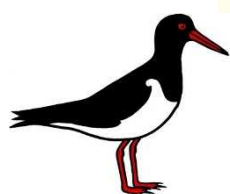




Office of
Environment & Heritage
NSW National Parks & Wildlife Service



SHOREBIRD RECOVERY NEWSLETTER

south coast

Sharing the shoreline

2016/17 Season

This Season in Shorebirds

The **South Coast Shorebird Recovery Program** (SCSRP) continues to protect shorebirds along the south coast from Wollongong to Batemans Bay, with the 80 strong local volunteer base concentrating on the on-ground protection of nests and chicks, while the wider program maintains significant community education and fox control projects. Most volunteers have now been with the program for more than 5 years. Local groups are working together under the guidance of site coordinators and the SCSR coordinator to develop a strong base for shorebird protection in their local communities.

The program continues to be successful in gaining grants, with the **Local Land Services incorporating the SCSR into their 2016/17 Catchment Action Plan** and providing significant funding to maintain our summer and school education programs. The **Local Land Services Enhanced Fox Control Grant** and **Crown Lands Fox Control Funding** are expanding our baiting, trapping and shooting programs around shorebird nesting areas and across the wider landscape. In addition the state governments **Saving Our Species** funding is contributing to predator control, education programs, nest protection equipment, volunteer gear and the Hoodie banding project.

This nesting season the breeding success of our critically endangered **Hooded Plovers** was a little down on last season with only 6 chicks fledged from the 13 breeding pairs monitored. The nesting season was very short with pairs nesting less than 3 times each and most only between October and December. Finding a suitable nest site was difficult, with east coast lows causing significant beach erosion

and many favourite nesting areas unsuitable, particularly early in the season.

The **Pied Oystercatchers** had great success this season with 21 chicks fledged from the 28 breeding pairs monitored around south coast lakes and estuaries. Volunteers are noticing local increases in their Pied populations, a good sign of recovery for these endangered birds. Plus more volunteers are getting out and about on the lakes and reporting nesting activity.

The **Little Terns** skipped Lake Wollumboola this season but returned to Lake Conjola in good numbers, with 42 breeding pairs fledging at least 61 chicks, but possibly up to 100! A great result for the colony.

Thank-you to all the amazing south coast volunteers who helped protect endangered shorebird nests this season. It was a challenging year, but overall the recovery program and shorebirds are doing well. We all appreciate your hard work, passion and dedication. Thank-you :)



A young Hooded Plover chick hides next to seaweed. Photo: Charles Dove

Hooded Plovers



Hooded Plover numbers on the south coast are still doing well with around 40 adult birds sighted again this season between Nowra and Batemans Bay. This is a doubling in the Hoodie numbers on the south coast in the last 8 years. In 2016/17 thirteen pairs of Hooded Plovers were observed nesting and regularly monitored by shore-bird volunteers and NPWS staff along the south coast.

The season started slowly with only a few early nests. Frequent cold snaps kept turning off the Hoodies breeding cycle. Pairs would begin to settle, start making nest scrapes but then a cold snap and they would leave. Overall the hoodies were very unsettled and really gave us the run around early in the season! It wasn't until October that most pairs started nesting. I had thought this might result in more later season nests, but no eggs were laid after new years despite the continuing warm weather. It was a short nesting season for the Hoodies.

With the increase in Hoodie numbers in recent years, a pair (L4/D3) finally took the leap north over Jervis Bay and nested at **Hammerhead** on Warrain Beach last season 2015/16 (between Culburra and Currarong). Although the 2015/16 nest was unsuccessful, we were all keenly awaiting the pair returning to the site for 2016/17. Local volunteers reported a nest scrape very early in the season, on the 13th of August, then a week later there were 3 eggs in the scrape and the Hoodies were incubating.

This was our first nest of the season and I met the volunteer team on site so we could discuss our best approach for protecting the nest. We observed ravens foraging very close to the nest, but surprisingly they did not find the eggs, so we decided on a low-key approach rather than drawing attention to the area. No fences or signs were installed, hoping that the Hoodie pair could distract potential predators and let the egg camouflage do its thing. Despite this area being part of Jervis Bay National Park, off leash dogs continued to be a problem, as well as foxes and ravens. On inspection on the 29th of August the eggs were gone, with fox and raven tracks right at the site, and some small pieces of egg shell was all that remained. From photos it appears the fox was the culprit. The volunteers con-

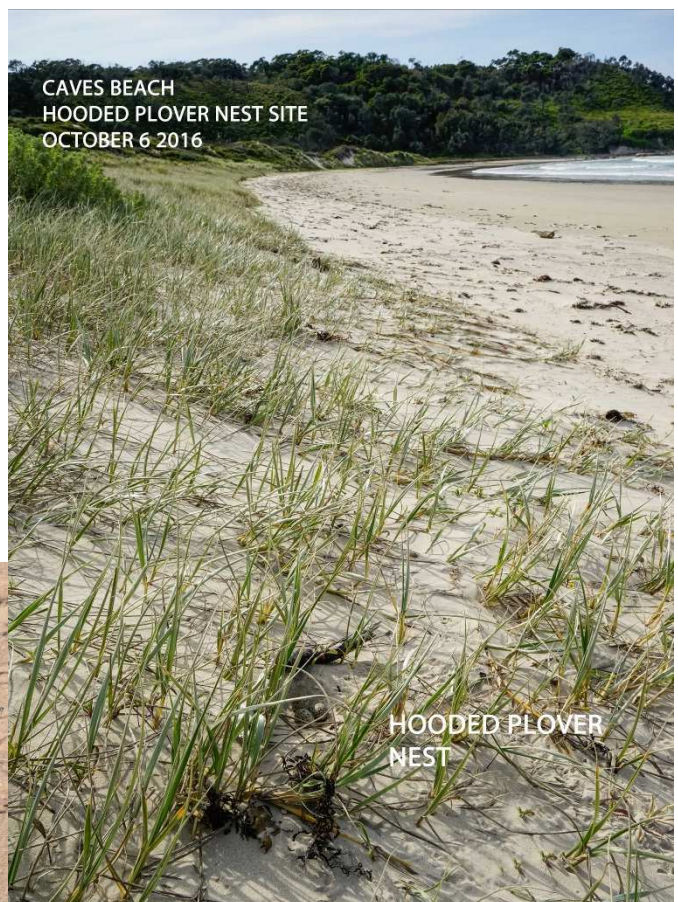
tinued to monitor the area and we were hopeful that the pair would nest again, but they were barely seen for the remainder of the nesting season.

A pair of Hoodies (C7/M9) nested at **Caves Beach** in Booderee National Park again this season. In late August nest scrapes were reported, and the pair were regularly sighted. However, it was not until October that a nest was laid and found by new volunteers, Chris and Marly Grounds. The 3 eggs were in the foredune and well hidden, nestled between the spinifex runners. Inundation and exposure to extreme weather were identified as risks associated with this south facing beach that often cops the brunt of storms. On the 24th of October the local site coordinator, Stan Brown, reported that the nest was gone due to strong winds and large seas. The pair were sighted back at Mary's Bay after their nest loss, then made nest scrapes at Caves but then returned to mate at Mary's Bay. Eggs were imminent but at Caves or Mary's?

In mid-November the pair were settling in at Caves, and a week later one egg was reported in their nest scrape. This nest was in a much better position, high up on the fore-dune and well out of the reach of big swells. Disappointingly, Army exercises disturbed the area with 20-30 personnel on the beach on at least 3 occasions. Local volunteer, Chris, attempted to move them on with no luck. Despite the disturbances the pair continued to incubate their well hidden nest, which now contained 2 eggs. A couple



Hammerhead Hooded Plover nest predated by foxes. Photo: Michael Jones



Hooded Plover nest on Caves Beach. Photo: Chris Grounds

Hooded Plover breeding activity in the NSW South Coast Region - 2016/17 breeding season

SITE	PAIR	NESTS	EGGS	CHICKS	FLEDG LINGS	EGG FATE	CHICK FATE
Hammerhead	L4/D3	1	3	0		Fx	
Caves Beach	C7/M9	2	3	0		SB	
			2	0		Ue (Fx/Go)	
Bherwerre Beach	ub/ub	2	1	0		Ue	
			1	0		Ue	
	K1/N5	susp	sighted: M9/C7/L4/J7/D3/N2/L7/K9/M4/C8/B1/E6/A2/B4/3ub				
Berrara Beach	N2/ub Monument Beach	3	2	0		Fx/R	
			3	0		Ue	
			3	0		Ue (R)	
Inyadda Beach	E1/L7	2	2 #	0		Ue/Ab	
			2 #	2	1	H	FI/Uc
Conjola Beach	D6/ub B8/J2	susp					
		3	2	0		R	
Buckleys Beach			2	0		R	
Conjola Beach			1	0		R	
Narrawallee Inlet	M0/J0	3	3	3	0	U (H?/HI?)	
			2	0		Ue	
			1	0		Ab (HI)	
Pockets Beach	A8/C9 Rennies Beach	2	3 #	0		In	
			3 #	3	3	H	FI
Racecourse Beach	J1/D4	1	2 #	2	1	H	FI/Uc
			sighted: N5/B4/B0/H5/N2/K9/2ub				
Wairo Beach	A4/M5	3	2 #	0		HI (kids)	
			3 #	2	0	H/nV	In
			2 #	1	0	H/nV	HI (atv)
Lake Tabourie	C5/E8	1	3 #	3	1	H	FI/Uc/R
Termeil Beach	E2/M2	susp					
Racecourse B Murramarang B	H3/J7	3	2	0		Ue (R/Fx/In)	
			3	0		Fx	
			3	2	0	H/nV	R/Uc
Pretty Beach	H7/P7	1	3	0		R	
SCR TOTALS	13 BP 40 HP	27	61	18	6		

Abbreviations
H = hatched
Ab = abandoned
FI = fledged

U(e/c) = unknown egg or chick loss
SB = sand buried
In = inundation
susp = suspected nesting

Fx = fox predation
Dg = dog predation
HI = human interference
= nest caged

R = raven predation
Go = goanna predation
atv = all terrain vehicle

of nesting area signs were installed in an attempt to keep the Army exercises away from the site. But sadly on the 12th of December the nest was empty, with a small set of fox and Goanna tracks nearby.

Bherwerre Beach is the south coast hotspot for Hooded Plovers, with up to 12 birds sighted along this 7km stretch of remote beach in Booderee National Park (Parks Australia). Despite the high number of Hoodies, very few nests are found, probably due to the ravens frequently patrolling the beach. Vehicles are also becoming an increasing problem on this apparently remote beach.

Bherwerre Beach is south facing and very exposed to storms and big swells. Over the last few winters the beach has been significantly eroded by the east coast lows, and has not built back to its original level. Consequently most of the beach is quite narrow and backed by high sand cliffs, not good Hoodie nesting habitat. There are a few areas wider area, more suitable for nesting, mostly dune blowouts or the northern end of the beach. Perhaps this beach is more important to the Hoodies as a feeding and meeting place?

A nest was found on the 11th of September, a very new nest as only one egg had been laid so far and an unbanded pair of Hoodies were seen nearby. When the site was checked 2 weeks later, the egg was gone. A little further along the beach a new nest was found in a dune blowout, again with only one egg and the unbanded Hoodie pair nearby. A week later this nest had also disappeared and fox tracks were observed indicating the culprit.

Despite the numerous Hoodies on the beach including pairs regularly sighted together (K1/N5, E6/A2) no other nests were found this season. Other birds sighted include C8, B1, B4, K9, M9/C7, L4/D3, J7, N2, L7 and 3 unbanded birds

Further south at **Berrara Beach** (Conjola National Park), the resident Hoodie pair (N2/ub – K3 was lost after last season and replaced by an unbanded bird) nested towards the southern end with a 2 egg nest fenced and sign posted on the 14th of September. However, sadly the nest was soon lost, probably taken by Ravens with tracks at the nest site. The pair continued to be sighted and a 3rd Hoodie (C8) visited for a time, possibly disrupting their subsequent nest preparations.

The pair did not renest until early December when 3 eggs were found on **Monument Beach**. The site was quickly fenced and sign posted as numerous dog walkers frequent the area walking north from Bendalong. The eggs disappeared within a week. The pair renested further north along the beach, up on the embankment at the back of the beach. The eggs were well hidden between the grass and out of the way of beach users and dog walkers. It was fenced and signposted and again lost within a week, this time ravens were known to be the culprit. Three nests and no chicks for this pair.



top to bottom: The Caves Beach second Hooded Plover nest—well hidden in the top of the foredune, Army exercises on Caves Beach, the Berrara breeding pair N2 + unbanded, Photos: Chris Grounds and Mike Clear

At **Inyadda Beach** the hoodie pair (L7/E1 – D5 lost after last season and replaced by E1) were sighted on the beach throughout Spring, however the pair did not nest until the weather was nice and warm in November. A 2 egg nest was found at their favourite site by the creek at the southern end of Inyadda Beach. But within 2 days one of the eggs mysteriously disappeared. The local volunteers, Terry and Carol, quickly installed a protective cage over the remaining egg and also added a few sandbags along the side in case the creek flooded. The parents continued to incubate the egg for a week, then abandoned it. There was heavy rainfall and huge tides, so we are not sure if this discouraged the nesting.

On the 4th of January, a 2 egg nest was discovered only metres from the original nest site. Both eggs were quickly



Hoodies in flight. Photo: Charlie Dove



Buckleys Hooded Plover pair B8/J2. Photo: Charlie Dove

caged and protected. The parents incubated the nest through the school holidays and both chicks hatched out in mid January. They survived the remainder of the summer holidays and the Australia Day rush of beach visitors and were doing well foraging around the creek inside their protective fenced area. As they grew, the chicks began taking trips out onto the beach to forage along the tide line and in the seaweed. Sadly, in early February one chick was lost to an unknown cause. The last chick survived to fledge in mid February.

Further south at **Conjola spit** and along the beach a pair of Hoodies (D6/ub) were sighted early in the season with nest scrapes, but no eggs were found. Hopefully the pair try again next season.

On the southern end of **Conjola Beach** (Narrawallee Creek Nature Reserve), the north Buckleys Beach pair (B8/J2) nested in the dune blowout/lagoon area with 2 eggs in October. The area was fenced and sign posted, and within a week ravens had predated the nest. The pair returned to **Buckleys Beach** and nested in their usual spot at the northern end with one egg. A couple of signs were installed to discourage people from walking on the higher area of the beach where the nest was located. But again the nest lasted less than a week. The pair then relocated back to south **Conjola Beach** with another single egg nest reported in mid December, but that was lost a week later, again to Ravens. This last nest was not fenced or sign posted but the Ravens still found it easily.

On the southern end of Buckleys Beach (Narrawallee Creek Nature Reserve) the resident pair (M0/J0) nested on the northwest corner of **Narrawallee spit** with 3 eggs in mid October. The area was fenced and signposted. The eggs were due to hatch in mid November but when I visited the site on the 14th, there were no eggs in the nest and the adults appeared very agitated. I hoped that chicks were present but hiding, however further inspections later in the week, and no chicks sighted. Contestants from an international adventure race, Geocentric, had just started passing through the area that morning and had cut in between the two fenced areas to swim across the inlet. The disturbance

or direct impact of all the foot traffic may have resulted in the loss of the chicks. Almost 400 contestants passed through the area over the following 3 days. A significant disturbance for this usually quiet area.

The pair re-nested in late November inside the main fenced area on the spit where the Pied Oystercatchers had already hatched out their chicks. The 2 eggs were progressing well and chick shelters were strategically placed nearby in preparation for the hatching. However the nest was lost in mid December to an unknown predator. The pair had one final nesting attempt with one egg laid outside the fence on Christmas Eve. The local volunteer, Dom Toldi, fenced the site, but the damage had already been done due to excessive disturbance from holiday makers (and locals) flocking to the area and many taking their dogs across the inlet to the spit. The hoodies did not return to their nest. This was a very disappointing result for this usually successful pair of hoodies nesting on National Parks estate.

The **Bommie/Pockets/Rennies Beach** pair (A8/C9) nested on Pockets beach in mid October. The nest was quickly fenced, sign posted and caged on this busy town beach where off leash dogs and raven predation are often a problem. With the low level of the beach from the winter east coast low, a sandbag wall was also installed in an arc around the nest site to hopefully protect the eggs from any incoming big swells or king tides. When I visited the site on the 25th of October, the swell was huge and washing with great force all the way to the back of the beach. The fence, string and signs were mostly torn out, being washed around and tangled but thankfully still joined together. The cage was even bent out of shape and sandbags moved metres by the force of the waves. I quickly dashed in between sets of big waves to retrieve the fencing and pile it up on the embankment at the back of the beach, so as there was no chance it would get washed out. The force of that swell was amazing, and there were no signs of any eggs or birds.

The pair relocated to **Rennies beach** and nested with no one noticing for many weeks. Their well hidden nest site was in the low dunes at the back of the beach. I found it on

the 22nd of November and 2 days later a couple of helpful locals assisted in fencing, signposting and caging the nest. Within two weeks all 3 chicks had hatched, and upon entering the beach I saw a black Labrador chasing one of the adults along the shoreline. I raced after it, yelling out to the owner. None of us had any idea that the chicks had already hatched, and as she restrained her dog we saw the 3 little chicks emerge from nearby seaweed and hightail it back to the safety of their fenced nesting area! Wow, nice predator distraction work parent Hoodie!

After that encounter we installed a lot more signs and even extended the fenced area down from the dunes onto the beach, to try and give the birds a safe zone for getting to the shoreline to feed and cool down. This beach is one of the doggiest, and yes mostly off leash, beaches on the south coast. I freaked out nearly every time I went to that beach, numerous times the chicks were happily resting in a clump of seaweed right by a dog who was thankfully more interested in watching its master surf! Amid all of these dogs, all three chicks fledged in late December. An amazing result that makes me wonder whether all the dogs and people kept the ravens and foxes away? Or whether these hoodie parents have finally learned how to distract the dogs from getting their chicks? Whatever it was, it worked for the birds at Rennies this time.

Down at **Racecourse Beach** the local volunteer finally found a nest for the resident Hoodie (D4/J1). Both chicks hatched and one chick fledged successfully. See local site coordinator Chris Brandis's article for more info on his alternative nest protection techniques! Other birds sighted at the popular Hoodie spot, Racecourse ledge, include N5, B4, B0, H5, N2, K9 and 2 unbanded adults.

At **Point Northeast** (north Wairo Beach) the local pair (A4/M5) attempted nesting 3 times, but frustratingly between the vandalism from kids and the ATV's (all terrain vehicles) on the beach, the Hoodies didn't have a chance at this seemingly remote spot. See Chris's article for more info.

At **Lake Tabourie** the local Hoodie pair (E8/C5) were sighted around the lake entrance area throughout September and October, and a fence was even installed to give them some space. But then the pair went a couple of hundred metres north along Wairo beach and nested in the low dune at the back of the beach. The 3 egg nest was found by local volunteers on the 1st of November and quickly caged, fenced and signposted the next day. On the 24th of November, I was walking south from Dolphin Point to Bawley Point and thought I would quickly have a look at the nest. I went around the back of the fenced area so I could look down on the cage and not get too close. To my surprise, the Hoodie was still on the nest despite me being only 10m away, but it jumped up quickly and ran off. Out tumbled one little freshly hatched chick, no eggs left in the nest and then as I looked past the nest cage there was a second chick, fluffy and running after the adult. Where was the third?



The 3 young Hooded Plover chicks at Rennies Beach with a parent; two of the three successful Rennies fledglings with an unbanded adult; the just hatched Racecourse Beach Hoodie chicks inside the protective nest cage; only one Racecourse chick remains at 3 weeks age; the Racecourse Beach fledgling. Photos: Charlie Dove, Jodie Dunn and Chris Brandis

Hooded Plover nest protection, a slightly different approach

by Chris Brandis

At Racecourse Beach in the 2014/15 season, local shorebird volunteer and photographer, Charlie Dove saw Australian Ravens (AR) take a Hooded Plover (HP) egg and then for the whole season no more eggs were sighted. During the 2015/16 season we again failed to find any eggs and I saw one AR fly over the area. It saw the 2 HP's resting in scrapes and circled down landing by the HP's, walked over and frightened them off their scrapes and checked if there were anything there to eat, like fresh eggs. The area was always covered in AR footprints checking every nook and cranny that a nest scrape could be. A similar situation was also noted at Point Northeast, where one egg in a scrape disappeared in the 2 hours before I could get a nest cage over it.

There was talk of getting the contract shooter in, but as AR's are very clever, the new or remaining birds would quickly learn to avoid the man with the gun. So, I thought why not teach them that eggs are not good food. I got some quail eggs, which look similar to and the same size as HP eggs, emptied out the contents and re-filled them with the hottest chilli sauce I could find, then made scrapes in the nesting area and put 2 eggs in each. For the first 2 weeks over a dozen eggs were taken then some would be pecked open and left and then some were left for days and AR footprints in the area seemed to reduce.

The Point Northeast pair laid one egg and we were able to get a cage over the nest before it was lost and they laid 2 more and eventually raised and fledged 3 chicks in late 2015/16 season. The Racecourse pair did not seem to have laid and some AR's were still prowling around. I read that some animals and birds are not affected by hot chillies so I made up another different nasty smelling solution.

These were used from the start of the 2016/17 season and only a few eggs were taken before they were left untouched. AR and fox prints became uncommon in the nesting area. During the season we managed to cage 3 nests at Point Northeast and one at Racecourse beach, the first for 3 seasons, without losing any to predators, except feral kids. AR's were still present on the beaches but did not seem to focus on the nesting areas as much as before. Finally, HP eggs were sighted before they were lost to AR's, and the nests could be caged giving the parents a much better chance of at least getting chicks to hatch.

In 2016/17 season the Racecourse Beach pair (J1/D4) fledged one of their two chicks that hatched, while at Point Northeast (A4/M5) one nest was vandalised by kids, and the other two nests hatched but chicks were thought to be lost to inundation, all terrain vehicles on the beach and sea gulls. But we did have chicks!



Photos L to R: Decoy nest, eggs gone and Australian Raven prints; typical Australian Raven prints; hooded Plover nesting safely in the nest cage at

There were Raven tracks everywhere and as I continued walking south I saw three ravens fly down to the nesting area. I ran back and threw some sticks at them and scared them off, then quickly called the contract shooter. Dean came down and shot 3 ravens and the remaining 2 chicks survived that day. However, a few days later another chick was lost. The parents headed north with the remaining chick and at almost 4 weeks of age, myself and the local volunteers, Cathy and David, trapped and banded this little one, H5. It fledged a week later and is now sighted regularly on the Racecourse Beach rock ledge with the winter flock of Hoodies. H5's hood is almost fully black now and this little one may even nest in the 2017/18 season if it finds a suitable partner and breeding territory.

Frustratingly the resident **Bawley Point/Meroo** National Park Hoodie pair (M2/E2) did not settle for long this season. The pair frequently moved between their usual nesting site at Willinga Lake and their 2015/16 nesting site at Termeil Beach, requiring monitoring and tracking by 2 volunteer groups. Disappointingly a nest was never found, even though nest scrapes were sighted at Termeil Creek. This pair have nested successfully in the past, let's hope they are not 'over the hill' and nest again next season.

Further south at **Racecourse Beach**, Kioloa, the Hoodie pair (H3/J7) nested up in the dunes with the first egg found on the 15th of October. The fence was installed and another egg added to the scrape the following day. The pair were not incubating and it was assumed they would lay a 3rd egg, but then the nest was mysteriously abandoned and the eggs lost to a predator on the 20th of October – fox, raven or magpie, all seen in the area.

The pair then relocated to **Murramarang Beach** with a new one egg nest found on the 19th of November. The nest was at the southern end of the beach, so just a few signs were installed to keep people and their dogs away. The 2nd egg was found on the 22nd of November and the 3rd egg reported on the 24th of November when the fence was installed. Sadly on the 9th of December the eggs were gone and only fox tracks remained, indicating the predator. The fox trapper was working in the area but did not trap the 3 foxes until 1- 2 weeks later. A bit too late.

The pair nested again at the end of December with another 3 eggs. This time the nest was in the middle of the beach, just north of the Swan Lake entrance area and was fenced and signposted the same day. This beach can be busy with people and dog walkers, especially during holiday season. The nest progressed well with the amazing local volunteers taking shifts to educate beach goers and hand out leaflets. The site coordinator even used the human hair on the fencing stakes trick to deter foxes. It worked and 2 chicks hatched out on the 21st of January, with the 3rd egg was collected as it was not viable. One chick was lost in the first 24 hours to an unknown predator/fate. The remaining chick was lost just over a week later, in the daytime and with raven tracks where last sighted, indicating



Top to bottom: The Tabourie chick hiding at one day old; foraging with parent Hoodie; now a juvenile, banded H5 and hanging out with the winter flock at Racecourse ledge in Ulladulla; new Hoodie nest at Racecourse Beach in Kioloa Photos: David Swartz and Robin Berkhout

the most likely culprit. Very frustrating after the fox trapper removed the 3 foxes causing the last nest loss.

At our southernmost nesting site at **Dawsons Beach** only one Hoodie was sighted throughout spring, H7, and K0 had disappeared. Then we started seeing nest scrapes and lots of tracks and were hopeful that she still survived. But to our surprise the female was not K0 but P7, one of last years fledglings from the far south coast's (FSC) Pooles Beach near Mystery Bay!

The pair had a 3 egg nest on the 26th of December. Our first ever known evidence of inter breeding between the south coast and far south coast populations. (Y8 had visited from the FSC in 2014 but then returned without nesting.) Sadly down at Dawsons Beach, after 2 weeks of incubation the eggs were gone and raven tracks indicated the predator. We hope this pair nest again next season. P7 was recently sighted at Mollymook Beach so at least she is still around!

Overall during the 2016/17 south coast breeding season thirteen pairs of Hoodies were monitored and incubated 27 nests containing 59 eggs. At least 15 chicks hatched out and 6 of these chicks fledged.



Far south coast Hoodie P7 at Mollymook Beach in June 2017
Photo: Charlie Dove

Little Terns



The first **Little Terns** were sighted on the south coast in October with small numbers passing through Lake Wollumboola and Lake Conjola. However no birds settled at Lake Wollumboola or Shoalhaven Heads this season, with the only south coast colony located at Lake Conjola.

During November numbers started to build at **Lake Conjola** and pair courtship behaviour was witnessed in the beautiful fish gifting ritual. Pairs began to settle and make practice scrapes on the sand spit and on the low dune step created by the spoil from the winter dredging of the lake. Much of the sand spit was eroded and low-lying due to storm surges and wash overs from winter storms, meaning any nests laid out there would be in danger of inundation. The first nest in mid-November was on the low dune, and by the end of the month there were 24 nests on the beach at the base of the

dune area, on the low dune step and even up on top of the big sparsely vegetated dunes.

A few nests were lost or abandoned due to bad weather but in general the colony was progressing well. More Little Terns joined the colony and further nests were laid. By the 11th of December there were 37 nests containing 91 eggs and the first 3 nests hatched out tiny fluffy chicks. By Christmas time the majority of nests had hatched and there were little chicks all over the nesting area, hiding in rocket bushes and chick shelters. The older chicks were starting to venture outside the fence onto the beach, gathering along the shoreline eagerly awaiting their parents return from fishing.

Boxing day saw the beautiful quiet Conjola explode with visitors. The winter dredge spoil had been used to nourish the beach between the caravan park and the spit nesting site, and this provided excellent beach areas for families to hang out while their kids played in the protected waters of the

Little Tern breeding activity on the NSW South Coast Regions—2016/17 season

Site	Pairs	Nests	Eggs	Chicks	Fledglings	Main Fate
Shoalhaven Heads	0	0	0	0	0	
Lake Wollumboola	0	0	0	0	0	
Lake Conjola	42	55	134	109	61-100	Ant / In / Ab / FI
Grand Total	42	55	134	109	61-100	

Abbreviations

FI = fledged

In = inundated

Ab = abandoned

Ant = ant predation

lake. This was great for the birds as the spit remained unusually quiet! Disturbance to the nesting area was at an all time low, except for the kids that kept sliding down the eroded sand cliffs on the western side of the nesting area. It was a constant battle of moving signs and fencing to try and control the disturbance and minimise damage to the sand dunes. Staff or volunteers visited the site most days to talk to beach goers and monitor the colony.

Thanks to the intense fox control in the area the spit remained fox free for the entire Little Tern nesting season and no eggs or chicks were lost to foxes. Sadly, a few newly hatched chicks were attacked by ants up in the dunes. The local volunteer, Col, picked the ants from any he found, to give them a second chance. A few more chicks were found dead from unknown causes. But all in all the colony was progressing well, with continued nesting through January, no evidence of ravens, gulls or foxes at the colony, and only a small number of nests had been lost to big swells and bad weather and one nest was stomped by a kangaroo.

The first chicks began to fledge in the new year, but initial fledgling counts were lower than expected. Perhaps more chicks had been lost due to the high levels of disturbance from summer school holidays and high visitation levels? Later fledgling counts picked up and at least 61 fledglings were observed by late January. However there was no reason why all 100 chicks did not survive. Estimating final fledgling numbers is inherently difficult, as all the chicks gather together and some families begin to leave the site early and head north. By early February the colony was deserted and the last few nests were abandoned. After the intensity of the Little Tern nesting with all the chattering and dive bombing, it was eerily quiet!

Overall it was a great season at Lake Conjola with 42 Little Tern breeding pairs incubating 55 nests containing 134 eggs. From these nests 109 chicks hatched and at least 61 chicks fledged, but possibly up to 100 fledglings for 2016/17.

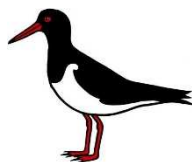


Beautiful Little Tern nest; freshly hatched chick awaits it's siblings arrival.
Photos: Jodie Dunn



Top to bottom: Little Tern flying in with a fish; chick hiding; new fledgling; parent supervising chick eating a bug! Photo: Charlie Dove

Pied Oystercatchers



On the south coast this season a record 28 pairs of Pied Oystercatchers were monitored nesting around our coastal lakes and estuaries and on beaches.

Long standing local shorebird volunteers have reported an increase in the number of Pies in their area, hopefully indicating the beginnings of recovery for this endangered shorebird.

At **Gerroa** the Pied pair fledged 2 chicks and down at **Shoalhaven Heads** the 3 pairs fledged a chick each. Gerroa site coordinator, Sally Leonard, has written an awesome article detailing their local Pied Oystercatcher protection program for 2016/17. Thanks Sally!

Further south on Comerong Island at the **Crookhaven Breakwall** (Comerong Island Nature Reserve), local NPWS ranger Valda and NPWS project officer Phil, reported a pair of Pied Oystercatchers nesting in late September. The nest was located on the breakwall and contained 2 eggs. The site was only checked intermittently due to the difficulty in accessing the remote island. On the 11th of October one chick was sighted at only a day or two old, following its parents northward along the beach and hiding in the vegetation. It was sighted again a few days later even further north but then on the 4th of November there was no sign of the chick and it was presumed to have been lost.

At **Lake Wollumboola** this season at least one pair of Pied Oystercatchers nested on the southern side of the lake entrance (Jervis Bay National Park). The lake was open so the first nest was inferred by the repeated sighting of a Pied Oystercatcher sitting atop the low dunes on the opposite side of the entrance channel in early September. However, after 5 days the Pied was no longer sighted and it was assumed the nest had been lost, probably to a fox.

In early November when local NPWS ranger, Alex Deura, was undertaking the fox baiting run along the southeastern corner of the lake, he heard the distressed calls of Pied Oystercatchers and then sighted a 2 week old chick. On his return 2 weeks later the chick was nowhere to be seen and presumed lost, again probably to a fox. Later that month, Pies were again reported as sitting on a nest on the southern side of the entrance channel, just west of the first nest. The volunteers paddled over to inspect the area and reported a 2 egg nest. The area was fenced and signposted to keep the crabbers and prawners away from the nest area. But sadly, within a matter of days a fox predated the nest.

Further south in the northern Jervis Bay area, on Defence land at **Beecroft Peninsula**, three pairs of Pied Oystercatchers were monitored by the local volunteer group and Diana Lindsay has written a report summarising their season of shorebird protection. Thanks Diana!



Top to bottom: Pied Oystercatcher "KW" of the Gerroa nesting pair; the 2 Gerroa chicks almost 3 weeks old; first flight of a fledgling; Lake Wollumboola nesting update signage Photos: Sally Leonard and Frances Bray

Pied Oystercatcher breeding activity in the NSW South Coast Region — 2016/17 season

SITE	PAIRS	NESTS	EGGS	CHICKS	FLEDG LINGS	EGG FATE	CHICK FATE
Gerroa	1	1	2	2	2	H	FI
Shoalhaven Heads/ Comerong Island	3 (CINR) (dune) (r'mouth)	1	2	1	1	H/In	FI
		1	2	1	1	H/nV (ro)	FI
		1	2	2	1	H	F/Fx
Crookhaven Breakwall	1	1	2	1	0	H/U	U
Lake Wollumboola	1	3	2	0		U (Fx)	
			2*	1	0	U/H	Fx?
			2	0		Fx	
Cabbage Tree Island	1	1	2	0		In	
Green Island	1	1	2	2	2	H	FI
Long Beach South	1	3	2	0		HI (crsh)	
			2	0		U	
			2	1	0	H/R	R
Creswell/Greenpatch	1	1	2	1	0	H/U	U
Sepulchre Island	1	1	1	0		AP	
Bherwerre Beach	1	2	3	0		U	
			2	0		U	
Oakay Island	1	2	2	0		U	
			2	2	1	H	FI/U
Sussex Inlet	1	1	2	2	2	H	FI
Berrara Creek	2 (early) (later)	1	2	2	1	H	FI/Fx
		2	1	0		U	
		1	1	1	1	H	FI
Conjola Entrance	2 (dune) (spit)	1	3	2	2	H/U	FI
		1	2	2	1	H	FI
Conjola Islands	1 (BR)	1	2	0		U	
	1 (east)	1	2	1	0	H/U	U
Narrawallee Inlet	1	2	1	0		U	
			2	2	2	H	FI
Burrill Lake	3 (Rman) (Wpen) (Epen)	1	2	1	1	H/nV	FI
		1	2	1	1	H/U	FI
		1	2	0		U	
Island Beach	1	2	2	0		Fx	
			3	2	1	H/nV	Fx/FI
North Durras	1	1	2	0		Fx	
Durras Lake Entrance	1	1	2	2	0	H	U
Batemans Bay Marina	1	2	3	3	0	H	U (HI?)
			2	1	1	H/U	FI
TOTALS	28	38	74	36	21		

Abbreviations

H = hatched
In = inundation
R = raven predation

Ab = abandoned
Fx = fox predation
ro = rolled out
* = nest not observed - assumed 2 eggs based on average clutch size

FI = fledged
nV = not viable
crsh = crushed

U(e/c) = unknown egg or chick loss
HI = human interference
AP = avian predation

Gerroa and Shoalhaven Heads Pied Oystercatchers 2016/17 by Sally Leonard

The Gerroa/Shoalhaven Heads shorebird area comprises 18km of exposed beach bordered by Crooked River in the north and the Crookhaven River to the south. The Shoalhaven River was open this season, separating Shoalhaven Heads from Comerong Island to the south. Nowra NPWS ranger, Valda Corrigan, is our rock and we all appreciate her dedication and enthusiasm for shorebird protection.

This season we had one nesting pair at Gerroa who fledged 2 chicks, two pairs on the Shoalhaven Heads side of the rivermouth who fledged one chick each and one pair on the Comerong Island side who also fledged a chick.

Gerroa is a newly recorded nesting site with one chick fledged in 2015/16. One bird is flagged "KW". The shorebird area is very exposed, very flat, it floods, is influenced by tides and only has a very small amount of beach vegetation and one log for cover and protection. Crooked River runs out to the ocean here.

The only thing that is abundant here is people, especially in the holidays. It is a "no dog" zone maintained by Kiama Council. Foxes and ravens have not been a problem at this site, as yet.

The main threat this season was a man using a very fast, large remote control car! And some photographers disturbing the birds. People generally stayed outside the string fence, but it was used to hang towels and swimmers on. These birds adapted really well and soon learnt that safety was within the fenced area. The parents would take the chicks down to the river early in the morning then retreat when tourist numbers grew. The tide caught the birds out a couple of times and I saw the chicks swim at just 4 days old, see photos.

The breeding area was inundated by a moderate tide of 1.6m with a southerly swell. The team laid sandbags to the east, outside the electric fence. This later built up to small sand dunes. The huge seas in October were very stressful, but "KW" and mate managed to fledge both chicks.

The 3 pairs at the Shoalhaven River all presented different challenges. The #1 (Rex's) pair nested in the sand dunes, but a huge swell and waves came through the area. Rex has monitored this female for 22 years and she has fledged 11 chicks. In 2016/17 she fledged one. The other Heads pair made their nest on a sand spit, the area was obviously going to go under, so Valda and Nicole removed the eggs, laid about 30 sandbags then rebuilt the nest on top, placing sticks and shells back as they were. This "throne" proved successful for the second year in a row and one chick fledged from the nest. Foxes, people and dogs are a real problem here. The Comerong Island pair were isolated by the river being open. We occasionally visited them by kayak or SUP. Foxes and ravens were their main problems until the ocean came up the river, see pic, but they too managed to fledge one chick.

Five fledglings from 4 pairs is a great success for the Gerroa and Shoalhaven River area.

A very enjoyable season of shorebirding was had by all. We look forward to 2017/18!

North Jervis Bay Team report by Diana Lindsay

The North Jervis Bay team monitors two bay facing areas within the Beecroft Weapons Range, Green Island and Long Beach South where Pied Oystercatchers are found. Here we work under Defence guidelines and management and the Defence Rangers erect and take down the nest protection fences. A pair of POC successfully fledged two chicks from a nest site on Green Island, see picture.

The Long Beach South pair laid three sets of two eggs, but lost all the eggs. Our team can only access the area when the Range is open to the public. Activities such as commercial fishing and towing boats along sand are permitted at Long Beach South. The loss of the first eggs appeared to be due to either of these activities. The second round of eggs were lost the day a fence was erected by Rangers. The POC then moved to another area of the beach where we expected success but the eggs were lost, we believe to raven predation around hatching time. The number of ravens on the beach was greater than our team had previously seen.

A better outcome for the Long Beach South POC was recounted in the children's book '*Long Before People...*' written by team member Diana Lindsay about the 2014/15 breeding season.

To our surprise several more POC were observed around Cabbage Tree Point, between the Green Island and LBS areas. One pair laid eggs which were lost during a storm surge in November. That nest site was poorly positioned, possibly a 'first nest' by this pair. We observed a lot of interactions between these birds and the Green Island POC - a Ranger suggested the new birds may be offspring of the Green Island POC.

So ten POC eggs all up, with two fledglings.





The Creswell Pied Oystercatcher chick around 2 weeks old visiting Greenpatch. *Photos: Chris Grounds*



Oaky Island Pied Oystercatcher nest in sea grass and Casuarina needles. *Photo: Brett Davis*

In early December, the Defence Environment Officer contacted us to report a Pied Oystercatcher nest on the southern side of Jervis Bay at HMAS **Creswell**, near Captains Lagoon. His team fenced and signposted the nest to keep naval residents clear of the area. There were no further reports until the 28th of December when a local shorebird volunteer sighted a Pied Oystercatcher family with a 2 week old chick at **Greenpatch**! Wow, right in the midst of very busy holiday season in Booderee NP. The beach south of Creswell runs all the way to Greenpatch, the dates and one of the parent birds “YW” yellow engraved leg flag confirmed that this was the chick from the Defence nest. The chick was only reported a couple of times, then by new years it had vanished. Sightings of the parents minus the chick confirmed it had been lost.

On the northern side of **St Georges Basin**, local volunteers Brett and Karen, reported a Pied Oystercatcher nest on **Sepulchre Island**. The one egg nest was discovered on the 12th of September but on further inspection on the 25th, the egg had been partially predated and the Pies nowhere to be seen. This looks like avian predation, a raven or raptor must have pecked the egg but was possibly disturbed or chased off before it could consume the contents.



The partly consumed Pied Oystercatcher egg on Sepulchre Island, indicates avian predation. *Photo: Brett Davis*

On the southern side of Jervis Bay, on **Oaky Island**, the volunteers reported a 1 egg Pied nest on the north side of the island on the 7th of September and another pair of Pies including “6L” yellow engraved leg flag looking nesty on the western end. A follow up inspection on the 20th had 2 eggs now in the northern nest and the western site abandoned, but shell fragments in a nest scrape indicating “6L” had nested but the eggs had been predated. Probably an avian predator by the shell fragments. A month later the northern pair had abandoned the site and eggs/chicks lost, but a new 1 egg nest was found on the southern side, probably the same pair as these nesting sites are only ~100m apart. This nest hatched in late November and 2 chicks were spotted using scopes from the mainland. Another egg must have been laid in the nest soon after the volunteers found it. One chick fledged in late December.

On **Bherwerre Beach** in Booderee National Park (Parks Australia) the local volunteers reported a Pied Oystercatcher nest in the middle of this 7km long beach. The 3 egg nest was discovered on the 4th of September but lost within a week, probably to a fox as indicated by the tracks through the scrape. On the 20th of September a new Pied nest with 2 eggs was found close by the original site, however it was also lost within a week.



Beautiful three egg Pied Oystercatcher nest on Bherwerre Beach. *Photo: Brett Davis*

On the far southern tip of Bherwerre Beach, along **Sussex Inlet**, a Pied Oystercatcher nest was found in early November. Volunteers, Sue and Ronnie had paddled over and found a 2 egg nest right near the Bay of Plenty Lodges in some nice low dunes. The following day they paddled back armed with stakes, string and signs and installed a protective fence around the area in preparation for the busy holiday season. We also spoke to the BOP staff and informed them about the endangered nesting birds and the fenced area. BOP was very supportive and leaflets were left for their patrons. Both chicks hatched out on the 3rd of January amidst holiday makers, and both survived to fledge in mid February. An amazing result!

At **Berrara Creek** (Conjola National Park) a pair of Pied Oystercatchers nested on the sand flat on the south side in early September. The local volunteers, Mike and Rose, found the 2 egg nest and quickly fenced and sign posted the area. The nest progressed well and the local Hoodie pair even visited in between their nesting attempts further south. A huge swell of 4.1m was forecasted for the 23rd of September so volunteers installed an arc of sandbags to protect the nest. The eggs survived the stormy weather and big seas and both chicks hatched in early October. In the first 24 hours one of the chicks was lost, probably to a fox. The remaining chick was sighted along the creek foraging with its parents during October, and then moving south along the beach feeding and hiding amongst the rocks at Mermaid Pools. Strangely the Pied chick disappeared after the 4th of November, about fledging age. We assume and hope that the chick fledged but it is very strange that it disappeared so quickly. Fledged Pied chicks generally stay with their parents for weeks if not months after starting to fly. Perhaps the whole family relocated?

A new one egg Pied nest was found at Berrara creek on the 9th of November, and assumed to be a second pair, as it seemed to soon for a re-nest if the almost fledged chick was lost? The nest was fenced and signposted the following day but was quickly lost to an unknown cause. The Pied pair persisted with another one egg nest on the 24th of November. This nest hatched in early January and the chick again moved down to the southern end of the beach to hide at Mermaid Rocks and avoid the summer holiday crowd at the northern end of the beach and the creek area. This chick fledged in early February. A great result. Definitely one if not two Pied chicks at Berrara!

At **Lake Conjola** two Pied Oystercatcher pairs nested on the spit, one partner of each pair has a band – one pair has a bird with a metal band and the other pair, one bird has a yellow engraved leg flag “1P”. One egg in a scrape was reported in early September, however the local volunteer, Col Ashford, could not locate this nest so it may have been quickly predated. There was a lot of breeding behaviour and nest scrapes from both pairs and finally on the 11th of September the metal banded pair laid an egg in the dunes, with a 2nd egg on the following day when the volunteer installed the fencing and signage. A small electric fence was in-



The Sussex Inlet Pied Oystercatcher sitting on the nest; two egg nest; the two chicks foraging between the seaweed; the final Berrara Creek Pied Oystercatcher chick almost fledged. Photos: Sue Tolley; Karen Davis and Mike Clear

stalled on the 13th to protect the nest from the fox frequenting the area. To our surprise there were 3 eggs in the scrape on the 16th. However strangely one egg was lost in early October, possibly to an avian predator such as a raven and the nest was back to 2 eggs. Both chicks hatched on the 18th of October and fledged in late November.

Meanwhile the other pair nested on the low dunes on the southwestern corner of the spit. Two eggs were found, fenced, sign posted and then even a small electric fence was installed all on the 15th of October. A very busy day for the local vol! Both chicks hatched on the 12th of November, but one was seen standing really still and then found dead when almost 2 weeks old. The remaining chick went on to fledge in late December. Intense fox control was carried out in the area, and 4 foxes removed by the trapping and shooting program. A fox was shot further south at Buckleys Beach in August and another on Cunjurong Pt in October. A fox was trapped at south Conjola Beach in October and another in the December. This likely assisted the survival of these 3 endangered chicks.

On the **islands in Lake Conjola** two Pied pairs were found nesting. On the island near the Annie street boat ramp a 2 egg nest was found on the 27th of September but when I returned 3 weeks later there were no eggs or chicks. The eastern island (south of Chinamen's Island) pair were seen mating on the sandflats on the 27th of September and incubating a 2 egg nest on the 17th of October. One small chick was sighted on the 8th of November but was gone 2 weeks later. The fate of chicks on these seemingly remote islands is a mystery, and possibly due to raptors such as sea eagles taking young chicks when they venture out onto the sandflats to learn how to feed, and are very exposed.

Further south at **Narrawallee Inlet** (Narrawallee Creek Nature Reserve) the resident pair had one egg on the 11th of August but it was gone within a couple of days, possibly to the fox on Buckleys Beach that was shot 2 weeks later. The pair renested in mid September just outside the large fenced area installed by the local volunteers. Extra signs were installed to protect the nest just outside the fence. Both chicks hatched successfully and fledged by late November.

At **Burrill Lake** 3 pairs of Pied Oystercatchers were monitored over the season. All three pairs have one partner with a yellow engraved leg flag making ID much easier. At the end of August a 2 egg nest was found on the western end of the private peninsula on the south side of Burrill Lake with pair "L9" in attendance. Then at the start of September "3D" had 2 eggs inside the lagoon at the private peninsula, "L9"s nest on the western tip had disappeared and "DY" had a 2 egg nest on the small island off the mudflats at Rackerman Crescent. In late September a young chick was sighted inside the lagoon with "3D" and the fate of the second egg/chick remains unknown. This chick fledged in late October. Meanwhile one of "DY"s eggs hatched on the small island off Rackerman and the other wasn't viable. This little chick survived to fledge in early November.



Top to bottom: Lake Conjola Pied Oystercatcher young chick; almost fledged chick behind its parent; Burrill Lake Pied Oystercatcher nest; Burrill lagoon chick with parent. Photos: Charlie Dove and Peter Lymbery



First egg of the Island Beach Pied Oystercatchers. *Photo: Robin Berkhout*

Down at **Island Beach** (Murramarang National Park) a pair of Pied Oystercatchers nested at the north end of the beach up on the grassy flat area with 2 eggs in late August. Local volunteers were very excited as it was their first Pied Oystercatcher nest. Signs were installed at either end of the beach to alert beach walkers to keep away from the upper beach area in this remote location. Sadly a fox took the eggs within a week. The pair renested further south at the back of the beach, near the small creekline with 3 eggs in mid September. Two eggs hatched and the third was non viable. At one week old a chick was lost, probably to the fox. The remaining chick survived to fledged in early December.

On **North Durras Beach** a nest was reported by an anonymous phone call. The local volunteer, John Perkins, inspected the area and found a 2 egg nest up on the grassy embankment at the back of the beach. The nest was well hidden and out of the way, except for the odd fisherman using a nearby track, so it was left unfenced or signed. Frustratingly a fox took the eggs a week later.



The beautiful North Durras Pied Oystercatcher nest looking out to Point Upright. *Photo: John Perkins*



The Durras Pied family checking out John's kayak. *Photo: John Perkins*

At **Durras Lake entrance** the resident pair nested with 2 eggs in their usual spot in the low dunes on the southern side of the lake entrance in late September. Fox tracks were seen and the human hair in a sock on the fence stakes trick was used to deter the fox. The contractor finally shot the fox on the 13th of October, a couple of weeks before the little chicks hatched out. Both chicks were doing well throughout November. The family was frequently sighted foraging around the edge of the lake. But the parents insisted on swimming their chicks across to the north side to the dismay of local volunteer, John.

The northern side was more disturbed and impacted by the boat ramp area with vehicle access to the beach and off leash dog walkers, despite being part of Murramarang National Park. Plus there was no fenced nesting area for refuge. John worked hard installing signage and talking to beach goers and dog walkers. Then sadly at 4 weeks of age both chicks disappeared. Very frustrating after all John's hard work and watching these little ones grow. If only they had stayed on the south side where we had removed the fox and installed a big fence to keep them safe.

At **Batemans Bay Marina** this season, the planned winter development works to install extra berthing arms continued into the Pied Oystercatcher season. Meetings with the developers and contractors allowed for work practices to be put into place to minimise disturbance to the endangered birds and their sand flats. The Pies nested with 3 eggs in August, which were quickly fenced and signposted. We also installed a small electric fence to protect the nest from the fox frequenting the area.

Dredging of the western end of the sandflats continued and the spoil was piped across the flats and used to reclaim land at the eastern end, along the Coachhouse Resort - Marina boundary. To see the loss of the Pies feeding grounds in both the removal of sandflats through dredging then the covering up of intertidal feeding areas by land reclamation was quite depressing. The dredge pipe work did not disturb the nesting Pies, however the concrete block wall built to contain the dredge spoil for land reclamation was not built to spec and partly fell down during operations.

The developers had also neglected to install the Geotech fabric lining on the wall, so it was tacked on the outside afterwards. This was poorly carried out and proved an issue

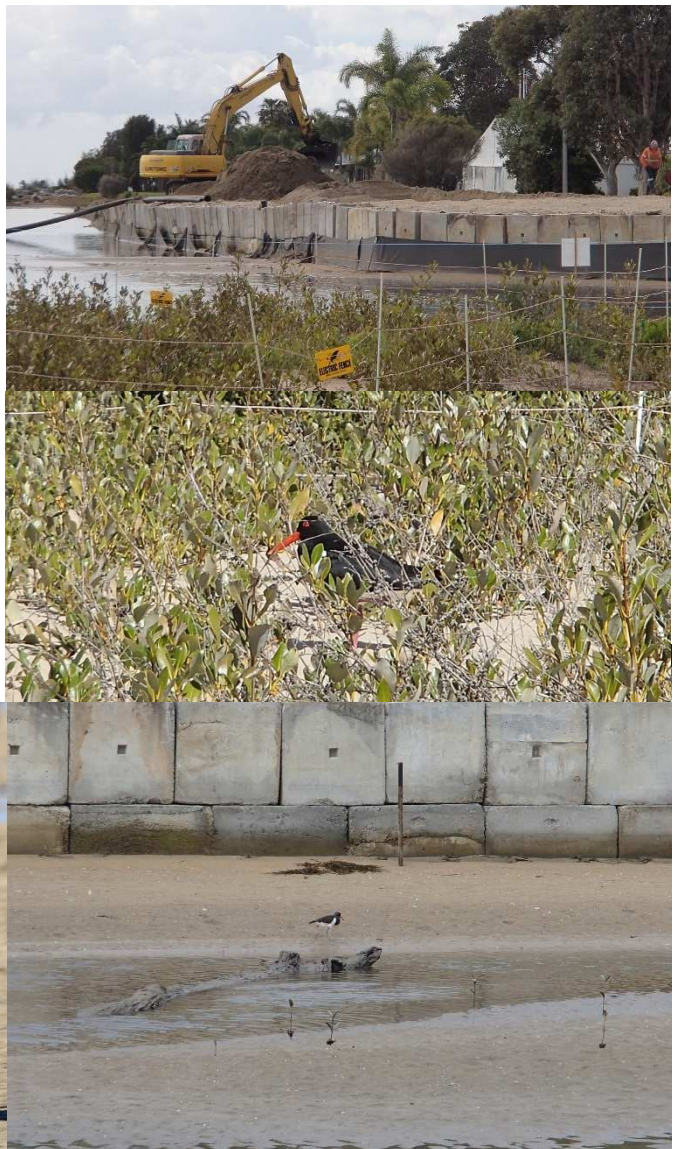
for the chicks. This wall was only 10m from the nesting area, and soon after hatching, one of the young chicks became entangled in the fabric, needing to be rescued by the local volunteers son. Only days later all 3 chicks disappeared. Their fate is unknown but with the already witnessed issues with the degraded fabric lining on the wall, fox activity and intruder Pies seen harassing the parents, the odds were stacked against them.

The persistent pair nested again with 2 eggs in mid November. Again the electric fence was maintained to keep foxes away. The nest hatched successfully and one chick was sighted in late December, but the fate of the second egg/chick is unknown. Surprisingly, this last chick survived to fledge at the end of January despite all the disturbance and works. A great result in such difficult circumstances.

Overall during the 2016/17 nesting season, 28 pairs of Pied Oystercatchers were monitored on the south coast and incubated 38 nests containing 74 eggs. From these nests, 36 chicks hatched out and 21 fledged.



Pied Oystercatcher in flight. Photo: Charlie Dove



Batemans Bay Coachhouse Resort land reclamation works with Pied Oystercatcher nesting area in the foreground; Pied parent determined to sit on the nest; Pied fledgling checks out the works. Photos: John Perkins

Sooty Oystercatchers

The south coast Sooty Oystercatcher nesting islands were not surveyed this season, due to lack of resources and funding.

However analysis of breeding pair numbers and nest/chick records from previous seasons where all 6 islands (Brush, Belowla, Wasp, Grasshopper, Tollgates and Snapper) were surveyed indicates that the population is relatively stable at around 65-70 pairs, typical of surveys conducted 2006/07 to 2012/13.

Next season the Sooty surveys will be a priority so that the population can still be tracked at least every second year.



Sooty Oystercatcher on the Racecourse rocks. Photo: Charlie Dove

Hooded Plover Banding + Genetics Report

The Hooded Plover Banding Project continues with most of the SC and many FSC Hoodies now banded with a black leg flag and unique ID code. Resightings of banded Hoodies in 2016/17, along with estimates of remaining unbanded adult numbers brings total NSW adult population estimate up to around 80 Hoodies, an increase of 30 adults since 2007/08 surveys.

Most breeding pairs are monogamous and nest at the same site with the same partner each season, however after the loss of a partner another quickly steps in and nesting continues.

A far south coast 2015/16 fledgling 'P7' was sighted on the south coast this season, then finally settled at Dawsons Beach in Murramarang NP with our own 'H7'. The pair nested in December with 3 eggs. Our first confirmed interbreeding and further confirms the link between the SC and FSC populations despite 100's of km's of unoccupied and unfavourable coastal line. But sadly these eggs were predated by ravens. Let's hope the pair nest again next season.

The genetics study of our Hoodies is currently underway. A family tree soon!



LLS Community + School Education Grant

The Local Land Services Catchment Action Plan funded a shorebird summer and school education program in 2016/17. The summer program included shorebird education stalls at local markets, ranger nest wardening - talking to beach goers and dog walkers and 'kids activity' sessions in caravan parks.

The school education program involved shorebird workshops for Stage 3 (yr 5/6) in south coast schools. The full day workshop involved an endangered wildlife + shorebird presentation, a scientific experiment on nest protection, small group rotations through workshops on lifecycles + food webs, shorebird quiz game and the danger run - a day in the life of a shorebird. Then we wrapped it all up by making prayer flags. This is where the kids get to combine everything they have learnt into a beautiful message for their local shorebirds.

Ulladulla, Milton, St Mary's, Sussex Inlet, St Georges Basin, Vincentia, Huskisson, Culburra and Shoalhaven Heads public schools in Term 2 2017. A total of 12 days across 9 schools reaching over 800 kids! It was great fun for us all and awesome to work with the local kids. Milton artist, Jules Sydenham, is now working with the schoolkids to create shorebird murals.



Summer Holiday Education Program 2016/17

Thanks to ongoing sponsorship from the Shoalhaven Holiday Haven Tourist Parks, the shorebird recovery program was able to once again undertake a summer holiday shorebird education program. Over 8 event days the education team set up morning 'shorebird education stalls' at beach reserves near nesting sites along the south coast, then in the afternoon 'kids activity' sessions were undertaken in the nearby Holiday Haven Tourist Park.

'Shorebird Education Stalls' include nest displays, photos, leaflets, stickers, free dog leashes, plus two rangers to speak to beach goers and dog walkers about local shorebirds. 'Kids activity' sessions involved an introductory shorebird presentation, painting calico bags, playing the shorebirds snakes and ladders floor mat game and colouring in shorebird postcards. It is estimated that these events reached around 600 people during the summer holidays.



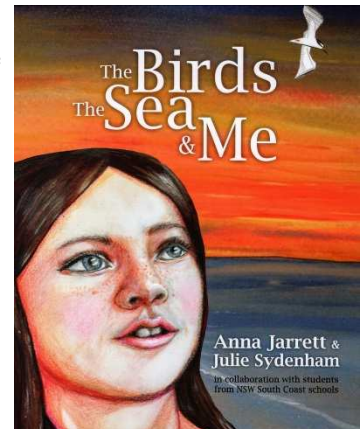
"The Birds, the Sea and Me" Kids Story Book

The creation of "the Birds, the Sea and Me" was funded by an Environment Trust grant in 2015/16. Writer, Anna Jarrett, oversaw the amazing process of running creative writing and art workshops in south coast schools with artist Jules Sydenham. Then the creative pair incorporated the school kids words and artworks into a beautiful storybook that captures the essence of the south coast and its endangered beach nesting birds.

The story follows 10 year old Rikki as she explores the beaches and learns about the shorebirds nesting there, while her Dad goes surfing. The Hoodies, Pies and Little Terns all feature in the story as well as their important nesting sites such as Shoalhaven Heads, Lake Wollumboola and Narrawallee Inlet. Every one of the 123 students involved in the project have at least one artwork incorporated into the book.

Books were donated to all south coast schools and libraries.

Additional copies are available for \$20 each from jodie.dunn@environment.nsw.gov.au



LLS 3 year Enhanced Fox Control Grant

Through the Local Land Services 'Realise the Potential of Wetlands' grants, the shorebird recovery program was successful in gaining 3 years of funding to enhance fox control on the south coast. 2016/17 was the final year of this grant.

The project included improving the baiting program - increasing the duration, adding extra stations and using temporary beach stations on NPWS estate to target problem foxes plus extra trapping and shooting nights, and working with private landholders for better landscape scale coverage in the fox control program.

All coastal National Parks estate are regularly baited in shorebird nesting season, however this project allowed an extension of 4-8 weeks for these programs to include pre nesting season fox baiting. Another 24 bait stations were added. In high risk areas such as along beaches in NP's we experimented with free feeding and adding poison bait once the fox visitation was confirmed, however after 2 seasons this was discontinued due to lack of success and we added an Autumn baiting session instead. The project approximately doubled the number of baits laid on coastal NPWS estate, resulting in 260 bait takes from 1073 baits laid in the final season (2016/17).

During the 3 years of this project fourteen beach foxes were trapped over 570 trap nights, 47 beach foxes were shot over 144 shooting nights and 73 foxes were shot on nearby private property over 48 shoot nights.

Overall the project significantly increased our fox control around nesting shorebirds.



Shorebird Vol Conference @Corunna Farm 2017

In late April, more than 40 south and far south coast shorebird volunteers gathered at the beautiful Corunna Farm to hear the overall results of our 2016/17 endangered shorebird nesting season, plus an update on grants, Hoodie banding and seabird rescue. We also had a fun interactive shorebird education session from the FSC discovery rangers. The conference was funded by our OEH volunteering unit.

This was a great opportunity for us to get together in a beautiful location, enjoy yummy food and a few drinks together, and debrief from the shorebird season just passed. Amy (FSC coordinator) really delivered with amazing wood fired pizzas for dinner, plus an array of nibblies and desserts including a 'Little Tern' cake. All this great food was accompanied by beautiful wines and beers and great company!

Thank-you to all the volunteers who came along :)







Saving our Shorebirds



South Coast Shorebird Recovery Program Registered Volunteers 2016/17

Durras / Batemans Bay	<u>John Perkins</u> Meryl Hannan		Pam McGilvery + Anne Finlayson Brett + Deb Stevenson
Bawley / Kioloa	<u>Marg Hamon</u> (Bawley) <u>Robin Berkhout</u> (Kioloa) Maggie Mance Steve Berkhout Sybille + Don Davidson Neil Brown + Judith Carroll Eve Jenkins Robin McTavish Debbie Andrews Cecelia Bradley Helen Nelson	St Georges Basin / Jervis Bay South	<u>Stan Brown</u> + Susan Garside-Brown Karen + Brett Davis Norm + Maureen Webb Barbara Liddle + Rob Dunn Robyn Hill + Doug Hargrave Yolande Cozijn Ian Brown Chris + Marly Grounds Wendy Hartman
Tabourie	<u>David Swarts</u> Kaye Milsom Joan Lonergan Cathy Stapleton Natasha Pritchard	North Jervis Bay	<u>Wendi Johnson</u> + Michael Jones Diana Lindsay Les Lawrenson Anne Norton
Burrill / Racecourse	<u>Chris Brandis</u> Bob Rusk Peter Lymbery	Wollomboola	<u>Frances Bray</u> Michael Abramowitz Thomas Kaar Narelle Wright Rick + Elly Kyoptke Duade Paton Matt Jones
Rennies	<u>Barbara</u> + John <u>Smith</u> Jensen + Linda Ruehle	Shoalhaven Heads	<u>Nicole Ison</u> Rex Worrell Teena Bronzino Harry + Joseph Bronzino Pat Tedder
Conjola / Narrawallee	<u>Col Ashford</u> Neal Cameron Carol Hodgetts Sandra Dodimead	Gerroa	<u>Sally Leonard</u> Barbara Haase Kim Leonard
Inyadda	<u>Terry</u> + Carol <u>McBride</u>		
Berrara / Cudmirrah	<u>Mike</u> + Rose <u>Clear</u> Margaret Webber Maree Menzies Sue Tolley + Ronnie Kroon Denise Dent		

Thank-you all for your passion + support  
  Jodie Dunn NPWS Shorebird Recovery Coordinator



The South Coast Shorebird Volunteer BBQ 2012. Photo: Richard Green