** *Cygnus columbianus bewickii*

A single bird flying upriver off the Lydney New Grounds in the winter of 2011 is the only record.

#### **European White-fronted Goose** *Anser albifrons albifrons*

Whilst this bird is a regular winter visitor to Slimbridge WWT it has not been recorded on the Lydney New Grounds.

#### **Shelduck** *Tadorna tadorna*

The Severn estuary is a site of international importance for wintering Shelduck; five-year mean counts across the whole estuary have tripled from 1,500 in the 1970’s to 4,480 at the time of the completion of the Birds of Gloucestershire in 2011. Of these about 10% use the Gloucestershire section, where numbers before the 1980’s did not reach 200 but now total 400-500 birds (mainly in the Slimbridge/Awre basin, numbers in the Lydney New Grounds sector rarely exceeding 20.

With this in mind they are regularly seen all year round on the New Grounds and have become more numerous over the last few years. Increasingly seen feeding at the southern end towards Warth Brook where the area between the sea wall and the embankment has become wetter in recent years and is regularly breached on the higher tides by the river. Small numbers (1 -2) also feed in the improved grassland fields (summer) and remnant maize stands (winter) in the central areas of the New Grounds. A group of 60 reported by WeBS observer A. Salter on 10 Feb 2016 is an unusually large number for the area.

Shelduck have also been recorded in Rodmore Mead with up to 15-18 being present on a number of days in 2017. This is a very wet pastoral field of improved grassland, nicknamed “The Swamp” by the Lydney Estate located at SO618010. As noted in the Curlew section this is also a roosting/feeding area for this species.

No evidence of having bred on the New Grounds although suitable habitat in the form of rabbit holes and natural holes beneath trees exist. It remains to be seen whether increasing numbers lead to breeding success in the future.

#### **Wigeon** *Anas penelope*

A common winter visitor along the Severn Estuary - small numbers (20 – 40) are occasionally seen roosting on the river adjacent to the study area boundary of the Lydney New Grounds in winter fairly close inshore. Groups are also seen flying up/down river. Numbers fluctuate depending on the severity of the winter.

Notable sightings include:

15 off Lydney Harbour on 8 December 2006

92 on the river off the New Grounds 15 February 2009

60 seen flying down-river off the New Grounds on 23 January 2011

6 reported by WeBS observer A. Salter on 10 Feb 2016

#### **Gadwall** *Anas strepera*

A single male seen on 9 May 2016 flying past the wet area between the sea wall and the embankment at the southern end of the New Grounds towards Warth Brook was the only record of this bird. It regularly occurs in small numbers (1 – 5) on the larger of the two Lydney Harbour Pools east of Lydney Railway Station.

#### **Teal** *Anas crecca*

A common winter visitor along the length of the Severn Estuary. Seen on spring and autumn migration.

Occasionally seen roosting in small numbers (10 – 20) on the river in winter, fairly close in-shore or in groups flying up/down river along the boundary of the Lydney New Grounds. Favours the sheltered area at SO630004). Can also be encountered in small (1 – 5) numbers in the wet ditches on the estate. A group of 5 were flushed from a deep ditch at SO629010 on 13 March 2017.

Notable sightings include:

30 at low tide on the Lydney New Grounds 14 February 2003

A count of 100 on the Lydney New Grounds in January 2010 was unusual

A total of 50 seen on the river and flying upriver on 23 January 2011

33 on the Lydney New Grounds 3 February 2016

25 on the Lydney New Grounds 7 March 2016

Teal are also found in small numbers (1-10) on the larger of the two Lydney Harbour Pools and the reed fringed back edge where they are less likely to be disturbed.

Aylburton Warth is an important wintering site for this species – see comments on page 22.

#### **Mallard** *Anas platyrhynchos*

A common resident frequently seen either roosting or feeding in the river close to the shoreline all year round – one favourite spot is at the outfall from the Lydney canal into the River Severn at the

Docks end. The largest group recorded was of 36 seen in 2011 but on average numbers typically 10 – 12. Small numbers of pairs nest in the dense vegetation and reeds in and around the wet ditches.

**Pintail** *Anas acuta*

Whilst this bird is a regular winter visitor to Slimbridge WWT it has not been recorded on the Lydney New Grounds.

**Shoveler** *Anas clypeata*

Whilst this bird is a regular winter visitor to Slimbridge WWT it has only been recorded twice on the Lydney New Grounds: 2 on 8 November 2008 and 4 on 16 January 2010. Small numbers (1-4) occasionally to be seen on the Lydney Harbour Pools. A pair were also present on the Lydney Canal on 13 March 2017 feeding along the edge closest to the Lydney industrial Estate Gate No.2.

**Pochard** *Aythya ferina*

Whilst this bird is a regular winter visitor to Slimbridge WWT it has not been recorded on the Lydney New Grounds. A small flock of 10 was seen on the river off Lydney Harbour on 8 December 2006. Small numbers (1-4) occasionally to be seen on Lydney Harbour Pools in the winter.

**Tufted Duck** *Aythya fuligula*

Whilst this bird is a regular winter visitor to Slimbridge WWT it has not been recorded on the Lydney New Grounds. Regularly occurs in moderate numbers (10-40) all year round on Lydney Harbour Pools.

**Ringed Plover** *Charadrius hiaticula*

Small (1 – 3) numbers occasionally turn up as a winter visitor or passage migrant particularly amongst the flocks of wintering Dunlin that feed in the central area of the New Grounds when conditions are favourable – wet, cold wintry days in bare wet areas of the fields. As the fields have become drier over the last few years and increasingly planted with rape there have been no recent records.

**Grey Plover** *Pluvialis squatarola*

An uncommon passage migrant and scarce winter visitor.

Notable sightings:

Single bird on spring passage seen off Lydney Harbour on 2 April 2001

Single bird on Lydney New Grounds on 2 December 2007

Single bird on Lydney New Grounds 20 January 2013

Single bird on Lydney New Grounds 30 September 2013

3 birds seen feeding in a new wet area of unimproved grass at the southern end of the New Grounds towards Warth Brook in May 2016 (see photograph 4).

### **Lapwing** *Vanellus vanellus*

A common winter visitor and passage migrant. Small numbers, typically 1-5, seen on every Breeding Bird Survey (BBS) visit between years 2002 and 2016, during the period Mid-April through to the end of June.

In winter birds occur in all areas (from the foreshore at the docks throughout all the arable and pastoral fields on the New Grounds). Larger flocks can be sizeable in harsher winters (1000 - 2000) and generally seen away from the foreshore in the centre of the New Grounds.

#### Peak counts:

700 on Lydney New Grounds November 1999  
280 on Lydney Sands 29 December 2000  
600 on Lydney Marsh November 2003  
2500 on Lydney New Grounds 30 December 2004  
280 on Lydney New Grounds November 2005  
1000+ on Lydney New Grounds 2 December 2007  
400+ on Lydney New Grounds November 2008  
2100 on Lydney New Grounds February 2009  
1000 on Lydney New Grounds November 2009  
1000 on Lydney New Grounds February 2010  
700 on Lydney New Grounds November 2010  
335 on Lydney New Grounds 23 January 2011  
1000+ on Lydney New Grounds November 2011  
335 on Lydney New Grounds January 2012  
500 on Lydney New Grounds November 2013  
221 on Lydney New Grounds 10 November 2014  
81 on Lydney New Grounds 7 November 2016

Lydney Estate Farm Manager said that Lapwing used to breed pre 2002 on the arable fields near the main railway tracks at the back end of the Lydney Industrial Estate but there has never been any concrete evidence that they have done so since anywhere on the New Grounds since BJM started BBS visits from 2002 onwards (see Map 1).

The 1995 Severn Vale Breeding Wader Survey recorded a single territory on unimproved pasture land at SO628004.

### **Dunlin** *Calidris alpina alpina*

A common winter visitor and passage migrant along the River Severn but relatively uncommon on the Lydney New Grounds.

Reasonable numbers (>50) were occasionally seen in winter with the flocks of Lapwing and Golden Plover roosting/feeding on the central area of the New Grounds when the fields were wet peaking in the winter of 2008-9. Since then changes in agricultural practice and drier winters recently have led to a decrease in observations and numbers.

Notable WeBS High Tide sightings on the New Grounds unless otherwise stated:

200 noted on the 27 January 1998  
40 on the 5 December 2000  
70 on the 12 December 2002  
44 on the foreshore at Lydney Harbour on 4 January 2004  
60 on 12 November 2008  
500 on 4 December 2008  
600 on 18 January 2009  
200 on 15 February 2009  
15 on 10 May 2009  
5 on 21 February 2010  
6 on 23 January 2011  
16 on 15 January 2012  
3 on 18 November 2012  
4 on 10 November 2014

This species is more commonly encountered at Aylburton Warth.

#### **Whimbrel** *Numenius phaeopus*

Occurs regularly in small flocks in spring (April/May) migration and in smaller numbers on return passage (July – September).

Notable sightings:

One at Lydney Harbour 2 October 1998  
1 – 4 birds present on Lydney Sands July to October 2008  
4 birds on spring passage encountered on rocky shoreline on the New Grounds 26 April 2017  
Single bird feeding near sea wall defences at SO637006 on 15 May 2017.

#### **Curlew** *Numenius arquata*

Birds present throughout the winter months with a few remaining into May/June. No evidence of any having bred on the New Grounds in recent times. The last reported breeding attempt was in the 1995 Severn Vale Breeding Wader Survey when a territory was recorded on unimproved pasture land at SO631004; however there is some doubt as to whether they were actually breeding. Quite large numbers (30 -50) are sometimes seen roosting in the improved grassland fields close to the Lydney Estate Milking Unit (SO624008) and towards the southern end in the fields by Warth Brook (SO620003). These birds are presumed to be part of the large wintering flock that regularly congregates between Guscar Rocks and Aylburton. Occasional birds seen along the muddy shoreline at Lydney Harbour and also out on Lydney Sand/Saniger Sands.

Curlew have also been recorded (2017) roosting/feeding in Rodmore Mead (SO628010). This is a very wet occasionally fertilized grassland field which also supports numbers of Shelduck.

Significant peak numbers:

300 flying upriver at Lydney on 27 January 1998  
400 on the New Grounds 17 December 2002 (Low Tide Count) \*<sup>2</sup>  
370 on the New Grounds 12 January 2003  
250 on the New Grounds 19 January 2003 (Low Tide Count) \*<sup>2</sup>  
625 on the New Grounds 20 January 2003

580 at Lydney Harbour 4 February 2005  
150 at Lydney Harbour 26 August 2007  
250 on the New Grounds 23 January 2008 (Low Tide Count) \*<sup>2</sup>  
250 on the New Grounds 7 December 2008 (Low Tide Count) \*<sup>2</sup>  
119 on the New Grounds 23 January 2009 (Low Tide Count) \*<sup>2</sup>  
182 on the New Grounds 16 January 2010  
36 at Lydney Marsh 07 November 2016  
313 on the New Grounds 09 November 2016 (Low Tide Count) \*<sup>2</sup>  
254 at Lydney New Grounds 22 January 2017

\*<sup>2</sup> Records do not specify if these observations were of birds on the New Grounds itself or on the low tide exposed sands, but almost certainly refer to birds feeding at low tide on exposed mud- or sand-flats at Lydney Sand and Saniger Sands; these would be birds that had spent the high tide period at Aylburton Warth.

[Note to Barrie: Barrie, these counts must have been on exposed sands at low tide. Think that it by definition what is meant by LTC. So I have made a suggested amendment above which you may wish to amend. But I am not sure which site is the Lydney New Grounds LTC; the BTO website gives a list of numbers from LTC 601 to 620 and the maps aren't very specific; do you know which one corresponds with New Grounds? And there are two counts of different sizes given for 23 January 2009 – one must be a mistake]

### **Redshank *Tringa totanus***

One or two encountered throughout all months of the year along the rocky shoreline and on exposed mud at Lydney Harbour or seen flying up/down river.

In the spring of 2013 two birds were seen sitting on fence posts within the improved grassland field of the New Grounds which is indicative of birds contemplating breeding although there is no evidence that any has actually taken place.

#### Notable sightings:

2 on Lydney New Grounds 17 December 2002 (Low Tide count) \*<sup>2</sup>  
1 on Lydney New Grounds 19 January 2003 (Low Tide count) \*<sup>2</sup>  
1 on Lydney New Grounds 14 February 2003 (Low Tide count) \*<sup>2</sup>  
2 on the foreshore at Lydney Harbour 3 December 2003  
2 on Lydney New Grounds 4 January 2004  
1 on the foreshore at Lydney Harbour 08 December 2006  
1 on the shoreline off the New Grounds 18 January 2009  
1 on Lydney New Grounds 19 December 2009  
2 on Lydney New Grounds 16 January 2010  
1 on Lydney New Grounds 15 August 2010  
2 on Lydney New Grounds 23 January 2011  
1 on Lydney New Grounds 15 January 2012  
2 on Lydney New Grounds 29 April 2012

\*<sup>2</sup> Records do not specify if these observations were of birds on the New Grounds itself or on the low tide exposed sands opposite the New Grounds, but almost certainly the latter.

## **Other Notable Wader Sightings**

### **Oystercatcher** *Haematopus ostralegus*

Increasingly seen along the shoreline and occasionally in the improved grassland on the Lydney New Grounds. Usually no greater than 1 - 2 birds.

Pair seen 17 June 2000

5 on 10 May 2009 was unusually high number

3 on 14 June 2009

1 on 12 July 2009

2 on 12 April 2017

### **Golden Plover** *Pluvialis apricaria*

Fairly common passage migrant and winter visitor to the Lydney New Grounds. Numbers vary according to the severity of the weather.

Notable peak counts:

37 on the New Grounds 6 November 1999

19 on the Lydney Sands 29 December 2000

100 on the New Grounds 9 March 2003

40 on the New Grounds 18 January 2004

30 on the New Grounds 16 March 2004

100 on the New Grounds 12 November 2008

1000+ on Lydney New Grounds 18 January 2009

24 on Lydney New Grounds 23 January 2011

250 on Lydney New Grounds November 2011

52 on Lydney New Grounds 15 January 2012

250 on Lydney New Grounds November 2012

170 on Lydney New Grounds 28 March, 2 April and 16 November 2013

9 on Lydney New Grounds 12 October 2014

### **Ruff** *Philomachus pugnax*

Single male seen on Lydney New Grounds 9 October 1998

Single female on Lydney New Grounds 2 December 2007

Single bird on Lydney New Grounds 29 September 2013

### **Jack Snipe** *Lymnocyptes minimus*

This uncommon winter visitor turns up on the Lydney New Grounds occasionally.

Single bird seen on 16 November 1998

Single bird seen on 6 November 1999

Two birds seen on 18 November 2001

One bird present at Lydney Marsh from 14 – 21 January 2002

**Common Snipe** *Gallinago gallinago*

Regular passage migrant and winter visitor. In all probability they are present throughout all of the winter months and are seriously under reported due to the lack of general access. (The separate survey of roosting waders for Natural England in winter 2016/17 also found much larger numbers of Common Snipe than is suggested by the five year mean figure for the Severn Estuary SPA (Table 2); the figure of only two birds as 1% of the total SPA wintering population appears to be a serious under-estimate).

12 on the New Grounds 28 February 1998

Single records – New Grounds 1998

18 on the New Grounds 6 November 1999

18 at Lydney Harbour 11 January 2004

110 present on the New Grounds 21 December 2004

51 present on the New Grounds 30 December 2004

15 present on the New Grounds 15 February 2009

Single on the New Grounds 10 November 2014

Single bird seen by WeBS observer on Lydney Marsh 7 November 2016

The Lydney Estate Farm Manager reported that there were up to 20 birds present during February 2017 in the wet improved grassland fields on the Estate.

**Bar-tailed Godwit** *Limosa lapponica*

Single bird on Lydney Sands on 13 September 2005

6 birds at Lydney Harbour on 17 April 2009

**Black-tailed Godwit** *Limosa limosa*

Single winter visitor observed at Lydney on 12 January 2001

**Greenshank** *Tringa nebularia*

One on autumn passage at Lydney Harbour 4 September 2000

One on spring passage on 17 March 2009 at Lydney Harbour

**Green Sandpiper** *Tringa ochropus*

Single bird on autumn passage reported on the New Grounds 17 December 2002

Single birds on autumn passage reported on the New Grounds 16 August and 20 October 2003

**Common Sandpiper** *Actitis hypoleucos*

Single on Lydney Harbour Road 21 April 2003

5 at Lydney Sands 13 September 2005

2 on the rocky foreshore Lydney New Grounds 12 July 2009

1 on the rocky foreshore Lydney New Grounds 23 August 2009

3 on the rocky foreshore Lydney New Grounds 15 August 2010

2 on the rocky foreshore Lydney New Grounds 16 August 2015

1 on the rocky foreshore Lydney New Grounds 10 May 2016

2 on the rocky foreshore Lydney New Grounds 21 August 2016

### **Spring/Summer migrants:**

#### **Wheatear** *Oenanthe oenanthe*

A common spring and autumn migrant, seen in small numbers (1-3) on the grass foreshore between the reinforced river bank and the inner embankment.

#### **Yellow Wagtail** *Motacilla flava*

A common spring and autumn migrant and occasional breeder; seen in small numbers (1–4) on the grass foreshore between the reinforced river bank and the inner grass embankment. Adults feeding young were known to have bred in the maize crop in 2015. 5 seen on the foreshore at the Lydney end close to the artificial scrapes on 15 August 2010 was notable.

#### **Reed Warbler** *Acrocephalus scirpaceus*

This is the commonest breeding warbler on the New Grounds nesting in the reeds which border the deep ditches that criss-cross the estate. It has been recorded on every BBS visit since 2002 bar 2013 when it was recorded on additional visits. Specific locations are favoured and pairs are found within metres of the previous year's birds.

The only dip in numbers occurred when the Inland Drainage Board cleaned out the ditches before the spring of 2011.

#### **Blackcap** *Sylvia atricapilla*

Regularly encountered throughout the spring and summer months particularly around the derelict buildings at the sheepfold (SO636009).

## Rarities

Over the years a number of rare bird sightings have been observed either on the New Grounds, Lydney Marsh, Lydney Harbour Pools or at Lydney Harbour. This is an indication of the location and rich variety of habitat which exists within the area.

### **Lesser Scaup** *Aythya affinis*

An immature male was at Lydney Harbour Pools from 1 October to 15 November 2008.

### **Bittern** *Botaurus stellaris*

A single bird was flushed from the reeds of the smaller of the two Lydney Harbour Pools in the winter of 2009.

### **Cattle Egret** *Bubulcus ibis*

A bird was seen intermittently in the Lydney Harbour area from 11 November 2011 into 2012. An adult is currently residing in a very wet improved grassland field behind the Lydney Estate Milking Unit at SO625011 last observed by the writer on 4 March 2017. The Estate Manager has seen it on a daily basis since mid-February.

### **Purple Heron** *Ardea purpurea*

A single sub-adult was seen on the larger of the two Lydney Harbour Pools from 25 – 27 May 2008.

### **Glossy Ibis** *Plegadis falcinellus*

Single bird at Lydney Marsh on 15 October 2009

### **Black-necked Grebe** *Podiceps nigricollis*

Breeding was confirmed at the larger of the two Lydney Harbour Pools when an adult and a chick were seen on 4 August 2004. This is the only confirmed breeding record for the county.

### **Water Rail** *Rallus aquaticus*

An adult was observed walking along the edge of the Lydney Canal opposite the disused Pine End Works on 21 February 2010.

### **Spotted Sandpiper** *Actitis macularius*

Gloucestershire's first record was a bird just south of Lydney Harbour which stayed from 15 – 26 September 2011.

### **Red-rumped Swallow** *Cecropis daurica*

2 were recorded on the larger of the two Lydney Harbour Pools on 1 May 2004.

**Snow Bunting** *Plectrophenax nivalis*

2 were recorded and photographed along the rocky shoreline at the Lydney New Grounds on 6 November 2011.

## **Other Sightings:**

### **Brent Goose** *Branta bernicla*

A scarce or uncommon winter visitor and passage migrant. Eight birds were on the Lydney Sands 27 April 2012.

### **Little Grebe** *Tachybaptus ruficollis*

There is at least one resident pair on the Lydney Canal running the length of Harbour Road. In spring they have been heard trilling which is an indication of a breeding pair although no conclusive evidence has confirmed this.

### **Common Tern** *Sterna hirundo*

One or two records occur every year of birds on passage along the river, in Lydney Harbour and Lydney Harbour Pools.

### **Stock Dove** *Columba oenas*

The area inland close to the Milking Unit is particularly good for this species and they can be seen all year round in the adjacent hedgerows and fields in significant numbers (20-30).

### **Skylark** *Alauda arvensis*

Several pairs breed every year along the foreshore from the Lydney Docks end right up to Warth Brook. These will be vulnerable to an increase in walkers with dogs.

Successful breeding inland in the improved grass fields is also dependent on when the grass is cut.

### **Cetti's Warbler** *Cettia cetti*

Suitable habitat exists for this bird in the reed beds of the Lydney Marsh. This location provided the first report of a bird west of the Severn in 2000. Despite its explosive give-away call and song, its regular presence on the New Grounds and surrounding areas is in doubt.

During the Wetland Bird Survey (WeBS) visit on 12 April 2017 three birds were heard along the Lydney Canal – two at the extreme ends (near Railway Station and Lydney Harbour ends) and one midway. The conclusion was that these were three individual birds and if so is the most ever recorded and perhaps an indication of the continued expansion in the range of this bird.

### **Black Redstart** *Phoenicurus ochruros*

Occasional birds seen in winter amongst the reinforced rock boundary at the edge of the river. These may be birds flying across from Sharpness Docks and the disused Berkeley Power Station where they have become regular winter visitors.

### **Stonechat** *Saxicola torquatus*

Uncommon - occasional birds seen on passage.

### **Meadow Pipit** *Anthus pratensis*

Small numbers regularly encountered throughout all months of the year with numbers increasing during the winter. Suspect one or two pairs breed along the area between the rocks at the river's edge and the inner embankment along the length of the area covered by this report. These will be vulnerable to an increase in walkers with dogs.

## **Adjacent areas of note:**

### **AYLBURTON WARTH**

The immediate area down river from Warth Brook is a site of especial interest (known as Aylburton Warth). This is owned and managed by the Lydney Estate and whilst this report does not cover the area in detail its importance cannot be understated. The site supports a considerable variety and number of waders and wildfowl during all months of the year. It is a known current breeding site for both Lapwing and Redshank. The river coastline on the Warth is constantly changing with the consequent effect that some areas are being rapidly eroded whereas others have material deposited.

Whilst the new permissive pathway officially ends at Warth Brook any increase in disturbance at this end of the New Grounds by people and free roaming dogs is likely to have a significant effect on the wildlife in the area, particularly on Aylburton Warth. In 1995 the Warth supported 4 pairs of breeding Lapwing, 6 of Redshank and possibly one pair of Curlew. In the BTO "Breeding Waders of Wet Meadows" survey in 2002 this had increased to 1 pair of Oystercatcher, 26 or more of Lapwing and 4 of Redshank. Since then, Aylburton Warth remains (with Slimbridge and Saul Warth) one of the prime breeding sites on the estuary for Lapwings and Curlews, with most years one pair of Oystercatcher (sometime more on maize fields behind the sea wall), still up to six pairs of Redshanks, but rather fewer Lapwings, perhaps six pairs. The area offers scope for further development of the habit if the relevant authorities, trusts and landowners collaborate together.

### **LYDNEY HARBOUR POOLS**

In the past these pools have been a site where the odd rarity has been known to turn up. Elsewhere in this report Red-rumped Swallow, Purple Heron, Bittern, Lesser Scaup and Black-necked Grebe have all been commented upon. It is also an important site for wildfowl, particularly in the winter months but also throughout the breeding season where Tufted Duck, Mallard and Great-crested Grebe are all confirmed breeders. Teal, Gadwall, Shoveler, Pochard and Tufted Duck frequent the larger pool usually at the far side where it's difficult to get a decent count of the numbers. In the last two years however the site has been turned into a private fishing lake to the exclusion of all else and first the larger pool and more recently (Feb 2017) the smaller pool have been completely fenced off with access restricted to members only. It has therefore become increasingly difficult to monitor the true extent of what is actually there.

### **LYDNEY MARSH**

**Lydney Town Marsh and Sidings** (see attached map 1) is designated as a Key Wildlife Site because of its plant interest ("A varied and rich habitat area lying between Lydney town and harbour, consisting of a reedbed, wet meadow, and disused railway sidings. The reedbed, possibly the largest in the county, has rich flora and birdlife, and the herb-rich wet meadow makes an interesting comparison. The disused sidings support a rich ruderal community with a number of local plants. The last records for the site was in 2009").

**Lydney Harbour and Dock** – This is an unconfirmed site – i.e. is a site that has been visited and records taken, however, it requires further surveys and could be a potential Key Wildlife Site (KWS). The last records for the site are 1997.

## **Mammals**

### **Hare** *Lepus europaeus*

Regularly seen in the pastoral fields of the New Grounds especially in the spring months when they are particularly active seeking mates.

### **Rabbit** *Oryctolagus cuniculus*

Regularly seen, especially around the fields surrounding the sheepfold, but encountered in all areas.

### **Otter** *Lutra lutra*

Otter spraint found on a wooden crossing spanning one of the deep ditches near the sheepfold – in spring 2013. A track of footprints was seen in the mud at low tide on 28 April 2015.

### **Mole** *Talpa europaea*

Field signs show this is a resident species.

### **Common Shrew** *Sorex araneus*

One seen on 19 June 2011 is the only known record by the report's authors.

### **Red Fox** *Vulpes vulpes*

Field signs on several occasions; however it is suspected that numbers are kept to a minimum. Sightings reported May 2009; May 2010 and June 2014.

### **American Mink** *Neovison vison*

Single seen in May 2010

## Review's Conclusions

Four areas (Map 1) within the study area of Lydney New Grounds have been identified as being of importance to roosting / feeding Curlew, Shelduck and Lapwing during the winter and to Whimbrel on passage (April – May, July - Sept). Of these species Curlew is considered the most significant in the context of the SPA, but the New Grounds could be also considered an important wintering area for Lapwing (and Golden Plover), which would be susceptible to any increased disturbance which might have the effect of pushing the birds either further away or out of the area all together. There are no significant wader breeding sites within the study area, though there are historic records for individual breeding pairs of Lapwing, but nothing in the last 10 years.

The four areas are:

- I. Central area to the south of the sheepfold (Lapwing)
- II. Area immediately adjacent to the rail line south of the dairy unit (Curlew)
- III. Area around the Southern end of Warth Brook (Curlew)
- IV. Area of saltmarsh between the embankment and estuary (Shelduck).

Whimbrel may appear on passage almost anywhere through the New Grounds, on the mudflats at low tide, on the rocks along the shoreline, or in the fields, so are not found in any particular area.

There are potential opportunities for habitat enhancement, information or potentially hides in these area. Care must be taken that recreational disturbance does not increase. Observations of colour-ringed Curlews at Aylburton Warth and Guscar Rocks show that this species is extremely site faithful, returning winter after winter to exactly the same site; the same may be true of other species.

Numbers of four species in the New Grounds approach or exceed the 1% figure for the total population of the Severn Estuary SPA (Table 1). These are Mallard, Lapwing, Curlew and Whimbrel. In addition Tufted Duck populations on the Lydney Harbour Pools near the railway station exceed the 1% criteria and Common Snipe and Golden Plover should also be included. Plans or projects (including disturbance) with potential to impact these species / locations will require particular consideration in relation to the Habitats Directive and should only be permitted where impacts can be avoided by mitigation measures or appropriately compensated for.

In assessing potentially damaging activities on the Lydney New Grounds, particular attention should be given to potentially significant effects on bird species that make up or approach 1% of their estuary's total population. The recently opened permissive path could increase disturbance if not appropriately managed.

Additional areas just outside the Lydney Grounds study area have been identified as important and these include Rodmore Mead, Aylburton Warth and an area south of Alvington Court (Maps 1 & 5). By far the most important area for waders and wildfowl in the whole Lydney/Chepstow basin is Aylburton Warth / Guscar Rocks (Maps 1 & 5), which is potentially of comparable importance to the New Grounds at Slimbridge. In many ways Lydney New Grounds is an outlying area of Aylburton Warth / Guscar Rocks, so it is important to ensure that any increased use of Lydney New Grounds does not impact Aylburton / Guscar. Needless to say, there are also huge opportunities for enhancing habitat, improving viewing opportunities and limiting disturbance at Aylburton/ Guscar,

where major areas have recently been acquired by the Environment Agency for saltmarsh recreation.

## Appendices

Appendix A	Estuary Designations Bird Assemblages
Map 1	Wader breeding Sites & Main Shelduck, Curlew and Lapwing Roosting/Feeding Sites
Map 2	Topography – Lydney New Grounds 2000
Map 3	Topography – Lydney New Grounds 2009
Map 4	Topography – Lydney New Grounds 2017
Map 5	General Area
Table 3	SPA Species – Presence on Lydney New Grounds
Table 4	Spring/Summer Migrants - Presence on Lydney New Grounds
Table 5	Other species of Note - Presence on Lydney New Grounds

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## Appendices

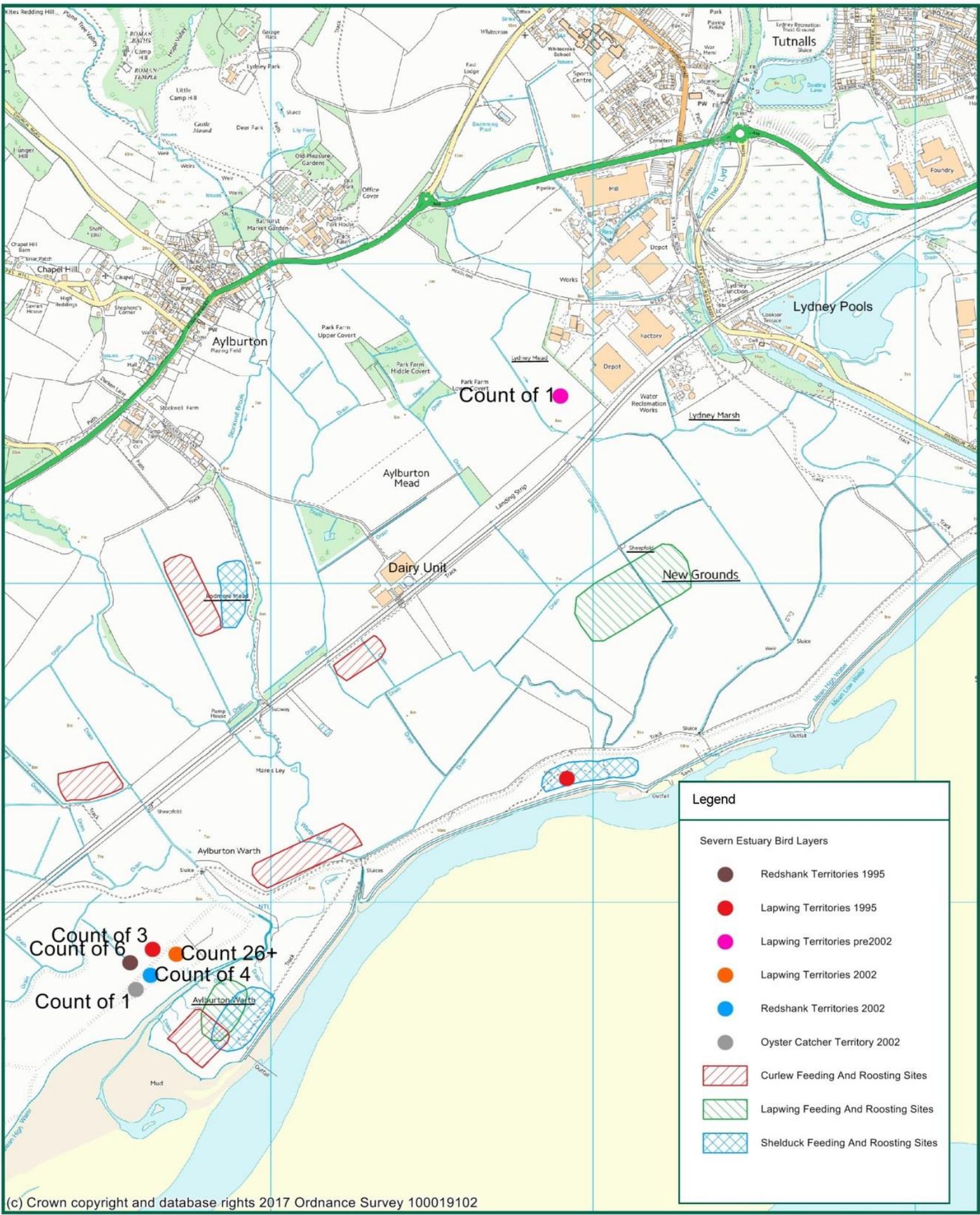
### Appendix A Estuary Designations Bird Assemblages

	SPA	Ramsar
Bewick's swan (w)		X
European white-fronted goose 3,002 50% British, 1% (w)	X	X
Spotted redshank 3 1.5% Great Britain (w)	X	X
Whimbrel 246 4.9% Great Britain (p)	X	X
Curlew 3,096 3.4% Great Britain (w)	X	X
Grey plover 781 3.7% Great Britain (w)	X	X
Ringed plover 227 1.0% Great Britain (w, p)	X	X
Tufted duck 913 1.5% Great Britain (w)	X	X
Pochard 1,686 3.8% Great Britain (w)	X	X
Pintail 523 2.1% Great Britain (w)	X	X
Teal 1,998 2.0% Great Britain (w)	X	X
Wigeon 3,977 birds 1.6% Great Britain (w)	X	X
Gadwall 330 2.8 % NW Europe (w)	X	X
Shelduck 2,892 1.2% North West Europe (w)	X	X
Redshank 2,013 1.3% East Atlantic flyway (w,p)	X	X
Dunlin 41,683 2.9% East Atlantic flyway (w,p)	X	X
Mallard,	X	
Shoveler.	X	
Lapwing	X	
Lesser black-backed gull (breeding)		X

(w = wintering and p = passage):

(See Joint Nature Conservation Committee website (<http://jncc.defra.gov.uk/>))

**Map 1 Wader breeding Sites & Main Shelduck, Curlew and Lapwing Roosting/Feeding Sites**



**Map 1 Wader breeding sites & main Shelduck, Curlew and Lapwing roosting/feeding sites**

0 200 400 metres



12 June 2017

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**Map 2 Topography – Lydney New Grounds c2000**



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### Map 2 Topography Lydney New Grounds (c2000)

0 200 400 metres



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**Map 3 Topography – Lydney New Grounds c2009**



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### Map 3 Topography Lydney New Grounds (c2009)

0 200 400 metres



12 June 2017

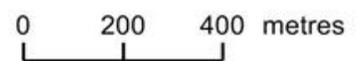
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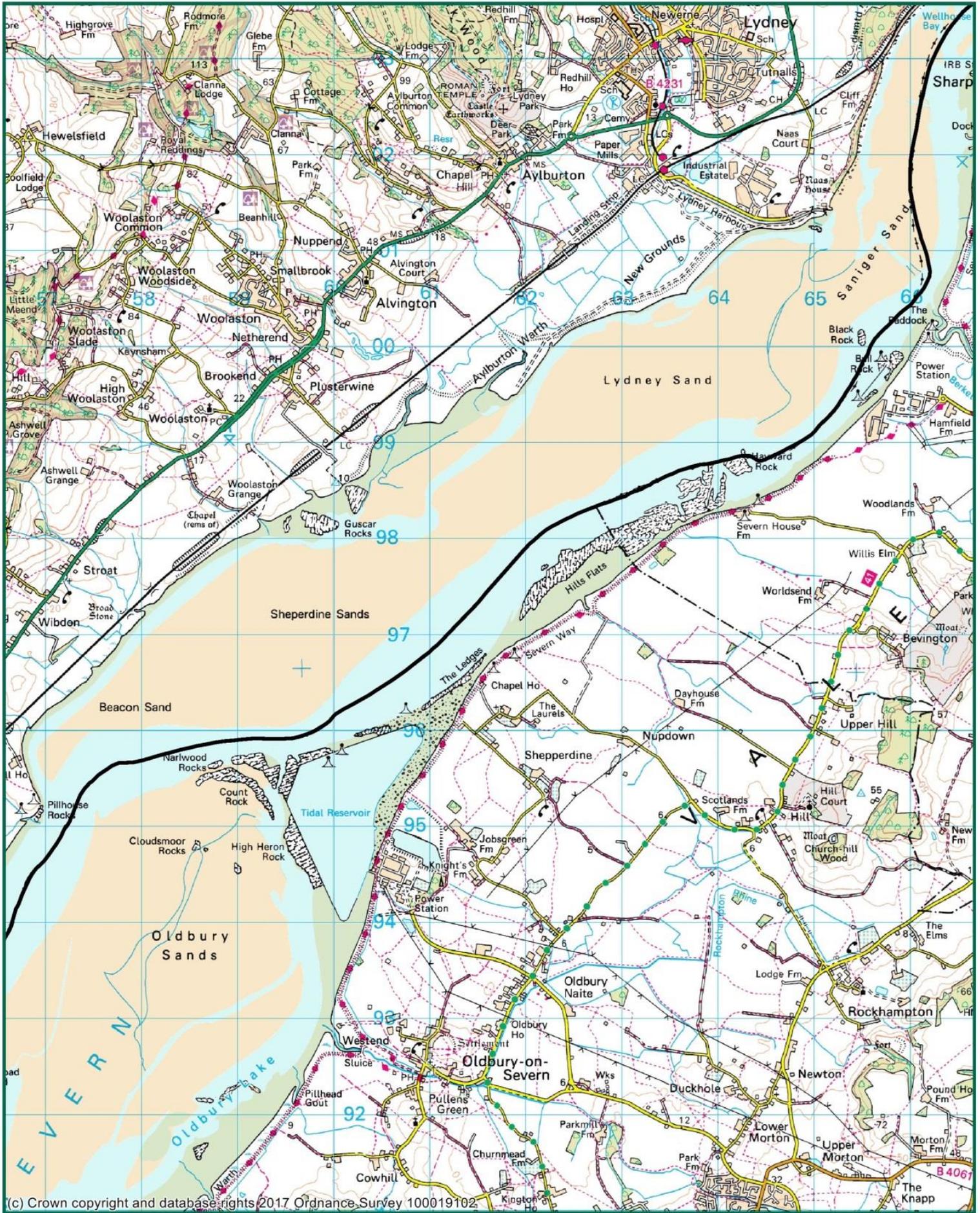
**Map 4 Topography – Lydney New Grounds c2014**



**Map 4 Topography Lydney New Grounds (c2014)**



**Map 5 General Area**



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Map 5 General Area

0 500 1000 metres



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**Table 3 SPA Species – Presence on Lydney New Grounds**

Year	BS	WG	SU	WN	GA	T.	MA	PT	SV	PO	TU	RP	GV	L.	DN	WM	CU	RK
2017																		
2016																		
2015																		
2014																		
2013																		
2012																		
2011																		
2010																		
2009																		
2008																		
2007																		
2006																		
2005																		
2004																		
2003																		
2002																		
2001																		
2000																		
1999																		
1998																		

	Solid coloured blocks - BBS visits
	Patterned blocks - Additional visits/WeBS
	Never observed
	Two-tone - Observed during BBS and WeBS
	No data available

BTO Code	Common Name	Scientific Name
BS	Bewick's Swan	<i>Cygnus columbianus</i>
WG	White-fronted Goose	<i>Anser albifrons</i>
SU	Shelduck	<i>Tadorna tadorna</i>
WN	Wigeon	<i>Anas penelope</i>
GA	Gadwall	<i>Anas strepera</i>
T.	Teal	<i>Anas crecca</i>
MA	Mallard	<i>Anas platyrhynchos</i>
PT	Pintail	<i>Anas acuta</i>
SV	Shoveler	<i>Anas clypeata</i>
PO	Pochard	<i>Aythya ferina</i>
TU	Tufted Duck	<i>Aythya fuligula</i>
RP	Ringed Plover	<i>Charadrius hiaticula</i>
GV	Grey Plover	<i>Pluvialis squatarola</i>
L.	Lapwing	<i>Vanellus vanellus</i>
DN	Dunlin	<i>Calidris alpina</i>
WM	Whimbrel	<i>Numenius phaeopus</i>
CU	Curlew	<i>Numenius arquata</i>
RK	Redshank	<i>Tringa totanus</i>



