# Shorebird Roost Rehabilitation at Stockton Sandspit

# Project Report 2015

## Introduction

Stockton Sandspit is a small but vital component of the Hunter Wetlands National Park and is regarded as one of the premier day-time roosts for shorebirds in the Hunter Estuary. Shorebird roost rehabilitation at Stockton Sandspit (the Sandspit) is focussed on a variety of roost habitats favoured by the shorebirds. As an added bonus, these rehabilitated areas provide occasional feeding habitat for shorebirds as well as breeding opportunities for some ground-nesting birds.

Volunteers from Hunter Bird Observers Club (HBOC) have a long association with this site and over the last 15 years have held a strong site presence. Over the last three years, HBOC members have been ably assisted by various crews from Conservation Volunteers Australia (CVA).

## 2015 Contribution

Since we have been keeping records (16th April 2003) an aggregate of 6,058.2 hours of volunteer work has accrued. The value of this effort in terms of productive habitat for shorebirds is immeasurable of course, but when figured against contractor rates, it amounts to an in-kind value of over $237,000. This is not an insignificant sum.

Volunteers visited the sandspit on 15 occasions to carry out restoration works during 2015 and a total of 601 volunteer hours of their time was put to good use.


*Figure 1. The 2015 volunteer effort has matched that of the previous year.*

The 2015 volunteer effort focussed on maintaining high standard saltmarsh and shelly sand areas, removal of mangrove seedlings over all areas plus the annual Clean Up Day activity. This has always been the case over the years. With the additional volunteer resource enjoyed once again this year, restoration of other non-roost areas was also targeted.

## Mangroves

To provide a shorebird friendly site all mangrove seedlings are removed from a schedule of designated areas. This is carried out under a licence (Permit PN14/333) issued by NSW Department of Primary Industries (Fisheries NSW).

We were blessed with a very low recruitment of seedlings during the spring of 2014 which meant that the effort required to remove them this year was extremely low. A single one-hour session in late March was all that was needed to complete this yearly task.

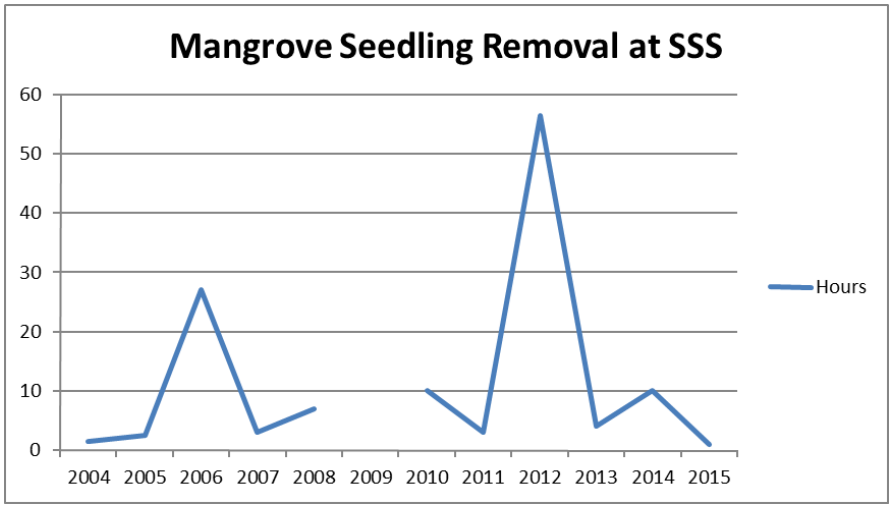


*Figure 2. A record minimal effort to remove the seedlings this year was all it took.*

## Clean Up Day

The first Sunday of March is when a “traditional” Clean Up Australia effort is made at Stockton Sandspit and 2015 was no exception. A small group of die-hards from HBOC (Caryl, Paddy & Melva) plus a resident from Fern Bay (Verity) jumped into it and 4 hours later had collected 20 bags of rubbish plus lots of larger items.

## Shelly Sand

Shelly sand is preferred by some shorebirds as a place to roost. An additional bonus with this work is that two species of resident shorebirds, Red-capped Plover and Pied Oystercatcher utilise the open sand areas for nesting.

Preparing areas of shelly sand remains the greatest challenge for volunteers each year at the Sandspit and is sometimes referred to as the great winter effort. The work is best described as three separate tasks; clearing all vegetative matter from the area firstly before turning over the sandy soil with a rotary hoe and finally raking clean the disturbed soil of as much stray vegetative material as possible.

This year the entire effort in the primary clearing of vegetation was undertaken by crews of International Student Volunteers. These teams were supervised by a local CVA Team Leader. The first visit included three days in late May where all of Big Island and 60% of The Shelly was completed. A second visit in June completed The Shelly and a few days later the rotary hoe treatment was carried out by two NPWS field officers.

Over the years it has become apparent that less and less of The Shelly area is available for this treatment as the soil condition moves away from one of pure sand. The soil is slowly becoming more charged with nutrients and broken-down plant material giving rise to greater coverage of grasses. Sooner or later It may well be a matter of brush-cutting these heavily affected areas and accept a reduced shelly-sand area for the birds to utilise.

The final preparation of raking the sand was carried out by HBOC volunteers over three visits in early July. Another good job well done.

*Figure 3. Volunteers begin the process of removing majority of vegetative matter on Big Island.*

*Figure 4. Removal of all woody plant material completed on Big Island.*

*Figure 5. NPWS field staffer operating the rotary hoe.*

*Figure 6. With the raking of the sand complete, this area can now be investigated by Pied Oystercatchers and Red-capped Plovers for nesting opportunities.*

## Ground Nesting Birds

Our resident Pied Oystercatchers were observed actively defending their territory during May and by late August were sitting on a nest scrape on Big Island. This first attempt only lasted a couple of weeks and by mid-September it was obvious that the nest had been abandoned. A second attempt came as no surprise and by late September the birds were sitting again. This attempt lasted at least three weeks before being abandoned and unfortunately no further attempts were made. This was despite several reports of copulation being witnessed over the next month.

Pied Oystercatchers have bred at the Sandspit since 2007 and not always successfully. So far though there have been slightly more (just) successful years than unsuccessful so we are always treating these events with a positive outlook.

| Successful breeding | Unsuccessful breeding |
|---|---|
| 2007 | |
| | 2008 |
| 2009 | |
| 2010 | |
| | 2011 |
| | 2012 |
| 2013 | |
| 2014 | |
| | 2015 |

*Figure 7. Pied Oystercatcher breeding success has been a stop-start affair at Stockton Sandspit.*

Every year since 2007, these resilient birds have taken advantage of our ground preparation work and while ever they continue to do so our resolve to provide them with this opportunity will continue also.

On the other hand, our resident Red-capped Plovers managed to have an average breeding success compared to other seasons with at least 5 attempts and 5 runners reared to independence. One interesting aspect observed over the last two seasons is the apparent lack of second clutches being attempted. At this stage there is no obvious reason for this but the birds have tended to vacate the sandspit once the initial spring breeding is complete.

*Figure 8. Bird's eye view of Stockton Sandspit in 1976 when it really was just all sand. (Tom Kendall)*

## Additional Works

Shorebird roost restoration work is tackled whenever the tides are low and the birds move off to forage. At times when the tides are full our attentions then turn to other areas adjacent to the roost.

Over the past year, 4 sessions of weeding through the planted areas near the Bird Hide or under the bridge was put to good use and all these areas were cleared of weeds at least once. A CVA Better Earth Team made great progress in this during December.

The various marsh areas also were swept for woody weeds on 4 occasions by these teams and the work here is gradually becoming less each year. The nature of the marshes these days means that rag weed and buffalo grass are at a minimum while native sedges and pig face dominate the ground.

*Figure 9. The marsh at Golden Plover Point cleans up in short time these days.*

**Acknowledgements**

The project continues to succeed because of the valuable input by many people and this aspect is gratefully acknowledged. It is a partnership of people and organisations that provides the structure for it all to happen.

Thankyou National Parks & Wildlife Service, Kooragang Wetlands Rehabilitation Project, Conservation Volunteers (Australia) and Hunter Bird Observers Club.

To every person who has volunteered and left some part of themselves at this amazing site, your contributions have produced many good outcomes and the sandspit-shorebirds continue to benefit from your care.

Tom Clarke

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January 2016

*Figure 10. For most of October the rare sight of a Beach Stone-curlew was a feature of the roost. (Juliana Ford)*