# TEAM OYSTERCATCHER NEWSLETTER No. 11. September, 2024



Here's our 11th edition of Team Oystercatcher Newsletter ! This edition reports on long-term trends in numbers of Pied and Sooty Oystercatchers in the regions monitored by shorebird volunteers, re-sightings of banded Pied Oystercatchers in SA, reports on recent breeding of Pied Oystercatchers, and an update on research projects supported by the SA Shorebirds Foundation.

## CONTENTS



## 1. REGIONAL NEWS

## 1.a. South East SA

Jeff Campbell and his Friends of Shorebirds SE (FOSSE) volunteers have regularly monitored both beach-nesting and migratory shorebirds every winter along the SE Limestone coast from the Granites to the SA/Victorian border since 2001, using the same survey methodology. Recent reports indicate that, in contrast to many of the other shorebird species, both Pied and Sooty Oystercatcher numbers have significantly increased over this period, for reasons unknown (Campbell, 2024).

Jeff and his team also monitor the birds at other times of the year, including the November biennial Hoodie surveys, January and April surveys. The wealth and value of information collected from such long-term surveys cannot be over-emphasised.

## 1.b. Coorong Lagoon and Ocean Beach

During this winter (August 3 – 6, 2024), Birdlife Australia conducted their winter Coorong Lagoon count of all wetland and shorebirds. More than a dozen volunteers and 4 commercial fishers undertook the survey in exquisitely calm weather. These winter surveys have been done since 2019. This last survey, we experienced relatively high water levels throughout most of the Lagoon, due to a significant slug of freshwater generated by the open Tauwitchere Barrage in July. With relatively high waters levels in the lagoon, foraging and roosting habitat for Pied Oystercatchers is limited, and the drop in 2024 may have been a result of this (see Table 1).

**Table 1: Counts of Pied Oystercatchers in the Coorong Lagoon in winter and summer, and the Coorong Ocean Beach in summer, 2019 – 2024.**

| Year | Coorong Lagoon Winter | Coorong Lagoon Summer | Coorong Ocean Beach Summer | Total Lagoon & Ocean Beach Summer |
|---|---|---|---|---|
| 2019 | 161 | n/a | n/a | |
| 2020 | 144 | 216 | n/a | |
| 2021 | 196 | 51 | 204 | 255 |
| 2022 | 136 | 148 | 192 | 340 |
| 2023 | n/a | n/a | n/a | |
| 2024 | 97 | 248 | 211 | 459 |

In 2020 - 2022 and 2024, numbers of Pied Oystercatchers varied between winter and summer surveys, which may have been due to the variable barrage flows between winter and summer. In the years when counts were made in both, the Lagoon and the adjacent Ocean Beach (2021, 2022 & 2024), Pied Oystercatchers made up between 20 and 55 % in the Coorong Lagoon, of the total count for the Coorong region. The total counts represent more than 1 % of the global population of this species and therefore, represent a significant region for this species. It should be noted that numbers of Pied Oystercatchers on the Ocean Beach have significantly dropped since the early 2000's (Team Oystercatcher Newsletter, No. 10, March 2024: www.sashorebirds.org).

Numbers of Sooty Oystercatchers remain consistently low in both winter and summer (averages: 5 – 23, resp.) in the Coorong Lagoon, reflecting their more preferred marine (ocean beach and rocky outcrops) habitat than in estuaries.

## 1.c. South Eastern Fleurieu (Middleton to Goolwa Beaches and Murray Estuary)

Since 2011/12, the overall numbers of Pied Oystercatchers have risen slightly but not significantly (Fig. 1), with large inter-annual fluctuations.

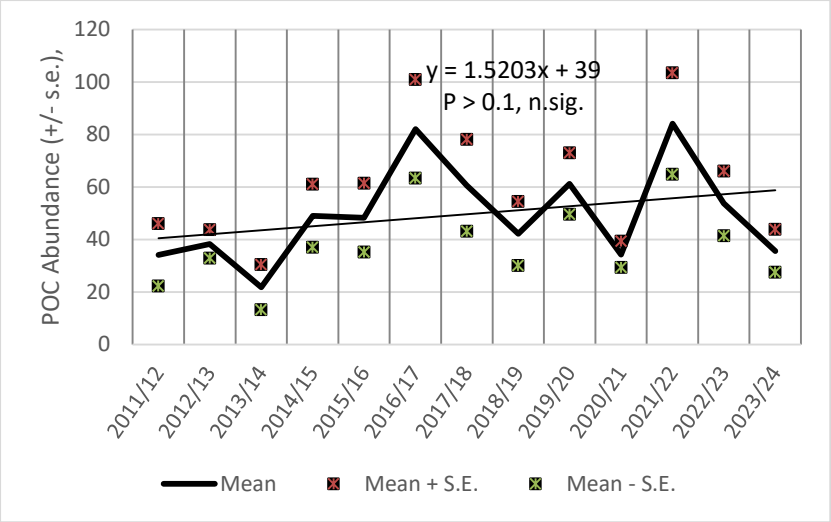


**Fig. 1. Annual Mean (+/- s.e.) Abundances of Pied Oystercatchers on the Goolwa – Middleton Ocean Beaches and the Murray Estuary, 2011/12 – 2023/24.**

The inter-annual fluctuations are greater for the POCs on the Ocean Beaches than in the Estuary (Fig. 2). On the ocean beach, there is a tendency for the higher numbers observed in 2011/12, 2016/17 and 2020/21, which correlate with relatively high barrage flows (Correlation Coefficient r = +0.4068, 0.1>P>0.05). To further test this hypothesis, there was a slight but not significant negative correlation between POC abundances in the Murray Estuary and the Barrage flow (Correlation coefficient, r = -0.2472, 0.1> P> 0.05), suggesting that the higher rates of flow from the barrages in a given year only partly influenced higher numbers of POCs on the ocean beaches.

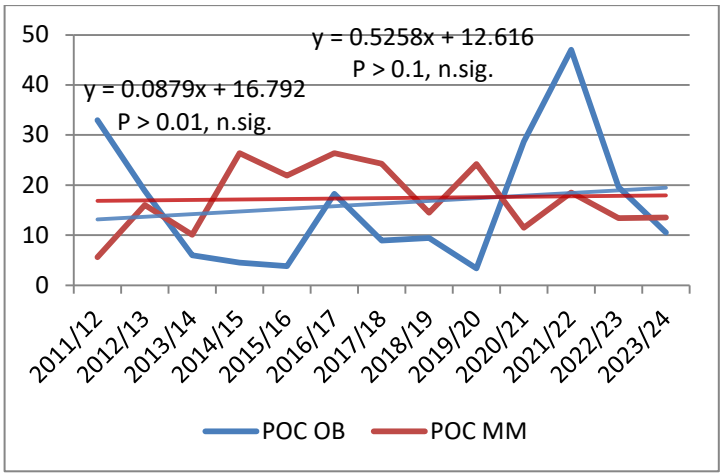


**Fig. 2: Trends in mean annual abundances of Pied Oystercatchers on the Ocean Beach (blue) and the Murray Estuary (maroon) for 2011/12 – 2023/24.**

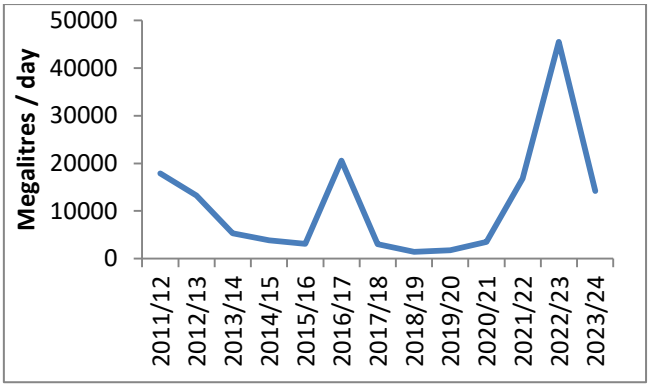


**Fig. 3. Mean annual Barrage Flows (mega-litres / day), 2011/12 – 2023/24.**

**Fig. 4: Mixed Flock of Pied and Sooty Oystercatchers foraging at high tide in the Murray Estuary (west of the mouth), August, 2024. ( Photo: K. Bartley.)**

For Sooty Oystercatchers, over the 13 year period, the upward trend in numbers is highly significant, (r = +0.8318, P < 0.0001(Fig. 5).

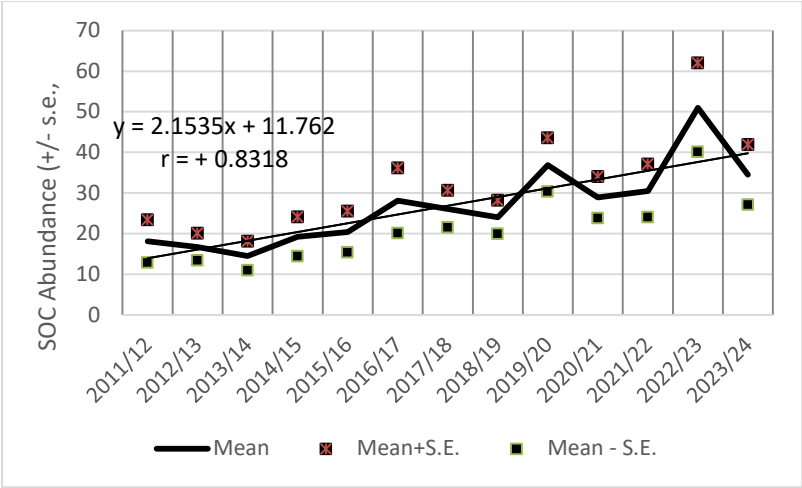


**Fig. 5. Mean Annual (+/- S.E.) Abundance of Sooty Oystercatchers on SE Fleurieu coast (Middleton – Goolwa Beach to Murray Estuary).**

When the trends in abundances are separated into the Ocean Beaches and Murray Estuary (Fig. 6), the upward trend for SOCs in the Murray Estuary is highly significant (r = 0.7890, P < 0.001, ***); however, the increase on the Ocean Beaches is just under the level of significance, r = 0.3972, 0.1> P > 0.05). When correlated with the Barrage Flow, the correlation is significant for SOCs in the Murray Estuary (r = 0.5068, 0.05 > P > 0.025, *), but

not for the Ocean Beaches (r = 0.1548, n.sig). However, these correlations may be masked by the significant rise in overall abundance.

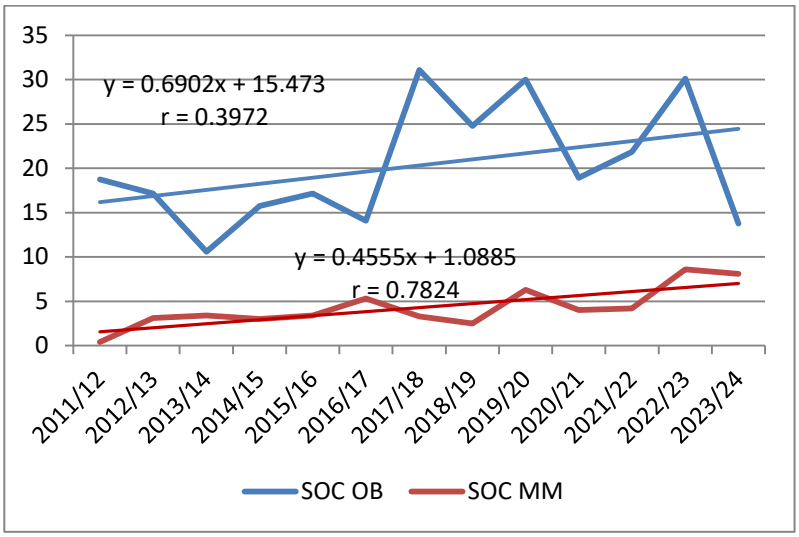


**Fig. 6: Mean annual abundance of Sooty Oystercatchers for the Middleton, Goolwa Beaches (Blue) and the Murray Estuary (Maroon), 2011/12 – 2023/24.**

## 1.d. South western Fleurieu - Basham's Beach to the Pages Islands

With the increasing number of observations by volunteers on the Southern Fleurieu coast to the west of Middleton Point, this Newsletter will now report on what's happening with the Oystercatchers on this SW part of the Southern Fleurieu Coast.

**Basham's Beach.** Using Birdata, counts of Sooty Oystercatchers have been reported by volunteers for a number of years at Basham's Beach. This beach, immediately to the west of Middleton Point, is a high energy beach, with rocky outcrops at each ends of the beach. High levels of beach wrack often occur on this beach. Sooty Oystercatchers are seen foraging on the beach or resting amongst the rocks at its eastern end. The birds occur throughout the year and counts of up to 18 birds have been observed at any one time (eg, May, 2022). Pied Oystercatchers are only occasionally reported on this beach (1 bird in February and October, 2022, respectively).

**Knights and Boomer Beaches.** Kerri Bartley, Bird Life Australia's coordinator for the Fleurieu region regularly monitors the Knight's / Boomer Beaches, west of Port Elliot and in early August, 2024 observed up to 12 SOCs foraging on the rock platforms and adjacent beach for limpets, chitons and worms (Fig. 7).

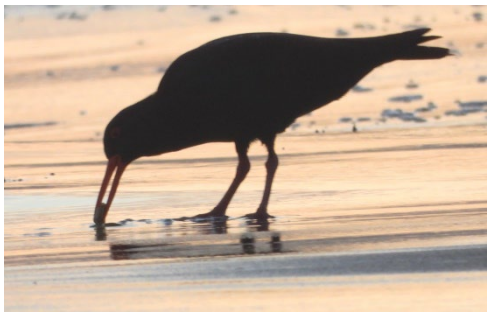

**Fig. 7. Sooty Oystercatchers foraging and flocking at Knight's/Boomer Beaches, SW Fleurieu Coast, August, 2024 (Photos: K. Bartley).**

In recent years, as part of the monitoring program on nesting Hooded Plovers, small numbers of Pied Oystercatchers have been reported on Birdata to the west of Victor Harbour at Waitpinga (Aug,'21, Nov'22, Oct'23) and Tunkalilla Beaches (Nov'22) (D & S. Thorn, pers.obs.).

**Offshore Islands off the SW Fleurieu coast.** Between September 2023 and March 2024, six boat surveys for shore- and sea-birds with Big-Duck Ecotours were conducted around 5 islands by trained volunteer counters (Bartley, 2024). The islands included Pullen and Granite Islands, Seal Rocks, Wright and West Islands. A total of 13 bird species were recorded, with Sooty Oystercatchers occurring on all islands (Fig. 8), and with breeding observed at Seal Rocks and Granite Island. Sooty Oystercatchers are also known to breed on the Pages Islands in the Backstairs Passage (Dennis and Shaughnessy, 2020). Finally, no Pied Oystercatchers have been reported on any of the islands off the SW Southern Fleurieu Coast, except that for a single sighting in September, 1999, reported on Birdata from the Pages Islands.

**Fig. 8. Pair of Sooty Oystercatchers foraging on a granite boulder on West Island, SW Fleurieu coast, September, 2024. (Note; Limpets in upper left corner, a known food item of Sooty Oystercatchers. (Photo; K. Bartley).**

## 1.e. Western Fleurieu Coast

Since mid 2022, numbers of Sooty Oystercatchers along the western Fleurieu coast have remained relatively low compared with 2021 (Fig. 9), and with a predominance of birds found at Snapper Point. During 2023/24, similar numbers of adults and juveniles were observed. Inspection of long-term data up to 50 years ago for Snapper Point (Ashton & Black, 1996), indicate that relatively low numbers of Oystercatchers is not new, with Sooty and Pied Oystercatchers reported only occasionally in the 1970's – 90's.

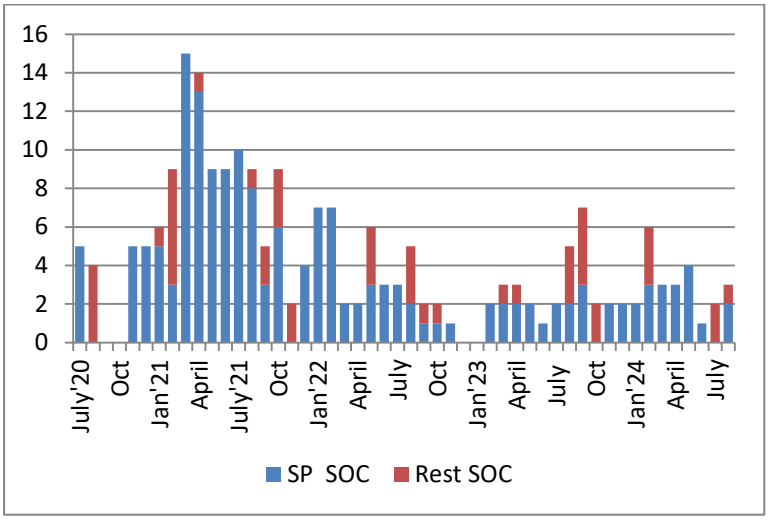


**Fig. 9. Monthly maximum counts of Sooty Oystercatchers reported July 2020 – August, 2024 for Snapper Point (blue) and the rest of the Western Fleurieu coast (maroon).**

## 1.f. Samphire Coast

For the Southern Samphire coast (Semaphore to Bird Island and including the whole of the Port River and St. Kilda), over the 8 years of surveys, the annual mean numbers of Pied Oystercatchers has significantly declined ($r - 0.5800$, $P < 0.05$) (Fig. 10). The on-going lack of numbers of POCs in the central Port River (Gillman) remained apparent this last year; however, the numbers on Bird Island have remained similar over the 10 years of the surveys. For the first time in several years, in this last year, small numbers of POCs were observed foraging in the inner Port River, at Bower Road and at Semaphore breakwater. Also, in late August, 2024, several BNB Volunteers reported up to 4 adult Pied Oystercatchers foraging along the GSV shore of the Tennyson Dunes.

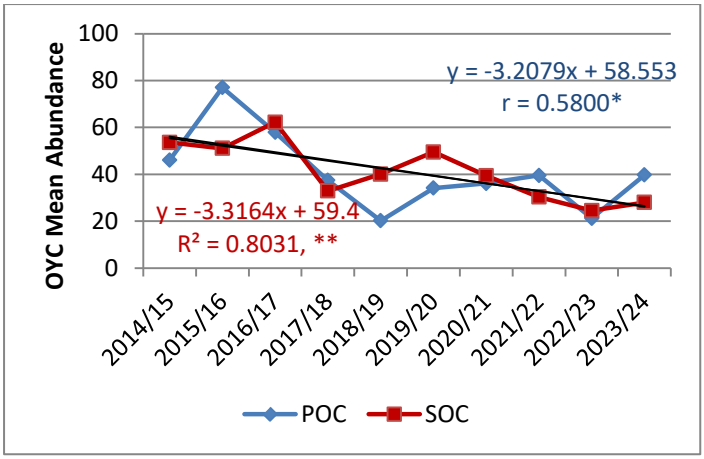


**Fig. 10: Mean annual counts and trends of Oystercatchers (POC: blue; SOC maroon) for the Southern Samphire Coast, 2014/15 – 2023/24**

Recent visits to Bird Island, north of Outer Harbour, revealed breeding and egg laying by POC's on the island in August, this year (Fig. 11).


**Figs. 11: a) Pair of Pied Oystercatchers on NW corner of Bird Island; b) dispersed flock of Pied Oystercatchers on Bird Island and c) a 2 egg Pied Oystercatcher nest on Bird Island, August, 2024 (Photos: a & b: K. Jones, c: K. Bartley).**

For Sooty Oystercatchers, the decline in mean abundances over this period has also been significant ( $r = 0.8031$, $P < 0.002$). The lack of birds in the central Port River continued in 2023/24, and only some birds observed at low tide in the inner Port River, near Bower Rd. On Bird Island, Sooty Oystercatchers have been observed roosting on the adjacent breakwater, and at times, on the eastern sand spit of the island.

In The Northern Samphire Coast (from the Price Saltfields to Port Gawler), mean counts of both species tended downwards; however, the declines were not significant. In all years, POCs were more abundant than SOCs (Fig. 12).

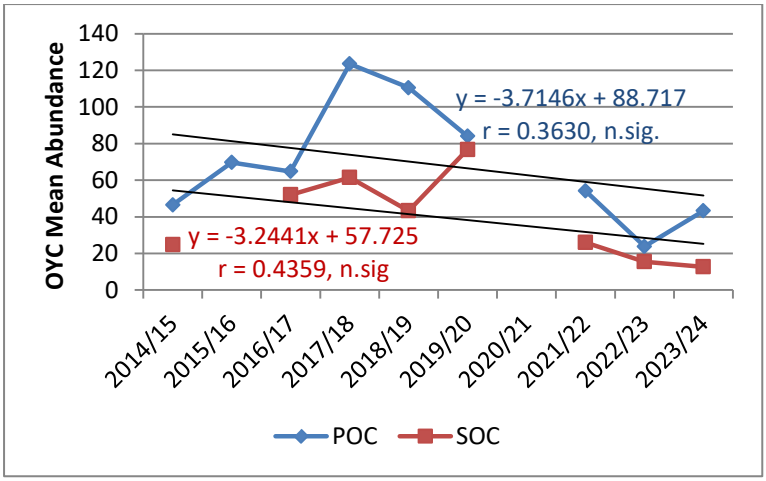


**Fig. 12: Mean Annual Counts and trends of Oystercatchers (POC: blue; SOC: maroon) for the Northern Samphire Coast, 2014/15 – 2023/24.**

## 1.g. Kangaroo Island

Late in August'24, the Island Ark Symposium was held in Kingscote, KI. This biennial conference is held in key islands across the Pacific Region, and aims to develop collaborations and partnerships for those involved in and with an interest in island management within the region. The symposium provided an excellent opportunity for our Oystercatcher volunteers on Kangaroo Island to give a paper on their monitoring work on Pied Oystercatchers over the past 8 years. Here's the abstract of the paper, presented by Jean Turner, co-author of the paper and a Team Oystercatcher member, together with several charts on breeding success and causes of nest failures that were presented (Figs. 13 & 14).

**Kangaroo Island: Refuge or Retirement Home for Pied Oystercatchers?**
David Potter, Keith Jones and Jean Turner

The Australian Pied Oystercatcher is a beach-nesting resident shorebird found all around the Australian coast. The species is listed as Rare in South Australia (National Parks and Wildlife Act 1975 Schedule 9) and Kangaroo Island supports a globally significant proportion of the Australian Pied Oystercatcher population. A systematic count along the entire Kangaroo Island coast in 1984 (Schulz, 1995) recorded 472 adult Pied Oystercatchers.

Since the 2015/16 breeding season, BirdLife Australia volunteers have done regular counts of Australian Pied Oystercatchers around Kangaroo Island, with more intensive monitoring of breeding pairs and flocking groups. Over this period the cumulative mean population count has averaged just over 200 adult birds. Breeding success, measured as percentage of chicks fledged for total eggs laid, is low and appears to be declining.

The age structure of the Pied Oystercatcher population is unknown, as are the movements of fledged juveniles and recruitment of young adults into the breeding population. One Pied Oystercatcher banded in 1987 was still actively breeding in 2022, when it disappeared aged

34. We are concerned that threats are increasing and the population is in decline, perhaps skewed towards older, less fecund birds.

Local BirdLife Australia volunteers are collaborating with the South Australian Shorebirds Foundation and the Victorian Wader Study Group to undertake a new banding study of the Australian Pied Oystercatcher on Kangaroo Island. In the 2023/24 breeding season, five chicks were banded and leg-flagged. Additional banding and flagging of chicks, juveniles and adult birds will be undertaken in 2024/25. Long-term citizen science monitoring of the flagged birds will reveal the movements of fledged juveniles; the stability, site fidelity and breeding success of adult birds; and the longevity of banded birds.

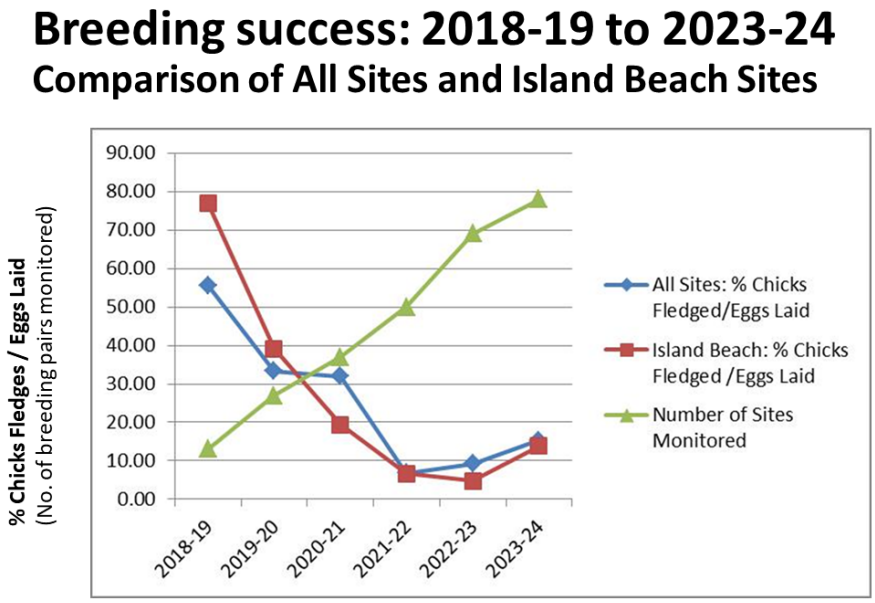


**Fig. 13. Breeding Success of Australian Pied Oystercatchers at Island Beach and other sites on Kangaroo Island, 2018/19 – 2023/24.**

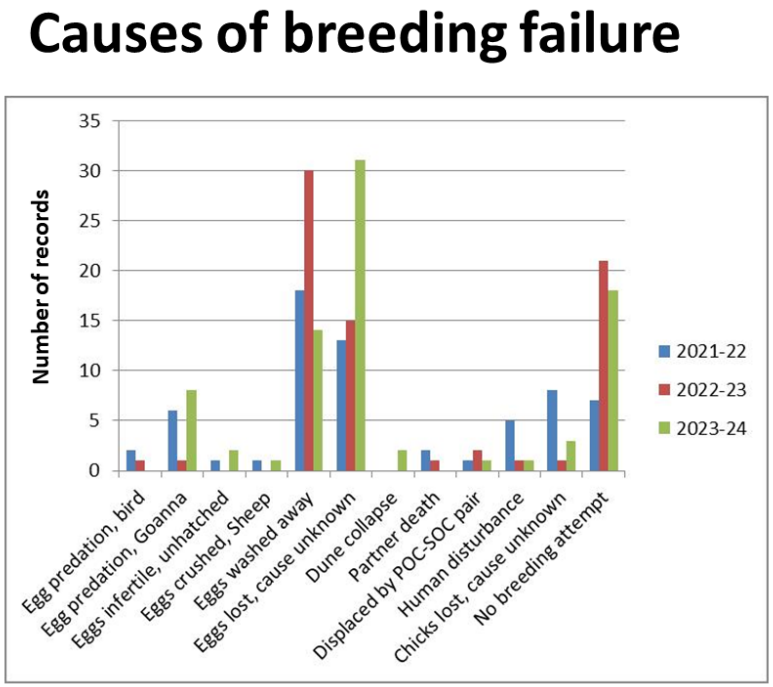


**Fig. 14. Causes of breeding failure for Australian Pied Oystercatchers on Kangaroo Island, 2021/22 – 2023/24.**

**The effects of Storm surges and natural predators on breeding success of Pied Oystercatchers on Kangaroo Island.** During August and early September, 2024, severe winds and storm surges were experienced on KI and other parts of Southern Australia. Dave Potter reported that just before the storms, at least 12 POC nests were seen, however, since then, there were 3 failures. Also, at a number of sites on the Island (Reeves Point and Swan Crossing), POCs were forced to forage amongst grass, adjacent to their normal roosting areas. Fig. 15 shows and adult POC foraging inland from Island Beach.

**Fig. 15. Adult Pied Oystercatcher forced to forage inland from Island Beach, KI, due to high tides and storm surges experienced in late August, early September, 2024. (Photo: D. Potter)**

Finally, recently, while monitoring POC nests on KI, David Potter found a Rosenberg's Goanna preying on 2 POC eggs, resulting on nest failure for the parents. Fig. 16 shows the parents their nest against the Goanna, to no avail. As seen in Fig.13, in some years, more than 5 % of breeding failure on the island is due to Goanna predation of eggs.

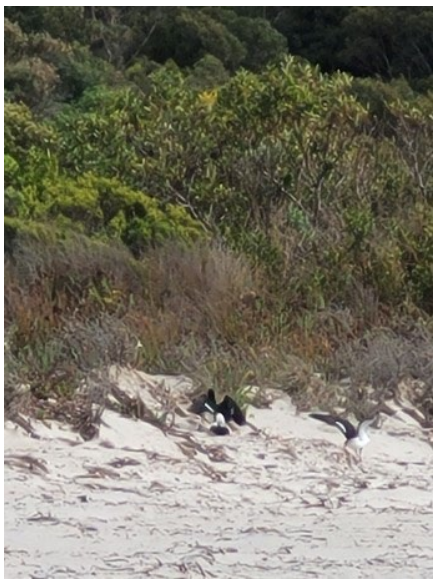

**Fig. 16. Pied Oystercatcher parents defending their nest against a Rosenberg's Goanna, September, 2024. (Photo: D. Potter)**

## 2. BANDING NEWS

## 2.a. Southern Fleurieu and Coorong Ocean Beach

Three POC chicks(Black 14, 07, & 06), caught and flagged in the SE SA, have recently been re-sighted at Goolwa Beach and inside the Murray Mouth, demonstrating movements between the Ocean Beach and the Murray Estuary (Table 2).

**Table 2: Movements and duration of flagged POCs at SE SA, Coorong Ocean Beach and SE Fleurieu between 2020 and 2024.**

| Location & Date of 1st capture and flagging | Location & Date of re-sighting – South East SA | Location & Date of re-sighting on Coorong Ocean Beach | Location & Date of re-sighting on SE Fleurieu coast |
|---|---|---|---|
| POC, **Flag 41** (Chick), Nene Valley, SE SA, Jan'2022 | | | |
| | Blackfellows Caves, SE SA, March'2022 | | |
| | | | Barrage Beach, Goolwa OB, Sep' 2023 |
| | | Ti-Tree Crossing, COB Jan' 2024 | |
| | | | Sugars Beach, Murray Estuary, 5 Aug'24 |
| | | | Beacon 19 Beach, Goolwa OB, 17 Aug' 24 |
| POC, **Flag 07** (Chick), Danger Point, SE SA, Nov'2020 | | | |
| | Nora Creina, SE SA, May'2023 | | |
| | | | Beacon 19 Beach, Goolwa OB, Sep'23 |
| | | Coorong OB, Jan'24 | |
| | | | Barrage Beach, Goolwa OB, June'24 |
| | | | Barrage Beach, Goolwa OB, July'24 |
| POC **Flag 06** (chick), Geltwood Beach, SE SA, Jan'24 | | | |
| | | | Barrage Beach, Goolwa OB, July'24 |
| | | | Sugars Beach, Murray Estuary, Aug 5, 2024. |



**Figs. 17: Flagged POCs re-sighted at Goolwa Beach and Murray Estuary; a) Flag 41; b) Flag 07; c) Flag 06 (note Juvenile colours, pale legs, mottled dorsal feathers) (Photos a) K. Bartley, b) K. Jones., c) K. Bartley.)**

There appears to be similarities in the age-related movements of the first two birds (41, 07), with them remaining about the SESA coast for the first 2 – 2.5 years of their lives. There-after, they moved to the SE Fleurieu and Coorong Ocean Beach, where they have remained up till August'24. The third bird (06), which was bred in the 2023 season, flew to the SE Fleurieu coast at about 8 months of age, and moved between the Goolwa Ocean Beach and the Murray Estuary (Fig. 16). It's important to note, that birds 41 and 06 have moved between the Goolwa Ocean beach and the Murray Estuary.

## 2.b. Kangaroo Island.

Since the KI banding trip in December, 2023, which was reported in our last Newsletter (No. 10), all five chicks have now fledged and after 6 months at liberty, re-sightings of most juvenile birds have been made at flocking sites up to 20 km away. Flocking sites occur at Cape Rouge (black flag, 33), Reeves Point (Black Flags, 34, 35) and Strawbridge Point (Black Flag 31). In Aril'24, Bird Black flag 36 was observed foraging with its parents in the Bay of Shoals. In 2024/25, 2 further trips will be undertaken in December'24 and May'25 to catch and flag more birds.

# 3. SA SHOREBIRDS FOUNDATION NEWS

## 3.a. Currently funded projects

**2021-02 Leanne Butterfield (Flinders University) . A social marketing intervention to increase compliance with Beach Regulations. (2nd of a 3 yr PhD project).**

Leanne has now completed her survey counts of all birds and human activities at 6 sites on the Western Fleurieu coast, between Moana and Sellicks. Two of the sites have vehicle restrictions on them. She has also conducted surveys of the invertebrate fauna on all these beaches and analyses of the samples are currently underway. Additionally, a questionnaire was developed to assess patterns, knowledge of and compliance regulations and personal values of beach users. A total of 1739 responses were made between October'23 and May'24.

**2022-02. Hoodie Banding Together on Kangaroo Island. Renee Mead, Beach-nesting Bird Coordinator, Birdlife Australia. (2 year project).** A total of 14 Hooded Plovers were caught and flagged in 2023/24 on KI. Also, a workshop was held at Penneshaw to inform interested public about the program. In the second year of the project, the BNB team will re-visit the Island to catch and band more Hooded Plovers and hold another workshop in October, '24.

**2023-01. Pied Oystercatcher banding project on Kangaroo Island. Friends of Shorebirds South East (FOSSE). 2 yr project.** Results of the first year are seen in Team Oystercatcher Newsletter, No. 10 and in this edition, (page 13).

## 3.b. New Projects for 2024/25.

**2024-01 E. Vanderzon. (Flinders University). The Ecology of Oystercatchers in SA. (1st year of a 3 yr PhD project).**

The Foundation has approved to financially support Emma Vanderzon's PhD project on the ecology of Oystercatchers on the Yorke Peninsula, NE Samphire coast of GSV, the Fleurieu coast, Coorong and Kangaroo Island. The aims of Emma's project are to:

1. Determine the distribution of Pied and Sooty Oystercatchers in Gulf St. Vincent and the Coorong;
2. To establish how Oystercatchers foraging behaviour and diet vary between locations;
3. To experimentally assess the tolerance of Pied and Sooty Oystercatchers towards human disturbance, and
4. To determine their movement patterns and habitat use during breeding.

**2024-03. Dr. Tom Prowse (Adelaide University) Quantifying the impact of disturbance processes on the movements and behaviour of Pied Oystercatchers.**

The aims of this 2 year project are:

1. To investigate the movement ecology of Pied Oystercatchers within the Coorong Lagoon and Ocean Beach (CLLMM region); and
2. To understand the impacts of various threatening processes on the environment and Pied Oystercatchers.

This project has two components; firstly, using GPS telemetry to monitor Pied Oystercatcher movements and behaviour of Pied Oystercatchers (to be funded by the SA Shorebirds Foundation) and secondly, using camera-trap technology to monitor Pied Oystercatcher nests and a range of threatening processes (to be funded by the CLLMM Research Centre).

## 4. ACKNOWLEDGMENTS

Team Oystercatcher members are grateful to the many volunteers who have reported their observations over the years on Oystercatchers in South Australia through either the Birdlife Australia's Birdata or Beach-nesting Bird Portal. We would especially like to thank Kerri Bartley and Julia Roetmann, Birdlife Australia's SA Shorebird Coordinators for the Fleurieu and Coorong areas for their support in organising surveys, including the Southern Fleurieu Island seabird counts and the Coorong and Bird Island winter bird counts.

The FOSSE and VWSG members are thanked for their knowledge of catching and banding Oystercatchers, used in the SA Shorebirds Foundation-funded KI POC Banding trip in December'23 and another exploratory trip in March'24.

Finally, I am grateful to Jeff Campbell, President of FOSSE for information on the localities where the POC chicks were caught and flagged in the South East, and where and when they moved to, as juvenile birds, on the Coorong Ocean Beach, Murray Estuary and the Goolwa Beach.

## 5. REFERENCES

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**Dennis, T.E., Shaughnessy, P.D. (2020)** Seabirds Islands Series. No. 269. The Pages Islands in the Backstairs Passage, South Australia. *Corella 44, 77 – 80.*

**Schulz, M. 1995.** A Survey of Shorebirds on Kangaroo Island, South Australia. *The Stilt No. 26 46-49.*

**Fig. 18. A roosting flock of 120 Australian Pied Oystercatchers at Reeves Point, Kangaroo Island. June, 2022. (Photo: J. Turner)**