# Breeding Wader Survey at Selected Sites in Cos Donegal and Sligo – 2018



### **Summary**

The main aim of this study was to assess populations of breeding waders at 20 sites in counties Donegal and Sligo. It was undertaken as part of the Cooperating Across Borders for Biodiversity (CABB) Project, an INTERREG V Project under the European Regional Development Fund (ERDF). Site selection was largely based on prior survey work in this region. 12 of the selected sites were surveyed in past machair studies (Narin & Sheppard, 1985, Madden et al., 1998 & Suddaby et al., 2009). Inch (treated as three separate sites in this survey) and three islands surveyed in a 2017 survey (McMonagle et al., 2017) are also included. All sites that held breeding lapwing during the 2017 survey were included for the 2018 survey. Although no lapwing were recorded at Tranarossan in 2017 it was also included in the 2018 survey as lapwing were recorded there as recently as a 2014 survey (Doanaghy, 2014). An additional site at Pollaguill was added during the course of the survey as breeding lapwing were reported at the site during the year.

Sites were visited between late March and early-July, a maximum number of six visits were carried out and survey methodology followed O'Brien and Smith (1992) on assessing pair numbers. Eight species of breeding waders were recorded; Oystercatcher *Haematopus ostralegus*, Ringed Plover *Charadrius hiaticula*, Lapwing *Vanellus vanellus*, Dunlin *Calidris alpina*, Snipe *Gallinago gallinago*, Redshank *Tringa totanus*, Common Sandpiper *Actitis hypoleucos* and Golden Plover *Pluvialis apricaria*. Lapwing, Oystercatcher and Golden Plover have recently been added to the International Union for Conservation Action (IUCN) Red List of near threatened species, while Dunlin and Golden PLover are an Annex I species as listed in the Birds Directive. Additionally, Redshank, Lapwing and Golden PLover are red-listed in Birds of Conservation Concern in Ireland, while the other five species are amber-listed.

A total of 359 breeding pairs of waders were recorded across the 20 sites which consisted of 168 pairs of Lapwing, 80 pairs of Oystercatcher, 37 pairs of Ringed Plover, 38 pairs of Snipe, 28 pairs of Redshank, 5 pairs of Dunlin, 2 pairs of Common Sandpiper and 1 pair of Golden Plover.

Site	OC	RP	L.	DN	SN	RK	CS	GP	Total Breeding Pairs
Doagh Isle	0 <mark>(0)</mark>	0 <mark>(0)</mark>	5 <mark>(5)</mark>	0 <mark>(0)</mark>	0 <mark>(0)</mark>	0 <mark>(0)</mark>	0 <mark>(0)</mark>	0 (0)	5 <mark>(</mark> 5)
Rinmore	4 (3)	5 <mark>(4)</mark>	31 <mark>(29)</mark>	0 <mark>(0)</mark>	2 (1)	0 <mark>(0)</mark>	0 <mark>(0)</mark>	0 <mark>(0)</mark>	42 <mark>(37)</mark>
Rinboy	1 (3)	2 (3)	2 <mark>(2)</mark>	0 <mark>(0)</mark>	1 (1)	0 <mark>(0)</mark>	0 <mark>(0)</mark>	0 <mark>(0)</mark>	6 <mark>(9)</mark>
Doaghmore	0 <mark>(0)</mark>	0 (0)	3 <mark>(1)</mark>	0 <mark>(0)</mark>	0 <mark>(0)</mark>	0 (0)	0 <mark>(0)</mark>	0 (0)	3 (1)
Tranarossan	0 <mark>(0)</mark>	0 (0)	0 <mark>(0)</mark>	0 <mark>(0)</mark>	0 (0)	0 (0)	0 <mark>(0)</mark>	0 (0)	0 (0)
Rosapenna Saltings	0 <mark>(0)</mark>	0 <mark>(0)</mark>	4 <mark>(3)</mark>	0 (0)	2 (1)	0 <mark>(0)</mark>	0 <mark>(0)</mark>	0 (0)	6 <mark>(4)</mark>
Dunfanaghy	1 (1)	0 <mark>(0)</mark>	4 (2)	0 <mark>(0)</mark>	2 (0)	0 <mark>(0)</mark>	1 (0)	0 <mark>(0)</mark>	8 <mark>(3)</mark>
Pollaguill	0	0	5	0	1	0	0	0	6
Falcarragh	0 <mark>(0)</mark>	0 (1)	3 <mark>(0)</mark>	0 <mark>(0)</mark>	1 (0)	0 <mark>(0)</mark>	0 <mark>(0)</mark>	0 <mark>(0)</mark>	4 (1)
Lunniagh	0 <mark>(0)</mark>	2 (2)	4 (3)	0 <mark>(0)</mark>	0 <mark>(0)</mark>	0 <mark>(0)</mark>	0 <mark>(0)</mark>	0 <b>(0)</b>	6 <mark>(5)</mark>
Magheragallan	0 <mark>(0)</mark>	1 (1)	19 <mark>(25)</mark>	0 (0)	4 (2)	3 (3)	0 <mark>(0)</mark>	1 (0)	28 <mark>(31)</mark>
Sheskinmore	0 <mark>(0)</mark>	0 <mark>(0)</mark>	10 <mark>(9)</mark>	0 <mark>(0)</mark>	10 <mark>(7)</mark>	0 <mark>(0)</mark>	0 <mark>(0)</mark>	0 (0)	20 <mark>(16)</mark>
Bunduff	0 <mark>(0)</mark>	0 (0)	8 <mark>(8)</mark>	0 (0)	6 (16)	0 (0)	0 <mark>(0)</mark>	0 (0)	14 <mark>(24)</mark>
Aughris Head	0 <mark>(0)</mark>	0 (0)	3 <mark>(2)</mark>	0 (0)	0 (0)	0 (0)	0 <mark>(0)</mark>	0 (0)	3 (2)
Inch – Long Point	0 <mark>(0)</mark>	0 (0)	5 <mark>(4)</mark>	0 (0)	5 <mark>(7)</mark>	6 <mark>(8)</mark>	0 <mark>(0)</mark>	0 (0)	16 <mark>(19)</mark>
Inch - Grianán	0 <mark>(0)</mark>	0 (0)	23 <mark>(39)</mark>	0 (0)	0 (0)	0 (0)	0 <mark>(0)</mark>	0 (0)	23 <mark>(39)</mark>
Inch - West	0 <mark>(0)</mark>	0 (0)	14 <mark>(18)</mark>	0 (0)	0 (0)	0 (0)	0 <mark>(0)</mark>	0 (0)	14 <mark>(18)</mark>
Inishtrahull	5 <mark>(9)</mark>	1 (1)	1 (5)	0 <mark>(0)</mark>	0 <mark>(0)</mark>	0 (1)	0 (1)	0 (0)	7 (17)
Tory Island	48 <mark>(75)</mark>	21 (40)	22 <mark>(29)</mark>	5 <mark>(6)</mark>	4 <mark>(8)</mark>	19 <b>(14)</b>	0 <mark>(0)</mark>	0 <b>(0)</b>	119 <mark>(172)</mark>
Inishbofin	21 <mark>(23)</mark>	5 <mark>(7)</mark>	2 (2)	0 <mark>(0)</mark>	0 <mark>(0)</mark>	0 (0)	1 (0)	0 (0)	29 <mark>(32)</mark>
Total	80 <mark>(114)</mark>	37 <mark>(59)</mark>	168 <mark>(186)</mark>	5 <mark>(6)</mark>	38 <mark>(43)</mark>	28 <mark>(26)</mark>	2 (1)	1 (0)	359 <mark>(435)</mark>

Results of the 2018 breeding wader survey showing the number of pairs of each species recorded at each site surveyed in Donegal and Sligo, where OC stands for Oystercatcher, RP: Ringed Plover, L.: Lapwing, DN: Dunlin, SN: Snipe, RK: Redshank, CS: Common Sandpiper and GP: Golden Plover. Results for 2017 shown in red parentheses for comparison (Pollaguill not surveyed in 2017).

From the table above it can be seen that overall numbers were lower than for 2017. The drop in Lapwing breeding pairs is mostly attributable to declines at Inch – Grianán which was the top site for this species in 2017. There were extensive habitat works carried out on the farm here over the winter of 2017-18 which included drainage works that resulted in the removal of many wetland features that are essential to breeding Lapwing. Numbers of birds steadily declined over the course of the breeding season and very few birds if any at all fledged from this site which was by far the most productive site in 2017.

Numbers of breeding Oystercatcher and Ringed Plover also significantly declined from 2017 which can largely be accounted for by a drop in numbers on Tory Island. The island sites were not visited as often as the mainland sites for logistical reasons so perhaps the timing of the visits may have been a factor. A good number of Oystercatcher were observed roosting together on each visit and were not recorded as breeding, though it is possible some may have been failed breeders or between nesting attempts. Tory Island should be closely monitored in future as it is clearly a site of major importance for breeding waders, most notably Dunlin and Redshank. The increasing population of Hooded Crow is likely to have a negative effect on wader breeding success and should also be monitored.

# Acknowledgements

The 2018 Breeding Wader Survey was funded as part of the Cooperating Across Borders for Biodiversity (CABB) Project, an INTERREG V Project under the European Regional Development Fund (ERDF).

The staff of BirdWatch Ireland who provided assistance with all aspects of the survey, in particular Dr. Anita Donaghy and Daniel Maloney. Daniel Maloney also supplied the data for Inishtrahull.

All land owners that provided access to their land.

Anton Meehan for sharing his in depth knowledge on the birdlife of Tory Island.

# Weather Synopsis

Conditions during the month of April to mid-May were very unsettled with frequent showery and windy conditions resulting in less than ideal survey conditions for the first two visits to most sites. Temperatures were about normal over this period. There was a marked improvement in weather from 20th May with a good spell of generally dry sunny conditions until the arrival of Storm Hector on 13th June which marked a brief return to more unsettled conditions. The latter half of June and July was mostly dry with a prolonged spell of fine settled weather with temperatures above normal.

Month	Mean Temp (°C)	Max Temp. (°C)	Min Temp. (°C)	30 yr. mean Temp (°C)	Precipitation Amount (mm)	30 yr. mean Precipitation (mm)	Mean Wind Speed (knot)
March	4.7	12.9	-5.0	6.8	52.7	103.8	9.8
April	8.5	18.7	-2.3	8.3	84.0	75.9	9.8
May	12.5	24.7	3.2	10.9	51.5	77.2	8.2
June	15.4	29.3	5.6	13.3	47.7	72.3	7.8
July	15.4	25.4	6.4	15.1	84.0	91.0	7.3

Weather Data for the 2018 Breeding Wader survey season at Finner Station, Co Donegal

# **Individual Species**

### Oystercatcher

Site name	1985	1996	2009	2017	2018
Doagh Isle	1	0	0	0	0
Rinmore	1	6	1	3	4
Rinboy	0	0	1	3	1
Dunfanaghy	0	1	1	1	1
Inishtrahull	NS	NS	NS	9	5
Tory Island	NS	NS	NS	75	48
Inishbofin	NS	NS	NS	23	21
Total	2	7	3	114	80

Total number of Oystercatcher pairs recorded in the 2018 study. Historical records of Oystercatcher pairs since 1985 are also included at comparable sites. NS stands for not surveyed.

As in 2017 the vast majority of Oystercatcher pairs were recorded on the island sites. There was a considerable decline in numbers recorded on Tory Island from the previous year.

Site name	1985	1996	2009	2017	2018
Doagh Isle	5	3	0	0	0
Rinmore	3	13	4	4	5
Rinboy	0	0	1	3	2
Rosepenna Saltings	1	0	0	0	0
Dunfanaghy	1	0	0	0	0
Falcarragh	NS	NS	2	1	0
Lunniagh	0	0	0	2	2
Magheragallan	1	2	0	1	1
Sheskinmore	1	0	0	0	0
Inishtrahull	NS	NS	NS	1	1
Tory Island	NS	NS	NS	40	21
Inishbofin	NS	NS	NS	7	5
Total	12	18	7	58	37

### **Ringed Plover**

Total number of Ringed Plover pairs recorded in the 2018 study. Historical records of Ringed Plover pairs since 1985 are also included at comparable sites. NS stands for not surveyed.

There was a large decline in numbers of Ringed Plover pairs from the 2017 survey almost entirely accounted for by a much smaller count on Tory Island.

Site name	1985	1996	2009	2017	2018
Doagh Isle	29	7	0	5	5
Rinmore	26	64	13	29	31
Rinboy	0	1	0	2	2
Doaghmore	0	3	0	1	3
Tranarossan	1	0	3	0	0
Rosepenna Saltings	9	25	9	3	4
Dunfanaghy	17	11	10	2	4
Pollaguill	NS	NS	NS	NS	5
Falcarragh	NS	NS	5	0	3
Lunniagh	0	2	0	3	4
Magheragallan	13	21	11	25	19
Sheskinmore	10	16	3	9	10
Bunduff	15	16	2	8	8
Aughris Head	NS	NS	NS	2	3
Inch – Long Point	NS	NS	NS	4	5
Inch – Grianán	NS	NS	NS	39	23
Inch - West	NS	NS	NS	18	14
Inishtrahull	NS	NS	NS	5	1
Tory Island	NS	NS	NS	29	22
Inishbofin	NS	NS	NS	2	2
Total	127	172	51	186	168

Lapwing

Total number of Lapwing pairs recorded in the 2018 study. Historical records of Lapwing pairs since 1985 are also included at comparable sites. NS stands for not surveyed.

The total number of Lapwing pairs declined from 186 in 2017 to 168. This is largely due to a significant decline of 16 pairs at the Grianán Farm section of Inch. There were also notable declines at Magheragallan and Tory Island. Most of the smaller sites had either similar or slightly increased numbers from the 2017 survey.

Snipe
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Site name	1985	1996	2009	2017	2018
Doagh Isle	5	1	0	0	0
Rinmore	5	1	0	1	2
Rinboy	1	0	0	1	1
Rosepenna Saltings	1	0	3	1	2
Dunfanaghy	1	1	6	0	2
Pollaguill	NS	NS	NS	NS	1
Falcarragh	NS	NS	1	0	1
Lunniagh	1	0	0	0	0
Magheragallan	0	0	3	2	4
Sheskinmore	1	2	12	7	10
Bunduff	7	5	5	16	6
Inch – Long Point	NS	NS	NS	8	5
Tory Island	NS	NS	NS	8	4
Total	22	10	30	44	38

Total number of Snipe pairs recorded in the 2018 study. Historical records of Snipe pairs since 1985 are also included at comparable sites. NS stands for not surveyed.

Due to the difficulties in accurately recording numbers of breeding Snipe the figures in the above table are likely to be unreliable. Still, Sheskinmore, Bunduff, Long Point (Inch), Tory Island and Magheragallan are all undoubtedly important breeding sites for this species.

### Redshank

Site name	1985	1996	2009	2017	2018
Rinmore	0	1	0	0	0
Rosepenna Saltings	1	0	0	0	0
Dunfanaghy	2	2	1	0	0
Magheragallan	4	3	0	3	3
Sheskinmore	2	0	0	0	0
Bunduff	3	2	0	0	0
Inch – Long Point	NS	NS	NS	7	6
Inishtrahull	NS	NS	NS	1	0
Tory Island	NS	NS	NS	14	19
Total	12	8	1	25	28

Total number of Redshank pairs recorded in the 2018 study. Historical records of Redshank pairs since 1985 are also included at comparable sites. NS stands for not surveyed.

Breeding Redshank are now confined to just a few sites. Tory Island was again the most important site with numbers up considerably from the previous year. Long Point (Inch) and Magheragallan numbers were similar to 2017.

Site name	1985	1996	2009	2017	2018
Rinmore	2	0	0	0	0
Rinboy	1	0	0	0	0
Dunfanaghy	1	6	0	0	0
Magheragallan	4	6	0	0	0
Sheskinmore	9	0	0	0	0
Bunduff	4	0	0	0	0
Tory Island	NS	NS	NS	6	5
Total	21	12	0	6	5

#### Dunlin

Total number of Dunlin pairs recorded in the 2018 study. Historical records of Dunlin pairs since 1985 are also included at comparable sites. NS stands for not surveyed.

As in 2017 Tory Island was the only site were breeding Dunlin were recorded. Suitable habitat in other sites with historic records of breeding Dunlin was carefully searched but without success.

### **Common Sandpiper**

Site name	1985	1996	2009	2017	2018
Dunfanaghy	0	1	0	0	1
Sheskinmore	1	0	0	0	0
Inishtrahull	NS	NS	NS	1	0
Inishbofin	NS	NS	NS	0	1
Total	1	1	0	1	2

Total number of CommonSandpiper pairs recorded in the 2018 study. Historical records of Common Sandpiper pairs since 1985 are also included at comparable sites. NS stands for not surveyed.

Most of the survey sites have little or no suitable breeding habitat for Common Sandpiper. One pair was recorded along rocky lakeshore at Dunfanaghy and another pair in a sheltered cove on Inishbofin.

### **Golden Plover**

Site name	1985	1996	2009	2017	2018
Magheragallan	1	0	0	0	1
Bunduff	0	2	0	0	0
Total	1	2	0	0	1

Total number of Goldlen Plover pairs recorded in the 2018 study. Historical records of Golden Plover pairs since 1985 are also included at comparable sites.

In Ireland Golden Plover generally breed in upland areas and would not normally be expected to breed at any of the survey sites for this survey. Three Golden Plover summered at Magheragallan and a juvenile bird was a surprise find there late in summer. Interestingly, a pair were recorded at this site in 1985.

## Lapwing Productivity

The breeding success of Lapwing was assessed by calculating productivity indexes. These indexes were calculated for each site as the total number of fledglings observed divided by the number of estimated breeding Lapwing pairs. Due to time lapses between survey visits, it is highly likely that not all fledglings at each site were recorded, these values therefore represent the minimum value of Lapwing productivity. The last column shows the productivity indexes for 2017 for comparison.

Site	Estimated No. of Pairs	Fledglings Observed	Productivity Index 2018	Productivity Index 2017
Doagh Isle	5	0	0.00	0.00
Rinmore	31	2	0.07	0.59
Rinboy	2	0	0.00	0.50
Doaghmore	3	4	1.33	2.00
Rosepenna Saltings	4	4	1.00	0.00
Dunfanaghy	4	0	0.00	0.00
Pollaguill	5	9	1.80	-
Falcarragh	3	0	0.00	-
Lunniagh	4	0	0.00	0.33
Magheragallan	19	2	0.11	0.28
Sheskinmore	10	1	0.10	0.00
Bunduff	8	6	0.75	1.75
Aughris Head	3	3	1.00	0.00
Inch – Long Point	5	2	0.40	0.00
Inch - Grianán	23	0	0.00	2.64
Inch - West	14	0	0.00	0.00
Inishtrahull	1	2	2.00	0.00
Inishbofin	2	0	0.00	0.00
Tory Island	22	0	0.00	0.07
Total	168	35	0.21	0.80

Productivity Indexes calculated for the 19 sites with Breeding Lapwing

As stated above the indexes calculated are likely to be an under estimation of productivity at many sites due to the time lapse between visits. Chicks can wander a considerable distance from nest sites and once fledged may quickly disperse and leave the area altogehter. Due to adverse weather conditions during April and early May nesting may have been delayed or failed and reattempted at many sites and a small number of chicks were seen late in the season and some of these may have fledged after the survey period. Some sites, such as Doagh Isle, Rinboy and Dunfanaghy almost certainly had total nesting failure as they were abandoned early in the year. A few sites with small populations fared well including Doaghmore, Rosapenna Saltings, Pollaguill and Aughris Head, all having productivity indexes of 1.00 or more. Of concern is the very low productivity figures at the sites with relatively large populations. Over 56% of the total amount of fledglings counted during 2017 were at Inch. During 2018 the numbers of lapwing observed in the farmed areas of Inch declined dramatically during the course of the survey and undoubtedly vey few birds if any fledged in these areas. Also of concern is the very low productivity numbers for the three sites with predator exclusion fences, namely Rinmore, Magheragallan and Sheskinmore. Due to technical problems none of the electric fences were operational during the 2018 breeding season. The problems have

been dealt with so hopefully these sites will continue to hold good numbers in future. The productivity numbers for the island sites are probably the least reliable due to the limited number of visits. However, actual productivity was most likely poor on Tory Island as was also noted in 2017. The growing population of Hooded Crow is of concern.

# **Individual Site Accounts**

For detailed site descriptions see McMonagle (2017). Any changes in site conditions from the previous year are noted in the site accounts.

Key for all maps:

Survey Boundary Area for all years surveyed

- Survey Boundary Area for 2017 and 2018
- Survey Boundary Area for 2018
- Predator Exclusion Fence
  - L. Lapwing Breeding Territory
  - OC Oystercatcher Breeding Territory
  - RP Ringed Plover breeding Territory
  - DN Dunlin Breeding Territory
  - SN Snipe Breeding Territory
  - RS Redshank Breeding Territory
  - CS Common Sandpiper Breeding Territory
  - GP Golden Plover Breeding Territory

# **Doagh Isle**



Survey Area for Doagh Isle

Visit 1: April 09 2018 Visit 2: April 17 2018 Visit 3: April 30th 2018 Visit 4: May 15th 2018 Visit 5: June 6th 2018

The area surveyed in previous surveys included three separate sections. No breeding waders were recorded during the 2009 survey and all five pair of lapwing recorded during the 2017 survey were in the southern section. No waders were recorded during a visit to the two northerly sections during the visit on 9th April and it was decided to exclude these sections from the 2018 survey which included only the area shown in the map above. Nine displaying lapwing were observed on the first visit. On the second visit only three lapwing were recorded during very windy conditions. No lapwing were found on subsequent visits so presumably the site was abandoned early in the season. The reasons for this are unclear. Possibly early nests failed due to either unfavourable weather conditions or predation or a combination of both but there seems to have been no attempt to renest at this site.

		Total Number of Individuals	Estimated Territories	Overall Estimated Territories
	Visit 1	9	5	
	Visit 2	3	2	
LAPWING (L.)	Visit 3	0	0	5
	Visit 4	0	0	
	Visit 5	0	0	

Number of breeding waders recorded at Doagh Isle

	Survey Year					
	1985	1996	2009	2017	2018*	
LAPWING	29	7	0	5	5	
OYSTERCATCHER	1	0	0	0	0	
RINGED PLOVER	5	3	0	0	0	
SNIPE	5	1	0	0	0	

\*Area surveyed in 2018 did not include the two northerly sections.

Number of breeding wader territories in 1985, 1996, 2009, 2017 & 2018 at Doagh Isle

Additional species recorded: Hooded Crow (4 visits, max. 4), Raven (4 visits, max. 4), Rook (4 visits, max. 4), Jackdaw (4 visits, max. 8), Magpie (1 visit, 2), Great Black-backed Gull (1 visit, 1), Herring Gull (1 visit, 2), Lesser Black-backed Gull (1 visit, 2), Black-headed Gull (1 visit, 1), Buzzard (1 visit, 1).

	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5
Sheep	46	36	23	28	0
Cattle	7	16	23	0	0

Livestock numbers at Doagh Isle

# Rinmore



Survey Area for Rinmore

Visit 1: April 10 2018 Visit 2: April 17 2018 Visit 3: May 01 2018 Visit 4: May 18 2018 Visit 5: June 07 2018 Visit 6: June 25 2018 The vast majority of breeding Lapwing are found within the three predator exclusion fenced areas, with a small number nesting just outside these fenced areas. Three to four pair nested some distance away to the south as was the case in 2017. There were two pair of Lapwing present at this area during the first visit that were being persisitently harrassed by a flock of around 10 Hooded Crows. However, up to four pair of Lapwing were present here during all visits and a chick was observed during the 4th visit. Also during the 4th visit a Hooded Crow was observed being pursued by several Lapwing and carrying what appeared to be a chick just outside the predator exclusion area. In all, seven family groups of Lapwing were observed with young chicks on 18th May. Disappointingly only one older chick was observed on the next visit despite considerable time spent monitoring the area suggesting a poor survival rate. One recently hatched chick was also seen during this visit. On the final visit there only eight Lapwing present. At least one pair of Oystercatcher and one pair of Ringed Plover nested within the most northerly of the predator exculsion areas and an Oystercatcher nest containing one egg was found here. Another Oystercatcher nest containing two eggs was found along the pebble shore adjacent to the fenced area and distraction displays from Ringer Plover were regularly observed along the shoreline. During the second visit a single Dunlin was recorded inside the northerly fenced area and a single Common Sandpiper was present nearby. However, as they were not observed again they were considered to be migrants.

		Total Number of Individuals	Estimated Territories	Overall Estimated Territories
	Visit 1	44	22	
	Visit 2	48	24	
LAPWING (L.)	Visit 3	52	26	31
	Visit 4	62	31	
	Visit 5	47	24	
	Visit 6	8	4	
	Visit 1	2	0	
	Visit 2	6	3	
OYSTERCATCHER	Visit 3	5	2	4
(OC)	Visit 4	9	4	4
	Visit 5	5	3	
	Visit 6	3	2	
	Visit 1	8	4	
	Visit 2	9	3	
RINGED PLOVER	Visit 3	9	4	5
(RP)	Visit 4	11	4	. 5
	Visit 5	12	5	
	Visit 6	9	5	
	Visit 1	4	0	
	Visit 2	4	0	
	Visit 3	0	0	
SNIPE (SN)	Visit 4	2	1	2
	Visit 5	0	0	
	Visit 6	4	2	
SNIPE (SN)	Visit 6 Visit 1 Visit 2 Visit 3 Visit 4 Visit 5	9 4 4 0 2 0	5 0 0 0 1 0	2

Number of breeding waders recorded at Rinmore

Additonal waders recorded: Dunlin (3 visits, max. 25), Common Sandpiper (1 visit, 1), Golden Plover (3 visits, max. 30), Curlew (2 visits, max. 1), Turnstone (2 visits, max. 15), Sanderling (2 visits, max. 30), Whimbrel (2 visits, max. 2)

Additional species recorded: Hooded Crow (6 visits, max. 17), Raven (4 visits, max. 2), Rook (4 visits, max. 25), Jackdaw (6 visits, max. 20), Great Black-backed Gull (5 visits, max. 2), Herring Gull (6 visits, max. 17), Common Gull (4 visits, max. 18), Black-headed Gull (2 visits, max. 6), Buzzard (2 visits, max. 3).

Survey Year							
	1985	1996	2009	2011	2014	2017	2018
LAPWING	26	64	13	9	17	29	31
OYSTERCATCHER	1	6	1	2	0	3	4
RINGED PLOVER	3	13	4	4	0	4	5
DUNLIN	2	0	0	0	0	0	0
SNIPE	5	1	0	0	0	1	2
REDSHANK	0	1	0	0	0	0	0

Number of breeding wader territories in 1985, 1996, 2009, 2011, 2014, 2017 & 2018 at Rinmore

	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Visit 6
Sheep	300	225	207	220	159	157
Cattle	38	42	44	31	30	38

Livestock numbers at Rinmore





Survey Area for Rinboy

Visit 1: April 10 2018 Visit 2: April 17 2018 Visit 3: May 01 2018 Visit 4: May 18 2018 Visit 5: June 07 2018 Visit 6: June 25 2018

As was the case in 2017 no Lapwing were found in the original survey area, though two pair were found on the boggy headland that was first surveyed in 2017. No Lapwing were observed on the last two visits so it seems unlikely that breeding was successful. Two pair of Ringed Plover and one pair of Oystercatcher were found along the pebble shoreline on the new survey area. Numbers of both Ringed Plover and Oystercatcher were recorded along the beach in the original survey area though no territorial behaviour was observed.

		Total Number of Individuals	Estimated Territories	Overall Estimated Territories
	Visit 1	1	1	
	Visit 2	4	2	
LAPWING (L.)	Visit 3	2	1	2
	Visit 4	3	2	
	Visit 5	0	0	
	Visit 6	0	0	
	Visit 1	7	0	
	Visit 2	4	0	
OYSTERCATCHER	Visit 3	0	0	1
(OC)	Visit 4	3	1	
	Visit 5	3	0	
	Visit 6	2	0	-
	Visit 1	8	2	
	Visit 2	16	1	-
RINGED PLOVER	Visit 3	12	0	2
(RP)	Visit 4	7	2	2
	Visit 5	7	2	-
	Visit 6	4	2	-
	Visit 1	3	0	
	Visit 2	1 (1)	0	
	Visit 3	0	0	
SNIPE (SN)	Visit 4	0	0	1
	Visit 5	0	0	-
	Visit 6	0	0	

Number of breeding waders recorded at Rinboy

Additional waders recorded: Dunlin (2 visits, max. 15), Golden Plover (1 visit, 1), Curlew (1 visit, 1), Whimbrel (3 visits, max. 9).

Additional species recorded: Hooded Crow (3 visits, max. 2), Rook (5 visits, max. 13), Jackdaw (1 visit, 8), Great Black-backed Gull (3 visits, max. 4), Herring Gull (5 visits, max. 13), Black-headed Gull (1 visit, 2).

Survey Year						
	1985	1996	2009	2017*	2018*	
LAPWING	0	1	0	2	2	
OYSTERCATCHER	0	0	1	3	1	
RINGED PLOVER	0	0	1	3	2	
DUNLIN	1	0	0	0	0	
SNIPE	1	0	0	1	1	

\*Additonal area surveyed in 2017 and 2018.

Number of breeding wader territories in 1985, 1996, 2009, 2017 & 2018 at Rinboy

	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Visit 6
Sheep	0	12	0	25	0	0
Cattle	20	21	20	30	55	26

Livestock numbers at Rinboy

## Doaghmore



Survey Area for Doaghmore

Visit 1: May 21 2018 Visit 2: June 07 2018 Visit 3: June 28 2018

It was origianally planned to omit Doaghmore for the 2018 survey as only one pair of lapwing were found there in 2017 but as time permitted it was surveyed on 21st May. Two pair were present so it was added to the survey for the remainder of the season and in three pair of lapwing were encountered on the next visit, all close to the wetland were a pair bred in 2017. A flock of 10 lapwing including at least four recently fledged birds were seen on the last visit indicating successful breeding at the site. It should be noted that a section included in previous surveys and lying approximately 1km to the northeast was not included in the 2018 survey. No breeding waders were present in that section in 2017.

		Total Number of Individuals	Estimated Territories	Overall Estimated Territories
	Visit 1	4	2	
LAPWING (L.)	Visit 2	6	3	3
	Visit 3	10	3	

Number of Breeding Waders at Doaghmore

Additional species recorded: Hooded Crow (2 visits, max. 20), Rook (1 vist, 4), Jackdaw (2 visits, max. 5), Grey Heron (1 visit, 1).

Survey Year						
	1985	1996	2009	2017	*2018	
LAPWING	0	3	0	1	3	

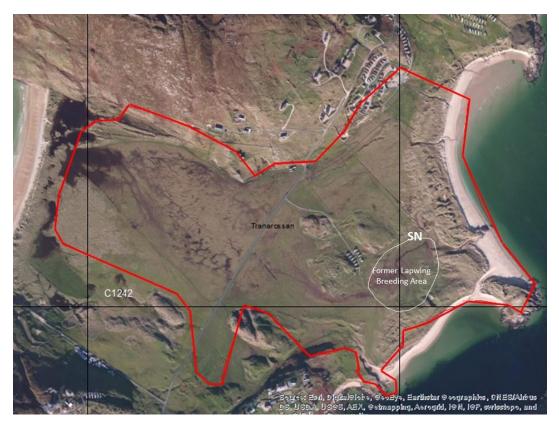
\*Area surveyed in 2018 did not innclude the most northerly section.

Number of breeding wader territories in 1985, 1996, 2009, 2017 & 2018 at Doaghmore

	Visit 1	Visit 2	Visit 3
Cattle			8

Livestock numbers at Doaghmore

### Tranarossan



Survey Area for Tranarossan

Visit 1: April 11 2018 Visit 2: April 24 2018 Visit 3: May 03 2018 Visit 4: May 21 2018 Visit 5: June 08 2016

Although no Lapwing were recorded at Tranarossan in 2017 it was decided to include the site in the 2018 survey as three pair were recorded nesting there as recently as 2014. The area were Lapwing previously found (outlined in white in map above) was near to a small caravan park. Access to this area for surveying purposes was denied by the owner of the caravan park. However, a farmer that owned the land just to the north of this area was very agreeable and an excellent view of the former Lapwing breeding area was possible. However no Lapwing were observed throughout the survey.

		Total Number of Individuals	Estimated Territories	Overall Estimated Territories
	Visit 1	0	0	
	Visit 2	1	1	
SNIPE (SN)	Visit 3	0	0	1
	Visit 4	0	0	
	Visit 5	0	0	

Number of Breeding Waders at Tranarossan

Other waders recorded: Ringed Plover (2 visits, max. 2).

Other species recorded: Hooded Crow (5 visits, max. 11), Raven (1 visit, 1), Rook (3 visits, max. 18), Jackdaw (3 visits, max. 12), Magpie (4 visits, max. 6), Chough (1 visit, 2), Herring Gull (5 visits, max. 13), Great Black-backed Gull (1 visit, 1), Common Gull (1 visit, 5), Kestrel (1 visit, 1).

	Survey Year							
	1985	1996	2009	2014	2017	2018		
LAPWING	1	0	3	3	0	0		

 Number of breeding wader territories in 1985, 1996, 2009, 2014, 2017 & 2018 at Tranarossan

	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5
Cattle	9	7	17	20	48
Sheep	113	144	122	121	120
Donkey	6		6	6	

Livestock numbers at Tranarossan

### **Rosapenna Saltings**



Survey Area for Rosapenna Saltings

Visit 1: April 11 2018 Visit 2: April 24 2018 Visit 3: May 03 2018 Visit 4: May 21 2018 Visit 5: June 08 2018 Visit 6: June 28 2018

Four pair of Lapwing were found at the north end of the survey area where lapwing bred the previous year. The unusually high count during the fifth visit was due to a flock of 13 Lapwing that were seen flying at considerable altitude and continued in an easterly direction before disappearing out of sight. Where these birds were coming from and going to is a mystery. Interestingly, the Lapwing that were present on the ground at the time did not react to the flock flying directly over the breeding area. On the final visit a flock of 10 Lapwing that included four recently fledged birds were feeding on the golf course adjacent to the breeding area indicating successful breeding at the site. The site is grazed by cattle which were excluded from the breeding area.

		Total Number of Individuals	Estimated Territories	Overall Estimated Territories
	Visit 1	8	4	
	Visit 2	7	4	
LAPWING (L.)	Visit 3	6	3	4
	Visit 4	7	4	
	Visit 5	19	3	
	Visit 6	10	3	
	Visit 1	1	0	
	Visit 2	3	1	
SNIPE (SN)	Visit 3	0	0	1
	Visit 4	0	0	
	Visit 5	0	0	

Number of Breeding Waders at Rosapenna Saltings

Other waders recorded: Golden Plover (2 visits, max. 75), Whimbrel (1 visit, 4).

Other species recorded: Hooded Crow (5 visits, max. 12), Raven (2 visits, max. 6), Rook (4 visits, max. 34), Jackdaw (6 visits, max. 22), Magpie (1 visit, 4), Herring Gull (3 visits, max. 5), Great Black-backed Gull (1 visit, 1), Common Gull (2 visits, max. 30), Black-headed Gull (3 visits, max. 6), Buzzard (3 visits, max. 1).

Survey Year									
	1985	1996	2009	2011	2014	2017	2018		
LAPWING	9	25	9	0	4	3	4		
RINGED PLOVER	1	0	0	0	0	0	0		
SNIPE	1	0	3	2	0	1	2		
REDSHANK	1	0	0	0	1	0	0		

Number of breeding wader territories in 1985, 1996, 2009, 2011, 2014, 2017 & 2018 at Rosapenna Saltings

	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Visit 6
Sheep	16	24	62		70	30
Cattle	2	4	6	6	6	16
Horse					1	

Livestock numbers at Rosapenna Saltings

### **Dunfanaghy – New Lake**



Survey Area for Dunfanaghy - New Lake

Visit 1: April 12 2018 Visit 2: April 25 2018 Visit 3: May 04 2018 Visit 4: May 28 2018 Visit 5: June 11 2018 Visit 6 June 29 2018

Conditions at New Lake were signficantly wetter than in 2017 with surface water covering a large area behind the dunes where the Lapwing territories are marked on the map above. A small number of Lapwing were also seen along the shore of the main lake on two occasions but it is thought that they were using this area mainly as a feeding and resting site. Four pair of strongly displaying Lapwing were present during the first three visits but none were seen thereafter indicating total nest failure and abandonment of the site for the year. The habitat looks excellent at this site and there is little human disturbance so predation would seem a likely cause. There were often a large number of corvids and gulls present around the wetland area. A pair of Black-tailed Godwit were seen displaying by the wetland during the third visit but were not seen again. The Oystercatcher pair were on a small island along a largely submerged causeway just off a headland on a peninsula on the eastern side of the main lake. A pair of Common Sandpiper were observed displaying on two visits around a small boat dock by the peninsula. There are quite a few stretches of rocky shoreline along the eastern shore of the lake that would be good Common Sandpiper breeding habitat.

		Total Number of Individuals	Estimated Territories	Overall Estimated Territories
	Visit 1	9	4	
	Visit 2	7	4	
LAPWING (L.)	Visit 3	8	4	4
	Visit 4	0	0	
	Visit 5	0	0	
	Visit 6	0	0	•
	Visit 1	9	1	
	Visit 2	2	1	
OYSTERCATCHER	Visit 3	2	1	1
(OC)	Visit 4	2	1	
	Visit 5	2	1	
	Visit 6	0	0	•
	Visit 1	11	0	
	Visit 2	3	0	
SNIPE (SN)	Visit 3	5	2	2
Sitil E (Sity	Visit 4	0	0	
	Visit 5	0	0	
	Visit 6	0	0	-
	Visit 1	0	0	
	Visit 2	0	0	
COMMON	Visit 3	2	1	1
SANDPIPER (CS)	Visit 4	0	0	
	Visit 5	2	1	
	Visit 6	0	0	

Number of Breeding Waders Dunfanaghy – New Lake

Other waders recorded: Black-tailed Godwit (1 visit, 2), Whimbrel (1 visit, 8).

Other species recorded: Hooded Crow (4 visits, max. 7), Raven (2 visits, max. 4), Rook (2 visits, max. 50), Jackdaw (2 visits, max. 50), Magpie (1 visit, 1), Chough (1 visit 8), Herring Gull (5 visits, max. 50), Great Black-backed Gull (4 visits, max. 7), Lesser Black-backed Gull (2 visits, max. 5), Common Gull (3

visits, max. 70), Black-headed Gull (5 visits, max. 20), Peregrine (1 visit, 1), Buzzard (1 visit, 1), Grey Heron (3 visits, max. 2).

Survey Year								
	1985	1996	2009	2011	2014	2017	2018	
LAPWING	17	11	10	0	4	2	4	
OYSTERCATCHER	0	1	1	1	0	1	1	
RINGED PLOVER	1	0	0	0	0	0	0	
DUNLIN	1	6	0	0	0	0	0	
SNIPE	1	1	6	2	0	0	2	
REDSHANK	2	2	1	0	1	0	0	
COMMON SANDPIPER	0	1	0	0	0	0	1	

Number of breeding wader territories in 1985, 1996, 2009, 2011, 2014, 2017 & 2018 at Dunfanaghy – New Lake

	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Visit 6
Sheep	10	10	20	8	26	20
Cattle	0	0	0	15	14	11

Livestock numbers at Dunfanaghy - New Lake

# **Dunfanaghy – Pollaguill**



Survey Area for Dunfanaghy Pollaguill

Visit 1: May 28 2018 Visit 2: June 11 2018 Visit 3: June 29 2018

This site has not been surveyed previously but was included after a report was received around 21st May of a pair of Lapwing with a young chick being present. The area is extensively grazed by sheep and generally the sward height is low. There are however some wet boggy areas with good cover. During the first visit a pair of Lapwing were observed in the area previously reported though no young were observed. While observing this pair more Lapwing were spotted towards the headland. On the third visit a pair of territorial Lapwing were observed at the site of the original sighting and a recently hatched chick was also seen here. Presumably the orignal clutch failed and either the pair renested or possibly a new pair moved in. Also during the third visit a flock of 17 Lapwing were observed sitting closely together. The birds flew off an resettled together on a hillside. Views were distant but several of these birds appeared to be juveniles.

		Total Number of Individuals	Estimated Territories	Overall Estimated Territories
	Visit 1	7	4	
LAPWING (L.)	Visit 2	9	5	5
	Visit 3	19 inc. Several fledglings	1	
	Visit 1	1	1	
SNIPE (SN)	Visit 2	1	1	1
	Visit 3	1	1	

Number of Breeding Waders at Dunfanaghy - Pollaguill

Other species recorded: Hooded Crow (2 visits, max. 5), Chough (2 visits, max. 7), Great Black-backed Gull (1 visit, 2), Herring Gull (1 visit, 1).

	Visit 1	Visit 2	Visit 3			
Sheep	100+	100+	100+			

Livestock numbers at Dunfanaghy - Pollaguill

# Falcarragh



Survey Area for Falcarragh

Visit 1: April 12 2018 Visit 2: April 25 2018 Visit 3: May 04 2018 Visit 4: May 29 2018 Visit 5: June 11 2018 Visit 6: June 28 2018

Conditions were considerably wetter at this site than for the 2017 though the wet areas behind the dunes had largely dried out by the end of May. On the first four visits a pair of Lapwing were present in the wet area behind the dunes while one to two pair were some distance away on a rushy hillside. On the fourth visit a flock of 11 Lapwing flew in from the direction of the sea and circled around briefly before flying off to the west. No Lapwing were seen on the final two visits so it is unclear if successful breeding took place.

		Total Number of Individuals	Estimated Territories	Overall Estimated Territories
	Visit 1	6	3	
	Visit 2	4	2	
LAPWING (L.)	Visit 3	6	3	3
	Visit 4	17	3	
	Visit 5	0	0	
	Visit 6	0	0	
	Visit 1	1	0	
	Visit 2	0	0	-
SNIPE (SN)	Visit 3	0	0	1
SINIPE (SIN)	Visit 4	1	1	-
	Visit 5	0	0	
	Visit 6	0	0	

Number of Breeding Waders at Falcarragh

Other waders recorded: Oystercatcher (1 visit, 2), Ringed Plover (1 visit, 1), Golden Plover (12 visit 20), Sanderling (one visit, 15).

Other species recorded: Hooded Crow (2 visits, max. 5), Rook (1 visit, 20), Jackdaw (1 visit, 30), Chough (1 visit, 2), Herring Gull (4 visits, max. 8), Great Black-backed Gull (1 visit, 1), Lesser Blackbacked Gull (2 visits, max. 6), Common Gull (1 visit, 2), Black-headed Gull (1 visit 2), Merlin (1 visit, 1), Buzzard (1 visit, 1).

Survey Year						
	2009	2014	2017	2018		
LAPWING	5	5	0	3		
RINGED PLOVER	2	0	1	0		
DUNLIN	0	1	0	0		
SNIPE	2	0	0	1		

Number of breeding wader territories in 2009, 2014, 2017 & 2018 at Falcarragh

	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Visit 6
Sheep	95	58	65	135	52	50
Cattle	0	0	0	20	7	7

Livestock numbers at Falcarragh

# Lunniagh



Breeding Survey Area for Lunniagh

Visit 1: April 05 2018 Visit 2: April 19 2018 Visit 3: May 07 2018 Visit 4: May 29 2018 Visit 5: June 13 2018 Visit 6: July 02 2018

The survey area was extended to the south in 2017 to include an area of machair and salt marsh and all breeding birds recorded were in this area. As this site is just across a small channel from the Magheragallan site and Lapwing were often observed flying between the two sites it is difficult to ascertain which birds belong to which site though three to four pair were acting territorially in Lunniagh for much of the season. During the fourth visit a fox was observed being pursued by several Lapwing. On the final visit two pair of Ringed Plover were observed performing distraction displays. Also on the final visit a flock of 12 Lapwing were observed in the saltmarch at the south end of the survey area. It is likely that some of these birds were from the Magheragallan survey area.

		Total Number of Individuals	Estimated Territories	Overall Estimated Territories
LAPWING (L.)	Visit 1	4	0	
	Visit 2	6	3	
	Visit 3	8	4	4
	Visit 4	6	3	
	Visit 5	4	2	
	Visit 6	14	1	
RINGED PLOVER (RP)	Visit 1	0	0	
	Visit 2	2	1	
	Visit 3	7	1	2
	Visit 4	0	0	-
	Visit 5	0	0	
	Visit 6	4	2	

Number of Breeding Waders at Lunniagh

Other waders recorded: Snipe (1 visit, 2), Curlew (1 visit, 24).

Other species recorded: Hooded crow (4 visits, max. 9), Jackdaw (1 visit, 20), Herring Gull (1 visit, 1), Common Gull (2 visits, max. 4), Peregrine (1 visit, 1), Grey Heron (1 visit, 1).

Survey Year							
	1985	1996	2009	2017	2018		
LAPWING	0	2	0	3	4		
RINGED PLOVER	0	0	0	2	2		
DUNLIN	0	0	0	0	0		
SNIPE	1	0	0	0	0		

Number of breeding wader territories in 1985, 1996, 2009, 2017 & 2018 at Lunniagh

	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Visit 6
Sheep	95	49	0	0	0	0
Cattle	12	9	0	0	0	0

Livestock numbers at Lunniagh

### Magheragallan



Survey Area for Magheragallan

Visit 1: April 05 2018 Visit 2: April 19 2018 Visit 3: May 07 2018 Visit 4: May 29 2018 Visit 5: June 13 2018 Visit 6: July 07 2018

The vast majority of waders nest within or very close to the predator exclusion fenced area. Early in the season a few Lapwing were seen displaying some distance to the west of the fenced area though this activity ceased as the season progressed though the area was still used for feeding. Chicks were also seen just across the road on the west side of the fenced area though as they have been observed passing through the chicken wire that runs along the bottom of the fence and crossing the road it seems likely they were led here by their parents. The first chicks were observed on the fourth visit when six family groups with between one and three chicks each were recorded. On the following visit only one family group that included three half-grown chicks was noted. This would suggest a poor survivial rate though some caution is required as chicks can wander some distance and have a remarkable ability to disappear in long grass. Also weather conditions were poor during this visit. However, the number of adult birds present was considerably reduced suggesting some birds may have already abandoned the area. On the final visit only six adult birds were counted though there were two family groups with two and four very small chicks present indicating late

nesting. The pair with four chicks were some distance north of the fenced area just beyond the GAA pitch. On a follow up visit to the site on 17th July only one adult and no fledglings were ovbserved. Three pair of Redshank were recorded with at least one pair inside the fenced area and the others just outside towards the saltmarsh. The site is well used by wintering and migrant Snipe with a small number also breeding. A pair of Ringed Plover were regularly seen along the headland and on the final visit they were accompanied on the beach by two small chicks. Three Golden Plover remained in the area into July though no breeding behaviour was observed. However, during the follow up visit to the site on 17th July the three Golden Plover were still present and were accompanied by a juvenile. Although the habitat is not typical for breeding Golden Plover a pair were also reported breeding here during the 1985 survey.

		Total Number of Individuals	Estimated Territories	Overall Estimated Territories
	Visit 1	19	10	
	Visit 2	38	19	-
LAPWING (L.)	Visit 3	28	14	19
LAPWING (L.)	Visit 4	30	15	19
	Visit 5	14	7	-
	Visit 6	6	3	
	Visit 1	0	0	
	Visit 2	3	1	
RINGED PLOVER	Visit 3	1	1	1
(RP)	Visit 4	2	1	
	Visit 5	0	0	
	Visit 6	2	1	
	Visit 1	6	0	
	Visit 2	71	0	
SNIPE (SN)	Visit 3	45	4	4
SINIPE (SIN)	Visit 4	2	2	_ 4
	Visit 5	8	4	
	Visit 6	2	2	
	Visit 1	5	0	
	Visit 2	4	2	1
REDSHANK (RS)	Visit 3	6	3	3
	Visit 4	4	2	
	Visit 5	6	3	1
	Visit 6	0	0	1
	Visit 1	0	0	
GOLDEN PLOVER (GP)	Visit 2	68	0	1
	Visit 3	16	1	
	Visit 4	3	1	1

Visit 5	3	1	
Visit 6	3	1	

Number of Breeding Waders Magheragallan

Other waders recorded: Whimbrel (1 visit, 17).

Other species recorded: Hooded Crow (5 visits, max. 6), Raven (2 visits, max.), Jackdaw (1 visit, 5), Chough (1 visit, 7), Herring Gull (3 visits, max. 7), Great Black-backed Gull (3 visits, max. 3), Lesser Black-backed Gull (4 visits, max. 15), Common Gull (4 visits, max. 36), Black-headed Gull (3 visits, max. 4), Grey Heron (1 visit, 1).

Survey Year							
	1985	1996	2009	2011	2014	2017	2018
LAPWING	13	21	11	9	15	25	19
RINGED PLOVER	1	2	0	0	0	1	1
DUNLIN	4	6	0	0	0	0	0
SNIPE	0	0	3	2	0	2	4
REDSHANK	4	3	0	1	3	3	3
GOLDEN PLOVER	1	0	0	0	0	0	1

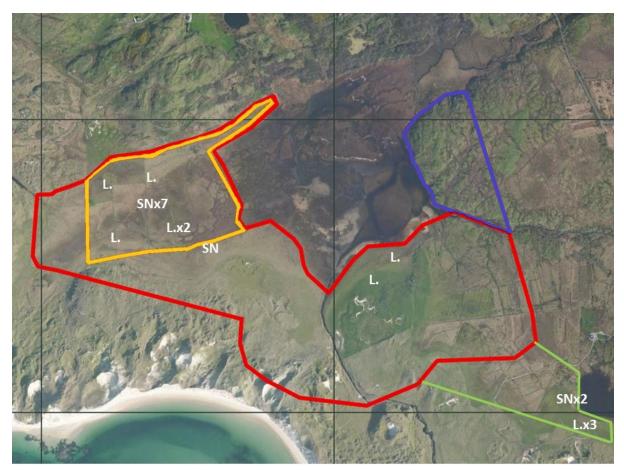
Number of breeding wader territories in 1985, 1996, 2009, 2011, 2014, 2017 & 2018 at Magheragallan

	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Visit 6
Sheep	97	81	92	63	110	173*
Cattle	2	0	0	0	0	0

\*including 67 inside predator exclusion fence.

Livestock numbers at Magheragallan

### Sheskinmore



Survey Area for Sheskinmore

Visit 1: April 13 2018 Visit 2: April 26 2018 Visit 3: May 05 2018 Visit 4: May 31 2018 Visit 5: June 15 2018 Visit 6: July 30 2018

During the first four visits nine to ten pair of Lapwing were consisitently found on site. A maximum of five pair were observed in the fenced predator exclusion area and one to two pair were regularly found by the south shore of the main lake. On several occaisons the entire flock for the area of up to 20 birds were seen on the headland overlooking the lake that was first surveyed in 2017 (outlined in blue on map). No territorial displaying was observed here and it is thought that this area may be used primarily for feeding and roosting. It was a mystery as to where the remaining three pair were breeding until a group were seen flying towards Sandfield Lake during the fourth visit and the area outlined in green was then added to the survey area for the remaining visits. By the fourth visit only two pair of lapwing remained within the fenced area and none were observed here on the final two visits suggesting they failed to fledge any young. Although a nest containg four eggs was found on short grass along the south shore of the main lake on the second visit it his thought nesting was unsuccessful here. The birds by Sandfield Lake appear to have fared better and were present through the last visit with at least one fledgling present. The fenced area is important for snipe and birds were regularly seen drumming overhead and heard chipping.

		Total Number of Individuals	Estimated Territories	Overall Estimated Territories
	Visit 1	19	10	
	Visit 2	17	9	
LAPWING (L.)	Visit 3	20	10	10
	Visit 4	19	10	10
	Visit 5	6	3	
	Visit 6	4	2	
	Visit 1	32	4	
	Visit 2	3	2	
SNIPE (SN)	Visit 3	9	4	10
51411 2 (514)	Visit 4	17	10	10
	Visit 5	10	5	
	Visit 6	1	1	

Number of Breeding Waders at Sheskinmore

Other species recorded: Hooded Crow (6 visits, max. 9), Raven (2 visits, max. 1), Rook (1 visit, 20), Jackday (3 visits, max. 15), Herring Gull (2 visits, max. 17), Great Black-backed Gull (1 visit, 1), Lesser Black-backed Gull (3 visits, max. 2), Common Gull (1 visit, 2), Grey Heron (5 visits, max. 1), Buzzard (2 visits, max. 1).

Survey Year								
	1985	1996	2009	2011	2014	2017	2018	
LAPWING	10	16	3	4	12	9	10	
RINGED PLOVER	1	0	0	0	0	0	0	
DUNLIN	9	0	0	0	0	0	0	
SNIPE	1	2	12	0	0	7	10	
REDSHANK	2	0	0	0	0	0	0	
COMMON SANDPIPER	1	0	0	0	0	0	0	

Number of breeding wader territories in 1985, 1996, 2009, 2011, 2014, 2017 & 2018 at Sheskinmore

	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Visit 6
Cattle	4	0	10	11	17	25
Horse	1	1	1	2	2	2

\*including 67 inside predator exclusion fence.

Livestock numbers at Sheskinmore

### Bunduff



Survey Area at Bunduff

Visit 1: April 15 2018 Visit 2: April 27 2018 Visit 3: May 14 2018 Visit 4: June 01 2018 Visit 5: June 16 2018 Visit 6: July 04 2018

Seven to eight pairs of territorial Lapwing were found consistently throughout the first four visits with half of them being around the most northerly Bunduff Lake and the other half being across the road. A nest containing 4 eggs was found on the first visit which was the earliest nest recorded during the 2018 survey. On the fifth visit only four pair were recorded with none in the area to the west. Also on this visit, a Hooded Crow carrying what appeared to be a small chick was observed being pursued by a pair of Lapwing. Also during the fifth visit a line of five Hooded Crows were observed walking steadily along the lake shore despite being mobbed by a pair of Lapwing. The northern half of the survey area is popular with walkers though they tend to stay away from the main breeding area due to the marshy conditions. However on a couple of occasions dogs were seen running loose by the northern edge of the lake. On the final visit there was only a single pair of Lapwing still acting territorially by the lake. In the field at the eastern edge of the survey area a group of 12 Lapwing were noted that included an undetermined number of recently fledged birds

		Total Number of Individuals	Estimated Territories	Overall Estimated Territories
	Visit 1	13	7	
	Visit 2	14	7	
LAPWING (L.)	Visit 3	16	8	8
	Visit 4	15	8	. 0
	Visit 5	8	4	
	Visit 6	14	1	
	Visit 1	41	2	
	Visit 2	12	0	
SNIPE (SN)	Visit 3	12	6	6
	Visit 4	9	5	. 0
	Visit 5	12	5	
	Visit 6	5	1	

Number of Breeding Waders at Bunduff

Other species recorded: Hooded Crow (6 visits, max. 8), Raven (3 visits, max. 3), Rook (1 visit, 4), Jackdaw (4 visits, max. 29), Herring Gull (4 visits, max. 5), Great Black-backed Gull (3 visits, max. 15), (6 visits, max. 5).

Survey Year							
	1985	1996	2009	2017	2018		
LAPWING	15	16	2	8	8		
DUNLIN	4	0	0	0	0		
SNIPE	7	5	5	16	6		
REDSHANK	3	2	0	0	0		
GOLDEN PLOVER	0	2	0	0	0		

Number of breeding wader territories in 1985, 1996, 2009, 2017 & 2018 at Bunduff

	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Visit 6	
Cattle	0	10	10	46	40	30	
Livesteek numbers at Dunduff							

Livestock numbers at Bunduff

# **Aughris Head**



Survey Area for Aughris Head

Visit 1: April 15 2018 Visit 2: April 27 2018 Visit 3: May 13 2018 Visit 4: June 03 2018 Visit 5: June 18 2018 Visit 6: July 05 2018

This site was surveyed for the first time in 2017 after two pair of Lapwing were observed during a casual visit to the area. Three pair were found in the same area on the first vist though only two pair were counted on later visits. While observing the birds during the fourth visit and flock of 13 Lapwing flew by were joined by the birds on the ground. The whole group then flew off to the south before disappearing. On returning to the field about an hour later it was noted that three Lapwing had returned to the usual area. On the 5th visit nine lapwing were observed on the ground before flying off without returning. It is unclear if some of these birds may have been juveniles.

		Total Number of Individuals	Estimated Territories	Overall Estimated Territories
	Visit 1	6	3	
	Visit 2	3	2	
LAPWING (L.)	Visit 3	4	2	3
LAPWING (L.)	Visit 4	17	2	
	Visit 5	9	2	
	Visit 6	0	0	

Number of Breeding Waders at Aughris Head

Other waders recorded: Snipe (1 visit, 2), Ringed Plover (1 visit, 1).

Other species recorded: Jackdaw (1 visit, 1), Herring Gull (1 visit, 2), Merlin (1 visit, 1).

Survey Year					
	2017	2018			
LAPWING	2	3			

Number of breeding wader territories in 2017 & 2018 at Aughris Head

	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Visit 6
Cattle	0	0	4	6	5	6
Livestock numbers at Aughris Head						

Livestock numbers at Aughris Head

## Inch Level – Long Point



Survey Area for Inch Level - Long Point

Visit 1: April 05 2018 Visit 2: April 17 2018 Visit 3: April 30 2018 Visit 4: May 16 2018 Visit 5: June 06 2018 Visit 6: June 20 2018

Four to five territorial pair of Lapwing were consistently seen thorughout the survey at this site. Chicks were seen during the fifth visit and on the sixth visit and an almost fledged chick along with an adult was seen along the causeway to the north that presumably originated in the survey area. On the second, fourth and fifth visits additional Lapwing were seen resting along the lake shore. These birds were very likely displaced from the adjacent fields due to the farm works ongoing at the time. Numbers of Redshank were also consisitent with five to six pairs nesting. On the first two visits additional Redshank were seen feeding along the lake shore. The site is important for migrant snipe with a few pairs also breeding. Ten Dunlin and two Ringed Plover were seen on the final visit though as none were recorded on previous visits they are treated as migrants. A female Red-necked Phalarope flushed out of the grass and landed close by on the lake during the fourth visit but was not seen subsequently. An immature White-tailed Eagle was a surprise visitor on the second visit. It circled around the lake and was at one time pursued by several gulls along with three Lapwing and one Redshank.

		Total Number of Individuals	Estimated Territories	Overall Estimated Territories
	Visit 1	16	4	
	Visit 2	20	5	
LAPWING (L.)	Visit 3	10	5	5
	Visit 4	21	5	
	Visit 5	53	4	-
	Visit 6	8	4	-
	Visit 1	63	0	
	Visit 2	33	1	-
SNIPE (SN)	Visit 3	10	0	5
SNIPE (SN)	Visit 4	7	0	5
	Visit 5	18	5	
	Visit 6	7	2	-
	Visit 1	17	0	
	Visit 2	27	5	
REDSHANK (RK)	Visit 3	5	3	
	Visit 4	12	6	6
	Visit 5	10	5	-
	Visit 6	8	4	-

Number of breeding waders recorded at Inch Level – Long Point

Other waders recorded: Dunlin (1 visit, 10), Ringed Plover (1 visit, 2), Golden Plover (1 visit, 85), Black-tailed Godwit (3 visits, max. 80), Curlew (1 visit, 5), Red-necked Phalarope (1 visit, 1).

Other species recorded: Hooded Crow (5 visits, max. 6), Magpie (3 visits, max. 1), Great Black-backed Gull (5 visits, max. 5), Herring Gull (3 visits, max. 12), Lesser Black-backed Gull (1 visit, 4), Common Gull (1 visit, 1), Black-headed Gull (6 visits, max. 100), Grey Heron (6 visits, max. 6), Little Egret (1 visit, 1), Sparrowhawk (1 visit, 1), White-tailed Eagle (1 visit, 1).

Survey Year			
	2017	2018	
LAPWING	4	5	
SNIPE	8	5	
REDSHANK	7	6	

Number of breeding wader territories in 2017 & 2018 at Inch Level – Long Point

No livestock were present during the survey season.

## Inch Level – Grianán Farm



Survey Area for Inch Level – Grianán Farm

Visit 1: April 05 2018 Visit 2: April 17 2018 Visit 3: April 30 2018 Visit 4: May 16 2018 Visit 5: June 06 2018 Visit 6: June 20 2018

During the winter of 2017-18 extensive works including hedgerow removal and drainage works were carried out at this site. The fields have become much more intensively managed grassland and heavy machinery was seen in several fields over the course of the survey. There was an ver 40% decline in numbers of lapwing recorded compared to 2017 and many of the fields where lapwing were previously found breeding were abandoned as the season progressed with very few chicks if any likely to have fledged. This site needs to be carefully monitored in the coming years to learn the full effect of the change in management.

		Total Number of Individuals	Estimated Territories	Overall Estimated Territories
	Visit 1	29	15	
LAPWING (L.)	Visit 2	38	19	
	Visit 3	19	10	23
	Visit 4	46	23	
	Visit 5	15	8	
	Visit 6	10	0	

Number of breeding waders recorded at Inch Level – Grianán Farm

Other waders recorded: Redshank (1 visit, 9).

Other species recorded: Hooded Crow (6 visits, max.), Rook (6 visits, max. 200), Jackdaw (1 visit, 20), Magpie (2 visits, max. 3), Great Black-backed Gull (1 visit, 1), Black-headed Gull (4 visits, max. 500), Grey Heron (2 visits, max.2), Buzzard (2 visits, max. 1).

Survey Year				
2017 2018				
LAPWING	39	23		

Number of breeding wader territories in 2017 & 2018 at Inch Level – Grianán Farm

	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Visit 6
Sheep	140	38	140	790	500	0
Cattle	0	0	0	190	259	320

Livestock numbers at Inch Level - Grianán Farm





Survey Area for Inch Level - West

Visit 1: April 05 2018 Visit 2: April 17 2018 Visit 3: April 30 2018 Visit 4: May 16 2018 Visit 5: June 06 2018 Visit 6: June 20 2018

As with the previous site, there were extensive drainage works along with hedgerow removal carried out during the winter. Although numbers of Lapwing territories recorded was down only slightly from 2017, it is believed that productivity was poor with very few if any chicks fledging. Several pair were found in stubble fields at the west end of the survey area but these fields were ploughed over in May and potatoes and maize planted. The birds remained in the area and looked as if they may be attempting to renest. However no Lapwing were observed during a follow up visit to the site on 16th July. As with the previous site this site should be closely monitored in the coming years.

		Total Number of Individuals	Estimated Territories	Overall Estimated Territories
	Visit 1	7	4	
	Visit 2	20	10	
LAPWING (L.)	Visit 3	18	9	14
	Visit 4	22	11	11
	Visit 5	28	14	
	Visit 6	11	6	
	Visit 1	0	0	
	Visit 2	0	0	
RINGED PLOVER (RP)	Visit 3	1	1	1
	Visit 4	0	0	-
	Visit 5	0	0	
	Visit 6	0	0	

Number of breeding waders recorded at Inch Level – West

Other waders recorded: Ringed Plover (1 visit, 1).

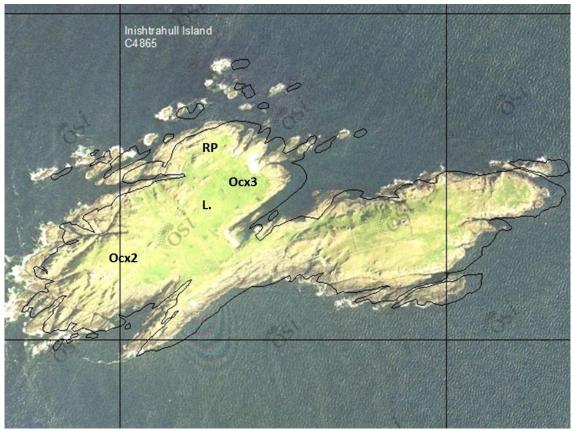
Other species recorded: Hooded Crow (5 visits, max. 3), Rook (1 visit, 1), Magpie (1 visit, 1), Blackheaded Gull (5 visits, max. 100), Grey Heron (1 visit, 1), Merlin (1 visit, 1).

Survey Year					
2017 2018					
LAPWING	18	14			
RINGED PLOVER	0	1			

Number of breeding wader territories in 2017 & 2018 at Inch Level – West

No livestock present during the survey season.

# Inishtrahull



Survey Area for Inishtrahull

Visit 1: July 13 2018

Inishtrahull was only surveyed one time when Daniel Maloney was able to record numbers of breeding waders. Due to the late timing of the visit it is possible that some waders were missed for the year. During the visit one pair of Lapwing with two almost fledged chicks were recorded. It should be noted that there is a large population of gulls and now two pair of Great Skua breeding on the island.

		Total Number of Individuals	Estimated Territories	Overall Estimated Territories
LAPWING (L.)	Visit 1	2	1	1
OYSTERCATCHER (OC)	Visit 1	10	5	5
RINGED PLOVER (RP)	Visit 1	2	1	1

Number of breeding waders recorded at Inishtrahull

Other species recorded: Hooded Crows (4), Raven (1), Chough (2), Great Black-backed Gull (55), Lesser Black--backed Gull (110), Common Gull (17), Great skua (4).

Survey Year				
	2017	2018		
LAPWING	5	1		
OYSTERCATCHER	9	5		
RINGED PLOVER	1	1		
REDSHANK	1	0		

Number of breeding wader territories in 2017 & 2018 at Inishtrahull

No livestock present during the survey season.

## **Tory Island**



Survey Area for Tory Island

Visit 1: May 02 2018 Visit 2: May 23/24 2018 Visit 3: June 21/22 2018

Numbers of breeding waders were generally lower than was recorded in 2017 with declines of 36% for Oystercatcher, 48% for Ringed Plover and 24% for Lapwing being notable. Anton Meehan, who is resident on the island and has an excellent knowledge of the local bird life commented that he felt overall numbers of breeding waders during 2018 were lower than usual. On a more positive note the numbers of Redshank increased by 36%. The 19 pairs represent 68% of the total numbers of Redshank pairs for the whole survey. As in 2017, Tory Island was the only site to have breeding Dunlin with five pairs recorded. Obviously the island is of great importance to the latter two species.

		Total Number of Individuals	Estimated Territories	Overall Estimated Territories
	Visit 1	14	7	
LAPWING (L.)	Visit 2	44	22	22
	Visit 3	24	13	
	Visit 1	40	8	
OYSTERCATCHER (OC)	Visit 2	126	48	48
	Visit 3	117	42	
	Visit 1	43	6	
RINGED PLOVER (RP)	Visit 2	41	21	21
	Visit 3	40	20	
	Visit 1	5	1	
DUNLIN (DN)	Visit 2	10	5	5
	Visit 3	8	4	
	Visit 1	0	0	
SNIPE (SN)	Visit 2	10	4	4
	Visit 3	5	3	
	Visit 1	20	10	
REDSHANK (RK)	Visit 2	28	15	19
	Visit 3	36	19	
		l kaading \A/adamaat		I

Number of Breeding Waders at Tory Island

Other waders recorded: Golden Plover (2 visits, max. 3), Curlew (2 visits, max. 1), Whimbrel (1 visit, 3), Black-tailed Godwit (1 visit, 1).

Other species recorded: Hooded Crow (3 visits, max. 24), Raven (3 visits, max. 2), Chough (3 visits, max. 5), Great Black-backed Gull (3 visits, max. 4), Herring Gull (3 visits, max. 42), Lesser Black-backed Gull (3 visits, max. 10), Common Gull (3 visits, max. 85), Black-headed Gull (3 visits, max. 4), Peregrine (2 visits, max. 4),

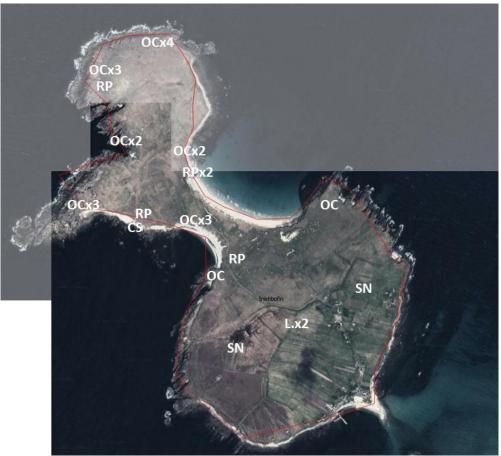
Survey Year				
	2017	2018		
LAPWING	29	22		
OYSTERCATCHER	75	48		
RINGED PLOVER	40	21		
DUNLIN	6	5		
SNIPE	8	4		
REDSHANK	14	19		

Number of breeding wader territories in 2017 & 2018 at Tory Island

	Visit 1	Visit 2	Visit 3		
Sheep	No Count	89	110		
Livesteck numbers at Tory Island					

Livestock numbers at Tory Island

### Inishbofin



Survey Area for Inishbofin

Visit 1: May 25 2018 Visit 2: June 27 2018

As was the case in 2017, just two pair of Lapwing were found on Inishbofin during 2018. Many of the fields aroud the village have a dense cover of hogweed, common nettle etc. which makes excellent cover for corncrake but not good conditions for breeding waders. There were a small number of sheep recorded and the Lapwing were seen in a small area of grazed pasture. A local resident also reported seeing the lapwing display over an area of cutover bog. Most Oystercatcher and Ringed Plover were recorded close to the shore along the northern half of the island. A Common Sandpiper acting very territorially was seen on both visits. Five Redshank were observed at the northern end of the island on the second visit and while there is an area of wet grassland nearby that could provide suitable breeding habitat they were not acting territorially and may possibly have dispersed from nearby Tory Island.

		Total Number of Individuals	Estimated Territories	Overall Estimated Territories
LAPWING (L.)	Visit 1	2	1	2
	Visit 2	4	2	
OYSTERCATCHER	Visit 1	42	21	21
(OC)	Visit 2	35	18	
RINGED PLOVER	Visit 1	2	1	5
(RP)	Visit 2	10	5	
SNIPE (SN)	Visit 1	4	0	2
(,	Visit 2	2	2	
COMMON	Visit 1	1	1	1
SANDPIPER (CS)	Visit 2	1	1	

Number of Breeding Waders at Inishbofin

Other waders recorded: Redshank (1 visit, 5), Dunlin (1 visit, 15), Curlew (1 visit, 1).

Other species recorded: Hooded Crow (2 visits, max. 6), Jackdaw (1 visit, 7), Herring Gull (2 visits, max. 19), Great Black-backed Gull (2 visits, max. 6), Lesser Black-backed Gull (1 visit, 1), Common Gull (1 visit, 6), Black-headed Gull (1 visit, 2), Grey Heron (1 visit, 1).

Survey Year					
	2017	2018			
LAPWING	2	2			
OYSTERCATCHER	23	21			
RINGED PLOVER	7	5			
SNIPE	0	2			
COMMON SANDPIPER	0	1			

Number of breeding wader territories in 2017 & 2018 at Inishbofin

	Visit 1	Visit 2
Sheep	15	19

Livestock numbers Inishbofin

#### Bibliography

Donaghy, A. (2014) Surveys for breeding waders at key machair and wet grassland sites in Donegal 2014. Halting Environmental Loss Project. Unpublished report to the NPWS: Birdwatch Ireland.

Fernández-Bellon, D. & Donaghy, A. (2011) Machair Breeding Wader Report 2011. Unpublished Report to the NPWS: Birdwatch Ireland.

Madden, B., Cooney, T., O'Donoghue, A., Norriss, D. W. & Merne, O.J. (1998) Breeding waders of machair systems in Ireland in 1996. Irish Birds 6: 177-190.

Mc Monagle, C., Bell, M. & Donaghy, A. (2017) Survey of Breeding Wader Populations at Machair Sites and Offshore Islands in North-West Ireland.

Narin, R.G.W, & Sheppard, J.R. (1985) Breeding waders of sand dune machair in north-west Ireland. Irish Birds 3: 53-70.

O'Brien, M. & Smith, K. W. (1992) Changes in the status of waders breeding on wet lowland grassland in England and Wales between 1982 & 1989. Bird Study 39: 165-176.

Suddaby, D., Nelson, T. & Veldmann, J. (2009) Resurvey of breeding wader populations of machair and associated wet grasslands in north-west Ireland. Irish Wildlife Manuals; National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin, Ireland.