



Hunter Bird Observers Club Inc.

Affiliated with Bird Observation and Conservation Australia

P.O. Box 24, New Lambton, N.S.W. 2305

Telephone: (02) 4951 3872

www.hboc.org.au

ABN: 62 415 889 446

Annual Report Appendix C Shorebird Roost Rehabilitation at Stockton Sandspit Report of Volunteer Effort for 2010

Stockton Sandspit is a major day-time roost for shorebirds in the Hunter Estuary and is located adjacent to the Stockton Bridge approaches on the eastern end. The Sandspit forms part of the much larger Hunter Wetlands National Park.



Over the years, members of Hunter Bird Observers Club (HBOC) have kept a fairly high profile at Stockton Sandspit through wader surveys, club outings and habitat restoration. Restoration works initially focussed on the roost but these days also have a feeding and breeding habitat focus.

All restoration works performed at Stockton Sandspit are carried out in partnership with Kooragang Wetlands Rehabilitation Project (KWRP) and National Parks & Wildlife Service (NPWS).

This report attempts to chronicle the restoration works carried out in 2010, savour some highlights and discuss challenges of the future.

Core Focus Areas

Mangroves

The recruitment of mangroves is a seasonal occurrence at the Sandspit and the process of invasion will go on forever. The removal of new mangrove seedlings from the site is therefore a never ending story.



These days, of course, we are well on top of the situation and three easy visits in January accounted for the work. One visit dealt with the Lagoon and saltmarsh areas and another visit cleared the beaches. A third visit was needed so that seedlings established furthest out from the beach could be accessed on a very low tide.

Later in August we were surprised to see an early start to the next season's influx of mangrove seeds but the clean-up effort (by others) after an oil spill took care of that (refer to The Oil Spill).

Shelly and Big Island

The creation of shelly sand is another never ending story and represents the greatest effort for volunteers each year. Usually the work is carried out from May through to start of August and finished just in time for ground nesting types and returning migrant shorebirds. This year's effort was deliberately started early due to availability of volunteers and commenced late March. All work was completed by June.

To create shelly sand it is necessary to remove as much vegetative matter as possible from the substrate. For the previous two years we had used a walk-behind rotary hoe to do the bulk of the hard work followed by the manual effort of raking, piling and barrowing. It became apparent this year that the previously worked sand had retained some fluffiness and that simply hand removing plants would easily account for the majority of the work.



This was proven in a trial in late March when it was demonstrated that a large proportion of the vegetation could be removed simply by raking.



To complete the job it was necessary to weed the remainder. This was achieved through the efforts of a few dedicated volunteers.

Of course this work is well worth the effort and this year's breeding records are all the incentive we need. A whopping 78% (14 out of 18) of all nesting attempts by Red-capped Plover and Pied Oystercatcher had nests placed on prepared shelly sand.

Golden Plover Point

Another success story is the restoration of Golden Plover Point and as per usual it was targeted during April. Working this area makes for a nice change from shelly sand creation during the great winter effort. This area only took one visit this year to clean up as the lacy ragweed succumbs to subsequent treatment and the creeping effects of increased tidal influence. The occasional *juncus acutus*, pigweed, galenia, oenothera and marrum were all easily accounted for during that single visit.



One pleasing aspect of this section is the coverage of *Carpobrotus glaucescens* (pig face) that has been able to establish.

Salt Marsh

Saltmarsh continues to thrive and expand and the sight of a wonderful coverage over the Scrape is very satisfying. For some time we have been conscious of several saltmarsh weeds being present in the establishing saltmarsh community areas and have opted not to treat while this process took place. The reason being was that these

weed plants still did represent a saltmarsh community and in any case helped create structure and diversity.



Since we now have such a complete cover it was agreed to start removing the more aggressive of the invaders. One of these weeds is *Tetragonia decumbens* (African spinach) which has started to suffocate glasswort around the edges of the saltmarsh. It is easily dealt with and can be simply removed from the ground and turned upside down to die. Another weed of similar habit, galenia, was also treated.

On the other hand it is pleasing to report that areas of saltmarsh once supporting certain pasture weeds are weed free these days. One such area is the Levee Finger and the continued tidal influence has been its salvation.

Sweeps for woody weeds.

General sweeps for woody weeds over the non-roost areas occupies our time over the rest of the year whenever other core focus work is complete or access is denied by tides or ground-nesting birds.

The once much hated *heterotheca grandiflora* (telegraph weed) continues to succumb to our regular treatments and *Chrysanthemoides monilifera ssp. rotundata* (bitou bush) is hard to find these days but the decline in these species give rise to others.

Taking a hold on the place these days are species like galenia, soursob, wild oat and mustard. These various weed species present us with different challenges and do their best to keep life interesting.



A small patch of *Oxalis pes-caprae* (soursob) was found to be spreading in 2010. Complete removal of all plant parts is necessary to control this weed.

There was even time to go and remove morning glory from the mangroves and search for hidden exotic palms and juncus in the now impenetrable Banksia Grove.

The Oil Spill

On 25th August, 20 tonne of fuel oil was accidentally discharged with ballast water from a coal ship while taking on coal at Kooragang Island. The alarm was subsequently raised and booms placed in the South Channel to contain the spill but two days later oil was discovered washed up on Stockton Sandspit.

A clean-up around the Newcastle Harbour facilitated by Newcastle Port Corporation also included the Sandspit. National Parks and Wildlife Service people provided expert support and guided the clean-up in these sensitive areas. The clean up at the Sandspit was underway three days after the spill and was confined to the beach until an expert from DECCW could make it to the site for an inspection of the affected saltmarsh areas and offer recommendations on its restoration.

The oil had made it into all areas affected by the tide.



An inspection of the saltmarsh areas was carried out and the worst affected areas flagged. The entire site was secured with temporary fencing and a site shed installed. The clean up work continued every day for a month with gangs removing any item (sticks, plant parts etc) affected by oil.



But in the end it was cleaned up to a very satisfactory condition. Since then no ill affects have been observed and life has prevailed as per normal at the Sandspit.

Ground-nesting Birds

It has become the norm that whenever reporting on the various aspects of Stockton Sandspit these days that Red-capped Plovers and Pied Oystercatchers get a mention. This report will be no exception. The continuing successes of these ground-nesting birds not only bring joy and satisfaction but inspire us all to persist with the restoration work (refer to Shelly and Big Island).

Pied Oystercatcher



The year started off with our resident family of two parents plus two runners from the previous year's brood. The runners were born on 12th December 2009 and were seen flying to the cover of the mangroves by 31st January 2010.



Both runners continued to be supervised by the parents until one was kicked out around 11th April. The second remained with the parents until 2nd May.

After a well deserved rest over the winter months nest site inspection flights were observed in late August and occasional token nest scraping took place into September. By late September these birds were sitting again on Big Island in exactly the same location as in the previous year. Unfortunately this attempt was abandoned after only about one week but a second attempt was made soon after in a new location on the Scrape.



This new location proved to be very beneficial with regards to reduced disturbance by visitors to the Lagoon and a trouble free brooding went the full term with a single chick hatching out 11th November. Just at this critical time however the nest had

became awash with a series of very high tides but despite the flooding and a need for the parents to relocate the eggs a couple of metres these amazing birds produced another youngster.

The family continues to hang together with the youngster progressing very well. These birds first nested at the Sandspit in 2007 and since then have had 8 separate attempts producing 4 runners. To date all runners have made it to independence.

Red-capped Plover

The breeding efforts of Red-capped Plover at the Sandspit took on new dimensions this year. They included the latest (successful) breeding attempt, the earliest (successful) attempt, a record number of attempts, above average successful nests and hatching rates. In actual terms there were 16 nesting attempts with 9 successfully producing young. Out of 24 eggs laid, 17 hatched and 12 hatchlings progressed to independently feeding but still under supervision of parents.



Without individual colour banding it is too hard to follow the lives of youngsters once they become independent. However by using logic and making regular visits to observe and record it is easily possible to follow the fortunes of the youngsters since their birth days tend to be staggered. Since at any time the various runners will be at different stages of development and as long as they are still growing and changing their appearance then individuals can be identified.

Since 2003 we have recorded 72 nesting attempts with 33 successfully producing young. From a likely 97 eggs being laid, at least 53 runners feeding freely under supervision of parents have been observed.

We love our Red-capped Plovers.

Roosting Birds

Creating and maintaining habitat suitable for shorebird roosts has always been the prime focus of the restoration work. Initial success has been followed by continuing success and the sight of lots of shorebirds standing about all over the various zones of habitat is very satisfying.

This current season has seen reduced numbers of shorebirds (a complete lack of a few species) due to the exceptional rains that have transformed the inland into a mega-habitat. Despite that we have witnessed a remarkable year for at least one species worthy of note.

The Pacific Golden Plover was once a regular visitor to the Sandspit and it remains a key indicator species in the restoration of the site. The last couple of seasons have seen this species return to some extent but 2010 has been a wonderful stand-out. At the end of the 2009/2010 season it was possible to find 16 golden plovers roosting over the high tide. The preferred area has become the margin between Saltmarsh Finger and Golden Plover Point. February was the best month for golden plover sightings at that time.



To our great joy at least two birds decided to over-winter during 2010 and spent the entire time hanging out at the Sandspit. One was a mature bird in partial breeding plumage with a broken leg the other was an immature bird. The lives of these two birds consisted of loafing in the saltmarsh of the Scrape or standing about the Shelly over the high tides and moving onto the beaches to feed over the low tides. It was quite remarkable that on any day these two could eventually be found somewhere at

the Sandspit. The only time they went missing was over the period of the oil spill clean up.

They produced heightened euphoria for restorers during a moment of curiosity when they actually walked up to 5m away from the slow-moving creators of shelly sand. They were at once regarded as our new site supervisors.

By October the new arrivals had explored the estuary and at least 3 birds were seen roosting. This arrangement continued through November. By December numbers of roosting birds had increased to a staggering 43 birds on one occasion but settled to about 6 birds that regularly stood at rest over the high tide.

So for over twelve months now we have had an almost constant site presence of these beautiful birds. This is by far the greatest achievement in all our endeavours at restoration. There needs to be no other incentive to continue.

Volunteers

It is worth repeating here some words from last year's report. The simple medium-term objective of this project is to keep up the on-going maintenance of the roost and non-roost areas. While this may appear to be (and mostly it is) an easily achievable goal it will always be totally dependent on volunteers with passion and commitment.

There is always plenty to do and while some of the work is challenging, no one is expected to perform outside their comfort zone. Anyone with the desire to contribute should be encouraged to do so. While there is work to be done, taking breaks to carry out shorebird observations is actively encouraged. These observations tell us a great deal about the nature of the site and how the birds live here. In the end the bird's behaviours guide the restorers in planning and implementing the works.

The other benefit of being a restorer is the regular close encounters with sandspit birds and other wildlife. This remains one of the great joys.

Volunteer effort for 2010 recorded 408.5 hours bringing the aggregate since 2003 up to 3918 hours. This equates to \$68,670.37 of in-kind contribution based on standard bush regenerator pay rates. Not counting the annual spike in May (188 hours) an average of about 20hr per month is gifted to the Sandspit. This figure has been the constant for the last three years.

That annual spike of activity in May is mostly due to what is now a regular event organised through KWRP. The event this year included volunteers from 'Kooraa Gang', Muslim families associated with the Al-Ghazzali Centre, followers of the Rigpa Buddhist faith and a troop of kids from the 1st Stockton Scouts. What a wonderfully diverse array of cultures to descend upon the place and contribute in restoration.

Of course there is always a good representation of HBOC members and occasional interested people from the community that get involved.

Acknowledgements

As stated in the introduction, the restoration work is carried out in partnership with other organisations. In particular, the support from Peggy Svoboda (KWRP) and Jo Erskine (NPWS) needs to be acknowledged.

For their efforts throughout the year I need to thank the following HBOC members; Robert McDonald, Michaela McRae, Paddy Lightfoot, Judy & Tony Iveson, Melva Fisher, Robert Greig, Helen Windon and Darryl Luck.

Non-birding types from the Fern Bay community (Malcolm, Robert and Michelle) also need to be commended for getting involved and a Conservation Volunteers Australia person, Melissa Wilson has made a thankful contribution.

Finally, all the really good bird pictures in this report have kindly been provided by Darryl Luck.

Tom Clarke
HBOC Projects Coordinator
January 2010.