

THE BREEDING LAND BIRDS OF LUNDY

By

L. LOCK

R.S.P.B. South West England Regional Office, Keble House, Southernhay
Gardens, Exeter, Devon, EX1 1NT.

ABSTRACT

During May 2000, RSPB/EN staff and volunteers completed a series of counts of the breeding land birds of Lundy. 40 man hours of fieldwork were completed with all areas visited at least once. The results are compared with previous counts back to 1922 and some comments made on population trends and issues arising

Keywords: *Lundy, Breeding land birds, Population trends.*

INTRODUCTION

Despite its popularity as a bird watching location, there are surprisingly little systematic data on the distribution and abundance of breeding land birds on Lundy. The number of breeding seabird numbers was documented by Price during the period 1981-1996, and the island was covered comprehensively as part of the National Seabird 2000 Survey. In May 2001, the need to carry out a comprehensive whole island survey of Manx Shearwaters as part of the National Seabird 2000 Survey necessitated having a small RSPB/EN team based on the island for a week. Whilst the primary objective was to ensure the completion of the Manx Shearwater survey (Price and Booker, 2001) it was also possible to conduct counts of land birds on the island. This paper presents the results of those counts and offers some thoughts on population trends and other issues.

METHODOLOGY

Methods involved simply walking within 100m of all points of the island and recording the species of all singing/territorial birds and pairs present (see notes below for exceptions). Every area of the island was visited once, with the more

bird rich valleys of Millcombe/St John and the east facing sidings as far north as a quarter wall being visited three times. Rat Island was not visited. (The exceptions were the Raven - breeding completed prior to survey period, but observations suggest two pairs; the Linnet - counts were based on singing males, or represent half of flock counts; the House sparrow - not counted on survey, as the data were obtained from student working on house sparrows, the Collared Dove - showed no indication of breeding but were present in a single flock, the Wood pigeon - counts represent single birds only, no breeding activity was noted and it was presumed that they were late breeders).

The fieldwork lasted for 40 hours in total, although there was some overlap with the ongoing Manx Shearwater census work. All of the survey work was carried out between 19th and 26th May 2000.

RESULTS and DISCUSSION

The results cannot be interpreted as absolute counts, but are inclusive of the numbers of birds present given the survey effort. Table 1 illustrates the population figures for each of the 13 separate compartments identified on the island (see Figure 1). 27 species were recorded during the survey.

Species	Farm	Millcombe/ St. John	SW Moor	Acklands Moor	1/4 wall to 1/2 wall	1/2 wall to 3/4 wall	3/4 wall to North End	Sidings - Shutter Point - Battery Point [®]	Sidings - Battery Point - St. James [®]	Sidings - St James Stone - NW Point	NW Point - Tibbetts	Tibbetts - Millcombe	Southern slopes - Landing Beach - Shutter Point [®]	TOTALS
Mallard		1			3									4
Peregrine										1	1			2
Oystercatcher								2	2	2	4	3	1	14
Lapwing				2										2
Wood Pigeon		1									1			2
Collard dove		13 indiv												6
Skylark			3	6	10	13	12							44
Meadow pipit		2	5	8	22	15	26	6	8	6	20	6	7	131
Rock pipit		1						4	2	4	11	3	4	29
Pied wagtail	3	1												4
Wren		3						2			7	2	1	15

	Farm	Millcombe/ St. John	SW Moor	Acklands Moor	1/4 wall to 1/2 wall	1/2 wall to 3/4 wall	3/4 wall to North End	Sidings - Shutter Point - Battery Point*	Sidings - Battery Point - St. James*	Sidings - St James Stone - NW Point	NW Point - Tibbetts	Tibbetts - Millcombe	Southern slopes - Landing Beach - Shutter Point *	TOTALS
Dunnock		4										2		6
Robin		1										1		2
Wheatear				3	3	1	6	4	6					23
Blackbird		7										8		15
Song Thrush		1										1		2
Sedge warbler		1												1
Whitethroat		1												1
Willow warbler		1										2		3
Raven										1 pair			1 pair	2
Starling		4												4
House sparrow	25	5												30
Chaffinch		1										1	1	3
Goldfinch		1												1
Linnet		8	10	56	6								26	106
Spotted flycatcher		1												1
Blackcap		1												1

Table 1: Lundy Breeding Bird Totals, May 2001

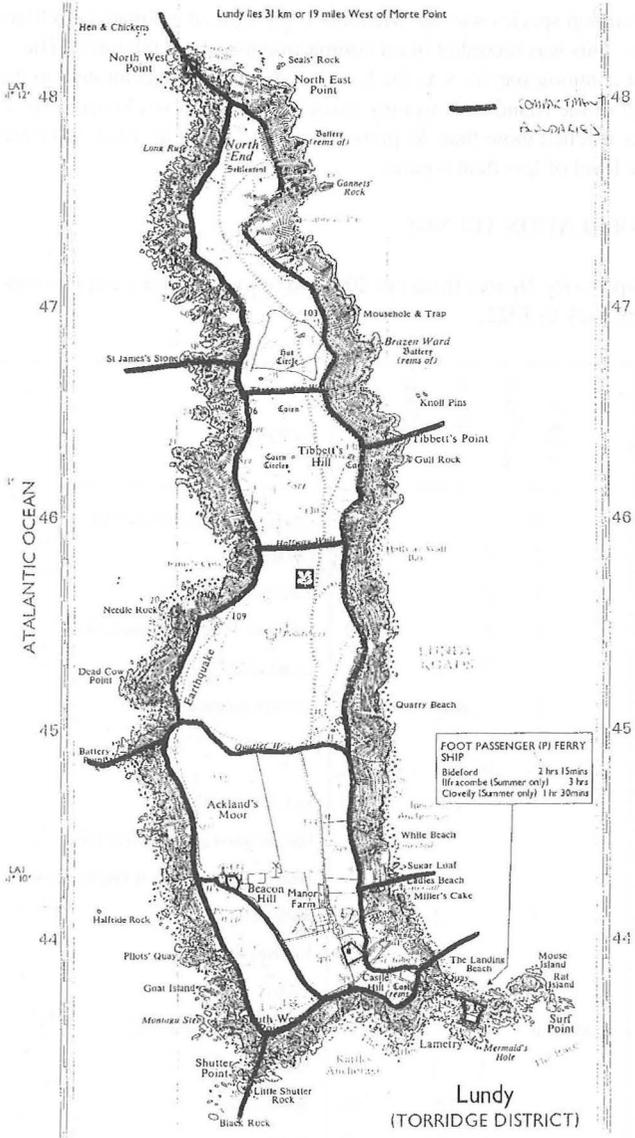


Figure 1: Compartments used in the study.

a COMMON SPECIES

The most common species was the Meadow Pipit with an estimated population of 131 pairs. This was recorded in all compartments except the farm. The second most common species was the Linnet, which was concentrated on the southern half of the island and strongly associated with gorse clumps. No other species reached more than 50 pairs. 16 of the 27 species recorded were at a population level of less than 5 pairs.

b POPULATION TRENDS

Table 2 compares the figures from the 2001 survey with those from previous counts dating back to 1922.

Species	c.1922(1)	c.1939(2)	c.1942(3)	c.1978(4)	2001	Comments
Mallard	3				4	Introduced birds bred between '58 & '74
Buzzard	2	5	3			Last bred 1965
Kestrel	2	2				Erratic breeder
Peregrine	2	2			2	Bred up to '56 then re-colonised c1981
Pheasant	1	5	3			Extinct in late 70s
Corncrake	1		calling bird			Last seen in summer in 1962
Oystercatcher	15	14	c.20	c.20	14	
Lapwing		3	c.10		2	Peak 40 prs in 1973
Curlew				1	1	One pair almost every year since 1940
Rock dove						Formerly bred, no reports of breeding feral birds
Wood pigeon	1	2	2	>4	2	Stable
Collared dove					6	First bred in 2001
Cuckoo	1	1	2	2		Extinct?
Skylark	numerous	39			44	15prs in 1955, 50prs in 1962
Swallow	1	1	2			Erratic since 1950
Meadow pipit		275	200		131	50prs in 1962
Rock pipit		41	c.20	c.26	29	Stable
Pied wagtail		6	1	2	4	Stable
Wren	several	11	35	28	15	Decline

Duncock	2	23	6	5	6	Stable
Robin	several	9	6	30	2	Serious decline
Stonechat	20	28	15			Last bred 1962. reasons for decline unknown
Wheatear	4	12	3	5+	23	Increase. May have increased as grazing has increased
Blackbird		34	12	c.25	15	Decline
Song Thrush	4	9	6	2	2	Erratic breeder
Mistle Thrush			1	1		Last bred 1947
Sedge warbler					1	Last confirmed breeding in 1934/35
Whitethroat	many		1	1	1	Erratic breeder since 1968
Garden warbler						Bred in 1934
Blackcap					1	
Chiffchaff				1		1965, 1967, 1976 only
Willow warbler		4		1	3	Erratic breeder
Goldercrest	1					Last bred in 1971
Spotted flycatcher		1			1	Last confirmed breeding in 1963
Chough						Last bred in 1895
Carrion crow	6	16	5			Extinct?
Raven	4	4	3	3	2	Usually between 2 and 4 prs
Starling			1	30	4	Serious decline since 1970's
House sparrow	5	22	1	5	30	40prs in 1939. population accidentally killed.
Tree sparrow		3				Bred in early 1960s after influx
Chaffinch	8	7	6	4	3	Stable
Greenfinch						Bred in 1934 and 1938
Goldfinch	1	1			1?	Last bred in 1974
Siskin						Bred in 1952
Linnet	v.numerous	38	6	40	106	Big increase
Hawfinch						Bred in 1927
Yellowhammer	8					Last bred in 1952
Reed bunting						Bred in 1971

References: (1) Harrison 1931, (2) Wynne-Edwards & Harrison 1932
(3) Alexander et al 1944, (4) Dymund 1980

Table 2: Comparative counts of land birds on Lundy (1922-2001)

Alexander *et al* (1942) highlighted the need for caution in interpreting past census data, but some comparisons can be made between 2000 counts and previous ones. Several authors have commented on the relative instability of the breeding avifauna on Lundy over the years (e.g. Harrison, 1931) and this pattern is believed to be typical of the small British islands (Lack, 1942). There is a clear pattern of erratic breeding shown by many summer migrants and establishment of breeding territories may depend greatly upon weather patterns during the spring migration. Chance factors may determine whether spring migrants such as warblers arrive on the island, stay on the island and are able to set up territories.

However, despite the somewhat erratic pattern shown by some species, there would appear to be some trends. Corncrake became extinct in 1962, following national and regional trends. Curlew and lapwing, which both increased during the middle of the 20th century, have now declined according to regional trends (Lock, 1998). Curlews have been extinct on Lundy since the 1980s, whilst Lapwings have declined from 40 pairs in 1973 to just 2 pairs in 2001 (observations also suggested that these were failed breeders and it may not be long before lapwings fail to appear altogether on Lundy during the breeding season). Cuckoo also appeared to have declined to extinction - following regional trends (Lock, 1998).

Meadow Pipit, Dunnock, Robin and Blackbird have all appeared to have declined substantially since the 1940s but more accurate and more regular monitoring is required to fully clarify these trends for these species. The decline of Stonechat could be related to the heavier grazing and loss of structural diversity of the heathland. Conversely, Wheatears may have increased as grazing has increased.

Perhaps surprisingly, Skylark and Rock Pipit populations appear to be stable. Furthermore, Peregrines have become re-established (following the national trend) and the small population of Raven has remained stable.

c CONSERVATION ISSUES

The most important bird populations on the island are without doubt the seabirds. In fact the conservation issues affecting the seabirds play an important role in how the island is managed. There is little doubt that predation by rats has severely limited some seabird populations and may well have almost lead to the extinction of the puffin - the island's totem. Plans to eliminate rats from Lundy are being developed for implementation in winter 2002/2003 and it is hoped that there will be a dramatic increase in seabird numbers as a result. However, the outcome/s of such action may also help the land bird population. Predation is almost certainly a key factor in the extinction of the Curlew and potential extinction of the Lapwing on Lundy and may also be a factor in depressing the population of other potentially

widespread species such as the Wren, Dunnock, Meadow Pipit, Rock Pipit, Skylark and Blackbird.

Changes in farming practices over the past 50 years are known to play a key role in the decline of many species. The combination of intensification and specialisation practices are very apparent on the island's farm. It is therefore not surprising that the farm compartment (see Figure 1) only supports 3 species (Starling, House Sparrow and Pied Wagtail) and that all of these species depend upon buildings for nest sites. This area of the island, which could provide a range of low intensity farmed habitats which are absent from the rest of the island and add some important habitat diversity, is currently devoid of areas able to support many breeding, passage or wintering birds.

A less intensive management regime with low input grasslands, lower stocking rates and more sympathetic management of walls and margins would enhance the value of this area. Wynne-Edwards (1931) refers to 'one or two fields under cereal crops each year' and at this time the island supported several pairs of Yellowhammer. The loss of such habitats is known to be of critical importance for many farmland birds and the reintroduction of some areas of low input spring cereal could have a significant positive effect on bird populations.

d THE FUTURE

Volatility in the breeding fortunes of many species (and in particular the decline of several common species), together with the relative instability of the small island populations, makes it difficult to predict what may happen to bird populations in the future. However, Lundy supports a fascinating breeding land bird fauna and the way forward should be made to maintain and enhance this through positive conservation management. Retaining the lapwing as a breeding species should be a primary objective. This would be seen as something of a flagship for the conservation of the island. Another species identified for conservation is the Chough. It is over 100 years since the Chough bred on Lundy, but given an expanding population in South Wales and birds only 45 miles away re-colonisation could be a real possibility through appropriate grazing management on the island.

There is clearly a need for more detailed, systematic monitoring of the land birds, carried out at regular intervals in the future.

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