Oystercatcher Productivity on Skomer 2018 by Duclie Fairweather

During my time as a spring LTV, I decided to conduct a project with the intention of expanding upon the information known about the breeding productivity success of Oystercatchers on the island.

Method

One of the most vocal waders, the Oystercatcher is a familiar sound on the island with their distinctively shrill 'kleep, kleep' call. Indeed, although often headache inducing, this characteristic was advantageous when trying to establish potential territories.

To determine nest sites, I would regularly monitor adult behaviour with binoculars from a high vantage point; ideally a rocky outcrop. A typical nest is a simple scrape on the ground, sometimes lined with shells or pebbles.

Using a GPS, I would map the location of the nest and aim to return 2-3 times a week to record clutch/brood size and adult behaviour.

<u>Results</u>



Figure 1 A clutch of oystercatcher eggs

Seventeen Oystercatcher nests were monitored from the 4th May 2018 until the 8th July. All nests monitored contained eggs, with a clutch of three being the most common.

For five of these nests it was not clear whether eggs successfully hatched due to the precocial behaviour of chicks and high nesting density. One of the difficulties of monitoring was the emergence of young coinciding with the islands peak busy period, where I was required to reduce monitoring in order to accommodate other island commitments.

For nests found containing no more than one or two eggs it is not known whether some eggs had already been lost before monitoring of those particular nests began. Individual nest productivity may therefore be inflated for these nests (see Table 1).

The overall mean productivity (given as the total number of 'Fledged' chicks per nest across all sites) of Oystercatchers during this study was 0.71.

Five chicks known to have been from my study nests were ringed as part of an effort to further monitor the species (see Table 2). Although chicks freeze when they sense danger, if big enough they can cover some distance and stealthily hide among dense bracken, making them difficult to find.

Table 1. Summary of Oystercatcher productivity from eleven monitored nests on Skomer Island

12	New Park	3	2	1	1	0.33	0.33
13	Well field	1 ^{1.}	0	1	1	1.00 ^{2.}	1.00
14	End Wall	2 ^{1.}	0	2	2	1.00 ^{2.}	1.00
	Ridge						
15	End Wall	3	0	1	1	0.33	0.33
	Ridge						
16	N of End	2 ^{1.}	0	2	1	1.00 ^{2.}	0.50
	Wall Ridge						
17	New Park	2 ^{1.}	0	2	?	1.00 ^{2.}	?
Totals		33	6	21	12		

Notes:

- 1. Nest possibly found after some eggs had already been lost
- 2. Individual nest productivity figure to be used with caution

OVERALL MEAN PRODUCTIVITY (given as the total number of 'fledged' chicks divided by the total number of nests) Total number of nests = 17 Total number of 'fledged' chicks = 12 Productivity = 0.71

Table 2. Ringing details of Oystercatchers

Nest ID	Site	Chick Number	BTO Number	Darvic Number
4	S/Hays	1	FJ03281	Orange E6
5	H/Stone	1	FJ03279	Orange E4
6	Isthmus	1	FJ03283	Orange H5
7	NHV Ladder	1	FJ03289	Orange H2
7	NHV Ladder	2	FJ03290	Orange H3
13	Well Field	1	FJ03288	Orange H1

Discussion

The overall productivity of oystercatchers was 0.71. This is slightly higher than the research conducted by J, Taylor in 2016 (0.67) and lower than the productivity value in 2006 (0.94).

Of 17 nests monitored, the most interesting was the Harold Stone site. It was exceptionally accessible, being situated on an exposed rocky outcrop where visitors regularly came within close proximity of the nest. Despite this potential disturbance, the nest was surprisingly successful (two chicks fledged). Furthermore, due to their location, the birds were easily observed even when fledging had occurred.

On the other side of things, one of my monitored nests at Bull Hole completely failed, most likely due to gull predation. This outcome was almost expected because of the density of gull colonies in the area.

To improve this study, I think that future researchers could consider selecting nests that are more isolated from each other and exposed to improve monitoring.



Figure 2 An oystercatcher chick just before ringing