

TEAM OYSTERCATCHER NEWSLETTER No. 7. September, 2022

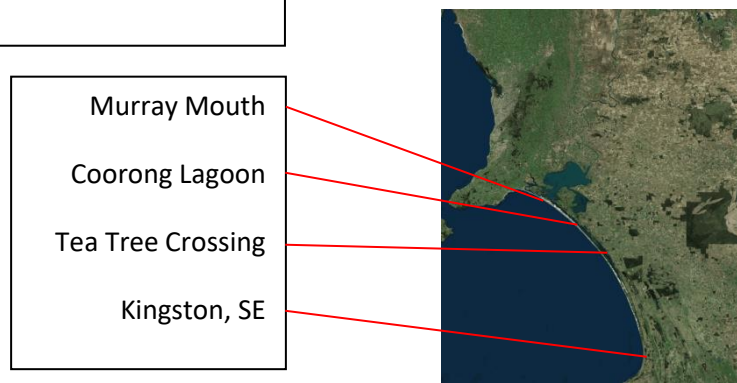


Here's the seventh edition of the Team Oystercatcher Newsletter, updating our monitoring work over the past 6 months here in SA. All our sites on the SE Fleurieu, western Fleurieu, southern Samphire and Kangaroo Island continued to be monitored. We provide seasonal counts over this last year and annual average counts for these regions, and discuss how these have changed over the duration of our surveys. Additionally, we report on summer and winter Coorong Oystercatcher counts, our attendance at the National Beach-Nesting Bird Conference at Moonta, Yorke Peninsula in May, the importance of Oystercatchers on Eyre Peninsula, and finally, progress with the SA Shorebirds Foundation. As usual, we welcome news from other volunteers on what's been happening with Oystercatchers in their particular region. Cheers and happy reading from the Editor, Keith Jones (email: docjones@bigpond.net.au).

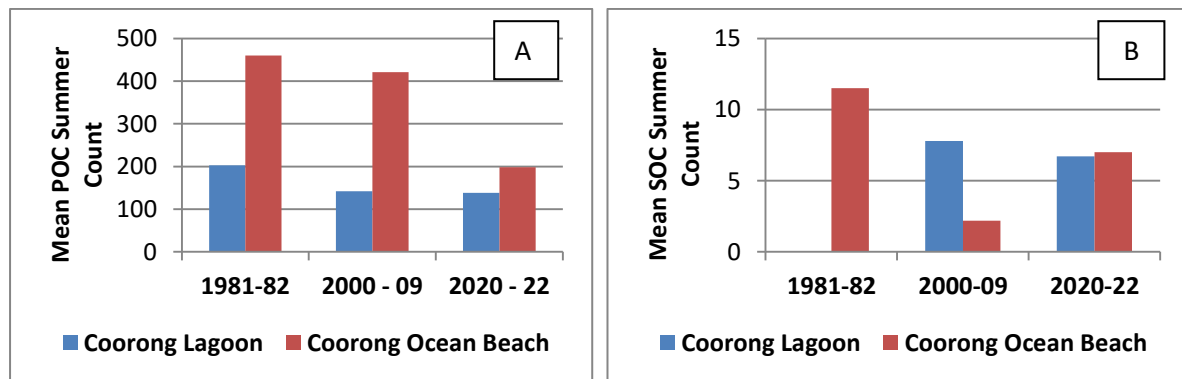
The Coorong Lagoon and adjacent Ocean Beach

We report here on the summer and winter surveys. Since 1981, summer (Jan or Feb) counts of both species of Oystercatchers and other shore and wetland birds have been counted throughout the Coorong Lagoon (Fig. 1). The surveys usually last 3 days and are carried out by land-based volunteers and boat-based Lakes & Coorong Commercial fishers. Also, since the same time, the adjacent Coorong Ocean Beach has been intermittently surveyed by volunteers. Results of all surveys between 1981 and 2008 have been reported in Wainwright & Christie (2008). Since 2019, volunteers and the Lakes & Coorong commercial fishers, under the supervision of Birdlife Australia, have carried out 3 day winter (May – July) surveys of the Coorong Lagoon (2019 – 2022).

Fig. 1: Satellite Image of the Coorong Lagoon and Ocean Beach



We can now compare the average counts for 3 periods of the summer surveys for the Coorong Lagoon and the Coorong Ocean Beach (The Coorong Lagoon takes in all the waters of the Murray Estuary, North and South Lagoons) (see Charts 1A & B). For the Coorong Ocean Beach counts for 1981 – 2 included entire the Coorong Ocean Beach from Kingston to the Murray Mouth), and therefore, not strictly comparable with the two later surveys that were between Tea-Tree Crossing and the Murray Mouth, a distance of approx. 100 km.



Charts 1A & B: Mean Summer Counts for A, Pied Oystercatchers (POCs) and B, Sooty Oystercatchers (SOC) in the Coorong Lagoon and on the Ocean Beach, 1981 – 2022. (data for 1981 – 2009 are from Wainwright & Christie, 2008), and data from 2020 – 2022 from the Birdlife Australia Coorong Summer Count).

In all 3 survey periods, higher summer counts of POCs occurred on the Ocean Beach, compared with the Lagoon (Chart 1A). Taking out the 1981-2 surveys that covered the longer coast of the Ocean Beach compared with later surveys, there has been a significant decline in mean counts of Pied Oystercatchers between the 2000's and the last 2 years. In the Coorong Lagoon, where the surveyed area hasn't changed over the three periods of surveys, we also see a decline in POC summer counts (Chart 1A).

SOCs (Chart 1B), are less abundant than POCs in both the Lagoon and the Ocean Beach, and we see an increase in their abundance in the Coorong Lagoon. Note, no Sooty Oystercatchers were recorded in the Coorong Lagoon in 1981 – 2. On the Ocean Beach, counts have been more variable, and in the last surveys (2020-2), similar numbers were observed for the Ocean Beach and the Lagoon.

Inspection of more detailed counts of both species, show that the majority of birds were observed in the North Lagoon or the Murray Estuary (Wainwright & Christie, 2008). This is probably due to adverse environmental conditions, unsuitable foraging and roosting areas for POCs, as well as other shorebirds in the Southern Lagoon. In the last two years on the Ocean Beach, SOC were more abundant closer to the Mouth (K.Jones, pers. obs).

Over the last four years, winter counts in the Coorong Lagoon revealed much higher numbers of POCs than SOC (Chart 2).

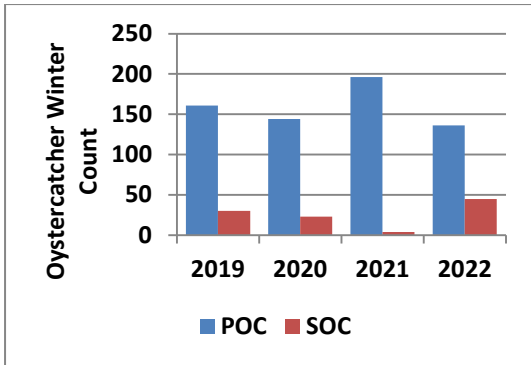


Chart 2: Winter Counts of POCs and SOC in the Coorong Lagoon, 2019 - 2022

SE Fleurieu (Murray Estuary and Ocean Beach)

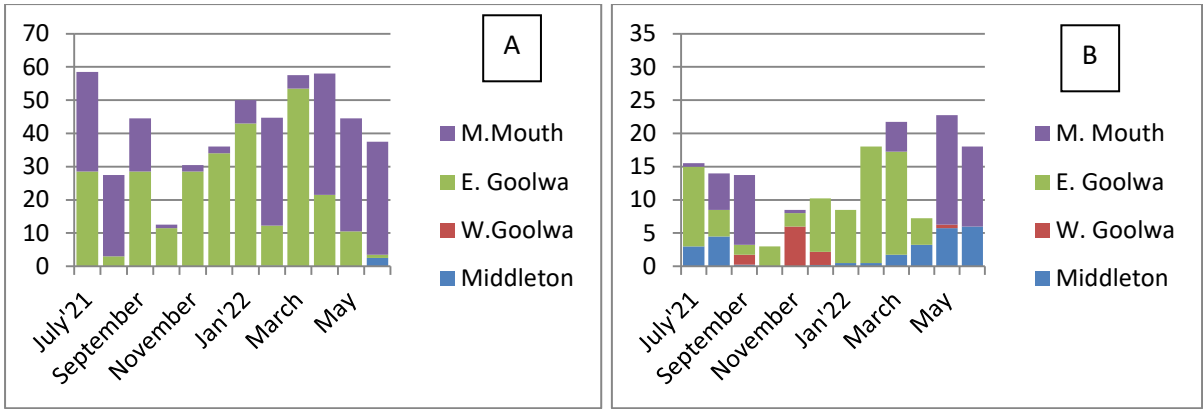
The ten sites from Middleton Point to the Murray Estuary have now been surveyed monthly for the past 11 years (July, 2011 – June, 2022) (Fig. 2).



Fig. 2: Location of survey sites on the Goolwa Ocean Beach (1 – 8) and the Murray Estuary (9 – 10) for the SE Fleurieu Oystercatcher Surveys, 2011 - 2022

Firstly, let’s see where the POCs and SOC were found during this last year (2021/22) (Charts 3A & B). POCs occurred in two main areas, the East Goolwa Beach (Barrage & Beacon 19) and lastly in June ’22, a rarely seen small number at Middleton (Chart 3A). For much of this past year, relatively high numbers were observed on the Eastern Goolwa Beach, only diminishing after March’22, when high numbers returned to the Murray Estuary. Movements of banded birds between the Ocean Beach and the Estuary over the years, confirm these observations.

SOCs were observed at most surveyed sites; during the warmer months (November – March) they were mainly seen on the Eastern and Western Goolwa Beaches, whereas during the cooler months (July, August’21 & May, June’22) they were predominantly seen either at Middleton or at the Murray Estuary (Chart 3B).



CHARTS 3 A & B: Seasonal Counts of POCs (A) and SOCs (B) on the SE Fleurieu Coast, 2021/22.

For POCs, the relatively high numbers on the Ocean Beach are not dissimilar to those for several other years (2011/12 and 2016/17; Chart 4). There are possibly two environmental factors driving this high variation between years in abundance; firstly, in years of high environmental flow through the barrages in the Murray Estuary, there is restricted roosting and foraging habitat within the estuary available for the POCs, forcing them to move to the eastern part of the Ocean Beach. Secondly, we’ve observed that Goolwa Pipis are an important component in the diet of both species on the Ocean Beach. Over the past 5 years (2017/18 – 2021/22), fishery-Independent monitoring of the Goolwa Pipi resource along Goolwa / Middleton Ocean Beaches by Dr. Nick Whiterod (Glenelg Nature Trust, pers.com.), links relatively high densities of adult Pipis in 2017/18 and 2021/22 with our observations of relatively high abundance of POCs in those years. In 2017/18, POC density was the third highest of the 11 years of surveys. Thus, with the high availability of food in those years, POCs may be able to remain longer on these beaches, than in other years of low food availability. The link between Goolwa Pipi recruitment on these beaches and environmental flow is the subject for further research.

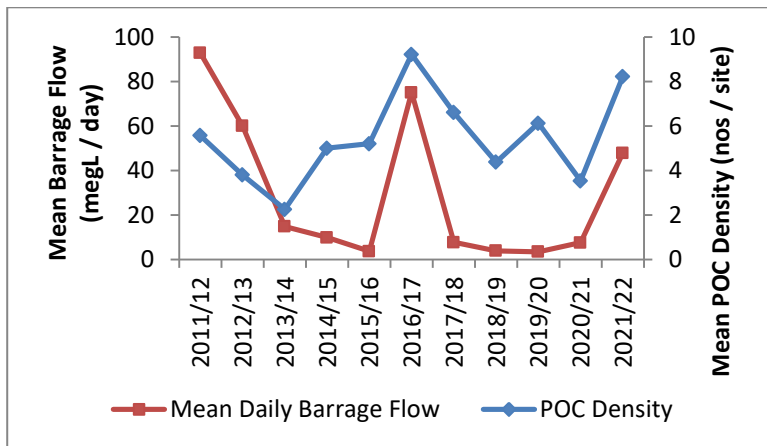


Chart 4: Link between the density of POCs on the Ocean Beach and the Environmental Flow through the Barrages, 2011/12 – 2021/22.

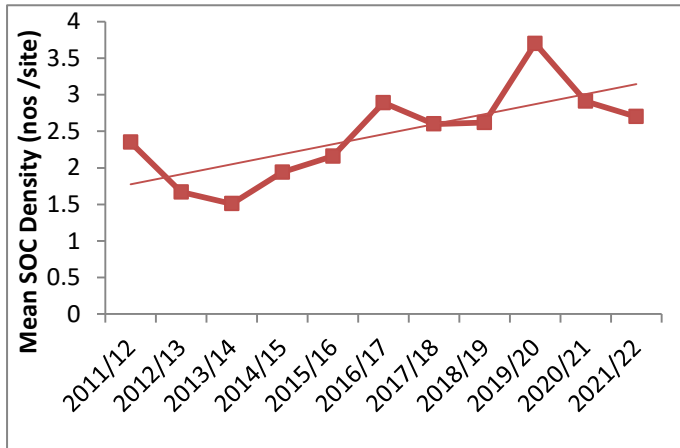


Chart 5: Mean annual SOC densities on the Ocean Beach, 2011/12 – 2021/22

The annual mean SOC densities on the Ocean Beach over the survey period show less inter-annual variation than for POCs (Chart 5), and less correlation with the environmental flows through the barrages. Although relatively higher densities were also observed in 2011/12, 2016/17 and 2019/20, similar to POCs, a lower density was observed in this last year of 2021/22. However, in this last year, we observed quite high numbers of SOCs at Basham’s Beach, further to the west of our study area.

Levels of human activities (beach walkers, dogs, recreational Pipi harvesters and ORVs) have continued to be monitored at all sites, and those results will be reported at a later date, suffice to say, all these activities are highly seasonal with summer months and Easter being the main periods when these occur.

Western Fleurieu (Snapper Point, also known as the Aldinga Reef Aquatic Reserve)

Inspection of Birdlife Australia’s Beach-nesting Bird portal and Birddata shows that Snapper Point is one of the few areas of coastal western Fleurieu from Cape Jervis to Adelaide sthn Metro, where SOCs are consistently seen. Other occasional sightings are at Ochre Point, Marino Rocks and at the mouth of the Onkaparinga River. Volunteer, Barry Simes, has twice monthly monitored numbers of juvenile and adult SOCs at Snapper Point for the past 2 years (Chart 6). Juvenile SOCs are distinguished from adults, having a black/grey tip to their bills and paler legs (Figs 3A and B). Both adults and juveniles utilise this reef habitat for foraging. No breeding or nesting has been observed. The proportion of juveniles to adults slightly varied between the 2 years (32% & 27%, resp.). In this last year, we’ve seen a significant drop by more than 50% in numbers of both adults and juveniles compared with 2020/21. In this last year, we also observed slightly higher numbers of people, dog walkers and dogs on and off leads compared with 2020/21. There have been a number of occasions where both adult and juvenile SOCs have been disturbed by “off lead” dogs. The birds either escaped to the outer part of the reef or moved further south along the coast. POCs are very rarely sighted along this coast with records in the past years of only a pair at Carrickalinga Beach and northern Aldinga Beach .

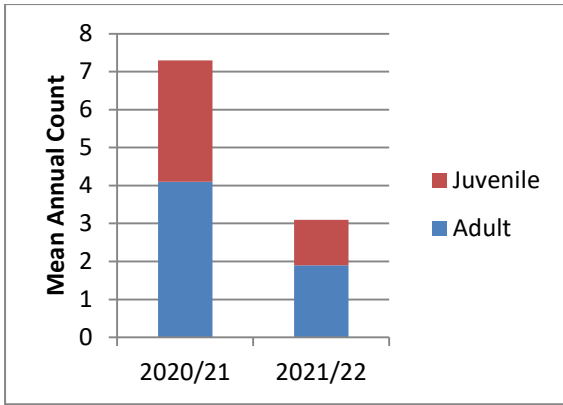
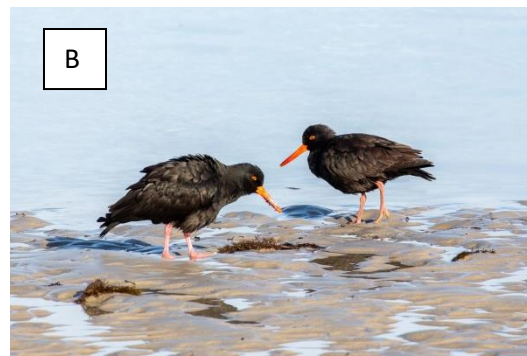


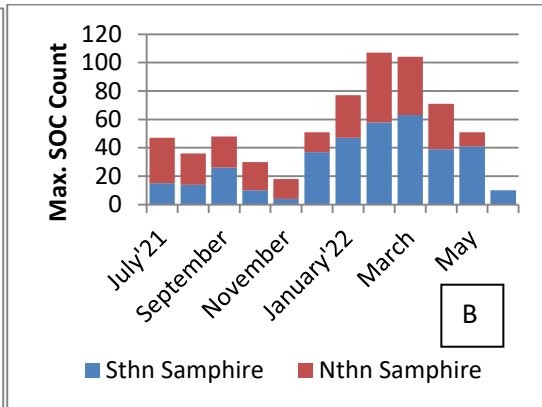
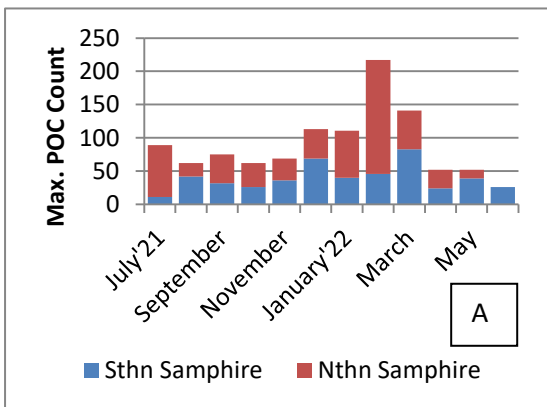
Chart 6: Cumulative mean annual counts of adult and juvenile SOC species observed at Snapper Point, Western Fleurieu, 2020/21 & 2021/22.



Figs 3 A & B: Juveniles (A) and Adults (B) SOC species at Snapper Point, Western Fleurieu, 2021/22 (Photos: Barry Simes)

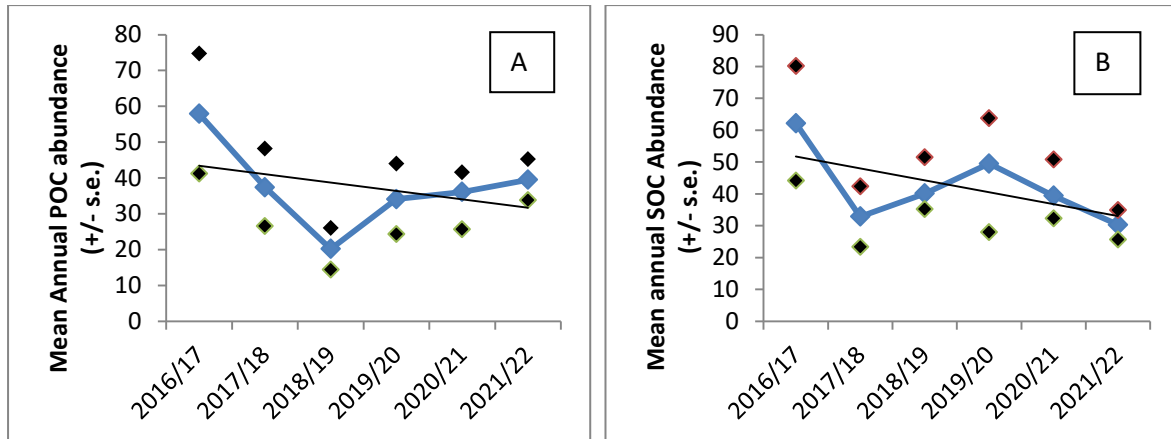
Samphire Coast (Semaphore to Port Clinton, NE Gulf St. Vincent)

This last year’s monitoring in the southern and northern regions of the Samphire coast show similar fluctuations in abundances of POCs and SOC species (Charts 7A & B), with highest numbers occurring over the warmer months (Dec – March), then dropping to lowest numbers in June. Highest numbers of POCs were seen in Feb, 2022 in the northern Samphire (north of St. Kilda), and with higher mean annual counts (62 +/- 12.6), than in the Sthn Samphire (Semaphore to St. Kilda) (39.2 +/- 5.7). For SOC species, overall, higher counts were observed in the Southern Samphire (30.3 +/- 5.8) compared with 25.4 +/- 3.5 in the Northern Samphire region.



Charts 7 A & B: maximum counts of POCs (A), and SOC species (B) in the southern and northern Samphire regions for 2021/22.

Over the 6 years of monitoring the southern Samphire (2015/16 to 2021/22), we've observed slight declines in the mean annual counts for both Oystercatcher species (Charts 8 A & B). Generally, there are a similar range in counts for both species (60 – 20 for POCs and 60 -30 for SOC). For both species, highest counts were seen in 2016/17, thereafter, fluctuating downwards in different years. For POCs and SOC, the central Port River (Gillman and SW Torrens Island) have been their strongholds, respectively, and the drop in annual abundances reflect the decreasing importance of these two sites.

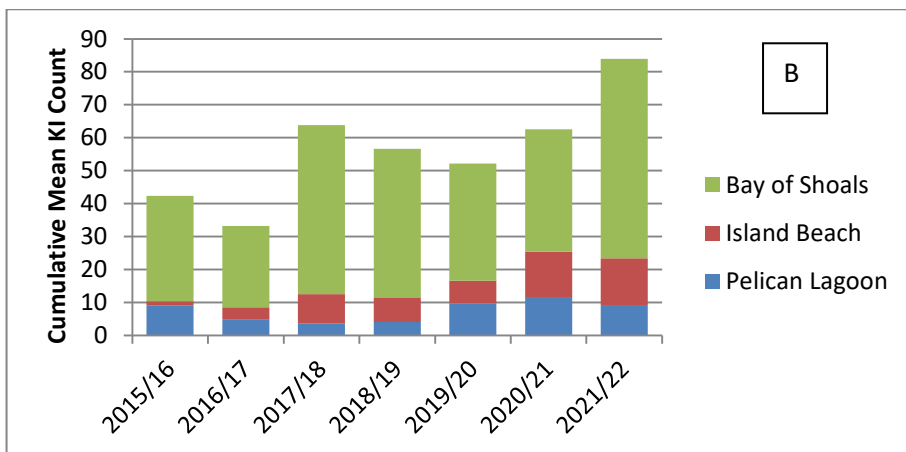
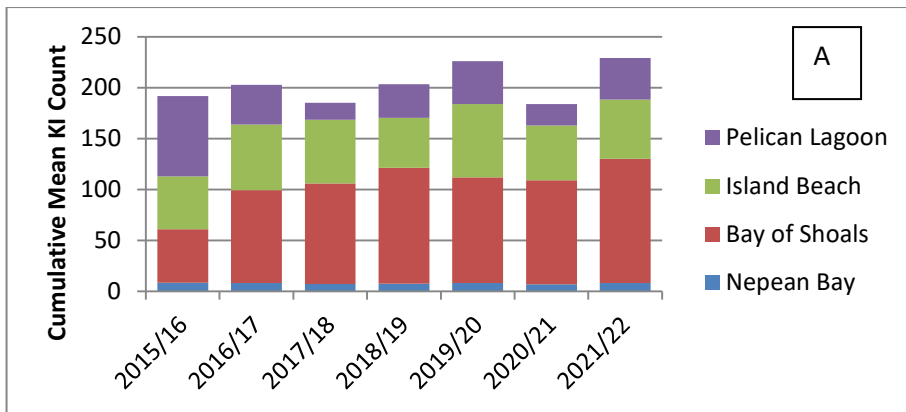


Charts 8 A & B: Trends in mean annual POC abundances (A) and SOC abundances (B) in the southern Samphire region, 2015/16 – 2021/22. (Black dots refer to +/- standard errors around means.)

Kangaroo Island

POCs and SOC numbers have now been regularly monitored by Dave Potter, Jean Turner and Peter Hastwell between 2015/16 and 2021/22 in 4 regions on the NE coast of Kangaroo Island (see Charts 9 A & B). As the length of these coastal surveys varies individually, the counts don't necessarily represent densities of birds in the respective regions; for example, in the Bay of Shoals, counts of both POCs and SOC include birds forming large roosting flocks as well as breeding pairs, whereas, at Nepean Bay, POC counts consist only of breeding pairs. Additional sites that have been monitored less often and have not been included in this report.

Both species have increased in counts over the survey period. For POCs, this was evident for the Bay of Shoals, and for SOC, both the Bay of Shoals and Island Beach have seen substantial rises. However, it should be pointed out that when historical POC counts, prior to 2015 and as far back as the 1980's are included, it appears that for some regions, such as Eastern Cove (Island Beach & Pelican Lagoon), the abundance of POCs has declined (D. Potter & J. Turner, 2022; poster presentation at the National Beach Nesting Bird Conference, Moonta, SA, May, 2022).



Charts 9 a & B: Cumulative Mean Counts of POCS (A) and SOCs (B) for NE KI regions, 2015/16 – 2021/22.

Eyre Peninsula

This is our first report about the Oystercatchers on the Eyre Peninsula (EP). A number of bays and Islands around the EP qualify as Internationally Important Bird Areas (IBA's), defined as an area where a species number exceeds more than 1% of their global population. Five coastal areas of EP are listed as IBAs and include: 1) Tourville, Murat Bays and Nuyts Archipelago; 2) Venus Bay; 3) The Investigator Group of Islands off the west coast of EP; 4) Coffin Bay, and 5) Sir Joseph Banks Group of Islands in SW Spencer Gulf (Dutson et al, 2009). We already know that both Pied and Sooty Oystercatchers meet the criterion for an IBA in the Tourville and Murat Bays and Nuyts Archipelago (Wikipedia) and for Pied Oystercatchers in the Coffin Bay (Clarke, 2019). Over the coming year, the other IBAs will be investigated using the large South Australian data-sets on POCs and SOCs, provided by Dr. Grainne Maguire of the Birdlife Australia, Beach nesting Shorebird Team. It is hoped that in the future, volunteers will be able to regularly monitor oystercatcher numbers and breeding success in each respective IBA.

During the winter of 2022, three Team oystercatcher members, David Potter, Jean Turner and Barry Simes visited several coastal sites on Eyre Peninsula. Here are a couple of photos that they took.



Fig. 4 : Mixed flock of roosting Sooty & Pied Oystercatchers, Second Creek, near Tumby Bay, Eyre Peninsula.
Photo: Barry Simes. July, 2022



Figs 5 a & b: Mosaic depictions of a) Pied Oystercatchers and b) Sooty Oystercatchers at the Port Neill foreshore, Eyre Peninsula, designed by artist, Karen Carr of “Squashed Cocky”.
Photo: Jean Turner, June, 2022.

National Beach-nesting Bird Conference, Moonta, May, 2022.

BirdLife Australia’s National Beach-nesting Bird Conference was held at Moonta, on Yorke Peninsula between May 13 – 15th, 2022. It was aimed at sharing the latest research findings and stakeholder knowledge around beach-nesting bird species, their habitats, threats and conservation management. More than 100 people participated, representing local and state government, coastal communities, volunteers, community groups, researchers and students. The conference included talks by key-note speakers, workshops and excursions to key shorebird sites around the coast of Yorke Peninsula.

At the conference, three posters were presented by Team Oystercatcher. These were:

- 1) Monitoring Pied Oystercatchers on Kangaroo island, by David Potter, Jean Turner and Les Montanjees;
- 2) Team Oystercatcher Population Monitoring in regional South Australia, by Keith Jones;
- 3) Foundation for South Australian Shorebirds; supporting research, monitoring and education on resident and migratory Shorebirds in SA through grants, by Keith Jones.

Foundation for South Australian Shorebirds

1. The Foundation financially supported a number of remote South Australian volunteers to participate in the National Beach-nesting bird Conference at Moonta in May (see above).

2. Recently, a foundation grant was awarded to Leanne Butterfield of the College of Science and Engineering, Flinders University to support operating costs for a PhD project, titled: “A social marketing intervention to increase compliance with beach regulations.” This project will involve gathering formation about public knowledge of and barriers to appropriate beach use, knowledge of human impacts on the environment and shorebird species, and the values and social norms of the target population in relation to desired beach use behaviours. Subsequently, an intervention incorporating the information learned, will be designed and implemented through a beach user phone application and social media. The project will focus along the western Fleurieu coast. Key shorebird species will include Hooded Plovers, Red-capped Plovers and Sooty Oystercatchers.
3. The Foundation is currently supporting Birdlife Australia’s arts project, “Hoodies on Display; Inspiring Conservation Action”. This project is based at the Point Turton Naturescape, on Lower Yorke Peninsula. South Australian artist, Karen Carr of “Squashed Cocky” will design and build a game – “Hoodie Play Pod”, an interactive tool to educate the public of all ages in the conservation of the vulnerable Hooded Plovers. Although focussing on this shorebird species, the project will have positive implications for other shorebirds, including Oystercatchers. An example of Karen’s art-work is seen in Figs 5 & 6, depicting Pied and Sooty Oystercatchers at the Port Neill foreshore.



Fig. 6: Mosaic display of Pied and Sooty Oystercatchers at the recently updated Port Neill foreshore by artist, Karen Carr of “Squashed Cocky”. Photo: Jean Turner, June, 2022. Karen’s artistic skills are being used in Birdlife Australia’s project: Hoodies on display: inspiring Conservation Action, partly supported by Foundation for SA Shorebirds.

Acknowledgements. As always, my gratitude to Team Oystercatcher members, David Potter, Jean Turner, Peter Hastwell and Barry Simes for providing count data and other observations on Oystercatchers in their respective areas. Also, additional count data collected by other volunteers and reported in Birdata and the Birdlife Australia’s Beach-nesting Bird Portal. Discussions with David Potter and Dr. Nick Whiterod have assisted in the interpretation of the data. Photos by Jean Turner and Barry Simes added greatly to the newsletter.

References.

Clarke, D. (2019) Long Beach, Coffin Bay and Pied Oystercatchers. *The Birder*. Official magazine of Birds SA. Summer, 2019, No. 252, p. 14 – 15.

Dutson, G., Garnett, S., Gole, C. (2009) Australia's Important Bird Areas. *Birds Australia (RAOU) Conservation Statement*. No. 15, October, 2009. 40 p. (page 33, map showing locations of IBAs in SA).

Wainwright, P., Christie, M. (2008) Wader Surveys at the Coorong and SE Coastal Lakes, South Australia, February, 2008. *The Stilt* 54, (2008): 31 -47.