

The Banded Dotterels of South Bay – The Empty Nest Syndrome.

Ailsa Howard & Lindsay Rowe

Introduction

Banded dotterels are significant birds of the braided river system , but are blessed to have an equally significant coastal stronghold. Despite their widespread distribution, nesting on coastal sites has been rarely studied in detail. South Bay Kaikoura had been identified by Kaikoura’s birding community as a reliable nesting site , however personal observations over nesting seasons 2013 -14, and 2014 -15 suggested that nests rarely hatched, and fledglings were perhaps non-existent.

In 2014, I took these concerns to our local Forest and Bird Branch, and they committed to support me in a long-term study. Nest monitoring began in the 2015-16 breeding season.

Our Objective: to quantify the nesting outcomes of Banded Dotterels at South Bay, to identify the factors in nest failure, and support the species by mitigating these factors where possible.

Method: For the breeding season (August to March), Banded Dotterel nests are located in our study area and the outcomes of nesting attempts monitored. Banding of the nesting adults has begun (colour combination of 4 colour bands (red top left leg) and a white flag) and chicks which had developed to sufficient size are colour banded also. Because the outcomes of our first season were so critical, signage, trapping, and advocacy have been added. In the 2nd year nest GPS coordinates were added.

Nest Outcome %	Nesting Season	
	2015-2016 (20 nests)	2016-2017 (23 nests)
Washed away	15%	17%
Hatched 2 chicks	20%	22%
Hatched 3 chicks	0%	17%
Nest eggs infertile	0%	4%
Run-over by Motor Bike	0%	4%
Nests failed for reasons unknown	65%	35%
Number Chicks fledged from nests	1	7+
Nesting Success (Chicks fledged/Eggs laid)	2%	11%

Discussion:

The nesting seasons 2015-16, and 2016-17, showed significantly different outcomes for nesting success. In 2015 -16 nesting success was critically low, though a nest outside the 20 nests studied, fledged two more chicks from South Bay late in the season, and we were able to band both.

Of the 6 adults banded in our first season, 4 returned to South Bay to nest again, and another banded female was seen breeding on the Whale Watch beach several km to the North and hatched 3 chicks late October. The outcome of this nest was not studied. The pair where we banded both birds showed that these birds had different nesting partners the following season. Only one of our banded adults was not seen in season 2016 -17.

The 2016-17 season was very productive early in the season, where 16 chicks were active on the beach in early October, but this number dropped rapidly as chicks quickly disappeared. Following the November 14 Earthquake, there was a sharp drop in nesting success. 5 of the 23 nests lost some eggs during the nesting time, before nest completion.

The Kaikoura Earthquake, of 7.8, caused fieldwork disruption. Only 3 of the 7 chicks that successfully fledged were able to be fitted with colour bands. Bands for fledglings were also very slow to arrive which added further difficulty to fledgling banding. It is very likely that two more chicks fledged (9 in total, rather than 7, but colour bands we were unable to confirm this. The number of fledglings was almost certainly significantly higher than the previous four seasons, and it is very disappointing to be unable to carry the knowledge of most of our fledglings forward.

Post-earthquake, helicopter landings very close to the nesting area continued for several weeks.. It was observed that these events tended to distress the nesting birds.

Two fledglings from 2015 -16 (both males) have been re-sighted in Kaikoura, but no evidence of them nesting has been found so far. Only 1 of the 12 banded adults has been sighted in Kaikoura so far, during Winter 2017.

Webcams have now been acquired for the 2017 -18 season, and it is hoped these will give us some information on the most significant reason for nest failure. No actual predation of chicks was observed during our fieldwork , though chick numbers were observed to drop rapidly. Local people reported to me presence of at least one stoat, and large number of cats at night along the racecourse area. One banded nesting female was lost to predation.

Acknowledgments: Forest and Bird Kaikoura and North Canterbury Branches – Funding
Mike Morrissey, DOC – Trapping, ,
Lindsay Rowe – Support and Advice
Ritchie Te Amo, for signage.



Please report sightings of colour-banded bird and location. Birds from this study have 4 colour bands, and a white flag – the upper band on the left leg is red.

Due to the accessibility of my study site, any ideas for further study that may increase our knowledge on banded dotterels as a whole, are welcomed. In the near future we are hoping to band to identify dotterels that stopover in Kaikoura post breeding season.