

Sharing the shoreline

2019/2020 Season Summary



NSW National Parks
and Wildlife Service

SHOREBIRD BREEDING SEASON

Firstly, thanks to all the volunteers who did a sterling job in really trying conditions this season. Fire, flood, pestilence - the NSW South Coast had it all!! It's amazing any data was collected at all from late December so thank you to all those who braved the smoke, heat, then rain to keep checking on our shorebirds. Due to the upheavals that so many faced this season including the change around in coordinators, this report may be a little sparser than others years however I hope the picture of what our threatened shorebirds did in 2019-2020 does shine through.

Please excuse the somewhat clumsy map attached as it was prepared by hand and it is not as exact as GPS would usually allow. One big red star is used in certain spots, like the Shoalhaven, for multiple Pied Oystercatcher nests.



Caves Beach Hooded Plover chicks. Credit: Chris Grounds

Thank you to everyone who helped with the conservation of our local beach nesting birds - your help is vital to the success of the program. Vanessa.

Hooded Plovers

Hooded Plovers did not continue with any northward expansion again this year. Caves Beach (Booderee National Park – Parks Australia) was the furthest nesting known for NSW.

At Caves Beach the Hooded Plover pair of E6 and an unbanded mate laid three 3 eggs in early October. Two chicks were hatched around 1 November but unfortunately both were lost at about 3 weeks in somewhat mysterious circumstances. Around this time, Caves Beach volunteers Chris and Marly Grounds noted tracks of an Eastern Quoll, part of a reintroduction program in Booderee. They also found, through discussions with researchers, about the success of a healthy breeding female residing at the northern end of Caves Beach. While there was no obvious connection to the loss of the Hoodie chicks, the relationship between our endangered shorebirds and the carnivorous Eastern Quolls will be keenly observed by volunteers.

Sadly, no Hoodies attempted nesting on Bherwerre Beach this season. This beach seems to be a favoured hang-out for both Hoodies and Pied Oystercatchers. This season 10 Hoodie adults were recorded in August surveys, with seven in October (K1& N5, unbanded birds and B4). During peak breeding times birds dispersed to other breeding territories with only 2 to 3 birds on Bherwerre however no pairs were recorded nesting there. Are these fledglings from the previous year, still not quite ready to settle down? Numbers increased again after the breeding season with nine adults observed in March 2020.

N2 and an unbanded partner which are usually found breeding at Berrara Lagoon behaved rather elusively in the beginning of this season, appearing at Berrara Lagoon early on as well as at the Sussex Inlet surf club and Monument Beach before finally nesting at Flat Rock beach in Bendalong in early December. The birds had not been recorded nesting so far South. They were not observed by volunteers until a friend of Rose and Mike Clear observed the birds and informed them. Despite surviving as an egg and young chick with no fencing or signage, the chick was unfortunately lost at approximately 2 week. At Inyadda, K9 and L3(?) tried two nesting attempts with the first two eggs being lost in unknown circumstances, most likely due to foxes or ravens. Three eggs laid from their second attempt were thought to be unviable after extremely hot weather in mid-November, but one chick turned up a few days later. Sadly, this chick disappeared around 5th December and no fate can be recorded. Manyana volunteer group coordinators Terry and Carol McBride were kept very busy this season, still finding time to keep an eye on the Hoodies while also giving their time assisting our wider community as RFS volunteers during the Currowan fire.

At Buckleys Beach, B8 and J2 had a very difficult start to the season with severe predation by ravens voiding all nesting attempts prior to mid-January, despite the implementation of control measures. With volunteers away overseas and tourist numbers reduced due to the fires, B8 and J2 managed to 'fly (breed) under the radar', with a relatively late attempt resulting in 2 fledglings observed in late February.

At Narrawallee Inlet, M0 and D6 had two nesting attempts. The first clutch of three eggs hatched however two chicks were lost at three weeks. The remaining chick successfully fledged and was observed foraging with M0 and D6 for several weeks before disappearing, assumed lost. Further observation after the re-nesting of M0 and D6 revealed the fledgling surviving alone further along Buckleys Beach. Presumably to make way for the next clutch which successfully produced 2 fledglings. A fantastic result for Narrawallee Hoodies this year!

The Rennies Beach Hooded Plovers were probably the saddest/most hopeful story of 2020. In early November, the resident pair of Rennies- C9 and A8- nested at the southern end of Rennies Beach, laying three eggs. After 3 ½ weeks, a fox killed C9 and the eggs also disappeared. A8 stayed at the Rennies/Pockets beach area and then, much to Geoff's surprise, at an unspecified date in January teamed up with N5 to lay 3 eggs all of which fledged! By late May, 10 Hoodies were sighted hanging out on Rennies Beach in gale force winds. Let's hope these birds survive the tumultuous weather that seems to whirl around and prep themselves for a better breeding season this coming Spring/Summer.

At Racecourse Creek, J1 and L9 again paired together for this season. Early in October the pair laid two eggs and both hatched. One chick was lost to ravens and one to unknown causes. The pair were not observed doing a second nesting. In late January, Chris Brandis noticed one chick, less than a week old, which fledged by the 22 February.

Termeil Beach provided another sad story this year with two unbanded Hoodies nesting around the 20th September, laying two eggs. Unfortunately, one week later the remains of one adult were found close to the nest and although the remaining adult stayed in the area, the eggs were abandoned. A couple of weeks later the remaining adult was observed paired up with another unbanded adult however, no subsequent attempts at nesting were made.

At Racecourse Beach between Bawley and Kioloa, B0 and an unbanded bird laid two eggs very early in October but these were sadly destroyed and taken by a person unknown on the 8th of October and the pair did not attempt to nest again.

H7 and M4 were busy early at Island Beach, laying 3 eggs about the 11th of August however these three eggs were inundated during a big swell. The pair moved further south to Dawsons Beach and laid a second clutch of three eggs four weeks later. Three chicks hatched however only one of these survived to fledge with the others lost to unknown causes. This fledgling disappeared soon after it was seen on the 20th November however. It is hoped it was well advanced and had just dispersed from its parents. After the fires, Jackson surveyed the beaches from Pretty Beach to Dawsons to find H7 and M4 with two chicks in early January. The fate of the two chicks is unknown and it is hoped that they survived to fledge. Aside from the remote nature of the site, the success of Hooded Plover chicks at Dawsons Beach may also be partially attributed to fox baiting in the area, with three baits taken in the dunes over a period of 4 months.



Hooded Plover Chicks. Credit: Chris Grounds

Pied Oystercatchers

At Seven Mile Beach a pair of Pied Oystercatchers nested in early November with two chicks fledging on 12th December, despite being close to a busy surf school. Good work from Shoalhaven Heads/ Gerroa site coordinator Sally providing information about the importance of giving the birds some space resulted in a positive relationship with the surf school. A great example of the community Sharing the Shoreline!!

Close by at Gerroa, two eggs were lost from a nest early in the season however this unbanded pair renested around the 15th of November, with one chick hatching and fledging around the 23rd January 2020.

At Comerong Beach an unbanded Pied pair nested with two eggs seen 28 September. One egg remained unviable and the fate of the one chick hatched is unknown. Later, two Pied pairs (possibly the same unbanded birds and 35 Yellow with an unbanded mate) nested within a week of each other along the Crookhaven breakwall. The "Inner" Breakwall pair of yellow banded 35 and an unbanded bird laid two eggs around 6th October with one chick hatching, then successfully fledging.

The "outer breakwall" pair, both unbanded, laid one egg around the 15th October with the single chick hatching but disappearing before fledging. This pair, along with several others in the Shoalhaven area, are often observed only from the water, making it difficult to easily identify chicks hidden in vegetation or rocky areas. At the Shoalhaven Estuary a pair of Pieds nested on Orchard Island and this pair could only be reached by Sally using her jetski – a great effort to help keep track of Pied nesting success. Whilst the island is fabulous for reducing predator and human interactions, it can cause some problems in monitoring consistency and accuracy of nesting dates. This pair were thought to have laid two eggs around the 16th of September. Two chicks were spotted 18th of October with one making it to fledging and the fate of the other unknown.

At Coalwharf the full impact of humans near to nesting shorebirds was illustrated when the nesting bird was seen numerous times with people fishing within metres of the birds sitting on eggs. The one egg laid at this nest was abandoned by 1st October and the pair moved and relaid two eggs around 15th October. The site was again in the well-used (by humans) spot however the birds managed to hatch both chicks, with one reaching fledging.

The Shoalhaven Heads pairs also struggled due to unwanted human interference. The Berm pair first laid 2 eggs around the 18th September. The Berm pair weathered harassment by ravens and wind covering their nest and then with the eggs close to hatching, major disturbance from avid 'birdos' coming to the area to catch site of a Semipalmated Plover caused them to abandon the nest and the eggs were lost around the 7th October. A good reminder that even those who care about the birds can sometimes unintentionally disturb them! This pair then wandered lost for some time, upsetting other nesting Pieds. It is disappointing to know that impacts on such threatened species are coming from people who would profess a love of the birds. OEH is trying to address impacts such as bird photographers by advocating responsible birding. Articles for online and print magazines are underway. Appropriate signage aimed at bird watchers to "watch out for the locals" may assist.

The Berm pair renested and laid two eggs by 21st October. Both chicks hatched, though only one reached fledging. The Pieds named the #1 pair were seen mating and with a scrape on 30th September. By 9th October, two eggs were both lost to aerial predators within days. The pair renested about the 27th October with one egg. but this was also lost.

On the 4th November the Lagoon pair laid two eggs that were inundated by high tides 10 days later. The pair renested also, laying one egg around the 26th November but this egg too was inundated.

At Lake Wollumboola one pair of Pieds began laying two eggs round the 1st October but both were lost to suspected fox or raven predation in only three days. The pair persisted, laying another two eggs at the end of October. The fires in the area ceased monitoring with access closed to many beaches. However, on 7th January two fledglings were seen with the adults. This was amazing with strong winds recorded that affected other breeding birds adversely.

In the north Jervis Bay area, the Long Beach South pair of unbanded Pied Oystercatchers nested again with two eggs laid by 13th October and two chicks thought to have hatched by 10th November. These chicks were almost fledged on a monitoring visit 15th December however as with many other places, monitoring ceased due to fires and resultant Park/Road closures. The adults were seen with two fledglings on the 24 January at the northern end of the beach, and then back at the southern end by mid-February when the beach was in heavy use by humans. The Green Island pair nested at the site of their last years nest and were monitored with two eggs up to 13 December when again fires removed the ability of volunteers to monitor. The beach was revisited in mid-January but no eggs or birds were seen.

Two unbanded birds paired at Moona Moona Inlet began nesting early with Jodie recording two eggs on the 29th August 2019 – just couldn't keep herself away from a bit of shorebirding! This nest had to be mounded up by volunteers as increasingly high tides threatened to inundate the site. On the 1st October both eggs hatched with the chicks successfully fledging around 25th November. The birds were seen again on the 3rd December but monitoring in this area also ceased with the fire activity of December-January. Moona Moona Inlet was a fantastic success story for the Pieds with a first nest in a new location hatching on the long weekend in one the busiest places in Jervis Bay but still managing to fledge. A testament to the hard work of volunteers!

Iluka Beach saw YW and an unbanded mate laying three eggs on a sand spit that leads to Captains Lagoon in September. All three eggs were lost to dogs by the 9th October. The pair then moved back to Hole in the Wall, where they had been seen early in the season, laying two eggs by 24 October. Both eggs were successfully hatched and fledged this time!

Numerous Pied individuals were recorded at Caves Beach with seven adults recorded in late September on one visit. XD and an unbanded mate had laid two eggs by the 20th September unfortunately one egg was lost around 8th October with the second gone by the 25th October. As the beach was well monitored after this, it is unlikely that the chick was missed. XD was seen at Caves Beach as late as 18th November but renesting did not seem to occur.

At Bherwerre Beach an unbanded pair of Pies laid three eggs by 22 September but all three eggs were lost to unknown causes by 6th October. It is again likely the weather played a role with sand covering the nest site. This pair renested with two eggs by 13th October that both hatched and successfully fledged.

Sepulchre Island was another hard to visit spot where a pair of Pies took up residence, forcing volunteers Brett and Karen Davis to jump in the kayaks to follow their nesting. As a result the site could only be accessed four times over the season. The fate of eggs/chicks, if hatching occurred, is unknown. The Garden Island unbanded Pied pair were first recorded in mid-September. By the end of October, they had nested with two eggs. These did not survive, with the nest found abandoned and egg shell evident, but no chicks or adult birds were seen on the island.

Sussex Inlet saw two pairs of Pies at the beginning of the season including a juvenile who was with the nesting birds for about a week, though only one pair ended up nesting. The breeding pair laid two eggs on the 11th and 16th September, which both hatched 11 November. One chick was lost to unknown causes around 20th October. The sole chick took a maiden flight on the 22 November when two other Pied Oystercatchers encroached on the breeding territory, but was judged to have properly fledged on the 28th.

At Berrara, a Pied pair laid two eggs on 11 September in a spot close to the creek bed. The area was fenced but unfortunately on 29 September a dog or fox dug under the fence and the eggs were destroyed. The pair renested close to the fence, laying two eggs by 31 October and the fence was extended around them. Two chicks were seen 29 November, but within a few days only one remained. This chick fledged and was seen flying with its parents on 11 January 2020.

Conjola Spit had two resident pairs (yellow and silver pair) each sitting on two eggs by 1st October. All four eggs hatched when the next monitoring occurred 8th October however, 1 chick was lost by 14th October. After some difficulty in observing the chicks for a number of weeks, the remaining three chicks (one to the silver pair and two to the yellow pair) were found to have successfully fledged.

A pair of Pies were seen at Narrawallee Inlet with two eggs on 15th August however, both eggs were inundated by the 27th August. The pair renested, along with another unbanded pair and by the 14th October, four chicks were seen. All four chicks successfully fledged, with Narrawallee providing another great success story for the Pied Oystercatcher—despite nesting occurring in a favourite swimming, surfing and fishing spot for tourists and locals alike. At Burrill estuary, on the 21st October 3D and an unbanded mate were seen with three chicks, one somewhat smaller than the other two. Unfortunately this chick did not survive and a second was lost by 15th November. The remaining chick fledged and was seen with adults on 29th November.

At Termeil two eggs were lost from an unbanded pair to fox predation on 10 September. By the 20th September the pair had relaid two eggs. Due to the fires and restricted access to the site, no fate was recorded for this second nesting attempt. Nesting began early at Pretty Beach too with a one egg nest seen on 11th August. This chick hatched around 25th September, and were seen “practising flying” on 9th October and fully fledged on the 12th October.

At Durras Beach, early fox activity had volunteer John nervous, with 7 foxes recorded in one night at a free feed site near the usual nesting area. With hard work from Nick, the fox control contractor and John, controls were effective and one nest turned into two nests, and then turned into three nests. Three pairs kept John and Nick busy, with six eggs laid and five fledging which is a great success at what is usually a busy summer spot. John pointed out that with the fires, then water bombing where the chicks were, it was amazing there was any success!

Unfortunately, at the Batemans Bay marina, an unbanded pair who had two eggs on 28th September had lost both by the 20th October. Large gatherings of Pies were seen at the end of the breeding season with 26 seen at Bherwerre Beach at the end of March!! 24 adults hanging out, with two fledglings amusing themselves.

Little Terns

Three Little Tern colonies were recorded in the South Coast area this season: Shoalhaven Heads, Lake Wollumboola and Lake Conjola.

The Shoalhaven Heads Little Terns were a small gathering of six adults. Only two pairs formed to lay successfully. Five eggs in total were laid, however only one nest hatched two chicks that did thankfully go on to fledge.

At Lake Wollumboola, volunteers first monitored four Little Terns on Saturday 26th October 2019. The colony soon increased to 36 individuals, and by 16 November 2019 the first nest was seen. Ten nests were laid by 23th November on mudflats extending out from the salt marsh wetland. This change in nesting area is most likely due to the consistent loss of nests that were laid on the sand bar due to frequent wave wash overs. Whilst the site may be more beneficial in the eyes of Little Terns, it makes for difficult work in monitoring the colony. Volunteers persevered and erected an extensive string fence with Little Tern notices at the main colony area and at the southern part of the sand-wetland to discourage people from approaching too close to the nesting site. Notices were also located at the main entrance to the lake sandbar. Wire nest frames were gradually placed over all known nests, with nesting birds all resuming sitting after the frames were installed.

Despite a strong start, the weather played havoc yet again with this colony. On 23th November, between 12 to 24 Little Terns were observed near the nesting site but only one bird was sitting on its eggs with a further three resuming nesting by the afternoon. The day was cold with strong southerly winds that seemed to interfere with the birds. By the next morning only Nest 1 remained sitting. Pairs must have been investigated their nesting sites, as Frances and other volunteers noted fresh Little Tern footprints at other nests for the next 2 days.

The Little Tern pair at Nest 1 persevered and hatched 2 chicks on 8th December, observed when NPWS Project Officer Jessica Sharp and the two migratory bird wardens Nathan and Simon visited. Unfortunately, one chick was lost by the 17th December. The remaining chick fledged in the chaos of the bushfires, with volunteers doing an amazing job trying to monitor the colony whenever possible with fires so close.

It was during the fire threat that NPWS Migratory Shorebird wardens found a Little Tern sitting on a one-egg nest on a separate mudflat located south west of the main site. Another nest in this same area was then found 7th January 2020 and an abandoned egg on the 13th January.

On 17th January 2020, Frances observed 48 Little Terns at Lake Wollumboola for the Birdlife Australia national bird count day, however the eggs from both nests 11 and 12 had sadly disappeared in gale-force winds.

In total twelve nests were laid, with only 1 chick fledging. One banded Little Tern was seen - Nest 1 male bird had an orange flag on his right leg.

By the end of January Little Terns were flocking to Lake Wollumboola to feed. 91 birds were seen in late January and by mid-February there were 56 adults and 20 fledglings. By the 25th February the Little Terns had departed. It is hoped this next season may be a much better one for this colony.

From the beginning of the 2019/2020 season, the imminent arrival of the Little Terns, the closed state of Lake Conjola and perceived link between the two heralded the continuation of tension between many members of the community following similar tensions in 2018/2019. With the Little Tern colony central to the ongoing disagreement between Shoalhaven City Council and the Conjola community, Jackson sought to engage with some key members of community advocacy groups in order to prevent the spread of misinformation about the intentions of the Shorebird Recovery Program. This was met with some success, however some vandalism of signs and fencing still occurred.

The Little Terns arrived in low numbers in mid-November and by the end of the month totalled approximately 50 individual adults. There were some concerns that due to the lake being closed, the terns might utilise the larger expanse of sand to spread their colony and the community were concerned that this would result in a conflict in the event of a decision being made to manually open the lake. Understanding that a spread out colony may result in increased susceptibility to inundation and also vandalism due to community perceptions, Jackson, along with volunteers Colin and Neal and other NPWS and council staff discussed the possibility of attempting to 'coerce' the Terns to nest on the Southern side of the entrance area through the use of flagged rope fencing, similar to that used to keep birds off airport runways. It was hoped that such an intervention would allow the birds to nest in a more suitable location, away from the risk of inundation and any potential conflict with a manual lake opening site. To some extent it was also hoped that this action might improve community perceptions of the program by looking to be 'doing something' to reduce perceived conflict however there was some hesitation in applying this strategy as Jackson, Colin, Neal and other NPWS staff did not want to scare the birds away from nesting altogether.

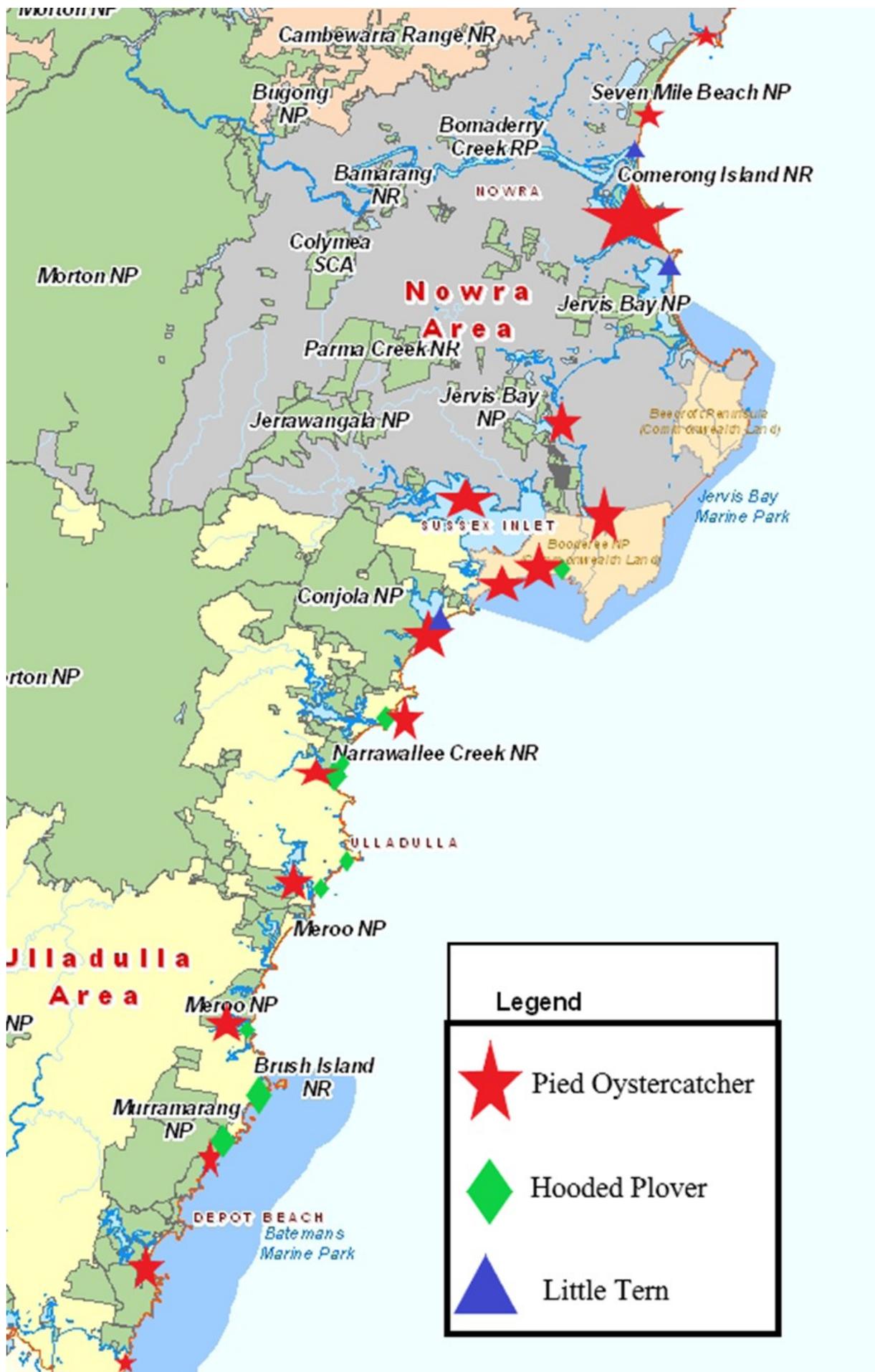
Thankfully, by a stroke of superb luck (or maybe some you-beaut habitat diversity) the Terns nested in the desired southern entrance area without any intervention and by late December, 26 nests were recorded with many beginning to hatch. Although things were looking promising, December 31st was to deal an unexpected blow to the colony as the Currowan fire roared into Conjola, forcing hundreds of locals and tourists in cars and on foot to evacuate to the beach around the colony. Although amidst the chaos people still managed to stay mostly outside of the colony, it is likely that the high stress situation may have caused the abandonment of a number of the nests. Following this, it appears that predation by a fox also affected the colony however, due to the nature of the fire situation and the aftermath, monitoring was unable to be conducted reliably for approximately 2 weeks and so most losses were unaccounted for. When monitoring did resume late in the season, two fledglings were seen on the 25 January by Col and Neal. This was down to one fledgling observed by volunteers amongst the flock prior to the Terns leaving on their migration in mid-February. Hopefully, next year will see an improvement in nesting success at an important South Coast Little Tern colony.



Flagged Little Tern at Lake Wollumboola. Credit: Frances Bray



Moona Moona Inlet pied Oystercatcher adult and chicks. Credit: Chris Grounds



Map of Shorebird nesting sites on South Coast 2019-2020

Fox Control

For the 2019-20 season, Dean and Troy Bagnall undertook shooting between Shoalhaven Heads and Kioloa from August 2019 to November 2019, targeting specific animals frequenting nest sites. However, shooting ceased when fires impacted on people's movements and safety. Nick Patrizi (Urban Feral Control) conducted fox shooting further south at Durras over five nights September to November and removed 2 foxes. His work too was ceased with the impact of the fires.

Baiting in the National Park Estate and on Crown Lands, carried out by NPWS staff and NPWS contractors, with Jackson undertaking some on some remote beaches in Murramarang NP, also helped control predator numbers near beaches with nesting birds. The disbursement of Parks employees for fire control and post-fire clean up works also limited the end results for these programs. Baiting, shooting and trapping are all again well under way for the 2020-2021 season as predator control post the fires is high on the NPWS agenda. Nick Patrizi and John Perkins have had great success, killing three foxes in mid-May 2020. Dean and Troy Bagnall are also already out spotlighting in shorebird sensitive sites along the south coast. Hopefully consistent feral species control will give a greater start to the breeding shorebirds in 2020-21.

Volunteer End of Season Get Together

It was extremely sad that post the fires the Covid-19 drama forced the cancellation of an end of season gathering. This get together should be about volunteers being thanked for their amazing efforts and meeting each other to discuss the great work they do. Dissemination of information, especially what works and doesn't work for different volunteers, is really important to keep people feeling motivated and positive in what sometimes seems a very bleak environment. NPWS hope that all volunteers do know how much their efforts are appreciated. Hopefully the 2020-21 get together can be a great one.

Shorebird Education Program

Educational contractors Anna and Monica did a fantastic job spreading information throughout our communities about the importance of shorebirds. Information stalls were held at most nesting sites and kids' activities targeting holidaying families in caravan parks close to nesting sites. Despite the entire program being forced to reschedule as a result of the serious fire situation, Anna and Monica still engaged with over 600 members of the community, complimenting the hard work of the volunteers by helping to increase awareness about nesting shorebirds and how we can all Share the Shoreline.

For the second year in a row, *Saving our Species* allocated funding to Shoalhaven Heads and Lake Wollumboola to employ beach wardens for the protection of migratory shorebirds at these two important south coast sites. We were fortunate enough to have Nathan and Simon, both environmental students from the University of Wollongong on site, providing education to beach goers and dog walkers as well as monitoring the shorebirds and installing temporary beach signs to warn beach goers not to disturb resting flocks of migratory shorebirds. A migratory shorebirds mural and several sculptures were installed at Shoalhaven Heads late last year and designs are currently being finalised for new and improved permanent signage about migratory birds for access points at both Lake Wollumboola and Shoalhaven Heads.

The migratory shorebird project is still evolving, headed up by NPWS Project Officer Jess Sharp and it is hoped that over the coming years we will be able to continue to share information throughout the community about the importance of our local South Coast beaches and lakes, not only as breeding areas for critically endangered species but also as essential resting and feeding grounds for an impressive range of international species navigating the flyways of the world.

Once again, a huge thank you to all the local volunteers involved in the endangered shorebird program. Approximately 1650 hours were given to ensuring the survival of these species by volunteers along the south coast. This is a tremendous effort, in what was a very trying season.

Good luck to you all for 2020 and beyond.