

# Shorebird Roost Rehabilitation Stockton Sandspit

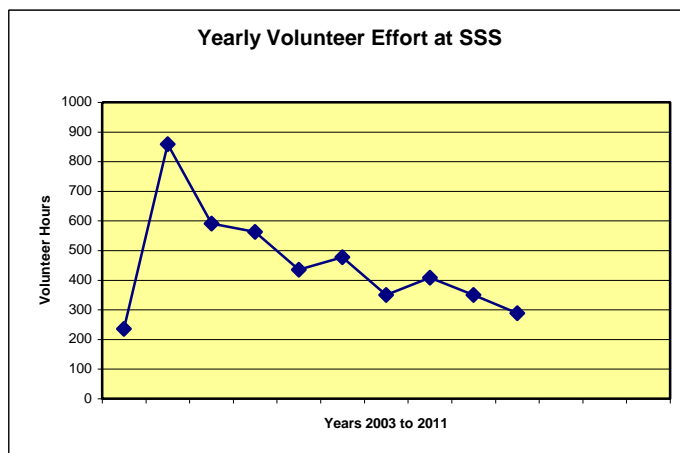
## Project Report 2012

The Stockton Sandspit continues to be one of the premier sites for roosting shorebirds in the Hunter Estuary. It also plays a vital role for some shorebirds as an interim place to forage and loaf during the mid-tide periods as well as provide nesting habitat for a few non-migratory shorebirds. Is it any wonder then that the Stockton Sandspit enjoys a wonderful reputation for producing good sightings for the many local and visiting bird observers?

Members of Hunter Bird Observers Club have been carrying out restoration works on this site for many years. In fact *a working bee to clear the samphire on the Wader Reserve* was arranged for Sunday 1<sup>st</sup> May 1977. Several weeding days have occurred since then but the concerted effort over the last 10 years has resulted in more than 4,500 hours of volunteer work restoring roost, feeding and breeding habitat. We are proud of our efforts and rightly feel that this contribution has helped in some small way to provide the ideal conditions for estuary shorebirds.

This shorebird roost rehabilitation work requires more than just the efforts of some HBOC volunteers to achieve the results. The project continues to be carried out as a partnership between several organisations with a passionate interest in the health of the estuary in general and shorebird habitat in particular. Staff from NSW National Parks and Wildlife Service (NPWS), Kooragang Wetland Rehabilitation Project (KWRP), Newcastle City Council (NCC), NSW Department of Industry and Investment (I&I) and Wetland Care Australia (WCA) have all contributed with planning and implementation of ground works, essential administrative matters and ongoing discussions regarding a variety of management issues pertaining to the site.

Volunteers from HBOC have enjoyed additional help from other groups volunteering their time including Conservation Volunteers, Raymond Terrace Venture Scouts, GIO, Newcastle Sportfishing Club and several generous minded citizens not acting on behalf of any group at all. The result was a 2012 figure of 288 hours of volunteer work carried out by 45 wonderful people over 43 visits. The total effort calculated in 'in-kind' dollars since 2003 now stands at over \$160,000; a remarkable feat in its own right but also a telling position statement of the investment that some people would place in shorebird habitat.



While the overall effort required in maintaining the shorebird roost continues to fall (and this is good thing folks!) the very pleasing aspect is the large number of people that offer their time and energy to the project.

## **Mangrove Removal**

Each year begins with the task of removing the previous season's mangrove seedlings from all areas of the site. This work is carried out under licence from I&I and the administration of NPWS. The current permit, P08-007, remains in force until **20<sup>th</sup> January 2013**. This will just allow for next year's effort but a renewal will certainly be required to allow treatment of mangrove seedlings in the future.

The January 2012 effort of removing mangrove seedlings proved beyond doubt that the year's production of seedlings has surpassed the previous year's literally by heaps.

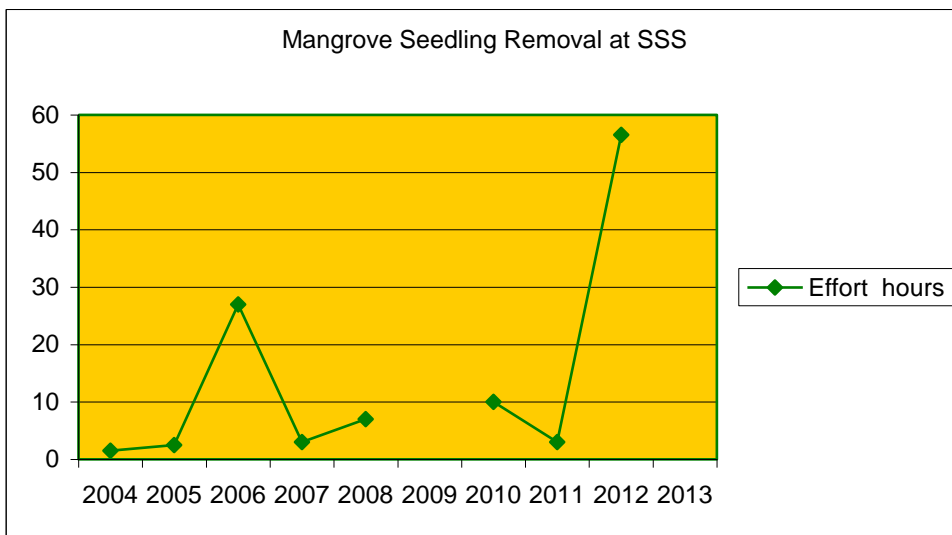


Seedlings were all over the mud flat areas and throughout the saltmarsh areas.



Seedlings were thick around the lagoon margins as well as within the 'green weed' of the lagoon.

Mostly we have enjoyed the relatively mild challenge of less than 10 hours of mucking about in the mud removing the new influx of seedlings.



However, this last year a total of 56.5 hours of work was required to finally clear the beaches and the saltmarsh areas of seedlings. This is the second spike we have witnessed in the last 10 years.

### **Treatment of Woody Weeds**

Treatment of woody weeds generally takes place in between other more focused efforts such as pulling mangroves or creating shelly sand. As opportunity presents itself time will be spent clearing the general non-roost areas of the various environmental weeds that continue to threaten the roost and saltmarsh areas.



The invading process of weeds never abates and detailed follow-up treatment of seedlings each year is extremely important if we are to maintain control. These bitou “puppies” are easy to remove and memories of the heavy work while doing the primary removal of the mother shrubs has faded somewhat.

### **Clean Up Australia Day**

Clean Up Australia Day has been going on at the Sandspit for many years and never seems to get easier. The amount of rubbish that accumulates at the site must be the product of a process not unlike that of invasive plants. The challenge never seems to lessen and totals of “34 bags of rubbish plus double that volume in large items” are entered onto the summary sheet like some pre-recorded Option A.



Large items typically include the odd car tyre, sink, printer, stove, building materials, chair and obligatory TV. These items just have to be dumped here by uncaring types taking advantage of the situation and other dumpings of garden waste continue to introduce a variety of weeds but these are not dealt with on Clean Up Day. Bagged items are mostly always food and drink packaging; much of which comes to shore on the tide.

Last year's clean up activities culminated in 47 hours of volunteer effort from a wonderful mix of people from diverse points of view and motivations including three members of the Newcastle Sportfishing Club. These gentlemen were horrified at the amount of rubbish left behind by so-called fellow fishermen.

### **Create Shelly Sand**

The creation of shelly sand over two nominated areas of the Sandspit remains the largest single effort of each winter season. During the winter months the site is at its quietest in terms of shorebirds as most have migrated to northern parts for a breeding attempt. The time between April and September is therefore used to good purpose in preparing the site for the next season's arrivals. Part of that time is spent creating the shelly sand habitat that many of the shorebirds like to stand on at roost and it is achieved through three main efforts.

The first of the processes aims to reduce the nominated areas of all the easy to remove woody weeds and a sneak day in late March got us off to good start. Three further visits in May were scheduled and after a 58 hour effort the site was ready for the second stage of the process.



Volunteers carrying out shelly sand prep work under the gaze of the ever-present “site supervisors”.



A day of pushing around a walk-behind rotary hoe was carried out by NPWS field staff which placed these areas in a condition easily raked clean of smaller herbs and grasses.



This was all done on 1<sup>st</sup> June and the result was truly awesome.



Raking the ground began a week later and 4 visits in June accounted for everything; the final phase of shelly sand creation was completed with a 39 hour effort and plenty of time to spare.



Of course we did get a wonderful boost along when a team from Conservation Volunteers Australia came to help on the last day. The CVA crew not only managed to rake the Shelly but also Big Island and still had time for a quick sweep over the saltmarsh areas chipping out Spiny Rush! Thanks to NPWS for arranging this work and thanks to the CVA team for their efforts and interest in the site.

### **Restore Marsh**

The extensive and flourishing saltmarsh at the Stockton Sandspit requires little attention these days and a single sweep over all the areas is enough to clear all the new season seedlings of Spiny Rush *juncus acutus*. This work was carried out in record time by the crew from Conservation Volunteers on the same day they helped complete the shelly sand raking.



The most dominant plant in the salt marsh is Beaded Glasswort *sarcocornia quinqueflora* and it is capable of flowering almost any time throughout the year.

Patches of fringing marsh also receive our care with general weeding treatment of exotic plants and the remainder of June and July was used to complete these tasks.

Fringing marsh comprising mostly Knobby Club-sedge *isolepis nodosa* and Pigface *carpobrotus glaucescens* exists on Golden Plover Point, at the Weir end of The Shelly and in isolated patches of the Lagoon Margins. These patches will change into saltmarsh in time as a result of sea level rise.



The simple task of removing exotic grasses and some herbs from these areas has enabled the native plants to more completely cover the ground. The resultant native plant community is a joy to behold as well as good habitat for non-shorebird types like foraging fairy-wren and pipit. The resident Australasian Pipit nests within the margins of the fringing marsh on Golden Plover Point.

### **Ground-nesting Birds**

For the team of restorers, probably the most celebrated and observed birds at Stockton Sandspit would be the ground-nesting birds. The dear little Red-capped Plovers are our unofficial site supervisors and the tenacious Pied Oystercatchers are our inspiration. While the focus of our work is that of providing a habitat with several roost options for the shorebirds the additional bonus is the opportunity for ground-nesting types to breed.

By mid July we realised that it was “that time of year again” as lots of Red-capped Plover courtship behaviours were witnessed. First nest of the year was discovered at the end of July followed by three others in early August. The first three failed (this is not unusual) but the nest discovered in mid-August was successful and resulted in 2 fully feathered juveniles by early October. What a wonderful experience for two observers who managed to be present at the time of hatching; 14<sup>th</sup> September at 15:45. Those fluffy runners are the most adorable things.

The Red-capped Plovers have enjoyed relative success at the sandspit with at least 90 nesting attempts (nest with eggs) located since 2003 and at least 39 (43%) of these attempts have been successful. Over that time at least 128 eggs (confirmed) have been laid resulting in 73 (57%) hatchings. From these fluffy runners we have confirmed at least 62 (85%) have progressed to feathered but still dependent juveniles.

The story is quite different for our resident pair of Pied Oystercatchers. First nest for the season was noted on 14<sup>th</sup> September but was clearly abandoned after a week of brooding. The location of this nest indicated that the birds had learnt some lessons

from the previous season where 4 attempts all failed due to a combination of disturbances and high tides. We always live in hope.

We didn't have to wait long to find a second nesting attempt on 1<sup>st</sup> October which once again failed; this time in less than a week.

The disturbances to these birds (oystercatchers) continues to be horrendous and between swamp harrier visits, gathers of green weed and people just wandering over the sandspit it is any wonder these birds can succeed at all. During this nesting attempt the behaviours were observed and noted for a two hour period and during that time the egg was covered for a cumulative 11 minutes only. A few days later the results were better when the egg(s) were covered for a cumulative of 32 minutes over an hour.



This family group (humans) that went walking all over the place took little notice of the signage and not only disturbed ground-nesting types but also roosting shorebirds.

At least 4 weeks passed by before a third nesting attempt was noted and my initial delight and excitement on discovering our Pied Oystercatcher sitting again turned to that of anxiety as I recorded several instances of disturbance over a period of two and half hours. A total of 38 minutes (about 25% of the observation time) were recorded for nest being uncovered from the following sources; bird watchers = 12minutes, swamp harrier = 10 minutes, sight seers = 6 minutes, photographer = 4 minutes, yabbie pumpers = 4 minutes and green weed gatherer = 2 minutes.

The issue of "crowd control" at the sandspit has been bought up on many occasions and I am pleased that recent discussions with NPWS have been positive in this regard. We have a massive task in educating people and "persuading" visitors to move through the area over designated paths but we need to start somewhere.

After a week this nest was abandoned due to fox predation.





The nest had been partially destroyed, assumed to be a result of the predation, and a likely fox scat found a few metres away on the saltmarsh. Further from the nest site fox paw prints leading away from the nest were found in a sandy patch of ground.

The fourth attempt just 12 days later also fell to the fox after a solid two weeks of brooding and all our hopes for success had risen. An inspection of the empty nest failed to find any evidence of eggs, however fox paw prints were discovered in the sand just 4m away. That fox is amazing!

Despite a fox baiting program carried out by WCA this cunning predator had outmanoeuvred all the best efforts of the pest management program.

Dummy baits were initially placed and when none were taken it was assumed that no fox threat existed. After the third nest failed due to predation live baits were placed. These were regularly checked and finally removed after it was apparent that no interest in the baits was being observed. The very next day the fourth nest was predated!

The oystercatchers have had a tough time of it at the sandspit but despite several setbacks continue to press on. The following table gives a brief history;

Year	Nesting	Comments
2007	1 attempt	Successfully produced 1 runner and subsequently raised to independence
2008	2 attempts	Both failed
2009	3 attempts	3 <sup>rd</sup> time lucky produced 2 runners and subsequently raised to independence
2010	2 attempts	2 <sup>nd</sup> time lucky but only 1 runner produced from 3 eggs. Runner subsequently raised to independence
2011	4 attempts	All failed
2012	4 attempts	All failed

Next season's challenge will be to manage the situation better and help those resilient oystercatchers to another successful breeding attempt.

### **Acknowledgements**

The project continues to succeed because of the valuable input by many people and this aspect is gratefully acknowledged.

NPWS staff have taken a real interest in this site over the last few years with both ground works like levee repairs, signage both temporary and permanent and support for many issues of site management. Thanks to Jo Erskine, Peta Norris and Boyd Carney for their constant support and to those NPWS field officers (Stephen Grimson and others) for on-ground contributions; the sandspit enjoys the benefits of your collective efforts.

Thanks also to Peggy Svoboda (KWRP) and the Koora Gang team for their efforts on planting days and other community events.

For valiantly taking on the wily fox situation; thanks to Louise Duff (WCA) and Paul Davo the fox man.

All those that have volunteered and left some part of themselves at this amazing site, your contributions have produced many good outcomes. The sandspit has benefitted greatly due to the efforts of the following;

Generous minded citizens – Melissa Wilson, David Small & Michael Scott.

Raymond Terrace Venture Scouts – 5 anonymous carers.

GIO – three anonymous carers.

CVA – six anonymous carers.

NCC – Lyn Patrick

Newcastle Sportfishing Club – Eddie Sitarz, Rod Unicombe & John Redman.

HBOC – Jerry Bullent, Liz Crawford, Melva Fisher, Juliana Ford, Anthony Gooden, Chris Herbert, Karen & Rod Howie, Judy & Tony Iveson, Leslie & Dick Jenkins, Caryl & Paddy Lightfoot, Robert & Michaela McDonald, Lorna Mee & Alan Stuart.

Tom Clarke  
Project Coordinator HBOC  
January 2013

