





This Season in Shorebirds

The South Coast Shorebird Recovery Program (SCSRP) in the south coast region (Wollongong to Batemans Bay), and in particular, the critically endangered Hooded Plovers, have had another great season! The program is really gaining momentum now, with more amazing breeding results for our threatened shorebirds and many passionate new local volunteers coming on board to help us protect nests and chicks on our beaches.

The **Hooded Plover** population is showing good signs of recovery with even more breeding pairs nesting on south coast beaches this season, a doubling in numbers over four breeding seasons! This is an amazing achievement for the program, and a great reward for all the hard work of the National Parks + Wildlife Service and the dedicated, passionate shorebird volunteers who tirelessly watch over their little 'Hoodies' each season. Thank-you all!

Sadly the migratory Little Terns mostly bypassed the south coast this season, but there was a large successful nesting colony further south at Tuross River. In the south coast region we did have a pair nest here at Burrill Lake for the first time since the 1950's, and they even fledged both chicks successfully. Let's hope more terns come back to the south coast next season. The Pied Oystercatcher numbers in the region got a boost with numerous volunteers getting out on the lakes and rivers to find new breeding pairs and nests for the program to monitor and protect. This information will help us get a better understanding of local population numbers, threats to nests and chicks and breeding success on our coastline.

All in all it has been another great shorebird season with more local volunteers joining the program and general awareness about our south coast shorebirds growing in the community. Thanks for your support everyone.



Hooded Plover and fledgling at Ulladulla Photo: Charles Dove



A Pied Oystercatcher family at Shoalhaven Heads Photo: C.Dove

Hooded Plovers

The critically endangered Hooded Plovers in the **south coast region** (Jervis Bay to Kioloa) are doing particularly well with yet another increase in the breeding population. An amazing fourteen breeding pairs (BP's) were monitored this season, an extra 3 BP's on last season and a doubling in BP numbers since 2007/08 season! Our hopes of a growing local population were confirmed by the annual beach survey in December which revealed a total of 38 'Hoodies' on our section of coastline (only 27 counted last season). This is an amazing result for such a critically endangered species! A doubling in breeding numbers in four seasons! Looks like our recovery efforts are working. We couldn't have done it without all the great volunteers.

Our northernmost pair of Hooded Plovers has now become two pairs with nests on both Bherwerre Beach and at Mary's Bay this season. Local rangers monitored the Mary's Bay pair which nested twice this season, with 3 eggs in each nest hatching three chicks. Sadly none of the October chicks survived but from the January chicks two went on to fledge. The second breeding pair at Bherwerre Beach was monitored by a great new team of volunteers who walked this ridiculously long beach several times throughout the season. Nice work Stan and Co! The 'Hoodie' pair nested three times with their first nest fledging one chick in November. Frustratingly, the second three egg nest was lost to ravens only days after being discovered. But then the third nest hatched three chicks in January, with one going on to fledge in February. Four fledglings is a great result for ACT's Booderee National Park!

Further south at **Cudmirrah Beach**, Sussex Inlet, the breeding pair tried nesting four times. The first nest was protected inside a nest cage and the nearby fox den fumigated just before the threatened chicks hatched in September. Frustratingly, the nesting area fence was vandalised twice, removed and dumped in the bush the first time and burnt the second time with the new chicks almost trampled. But our persistent local volunteers quickly reinstated



Banding tiny Hoodie chicks in Booderee National Park—Bherwerre Beach (L) and Mary's Bay (R). *Photos: Matt Hudson and Tony Carter*



The second Cudmirrah Beach nest got the works in protection, but was abandoned anyway! *Photo: J.Dunn*

the fence to protect the birds! Thanks for the hard work everyone, which finally paid off with one of the little chicks surviving to fledge in October. The following two nests were very low on the beach, not only exposing them to inundation but also predation by ravens. A sandbagging and nest caging effort resulted in the abandonment of the first nest, and then the second nest of only one egg was left alone but still abandoned for no apparent reason, then inundated! This was possibly a different more inexperienced breeding pair.

The last nest was laid high on the beach in the original nest scrape. This nest was caged to protect it from a fox in the area, however the predator tried to dig into the side of the cage as the eggs were hatching causing the adult to flee with one chick and abandon the remaining two eggs. The second Hoodie parent was nowhere to be seen, perhaps the fox had taken it when it was trying to defend the nest? Sue removed the two abandoned eggs and we attempted to hatch them in captivity using a heat mat and lamp. Both chicks hatched, but more than 12 hours late. Sadly, one died in less than 24 hours and the other had a crooked neck (probably from being in the egg too long) and was



Hatching out abandoned Cudmirrah eggs—heat mat buried under sand and lamp for temperature control plus digital thermometer. *Photo: J.Dunn*

Hooded Plover breeding activity in the NSW South Coast Region - 2011/12 breeding season

SITE	PAIRS	NESTS	EGGS	CHICKS	FLEDG- LINGS	EGG FATE	CHICK FATE
Mary's Bay	1	2	3	3	0	Н	Uc
			3	3	2	Н	1Uc + 2Fl
Bherwerre Beach	1	3	3	3	1	Н	2Uc + 1Fl
			3	0		R	
			3	3	1	Н	2Uc + 1Fl
Sussex Inlet	1	4	3#	3	1	Н	2Uc + 1Fl
			2#	0		Ab (cg)	
			1	0		Ab	
			3#	1	0	2Ab(fx)+1H	1Uc
Berrara Beach	1	1	3	0		R	
Inyadda Beach	1	3	2	0		Fx	
			3#	3	1	Н	2Uc + 1Fl
			2#	0		Ue	
Narrawallee Inlet	1	2	3	3	3	Н	3Fl
			3	3	2	Н	1Ue + 2Fl
	2	1	3	1	1	2In + 1H	1Fl
Bombie Beach	1	1	2	0		In	
Pockets Beach	1^	2	3#	0		In	
			2	0		Ue	
Rennies Beach	1	3	3	0		Fx	
			2	0		Fx	
			3#	0		Ab (fx)	
Burrill Beach	1	1	1	0		Ue	
Lake Tabourie	1	3	2	0		R	
			3#	0		1R + 2Ue	
			2#	0		Ab (fx)	
Meroo Beach	1	4	3#	0		Rat	
			2#	0		Ab (cg)	
			1	0		R	
			2#	2		Fx	
Willinga Lake	1	4	3	0		R	
			1	0		Fx	
			1	0		Fx	
			3#	0		Ab (fx)	
Kioloa Beach	1	2	3#	2	2	2H + 1Ab	2Fl
			3#	0		Ab	
TOTALS	14	36	88	27	14		

A l. l
Abbreviations

H = hatched Fx = fox predation

Ab = abandoned Ab(fx) = after fox dug around cage FI = fledged U(e/c) = unknown egg or chick loss

R = raven predation Ab(cg) = after nest caging $^{\sim}$ = same BP as above Rat = rat predation In = inundation # = nest caged euthanized. The intention had been to reintroduce these little ones to the parent and chick remaining on the beach. This last chick survived for almost two weeks before it was lost to an unknown cause, possibly the fox still in the area. A sad end to the season, but at least Sussex had one fledgling from that first nest. Still a good result for such a busy beach.

Late in the season a pair of Hooded Plovers turned up at the southern end of **Berrara Beach** and nested with three eggs partway up the embankment at the back of the narrow beach. A nice quiet spot and great for escaping any wave washovers. However, due to this quite steep location we could not install a nest cage and had to rely on the birds' natural predator distraction behaviour to conceal the nest. Local volunteers Mike, Rose and Margaret quickly fenced the area and began monitoring the nesting progress. But, disappointingly, in less than a week ravens had taken the eggs and the pair did not renest.

At Inyadda Beach in early September the local volunteer, Carol, found a partly buried abandoned egg, which may have been the remains of the local Hoodie pairs' first nesting attempt at the site. However soon after this an active 2 egg nest was located in the dunes. Sadly only a week before hatching the eggs disappeared, possibly to the fox roaming the site. A new 3 egg nest found a week later was quickly caged by Carol and Terry for protection from predators, and successfully hatched three chicks in early November. One chick was lost in the first week and a second was lost at three weeks age, but thankfully the third chick survived to fledging age. A fourth and last nesting attempt of two eggs, was found down near the creek line in January. The nest was again caged, however within a week one egg was lost and the second was cracked. The cause of these egg losses inside the cage remains a mystery. Again, four nests and a lot of hard work paid off with one little fledgling!

On the northern side of the inlet in Narrawallee Creek Nature Reserve three little 'Hoodie' chicks hatched on the spit in late September. All three fledged at this quiet site in October. About a month later another three egg nest was found slightly north of the spit at the back of the beach. Again all three chicks hatched out and began roaming the beach looking for food. Then surprisingly another pair of Hoodies nested at the northern end of the same beach. Sadly a big swell, high tide combination washed over this nest with two of the eggs lost and the third moved along the beach. The determined new pair continued to sit on this last egg and hatched out a chick which fledged in January. Meanwhile the original pair at the southern end of the beach had lost one of their chicks but managed to fledge two of their chicks. This brings the tally for Narrawallee up to an amazing six fledglings for the season.

At **Bombie Beach** in Ulladulla a two egg nest was found in early September, but it was inundated in a matter of days. The pair relocated to **Pockets Beach** further south and tried again with three eggs in November. However due to high rainfall over the last two years vegetation is growing quite low on the beaches and restricting the suitable nesting sites for the birds. Hoodies don't like to nest in plants, they like to be able to see any predators approaching. So this nest was in a clear low lying drainage line in the middle of the beach. The eggs were raised on sandbags, and nest caged, then the following day a sandbag wall added. Despite all these efforts a big wave washover and high rainfall still eroded under the sand bags and caused the nest sandbag tower to collapse to one side and split down the middle. The nest was divided in half with an egg on each sandbag, and consequently abandoned. The pair tried again with another two eggs in January, but again in the low lying area. A bigger sandbag wall was constructed this time in an arc a few metres from the nest, which seemed well concealed in the seaweed. In a matter







Narrawallee nesting *Top:* First little chick of the season *Middle:* Hoodie adult with chick now fledged (R) *Bottom:* The second nest at the back of the beach which eventually fledged another two chicks. *Photos: J.Dunn*



The well hidden Rennies Beach Hooded Plover nest. Unusual for Hoodies to nest in vegetation Photo: *J. Dunn*

of days the eggs were lost, possibly to a predator attracted in by the sandbags. No luck this season for the Bombie/Pockets pair.

A second pair in this area attempted to nest at the southern end of nearby Rennies Beach three times. The first nest of three eggs was lost, possibly to the fox known to be passing through the back of the nesting area. Any fox control is particularly difficult at this urban beach popular with dog walkers. A second well concealed nest closer to the front of the fenced area and further away from the fox pathway was progressing well and just about to hatch when sadly it too was lost to the fox. The predator was probably drawn in by the chirping of the just about to hatch chicks inside the eggs. The persistent Hoodie pair nested a third time and this time the nest was caged in the hope of protecting it from the fox. Meanwhile a careful soft jaw fox trapping operation was undertaken at the back of the nesting area in a desperate attempt to ensure the safety of any Hoodie chicks. But the operation failed to trap the cunning fox, who had now acquired a taste for Hoodie eggs and within the week had dug all around the cage trying to get the eggs and causing the pair to abandon their nest. Again no luck for the Rennies Hoodies. Very frustrating for local vollies John, Barbara, Ken and Kay.

For the first time on record a Hoodie nest was found at **Burrill Beach** early in the season by local volunteer Bob Rusk! With the lake being open, people and dog access was restricted and most of the beach was much quieter for nesting shorebirds. The single egg at the southern end of the beach was monitored for almost a month but then mysteriously disappeared. Both foxes and ravens frequent the area, and possibly found the nest or newly hatched chick. There was no more recorded nesting on this beach, however Hoodies were seen for most of the season, and will hopefully nest again next year.

Down at **Lake Tabourie**, after the success from our first Hoodie nesting season at this site last year, we had high hopes with the pair back on the beach again. But sadly our first nest of two eggs was lost to ravens within the week. The second nest in December contained another two eggs and the local volunteer, David, was keeping a close eye out for raven activity. One egg was soon lost to the avian predator and David guarded the remaining egg while a nest cage was installed. The Hoodie pair continued to sit on their lone egg and even laid another to bring the nest up to two eggs again. Almost two weeks later both eggs mysteriously disappeared from inside the cage and half an eggshell was found on the picnic area table at the nearby carpark. Perhaps dropped there by a raven? There has been a suggestion that determined ravens can squeeze inside the cage mesh! Or was it just interference by vandals?

A third nest of two eggs in early January was quickly caged again. However the odds were stacked against this pair and a fox dug around the cage, trying to get the eggs. The eggs were well protected with a mesh skirt buried beneath the sand to stop the fox getting in, however the disturbance resulted in the abandonment of this last nest. Frustrating! Some attempts at predator control were made throughout the season, however these were restricted and mostly unsuccessful at this urban doggy site and popular tourist destination.

Further south at Meroo Beach in Meroo National Park a pair of Hooded Plovers nested four times this season. The first three egg nest at the southern end of the beach was caged in late September due to high raven and fox activity. In a matter of days the eggs disappeared from inside the cage. A couple of days later, rat tracks were seen inside the cage and could explain the loss of these eggs? A second well concealed two egg nest was found in a dune blow out and again caged, but in light rain. The Hoodies abandoned their eggs perhaps due to the disturbance combined with the bad weather. A third one egg nest was found concealed in seaweed at the southern end of the beach, but was taken by ravens in a matter of days. In January a fourth and final nesting attempt of two eggs was caged and progressing well, until a fox discovered the nest and reached in through the wire mesh to scrape out the eggs. It must have had long legs! Such a disappointing result for this quiet, remote site in National Parks estate. Thanks for the long walks to monitor this remote site Eve.



Shorebird volunteers Maggie (centre) and Marg (right) meet Steve Austin (left) and his fox den detection dogs, Bolt and Echo. Photo: J.Dunn



Setting fox traps on the beach for the shorebird protection program: Livestock Health and Pest Authority Ranger Mark Sobierjski *Photo: J.Dunn*

Down at Willinga Lake the pair also attempted to nest four times. The first nest in September was probably lost to ravens drawn into the area by illegal campers on the beach nearby. The second and third one egg nests were both lost quickly, to a fox or possibly the raven again. The final nesting attempt of three eggs was caged to protect it from predators (first time a cage has been used at this site), however in less than a week a fox had dug around the cage, harassing the nesting pair and predating one of the adults trying to distract the predator from eating its nest. The remains of this Hooded Plover were found nearby surrounded by fox tracks. What a disaster and very sad for local volunteers Marg and Maggie. We hope that the remaining Hoodie returns to nest next season with another partner.

At **Kioloa Beach** the Hoodies get the works in nest protection from local volunteers Robin and Steve. The three eggs were protected by a cage and sandbag wall, and two chicks hatched successfully in September with the third egg abandoned. Both chicks went on to fledge in late October. But Robin was concerned that one was lost as it disappeared from the area soon after fledging. Thankfully both chicks had been banded and in December a pair of fledglings were sighted at South Tuross Beach on the far south coast with a confirmed metal band on the leg of at least one these birds. This is likely to be the banded pair of chicks



One of the two Hoodie fledgling sighted at Tuross Beach—probably from the Kioloa nest—note band on right leg *Photo: Pattie Parker*

from Kioloa who had travelled south after fledging. Still quite a long journey for such young birds but very interesting information on fledgling dispersal! A second nesting attempt in November was caged, but soon after, the nest was abandoned for no apparent reason. Strange.

This season on the **south coast** a total of fourteen Hooded Plover breeding pairs incubated 36 nests containing 88 eggs, hatching 27 chicks and fledging 14 of these chicks. This is a record number of nests found and monitored, a credit to all the local volunteers closely watching their local Hoodies. This will improve our understanding of their breeding success and nest threats.

This season there were a frustrating number of nest abandonments due to nest caging, bad weather, fox harassment or for no apparent reason at all. This may be due to the new inexperienced breeders which have been recruited into the growing local breeding population. Hopefully as these birds become more experienced, they will more readily accept our protection measures and generally become better parents. Next season will be very interesting for our Hooded Plovers.

Predator numbers appear to be on the rise, possibly due to the wet weather in recent years making food resources more readily available for foxes and ravens. In addition to the rise in numbers, these predators appear to be either learning to associate our nesting area fences and protective nest cages with a food source (eggs/chicks) or are generally just attracted to the foreign material on the beach. Either way, in regard to the high number of caged nests abandoned due to fox harassment or eggs that mysteriously disappeared inside nest cages (can ravens squeeze inside?) the validity of using nest cages needs to be reconsidered or the possibility of creating larger nest cages and perhaps using smaller mesh size. Motion sensor cameras used on caged nests may help understand these mysterious egg losses (as long as we can secure them!)

Overall the season has been a great success with an amazing doubling in the local Hoodie breeding population. Congratulations to all the volunteers!





Top: Hooded Plover congregation (with a couple of Ruddy Turnstones as well). *Photo: Karen Davis* Bottom: Hoodie chick *Photo: Mike Jarman*

Little Terns

With a record number of two and a half thousand Little Terns sighted on

their southwards migration in October, and large breeding colonies on the **south coast** in past seasons, we were expecting a big nesting season this year. Numbers began to build up at Conjola and Wollomboola throughout late October and in early November, but then one stormy day, the terns all left us and headed further south. The remainder of the season was relatively quiet with just a few nests here and there, which were mostly predated by foxes and ravens. The success story for the south coast was the new pair nesting at Burrill Lake. This site has not had Little Terns nest for more than 50 years! Both chicks fledged successfully and were our only two fledglings for the south coast region.

At **Windang** this season no Little Tern nesting was recorded. The 'Bird Island' nesting area was not reinstated by the Lake Illawarra Authority due to high rainfall flushing out the channel and a consequent lack of sand to work with (more info in Pied Oystercatcher section). A few Little Terns passed through the site, feeding and resting.

Further south at Lake Wollomboola, the first Little Tern was sighted at Lake Wollomboola on the 1st of November. Over the next week numbers rose gradually to a maximum of 19 birds on the 10th, but then a storm passed through and only 2 terns remained on site the next morning. Over the next couple of weeks numbers continued to fluctuate as birds passed through on their journey further south. Some were obviously paired, showing courtship and even nest scraping behaviour, however it was not until the 20th of November that the first nest of one egg was found. Due to the history of raven predation at the site, the nest was quickly caged. But disappointingly, something, possibly an avian predator still managed to get the egg from inside the cage by the next day. It has been suggested that a raven could squeeze through the cage mesh (100mm x 100mm) or a nankeen kestrel might manoeuvre through the top of the open ended cylindrical cage?

Adult Little Tern numbers remained low for the rest of the season, with a few breeding pairs making nest scrapes. A kite surfing event was restricted to the area of the lake which did not disturb the sensitive shorebird nesting area,



Egg predator evidence - Raven tracks and broken Little Tern eggshell at Lake Wollomboola. *Photo: Frances Bray*

in the hope of more Little Terns nesting. Finally in late December another one egg nest was found, but remained uncaged. A modified nest frame using two layers of mesh to make the grid size smaller and reduce the chance of ravens getting through was made up by the volunteers. However this double layering may increase the chance of Little Terns becoming entangled in the cage and the cage was not installed. This uncaged nest was predated by ravens within four days. There was no more nesting at the site, but small numbers of terns, including fledglings, did pass through on their northward migration at the end of the season.

Down at **Lake Conjola** the first pair of Little Terns were sighted on the 1st of October. Numbers fluctuated but generally rose over the following weeks with 40 LT's by the 2nd of November. Then suddenly a huge flock came in and there were more than 100 terns on site with our first 2 egg nest (at least one of the pair was actually a Fairy Tern - see photo next page) on the spit on the 8th of November. All signs indicated that this could be another big season for Little Terns at Lake Conjola, but then a big electrical storm came through that afternoon, the lone nest disappeared and all the LT's deserted the site. Ravens were seen loitering around the area, probably the predator of the nest. Over the remainder of the season small numbers of Little Terns passed through but there was no more nesting.

Little (and Fairy) Tern breeding activity on the NSW South Coast Regions—2011/12 season

Site	Pairs	Nests	Eggs	Chicks	Fledglings	Main Fate
Lake Wollomboola	2	2	2	0	0	R / AP
Lake Conjola	1	1	2	0	0	R
Burrill Lake	1	2	4	2	2	FI / In
Lake Tabourie	2	2	2	0	0	Fx
Grand Total	6		10	2	2	

Abbreviations				
Fl = fledged	In = inundated	R = raven predation	AP = avian predation	Fx = fox predation





Top: Little Tern at Lake Conjola, making nest scrapes. *Photo: Mike Danesh-Meyer.* Bottom: Fairy Tern on nest at Lake Conjola (note no black tip on beak + eye stripe does not continue to beak). *Photo: Ian Brown*

At Lake Conjola ravens predated numerous nests last season, so perhaps the terns remembered these losses and decided they were better off nesting elsewhere. This also appears to be the case at Wollomboola, since ravens decimated the colony in 2009/10? Another hypothesis for the lack of nesting at the usually successful Lake Conjola site, was a lack of suitable food source. The local shorebird volunteer reported that there did not appear to be many small fish in the lake for the terns to eat this season. Lake Conjola has been almost closed for two years and subjected to numerous artificial openings. The impacts on fish stocks are unknown, but may have lead to a lack of small fish for the terns, resulting in the birds leaving the site. Let's hope they come back to Wollomboola and Conjola next season.

For the first time since the 1950's a pair of Little Terns nested at Burrill Lake this season. Three adult birds were sighted on the 23rd of November, and then a pair settled to nest at the back of the beach on the northern side of the entrance channel on the 2nd of December. Sadly the first nest was washed away by big swells combined with king tides in mid December. However, the pair remained at the site and a second 2 egg nest was found higher on the dune on the 27th of December. In mid January both chicks hatched out, and hid in the grass at the back of the nesting area. The diligent parents regularly returned with fish for the growing chicks which both went on to fledge successfully. Additional Little Terns also began to pass through the site at the end of summer, creating a small flock of twelve which then left to migrate northwards. Hopefully they will all come back to nest next season.

Down at **Lake Tabourie** the Little Terns attempted to nest again this season. Like Burrill this site had its first nests in more than 50 years, last season, and it was very successful with all 7 chicks fledging. Eight Little Terns were sighted in mid December with numerous scrapes throughout the

nesting area, perhaps the same four pairs returning after their good season last year. The first nest of one egg was found and caged on the 20th of December, and a second pair were busy making nest scrapes. Sadly, on the 26th of December a fox dug under the simple cylindrical tern nest cage and predated the egg. But, meanwhile another single egg nest had been laid nearby by the other breeding pair. This nest had a cage with a buried skirt added, to stop the fox digging underneath. On the 30th of December the fox dug around and through the side of the cage and still managed to reach in to take the egg, very frustrating. Little Tern numbers fluctuated between 2 and 8 birds for the remainder of the season and a small number of new nest scrapes were made, but no more eggs were found.

Disappointingly the **south coast region** only had a total of seven Little Tern nests this season, containing ten eggs and hatching two chicks which both went on to fledge.

This recolonisation and success of the Burrill site is very exciting, as is the return of the terns to Lake Tabourie site to nest again. However the lack of breeding at Wollomboola over the past two seasons, and now the desertion of Conjola as well is very frustrating for these usually successful sites. Both colonies have been up to a hundred breeding pairs in size in the past and have had very good fledgling success. But, over the last few years ravens have predated many nests at both sites, and the terns may remember these difficulties. Better raven control is needed to ensure the future success of these breeding sites. I hope the terns will give us another chance to help protect their nests!



Two Little Tern chicks just hatched at Burrill Beach Photo: J.Dunn

Pied Oystercatchers



This season on the south coast even more pairs of Pied Oystercatchers were located and monitored for breeding activity, thanks to the efforts of many newly recruited shorebird volunteers who got out on the lakes and rivers.

A coordinated kayak and boat survey by Canberra Bird Observers on the 24th of September also contributed to the discovery of further new breeding pairs. This resulted in a total of 24 BP's monitored this season, compared to 15 BP's last season and only 11 BP's in 2009/10. This extra effort results in more accurate local population numbers and threat identification so that we can improve management and breeding success of our endangered Pied Oystercatchers.

Pied Oystercatcher breeding activity in the NSW South Coast Region — 2011/12 season

SITE	PAIRS	NESTS	EGGS	CHICKS	FLEDG- LING	EGG FATE	CHICK FATE
Windang	1	2	2	0		HI	
			1	0		R	
Shoalhaven Heads	1	3	1	0		R	
			3	2	0	1R + 2H	Fx
			2	2	2	Н	2Fl
Comerong Island	1	1	2	2	1	Н	1Uc + 1Fl
Crookhaven R Island	1	1	2	0		In	
Crookhaven Breakwall	1	1	2	0		Ue	
Green Point (Beecroft)	1	1	2	0	1	Ue	
Sepulchre Island	1	2	2	0		Ue	
			1	1	1	Н	1Fl
Garden Island	1	1	3	0		Ue	1
Oaky Island	1	1	2	2*	1	Н	1Fl
Sussex Inlet	1	1	2*	2*	1	Н	1Fl
Bherwerre Beach	1 (SW)	1	2	0		R	1
	2 (mid)	1	3	3*	1	Н	2Uc + 1Fl
Conjola Entrance	1 (spit)	2	2	0	1	R	
			2	2	1	Н	1R + 1Fl
	2 (dune)	2	2	0		R	
			2	0		R	
Conjola Islands	1 (BR)	1	2	0	1	Ue	
	2 (W)	1	2	0	1	Ue	
	3 (E)	1	2	2	0	Н	Uc
Narrawallee Inlet	1	2	2	0		Ue	1
			2	2	2	Н	2Fl
Burrill Lake Entrance	1	1	2	1	1	1Ab + 1H	1Fl
Burrill Lake North	1	1	2*	2*	1	Н	1Fl
Durras Lake Entrance	1	2	2	0		In	1
			3	3	3	Н	3Fl
Durras Lake	1	2	2	0	†	Ue	
'broadwater'			1	0		Ue	†
Batemans Bay Marina	1	1	2	2	2	Н	2F1
Buckenbowra Ck	1	1	2	0	 -	Ue	
TOTALS	24	33	66	28	17		+

Abbreviations

H = hatchedFx = fox predation R = raven predation

HI = human interference

U(e/c) = unknown egg or chick loss

Fl = fledged

In = inundationAb = abandoned* = nest not observed - assumed number of chicks from egg number or assumed 2 eggs/chicks based on average clutch size

In the Illawarra area up at Windang, the Pied Oystercatcher pair nested again this season. However the LIA in consultation with NPWS decided not to reinstate the 'bird island' due to a lack of sand in the area. High rainfall at the end of last season had flushed through Lake Illawarra and removed much of the 'bird island' and associated sand spit. This left little sand to work with for forming a significant island sanctuary nesting area. Consequently the Pied pair nested on the remaining sand flats to the northwest of the original 'island' area. A single egg was found in mid October and the area fenced off, then within two days a second egg was laid. The nest was progressing well until a week later when local volunteer Ian arrived on site for his daily monitoring session and found the fence had been partially knocked down, with footprints going through the middle of the nesting area and the eggs removed. This was very distressing and the culprits were never caught. The incident highlights the need for the dedicated 'bird island' which was typically not used as a thoroughfare and was less accessible by people. The nesting area fence was repaired and a few weeks later the pair renested along the rock wall further east with a single egg. In a matter of days the egg was lost, probably to the ravens in the area.

Down at Shoalhaven Heads the resident Pied pair nested three times. The well monitored birds had a dedicated team of volunteers and parks staff, lead by local volunteer Rex and ranger Valda, watching over the nests daily and even installing and maintaining a small electric fence to protect the eggs from foxes. The first nest was found in early September with just one egg, and while one of the volunteers organised the fencing gear, a raven predated the egg. Only a few days later a new nest was found with another single egg which was again promptly removed by a raven. However, surprisingly, the subsequent 2 eggs laid a few days later in the same nest scrape survived a month of incubation to hatch in October. But, soon after the little chicks left their protective electric fence enclosure and were predated, probably by the fox roaming the area. Thankfully the last nesting attempt in November was a success with the two eggs hatching both chicks. A fox was removed from the area at this very suitable time, which no doubt contributed to the survival of the chicks. Both chicks went on to fledge in January.



Shoalhaven Heads Pied Oystercatcher attacking a roaming shorebird nest and chick predator—the Red Fox *Photo: Rex Worrell*











Pied Oystercatcher nesting at Shoalhaven Heads - new nest, fluffy young chicks, 2 week old chick with parent, lift off - first flight of the Pied chick, the family feeding together (top to bottom) Photos: R. Worrell

The **Comerong Island** pair nested again this season with 2 eggs in October. The pair usually nest in low lying areas where the small electric fence cannot be used, however thankfully this season they nested higher and the nest got the protective fencing. Both chicks hatched in November, but one was soon lost to an unknown cause. The second chick went on to fledge in late December. This is the first successful fledging for this Pied Oystercatcher pair. Congratulations!

Two additional breeding pairs were located in the adjacent **Crookhaven River** this season. The first nest was discovered by parks staff member, Nicole, on a small sand island on the southern side of Comerong Island in mid September. However, disappointingly the low lying nest was inundated by high tides. A second pair nested at the nearby breakwall at the south-eastern end of Comerong Island in early October. But this nest also soon disappeared.

On the north-eastern shores of Jervis Bay, Holly at Defence Australia reported a 2 egg Pied Oystercatcher nest at **Green Point** in September. However another inspection in November revealed no eggs or chicks.

St Georges Basin was surveyed for the first time this season by the dedicated local paddlers and parks staff. Three pairs of Pieds were found nesting on islands and another pair nested along the inlet. Sepulchre Island on the northern side of the basin had a breeding pair with a 2 egg nest in mid August. However, the nest was gone upon inspection in September. The pair nested again with a single egg in December which fledged a chick in January. Nearby, the Garden Island pair had a 3 egg nest in August, but this nest was also gone upon inspection in September and no renesting observed. Along the southern edge of the basin a pair of Pieds nested on Oaky island with 2 eggs in early October. Later in the month one chick was observed with the protective parents and went on to fledge in December. Around the corner from Oaky, along the eastern edge of the Sussex Inlet channel a single young chick was observed with the parents in early October. This chick also went on to fledge in mid November. Great new discoveries and three fledglings for St Georges Basin!

On **Bherwerre Beach** in Booderee National Park a pair of Pied Oystercatchers attempted to nest at the south-western end of the beach, on the low dunes. However the 2 egg nest was lost to ravens within the week. This area is usually very quiet, however during holiday periods, there are a lot of visitors, probably contributing to the loss of this nest. A few kilometres further along the beach a second pair of Pieds nested with three eggs which hatched in mid November. Two chicks were sighted, however only one of these survived to fledge.

At Lake Conjola entrance two pairs of Pieds nested again this season. A two egg nest was found out on the spit in late September but was lost to Ravens two weeks later. Meanwhile a second pair nested in the dunes and their nest was also taken by ravens within a week. Another

two eggs on the spit in October survived to hatch in late November. One chick was lost in the first two weeks, and locals reported seeing a raven with the second chick in its beak. However the protective parents harassed the predator until it dropped the chick, which survived to fledge in January. The dune pair also tried again. However, this new nest did not even last until the local volunteer, Col could fence it the following day, ravens the suspected culprit again. Well at least we got one fledgling Col!

On the **islands of Lake Conjola** only three breeding pairs were found nesting this season. The high water levels in the almost closed lake, resulted in flooding of the fourth nesting site on Berringer Island. The pair on the Boat Ramp Island had a 2 egg nest in September, however this was gone two weeks later. The western island out in the channel had a two egg nest in October but this was also quickly lost. The eastern island had a two egg nest which hatched in November. However an inspection in December found this island deserted, with no chicks or fledglings. The cause of the nest losses on these seemingly remote and fox free islands remains a mystery. Avian predation and possibly human disturbance are the most likely causes. More frequent monitoring and remote camera work is needed to understand the lack of breeding success.

At Narrawallee Inlet the Pied Oystercatchers quickly lost their first nest in October to an unknown cause. This was very surprising at this usually successful remote nature reserve sit, particularly when the nearby Hoodie chicks continued to survive. The Pieds nested again with and the two eggs hatched in December. Both chicks were fledged successfully.

At **Burrill Lake Entrance** an early two egg nest was discovered on the sand island in August by local paddler, Peter. This nest hatched out one chick while the remaining egg was abandoned. The single chick survived, despite increasing levels of human disturbance and dog activity around the entrance area, and eventually fledged in September. Soon after fledging the family flew further up into the lake system to feed in the much quieter mudflats behind the bottle shop.



Pied Oystercatcher nest at Narrawallee Inlet Photo: J.Dunn





Top: First Pied Oystercatcher nest of the season at Burrill Lake Entrance. *Bottom:* Adult (L) and fledgling (R) feeding on Burrill mudflats behind the bottle shop *Photos: Peter Lymbery*

Along the **southern edge of Burrill Lake** a new nesting site was discovered on a privately owned peninsula by a local paddler, Jack. The Pied parents were reported with one small chick in mid October. Intermittent reports of the growing chick finally resulted in a confirmed fledgling at the site in December.

At the entrance to Durras Lake a two egg nest was found out on the sand flats in early September. The low lying area was threatened by inundation with the base of the nest scrape already damp, so the nest was quickly raised on sandbags by parks staff. Sadly, high rainfall and king tides less than a week later resulted in the nesting area being washed away. Two weeks later in a more suitable higher and drier location along the northern bank of the entrance channel, three eggs were found and fenced. All three chicks hatched and fledged in November, thanks

to the diligence of local volunteer John Perkins who tirelessly watched over the family.

Durras Lake Entrance Pied Oystercatcher second nest (inset) and the three fluffy chicks with their parents *Photos: John Perkins*

Two pairs of Pied Oystercatchers were sighted further up into **Durras Lake system**. The pair near the boat ramp were suspected of breeding, however only nests were found for the 'broadwater' pair. In mid September this pair had two eggs, but the nest was lost to unknown fate. Another egg sighted in late October also failed to produce any chicks. Monitoring is intermittent at these remote sites so the cause of these nest losses is unknown. Thanks to visiting paddler Rod for the great reports.

The resident pair at **Batemans Bay Marina** laid a two egg nest out on the sand flat in early September. The local volunteer, Meryl noticed that the nest was vulnerable to inundation by the imminent king tides, so it was quickly raised on sandbags by parks staff. Both eggs hatched in October and went on to fledge in mid November under the watchful eye of Meryl, who can see the Pied family from her window! What a beautiful view.

A new nesting pair were reported by Rod down on the Clyde River at **Buckenbowra Creek**. The two egg nest was sighted in mid November however a further inspection a week later failed to locate the nest or any chicks.

This season on the **south coast** a total of 24 Pied Oyster-catcher breeding pairs were monitored. These breeding pairs incubated 33 nests containing 66 eggs, hatching 28 chicks and fledging 17 of these chicks. **This is a record for the south coast, so thank-you to all the dedicated volunteers and paddlers who sent in reports.**







Batemans Bay Marina Pied Oystercatcher nest raising - Rohan, Meryl + Luke (L to R) carefully raising the nest on sandbags, parent returns to nest, eggs safe + dry during the king tide *Photos: J.Dunn*

Sooty Oystercatchers

All seven offshore islands in the **south coast** region were visited in only once in early November to survey Sooty Oystercatcher breeding pair numbers as well as nests, eggs and chicks. Brush and Belowla Islands were surveyed on the 6th of November and Grasshopper, Wasp, Tollgates and Snapper Islands on the 11th of November.

At **Brush Island** 6 breeding pairs were incubating nests containing 8 eggs (4x1egg, 2x2egg). An additional 14 pairs were holding territory but no active nests could be located. Evidence of avian predation, egg shell remains and empty used nest scrapes indicated that some nests may have already been lost. A motion sensor camera was placed on a one egg nest in the shell grit on the northern side of the island. Three days later a Swamp Harrier was caught on film devouring the egg. Many Sooty pairs also had fresh nest scrapes indicating that some pairs may not have nested yet, or were about to renest. There were an additional 3 individual birds, bringing the islands adult population up to 43 birds.

On **Belowla Island** no nests were found, despite eleven Sooty pairs holding territories. Egg shell found in a nest scrape on the southern side of the island indicated avian predation here as well. There was one additional lone adult bird bringing the islands tally up to 23 Sooties.

At **Grasshopper Island** five breeding pairs were incubating nests containing 9 eggs (1x1egg, 4x2eggs), another pair were suspected of having a nest on the inaccessible cliffs and a further three breeding pairs had chicks. One of these pairs had a tiny new chick and the other chick was just hatching. With an additional 2 pairs holding territories without nests, the islands adult population was 22 Sooties.

On **Wasp Island** there were ten pairs of Sooties holding territories but only one 2 egg nest could be found. There were a few nest scrapes, a broken egg and an old abandoned egg. Perhaps some pairs had not nested yet, or their nests were taken by avian predators too. One pair may have had chicks. The adult population was 20 birds.

On the **Tollgates**, three breeding pairs were sighted on the northern island, one Sooty Oystercatcher pair with a 2 egg nest and two pairs with chicks. The adult population was 6 Sooties. On the southern island five pairs were surveyed, two pairs with nests (1x2egg, 1x1egg hatching), two pairs with chicks and the last pair was holding territory but did not show any signs of active nesting. The population was ten adult birds.

On **Snapper Island** three breeding pairs were sighted, one with a 2 egg nest, the second with at least one but possibly two chicks and the last pair were particularly vocal and defensive indicating they probably had chicks too. The adult population was 6 birds.

The **south coast** Sooty Oystercatcher population for the 2011/12 survey was 26 breeding pairs, 37 non-breeding pairs and 4 individuals giving a total of 130 adult birds sighted. There were 17 nests containing 28 eggs, as well as between 10 and 18 chicks on the islands. There are indications of high levels of avian predation on the northern islands (Brush, Belowla and possibly Wasp) while in contrast, the southern islands (Grasshopper, the Tollgates and Snapper) had high numbers of nests and were successfully hatching chicks. In past seasons Wasp has also been part of this group, with high nest numbers. More remote camera work is needed to understand reasons for nest losses and more regular surveys to look at fledgling numbers.



Swamp Harrier caught on camera devouring a Sooty Oystercatcher nest on Brush Island *Photo: Scoutguard*

Sooty Oystercatcher breeding activity in the NSW South Coast Region — 2011/12 season

Site	Pairs	Nests	Eggs	Chicks	Fledglings	Main fate
Brush Is	20	6	8	0	?	Unknown
Belowla Is	11	0	0	0	?	Unknown
Grasshopper Is	11	6	9	4-6	?	Unknown
Wasp Is	10	1	2	0	?	Unknown
Nth Tollgate Is	3	1	2	2-4	?	Unknown
Sth Tollgate Is	5	2	3	2-4	?	Unknown
Snapper Is	3	1	1	2-4	?	Unknown
Total	63 (inc 26 BP)	17	26	10-18	?	

Champions of the Catchment

The South Coast Shorebird Recovery Program has been selected by the Shoalhaven Landcare Association as a "Champion of the Catchment" for outstanding commitment to community based natural resource management in the Southern Rivers Region. Lake Conjola Shorebird Volunteer, Colin Ashford and I proudly accepted the award at a recent dinner presentation at Mollymook Bowling Club.

This award recognises the amazing efforts of all the local volunteers who have made the Shorebird Recovery Program such a great success. This award is dedicated to you all!



Community Action Grant Team Site Visit

In February the Community Actions Grant (CAG) team visited the south coast to make a short film about the SCSRP, the birds and our volunteers. The program was the lucky recipient of a community grant from CAG in 2010/11 aimed at recruiting, training and equipping local volunteers for threatened shorebird protection. Our project was chosen from hundreds of others, to be showcased for the federal government.

The day turned out great with all four threatened shorebird species visiting us at the Burrill Beach nesting area. We then headed to Willinga Lake where local volunteers, Marg, Maggie, John, Sybille, Judith and I installed a fence. Marg and John were even interviewed and a friends dog even joined in the action to demonstrate the essential role of volunteers in education and talking to beach goers. The day was a great success and you can view the video at:

http://www.nrm.gov.au/projects/cag/video-projects/south-coast-nsw.html





Another CAG Grant - Community Education

CAG has awarded the SCSRP with another grant for the 2012/13 shorebird season. Now that we have lots of volunteers on board and they are all trained and equipped, the next step is to improve general community education. The \$18000 grant will be used to create and undertake new public presentations to promote the program and raise awareness about the plight of our beautiful local beach nesting shorebirds. New leaflets, posters, stickers and nest displays in visitors centres will also form part of the project. Ideas, suggestions or local shorebird art and artists are all welcome. Email me at jodie.dunn@environment.nsw.gov.au



Saving our Shorebirds



South Coast Shorebird Recovery Program Registered Volunteers 2011/12

Batemans Bay	Meryl Hannan	Inyadda	<u>Terry</u> + Carol <u>McBride</u>
	Carmel Cox	Berrara /	Mike + Rose Clear
Durras	John Perkins	Cudmirrah	Sue Patrick

Bawley / Kioloa

Burrill /

Rennies

not yet registered

Racecourse

Marg Hamon (Bawley)
Robin Berkhout (Kioloa)

Margaret Webber
Maree Menzies

Maggie ManceSt Georges BasinStan BrownSybille + Don DavidsonKaren + Brett DavisNeil Brown + Judith CarrollNorm + Maureen Webb

Eve Jenkins
Chris Louis
Rae Riley

Jervis Bay
In Brown
Ludy + Greene Watson

Tabourie Judy + Graeme Watson
Ian Taffs

Kaye Milsom
Joan Lonergan
Cathy Stapleton

Shoalhaven Heads
Peter Ward*

Teena + Josep

Cathy Stapleton Teena + Joseph Bronzino*

Chris Shinton Carla Jackett*

Bob Rusk Pat Hall + Jennie Fea*
Peter Lymbery Wollomboola Frances Bray

Jenny Bryant + John Olsen

Jack Robertson

Wolfonboola

I tances Bray

Michael Abramowitz

Thomas Kaar

Barbara + John Smith Thomas Kaar

Narelle + Alan Wright

Ken + Kay Smith Windang Chris Brandis

 Conjola /
 Col Ashford + Maureen Deigan
 Ian Shaw

 Narrawallee
 Eric Hardinge
 Terrill Nordstrom

Narrawallee Eric Hardinge Terrill Nordstron
Sue Ferguson + Kallista Buchanan

Jensen + Linda Ruehle

Sandra Dodimead

Robyn Kerves
Site warden
* = new vol's

Sandra Dodimead

Robyn Kerves
Midge (Marcia) Martin
Chris + Deb Forster

Thank-you all for your passion + support for
the shorebird recovery program. I hope to see
you again next season.

you again next season.

| Sodie Dunn | NPWS Shorebird Recovery Coordinator



The South Coast Shorebird Volunteer BBQ 2011: John, Mike A, Mike C, Maggie, Bob, Sybille, Sue, Margaret, Don, Rose, Greg, John, David, Marg, Barbara, Chris, Terry, Carol, Maree and Col (standing L to R); Stan, Maureen and Jodie (kneeling L to R) *Photo: Richard Green*