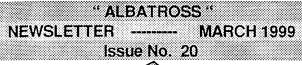
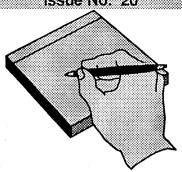
Southern Oceans Seabird Study Association Inc.

" Wildlife Research "







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A Note From The Editor

Once again it is pleasing to see the efforts being made by many interested people working together in an effort to understand and preserve our diverse seabird fauna. As oceans cover almost two thirds of the surface of our planet, seabirds are great biological indicators, not only of the state of our oceans, but of the state of our planet. occurrence of El Nino and La Nina weather patterns have had a pronounced effect on the occurrence of many seabirds around the coasts of Australia in recent years. This has been mirrored in the Boat Trip Reports, also in the findings of researchers at several breeding stations, including our own work "Five Islands." here at the The past season(1998/1999) has been disastrous for our local colonies of Little Penguins, The worst since our studies began in 1968, (thirty years ago!).

The New South Wales Albatross Study Group also recorded a poor season for albatrosses in general. with numbers well down on past seasons. Several birds remained late in the year Nov / December 1998. Some of these late birds we captured, were generally in poor condition with badly worn plumage.

SHORE LINES - Terns

Barbara Jones, president of Far South Coast Birdwatchers reports some success with their Little Tern Project; at least 10 pairs hatching chicks at Mongareeka Creek near Tathra on the south coast of NSW. The chicks are expected to fledge in mid March. Until then the colony is under the watch of a band of vigilant and dedicated volunteers, increasing public awareness to the status of this Threatened Species and explaining the reasons for fencing off areas during the breeding seasons. They in turn are part of a much larger network of hardy volunteers all along the eastern seaboard of Australia who are striving to save the Little Tern. (Sterna albifrons).

Peter and Barbara from Rotamah Island Bird Observatory (Vic), report: (Rotamah Network Newsletter No 17 February 1999) 'unfortunately, the Little Terns were less successful this year, with the colony crashing due to storms and ravens after Christmas. Then the birds moved away, some to breed elsewhere, others to who knows where!.'

Raoul Broughton reports that 50 pairs of Little Terns were breeding at Wollumboola near Nowra NSW. By setting areas aside for local breeding populations we are also preserving areas for migrating shore birds including Little and White-winged Black Terns and waders from the Northern Hemisphere.

FURTHER VETERINARY RESEARCH ASSISTANCE

Mike Cannon and Matt O'Donnell from Cannon and Ball Veterinary Hospital have agreed to assist in analysing blood samples of seabirds to determine the general health of seabird breeding colonies both local and remote. It is hoped that part of this valuable research can be conducted from the Consett Davis Hut on the Five Islands. Thus allowing us to better monitor our local breeding populations and allowing us to train researchers in the field.

Cetaceans

Boat Trips organised by members of SOSSA are adding to our knowledge of Cetaceans along coast line. Little is known of the movements or occurrence of many marine mammals in our waters. Identification at sea can be very frustrating with

often only brief glimpse of these shy and often elusive creatures. Sightings of them are always of interest. Below are some interesting recent sightings.

Bottle-nosed Dolphins mating in the shallow waters between Big Is No1 (Five Islands NSW) and Fisherman's beach Port Kembla. October/ November 1998. Ed.

Striped Dolphins off Wollongong (Pelagic) November 22nd 1998.PJ Milburn + LS.

Risso's Dolphin off Wollongong January Matt Hodgkinson & Capt. Carl Loves,

A pod of aprox 50 False Killer Whales, males, females and small babies to 2 metres. Inshore between the Five Islands (Flinder's Is.) and shore. Capt. Carl Loves 30th January 1996.

Have you seen any whales lately?

Many seabirds are known to occur with marine mammals.

LETTERS TO THE EDITOR

Dear Lindsay, Please find enclosed an article on Albatross ('Albe' the wandering Royal Albatross) which your members may be interested in.

At the time of writing (February 1st 1999). The Northern Royals are doing quite well; 14 nests this year and 6 chicks hatched so far despite the unusual weather. Hope that this article will be of interest. Kind regards Alan Wright.

interest. Kind regards On 21st February 1998, after a big storm of the Patagonian coast of Argentina, a very weak Southern Royal albatross (Diomeadea epomophora) was found on a beach near San Antonio Oeste, unable to walk or stand up. A non profit environmentalist organisation, Foundation Inalafguen, took charge of the bird and it was taken into backyard rehabilitation at Las Grutas to be restored to health by an enthusiastic couple, Bruce Johonson, an engineer from the U.S., and Maria Eugenia Picrno, a veterinarian. As luck would have it, the bird had a band (R-54119) and the record quickly made it's way to the Banding Office of the New Zealand National Banding Scheme here at the Science & Research Unit of the Department of Conservation (DOC). The bird was banded as a fledgling on October 3rd 1997 by Alan Wiltshire and team at Campbell Island, a nature reserve 600 kilometres south of NZ. The banding was part of a Science & Research Unit study of the population trends, dynamics and breeding success Southern Royals (Moore et al. 1997). banding and eventual recruitment of the survivors to the island to breed as adults provides part of the picture of how the population is faring, and allows

better interpretation of the trend in nesting numbers. Almost the entire population nests on Campbell Is, c,8000 nests each year, and having apparently increased after the depredations of farming earlier this century, they have increased further in number, of at least fluctuated, since the 1970s (Moore et al 1997).

A short time after it was banded, the albatross probably took it's first flight and over the next 4 months made it's way to Argentina, the normal pattern for non-breeding birds (Robertson & Kinsky 1972). Royal albatrosses feed mainly on squid of the continental shelf/ slope, rather than on more oceanic species, and they migrate from their breeding grounds in southern New Zealand waters to favoured feeding grounds near Chile and Argentina (Imber in press). Here they dine mainly on the squid *Moroteuthopis ingens* which dies and floats to the surface after spawning. Presumably the Royal in question became exhausted during the storm when feeding in these waters.

Soon I was in regular e-mail correspondence with Bruce Johnson about their charge that they nicknamed "Albe", as they needed reassurance as to feeding regimes, the health of the bird, and how to best get it back into the wild. A few tips passed on from Taiaroa Head albatross colony helped also. Curiously, he preferred fish to a squid diet - possibly this is not very digestible in a captive situation, for instance, chick fed squid at Taiaroa Head are more prone to dehydration. "Albe" received 1-1.5 Kg of fish per day and a vitamin/calcium supplement. In the heat of summer in his dusty enclosure, he required hosing several times a day to keep him cool, an activity he enjoyed, biting at the water to drink the spray. There were other problems, such as vomiting caused by the bird eating Ice Plant in the enclosure. I suggested that once healthy again the best thing would be to take the bird to a high windy place, such as a cliff edge. An initial attempt at release in March from a sloping sand dune at the coast failed because of the lack of wind. A couple of weeks later, and poor "Albe" rehabilitation from injuries sustained from crashing off a cliff. He apparently failed to open his wings after walking off the edge, despite a stiff breeze. After a period of convalescence, "Albe" returned to good health, but showed no signs off leaving of his own accord. After I returned to the office from a two month winter holiday, Bruce sounded near his wits end: "I am tied to the house and can't go anywhere because no one can seem to feed him, we are nearing the end of our rope!" Fish had become scarce and for a month intake was reduced to 0.5 kg/day before returning to nearer

1kg/day. Getting him out to sea to leave him to the vagaries of the wind was not an option because of the lack of access to a big enough boat or suitable retrieval gear if the release went wrong. Regular trips to the beach at least gave the bird exercise and the occasional short running flight in the shallows, but still provided unexpected mishaps. "The dog (Mini) is a real character". She protects the albatross at the beach from other dogs and sometimes people. Once a dog did charge the albatross and knocked him flat. "Now we take Mini every time for protection". At this time in late August, Bruce mentioned that "Albe" was 10 kg in weight, (from an initial 6.7kg), he had stabilised at about 8kg in March-July, but had increased again. Maybe he was getting a bit fat. I suggested that fasting, rather than daily feeds, and increasing the gaps between meals might make him lean and hungry and more keen to leave. After all, breeding birds routinely fast up to three weeks when waiting for their partner to relieve them at the nest. Only a week later, on a stricter diet, he was much more lively, biting his patron and attempting half-hearted take-offs at the beach. On 16th of September 1998 having lost a full kilogram of weight in three weeks, a 40-50 km/hr wind allowed "Albe" to run across the sand and become airborne for 50 metres, then across the breakers for further busts until he was out in the open ocean and "freedom. Eventually, Bruce lost sight of him, and after much patrolling of the coast for any sign, decided the release must have been a success. A long 207 days of rehabilitation were finally over. In that time "Albe" had been quite a media star, with several newspaper articles, radio and TV programmes about him. I'll miss Bruce's regular and entertaining updates on "Albe's progress. Bruce and Maria were doing all the hard work, and learning from trial and error, but it was nice that my advice at least helped fine tune the care of the bird, and kept their morale up. In Bruce's words, "I want you to know how much we appreciated your help and encouragement in this effort. You were on target all the time and that should give you a good feeling". Whether the albatross will be found again back on Campbell Island remains to be seen. The first birds start breeding at six years of age, so some lucky albatross worker may again find him there sometime after the year 2003. I'll keep Bruce posted.

Peter Moore S&R, Tory Street

Imber. M.J. in press Diet and feeding ecology of the Royal Albatross *Diomedea epomophora* - king of the self break and slope. *Emu*. Moore, P.J.: Scott, J.J.: Joyce, L.J. Peart, M.1997 Southern Royal

Albatross *Diomedea epomophora epomophora* census on Campbell Island, 4 January- 6 February 1996 and a review of population figures. Science & Research Series 101. Robertson. C.J.R. Kinsky, F.C. 1972. The dispersal movements of the Royal Albatross (*Diomedea epomophora*). Notornis 19:289-301.

Reproduced from *Conservation Science*Newsletter No 28 & 29, 18 December 1998.

DAMIEN AND THE WHALE!

Our taxidermist Damien has finally achieved his greatest goal. He now can claim to have prepared specimens of "Mice" to "Whales!"

He and fellow taxidermist Hank Van Leuwen are currently processing a 7.8 metre Hump-backed Whale skeleton for the Australian Museum. The whale a juvenile was washed ashore on October 22nd 1998 at Woolgoolga Beach, near Safety Beach village on the north coast of NSW. The fleshing of the beast took over 6 hours. The specimen had been dead for some time before being washed ashore and the stench was at times unbearable and still they toiled to retrieve the skeleton complete.

That's what I call dedication! Ed.

FIVE ISLANDS REPORT

Weather conditions and boat problems have hampered us this season. Generally the breeding season has been a little late with the Little Penguins nesting in lower numbers most birds that were nesting were still incubating eggs or very small chicks in late October and early November. (Chicks generally are fledging at this time of the year) Ed. A Quick visit to Flinder's Island, on November 11th

A Quick visit to Flinder's Island, on November 11th 1998 revealed only 4 pairs of Sooty Oystercatchers nesting, (all had eggs).

On December 3rd 98 our party was able to access Bass Is. The outer-most of the Five Islands group. Here we located 25 active nests of the Kelp Gull (Larus domminicannus), most with eggs 10 nests contained eggs and hatching chicks. 3 chicks were banded by the party. This is the largest number of active nests found to date at the Islands. Indicating that the population is slowly expanding. population has been studied since 1968-69 season Battam et.al. A Sooty Oystercatcher's nest on the northern side contained 2 eggs. The remains of several Pelicans' nests and dead chicks indicated that they had bred on the island this season. "Landing Party" L.E.Smith, Damien Stanioch, Mark Mayhew (Re. Albatross No 18). Our next visit to the Five Islands was on February 4th 1999. When we were joined by Allen Keast E.A.O. and his colleage, Floyd Conner from Queen's University Canada. This was Allen's third visit to the islands since 1942, when he visited the island with Consett Davis. Penguin numbers were well down with few birds ashore. Those that were moulting and were in excellent condition. Several new birds were banded though no chicks are known to have fledged this season, the lowest number since our study began in 1968, 30 years ago!, however there was good recruitment of 3-4 year old birds into the known population. The Crested Terns were successful in lower numbers and fledged only 300+young.

Pelican numbers have stabilised with 70 young birds and 10 nests, with chicks. On our last visit (Dec 1998), there were 350 dependent chicks, and many nests with eggs on Big Island No1 and No 2. Several Arctic Jaegers were observed harassing gulls off Fisherman's Beach.

PENGUIN PROBLEMS

This season 1998/99 has proved to be a disaster for the Little Penguin (Eudytula minor) at breeding sites along the southern coast of NSW. The initial indication that all was not well with the penguins was the late start to breeding attempts at the Five Islands colony. Generally the birds return to the islands to commence breeding activities in late July and early August, most are incubating eggs by mid September. This season was very different with few birds ashore and very little breeding activity noted and the birds generally were well down on average weight. Things became progressively worse. By mid November many breeding attempts had been abandoned. Many very small chicks were found dead in their borrows, whilst other larger down-covered chicks were observed wandering about the colonies in broad daylight apparently staving to death. The decaying bodies of others littered the colony. This was by far the worst season for breeding in the thirty years we have been studying the Five Islands population. It is doubtful that any chicks had fledged at all. Banding activities were suspended to minimise stress on those birds that were ashore.

Soon came news that all was not well at other breeding stations further south. Dr. Nicholas Klomp who is currently undertaking studies of Little Penguins at Montague Island on the far south coast, contacted me to advise that there were major problems with breeding attempts there too. He reported a fledging rate of only 6%, the worst result in the five years of his study.

Bruce Grey (NPWS) and member of the Jarvis Bay Penguin Study Group also advised that things were no better at the breeding colonies on Bowen Island at the entrance to Jarvis Bay.

The cause of this failure is not as yet known. However it may be linked to the swing from El Nino to La Nina which ever the case, there appears to have been a shortage of baitfish within the foraging range of the Penguins.

BLACK PETRELS AT SEA - Tony Palliser

I suppose I could put my hand up and state that I am probably as qualified as anyone to comment on procellaria identification in the field. It has been a hot subject here in Australia ever since the Westland Petrels turned up in 1996. I have learnt a lot about these birds since this time and they are indeed a difficult group.

Firstly White-chinned Petrels in this part of the world (off the NSW coast of Australia) predominantly (but not always) involve birds without any white on the chin at all. So we are left with size and bill colour. Size with all the procellaria petrels varies considerably and this is a trap, particularly if you see a lone bird and have nothing to compare it with. The rule of thumb that I use is to ask yourself is the bird larger than a Flesh-footed Shearwater If it is fairly obvious that it is (say 20-30% larger) and as far as you can see the bill is without a black tip then you can safely assume it will be a WCP. The bill tip is very important and most of the WCPs that we see are positively very pale tipped without any hint of black or dusky colouration. However, it is definitely possible for bill tips to look VERY slightly dusky but never black. The colour of the bill plates as I understand it, is variable according to age. varying from greenish horn to yellowish horn with the nostrils and the ungues paler again. The unques on some (but not all) birds looking distinctly whitish with an almost glossy tone. The ungues normally paler than the main plates.

Westland Petrel (WP) as far as I can tell is absolutely identical in size and body shape to WCP and I would challenge anyone who could tell WCP from WP using these features. Again I think there is considerable variation in size but I think WP and WCP would look noticeably larger than say a Flesh / Pink-footed Shearwater. Having said that, I was caught out with our first sighting of Westland in 1996 in that I thought the bird was too small. So it is not easy, especially if you have a completely unexpected bird. Size estimates alone are very difficult. Now for the interesting part the bill. This is where I need a greater sample size. But, each of the birds that I have seen well have had very dark bill tips with almost the entire unques black (June and Sept). In fact they have shown more black than any of the Black Petrels that we see later in

the year (Nov - Dec). Looking through the museum specimens though it is clear that there is some variation, generally of the three species WP nearly always has more black on the unques. I seem to recall that in some birds (JUVS?) the entire unquis is solidly black. The next feature is the shape of the bill, interestingly each of the birds that we saw in the field looked rather long billed. After studying the photographs for hours it would seem as though this may be because the length of the maxillary unquis is longer and the length of the main bill plates are longer when compared to Black Petrel. A trip to the museum though proved that this is not always true as there is considerable variation in bill length, particularly in BP. In fact I would go so far as to say that there are short-billed Black Petrels and longbilled Black Petrels. There is considerable difference in the measurements but the differences when looking through the specimens seems to indicate that it is entirely proportional. One thing I have noticed is that all the WP's seem to have long bill plates, long ungues and a heavily hooked tip and this shows up in some of my photos as consistent. So if you see a bird that is clearly considerably larger than a Flesh/Pink footed Shearwater and it has a bold black ungues with the bill plates looking long then this is the best clue to the ID being WP. Many have remarked (convincingly I might add) that body bulk is important, WP looks very bull-headed and heavy chested in the field. But I have to admit that I have considerable difficulty judging this feature - it needs a lot of practice and does not help much if you are unfamiliar with the group. Again the colour of the bill is age related, adults having the yellowish horn tone. Black Petrel is a bird I have seen a lot more of over recent years and I have been quite stunned at how difficult they can be to find amongst groups of Flesh-footed Shearwater. They are so similar that they can easily be overlooked. The size is only fractionally larger, probably as little as 10% most of the time. This is where other features such as the bill and the trailing feet and shape come in useful. BP is bulkier and more bull headed than FFS once you get your eye in, but the head is proportionately smaller than that of WP. The bill again is the key and I am staggered at the amount of variation that exists in the bill shape and length of these things. There are, as mentioned above (and to bring the fact to the extreme), short-billed and long-billed BP's. The short billed ones are fairly easy to identify from WP as the bill is so very compact with the unques looking too big for the size of bill (I have quite a few photos that show this). The extent of black on the bill is also variable.

Some birds only have a tiny patch of black on the tip and others have most of the unques black, but I have not seen any BP's yet with entirely black unques quite like that of a typical WP. Because of this variation there is a significant problem in reliably separating WP because with the long-billed forms (as I refer to them) the differences are almost entirely proportional. Though, with a brilliant view of the bill and an opportunity to judge size accurately it is possible. Another factor that may prove to be useful is the height of the maxillary unquis compared to the height of the culminicorn. Some of my photos show a considerable distance in BP its almost as though the bulk of the bill is the maxillary This may explain why WP bills look unauis. proportionately longer. The extent of colour on the mandibular unquis may also be significant. I know from the museum specimens that this varies a lot as well. As for the photos in Harrisons Seabirds of the world. My view is that 187 and 188 are Westland Petrel primarily because (to my eye) they look fairly long billed with dark tips that are very hooked in appearance and both birds are rather barrel chested and bull headed. 189 and 190 though in are in my opinion most likely Whitechinned Petrels and not Black Petrels as stated. I admit that there is a dusky content to the tip but not enough for Westland or Black. Basically though the photos are not good enough to be dead certain and these pictures have troubled me for years, also I have not seen BP of any age in July. Either way none of my photos of BP look like these and I have Anyway this is just a start. fascinating tricky subject. All the best from down under, Tony Palliser

INTERESTING BANDING RECOVERIES

A Wedge-tailed Shearwater (Puffinus pacificus). which was banded as chick on Big Island, Five Islands Group NSW Latitude: 34° 29 'S; Longitude: 150° 56 'E on March 27th 1998: was recovered at Divilacan, Isabela Providence, in the Philippines Latitude 17° 23' N Longitude 122° 19 'E on 14th The time between banding and October 1998. recovery was 0 years 6 months 17 days and the bird had moved a distance of: 6511km with a bearing of 328°. What is also of interest, is that adult WTSW's are present at the Five Islands to breed at this time of the year. The first new moon in October, is generally the period when the birds are most actively engaged in courtship display. This suggests that some young birds remain in the northern hemisphere before returning to breeding grounds as adults. Ed.

BOOKINGS INFORMATION FOR BOAT TRIPS

Iliawarra Boat Charter. Ph: -018-423 555
Captain. Carl Loves (SOSSA) (Sandra K)
Mobile: -61-18-423 555-International
P.O. Box. 148 Fairy Meadow NSW 2519
Email: Bookings for Sandra K:
fishing@wollongong.starway.net.au

Wollongong or Sydney: Ph wk..... 02-9900 1678
Tony Palliser (SOSSA) Ph hm..02-9427 7563 Ph
mb..... 0416 095875 fx wk.. 02-9900 1669
Email: Bookings for palliser@zip.com.au
Pelagic Reports On Home Page Website
Address: http://www.zip.com.au/~palliser

Brisbane Trip Bookings: Ph: 073-3918 839

Paul Walbridge. (SOSSA) Fax: 073-3918 839

135 Lytton Road East Brisbane QLD 4169

Portland Trip Bookings: Ph: 03-9787 7136
Mike Carter. (SOSSA)

30 Canadian Bay Road Mt. Eliza VIC 3930

Ross Payton.(SOSSA)
P.O. Box 410 Dunsborough, W.A. 6281

 Perth Information:
 Ph: 08-9386 5694- H

 Frank O'Connor.(SOSSA)
 Ph: 08-9167 1445- W

8c Hardy Road, Nedlands. W.A. 6009

Email: Bookings for Perth:foconnor@iinet.net.au

Eden Information: Ph: (02) 6495 7390

Barbara Jones Email Bookings for Eden

dbjones@acr.net.au

Tasmanian Information: Ph: 03-6233 6018
Tim Reid Marine Ecosystems Unit
Tasmanian Parks and Wildlife Service
P.O. Box 44a Hobart Tasmania
Email Bookings for Tasmania
Tim. Reid@delm.tas.gov.au.



SANDRA "K" -SEABIRD BIRD WATCHING BOAT TRIPS

4th Sunday Of The Month 25th April 99, 23rd May 99, 27th June 99, 25th July 99, 22nd August 99.

Comments On Boat Trip Data:

The response from all boat trip organisers to requests for reports of their trips has been outstanding. Their willingness to adopt the new data sheets has made the compilation of the completed data sets much more user friendly. There are still a few minor problems to be sorted out and these will be addressed as they come to light. This is particularly evident with the new Albatross Taxonomy. In this latest table we have tried to address this by including Wandering Albatross SD. Black-browed Albatross sp. and Shy Albatross sp. in addition to Giant Petrel sp. This allows for the inclusion of these birds under the previous taxonomy, or for birds that have not been identified to species level. If possible every attempt should be made to identify these birds to species level.

Thanks to the efforts of the boat trip organisers, we now have a very good and improving network. I am sure that there are many people reading with great interest what is happening on their local boat trips and elsewhere. For those members that have been regular subscribers, I am sure that they are noticing trends in the occurrence of seabirds moving along our coastline. This also assists birder's to determine the likelihood of seeing particular seabirds at different locations.

Many thanks to all who are assisting in this research, keep up the good work. The results speak for themselves. Ed.

NEW MEMBERS

98-99 new memberships only

Edward Kleiber, Alex Hunt, Roderick Gardner, David Siems, Duncan & Mish Walbridge, Barry & Val Abbott, Alexander Pisanello.

Next Meeting Saturday 24th April 99

held at HQ. 7.30 pm. 10 Jenkins Street - Unanderra. NSW. We only supply the Coffee, Tea and Biscuits!!!



NEXT NEWSLETTER MAY 1999 (providing there are no major hold ups)

BOAT TRIP DATA SHEET - DSOSSA-BTDS-V1.9-04111998 SOSSA

SOSSA - (02) 4271 6004 - Fax: (02) 4272 4626. PO. Box 142 UNANDERRA NSW 2526

E-mail address: sossa@ozemail.com.au

Seabird Records 1998-1999 TASMANIA & EDEN

			Eder	ì	la	S
Sp No	Species	Nov	Jan	Feb	Oct	Nov
005	Little Penguin, <i>Eudyptula minor</i>	1				3
085	Common Diving-Petrel, Pelecanoides urinatrix				2	
	Giant-Petrel, Macronectes sp					
929	Southern Giant-Petrel, Macronectes giganteus				1	1sp
937	Northern Giant-Petrel, Macronectes halli				1	
074	Southern Fulmar, Fulmarus glacialoides					2
984	Cape Petrel, <i>Daption capense</i>				5	2
075	Great-winged Petrel, Pterodroma macroptera	4	200	9	3	1
971	Providence Petrel, Pterodroma solandri	1				
078	Gould's Petrel, Pterodroma leucoptera		1			
	Fairy Prion, Pachyptila sp].				
083	Fairy Prion, <i>Pachyptila turtur</i>				200	100
084	Antarctic Prion, Pachyptila desolata				10	
917	Black Petrel, Procellaria parkinsoni		6			
0 69	Wedge-tailed Shearwater, Puffinus pacificus		30	250		
975	Buller's Shearwater, Puffinus bullerii	l	4			
072	Flesh-footed Shearwater, Puffinus carneipes		2	1		
070	Sooty Shearwater, Puffinus griseus		1		10	
071	Short-tailed Shearwater, Puffinus tenuirostris	380	40	65	10ks	200
068	Fluttering Shearwater, Puffinus gavia	8				
913	Hutton's Shearwater, Puffinus huttoni	2		9		
	Table 1			1		

	1998-1999		Ede	n	Та	ıs
Sp No	Species	Nov	Jan	Feb	Oct	Nov
	Wandering Albatross, <i>Diomedea sp.</i>	1	2		2	1
086	Wandering Albatross, Diomedea exulans					
973	Northern Royal Albatross, Diomedea sanfordi				1	
974	Royal Albatross, Diomedea epomophora				1	
	Black-browed Albatross, Thalassarche sp					
088	Black-browed Albatross, Thalassarche melanophrys	16		1	1	4
859	Campbell Albatross, Thalassarche impavida					
	Shy Albatross, Thalassarche cauta sp					
091	Shy Albatross, Thalassarche cauta	5		1	150	60
864	Indian yellow-nosed Albatross, Thalassarche bassi		1	1		
063	Wilson's Storm-Petrel, Oceanites oceanicus				11	15
064	Grey-backed Storm-Petrel, Nereis garrodia				2	
065	White-faced Storm-Petrel, Pelagodroma marina		3		2	25
104	Australasian Gannet, Morus serrator	12	20	14	15	4
102	Brown Booby, Sula leucogaster		1			
098	Black-faced Cormorant, Phalacrocorax fuscesens	30	60	80	50	12
096	Great Cormorant, Phalacrocorax carbo	25	8	16	I.	
106	Australian Pelican, Pelicanus conspicillatus	3				
980	Great Skua, Catharacta skua				1	
945	Pomarine Jaeger, Stercorarius pomarinus		35	20		
128	Arctic Jaeger, Stercorarius parasiticus				1	
933	Long-tailed Jaeger, Stercorarius longicauda		4	1		
126	Pacific Gull, Larus pacificus	3		3		3
981	Kelp Gull, Larus dominicanus					15
125	Silver Gull, Larus novaehollandiae				10	20
111	Caspian Tern, Sterna caspia					
115	Crested Tern, Sterna bergii	5		16		
109	White-winged Black Tern, Chlidonias leucoptera	1				
			L			1

BOAT TRIP DATA SHEET - DSOSSA-BTDS-V1.9-04111998 SOSSA

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WOLLONGONG BRISBANE PORTLAND SYDNEY BUSSELTON PERTH TASMANIA EDEN

Brisbane Wollongong Sydney Portland Busselton

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		ω		_			2	2-3	6		15	თ		8	_	Hutton's Shearwater, Puffinus huttoni	913
		60	2				2	20-30	2-4	2-3	8	350	1	1		Fluttering Shearwater, Puffinus gavia	068
		225	2300	10+	200+	2+	2	15+	6-10	20+	4+	600+	, ,	106	72	Short-tailed Shearwater, Puffinus tenuirostris	071
					4	6	6	_	5	ω	15	6				Sooty Shearwater, Puffinus griseus	070
23 3	20 12	100 2		40-60	30+	8+	8+		250+	20+	2		6	5		Flesh-footed Shearwater, Puffinus carneipes	072
				1	6			1	1	1						Buller's Shearwater, Puffinus bullerii	975
				150	140+	230+	230+	250+	20+	50+	125+	400	73	105	92	Wedge-tailed Shearwater, Puffinus pacificus	069
									1							Streaked Shearwater Calonectris leucomelas	853
							2									Black Petrel, Procellaria parkinsoni	917
			1	,							-1	1				White-chinned Petrel, Procellaria aequinoctialis	915
	7	7						1								Fairy Prion, Pachyptila turtur	083
																Prion, Pachyptila sp	
						#1								<u> </u>		Gould's Petrel, Pterodroma leucoptera	078
						#1										Black-winged Petrel, Pterodroma nigripennis	955
					2											White-necked Petrel, Pterodroma cervicalis	774
												1				Kerguelen Petrel, Lugensa brevirostris	935
									1				5	3	23	Tahiti Petrel, Pseudo bulweria rostrata	920
_							ယ	20-25				40+			5	Providence Petrel, Pterodroma solandri	971
								-1								White-headed Petrel, Pterodroma lessonii	077
	1	30	7	15-25	50+	140+	140+	7	40-60	125	75+	7				Great-winged Petrel, Pterodroma macroptera	075
			7									1				Cape Petrel, Daption capense	984
			1					1								Northern Giant-Petrel, Macronectes halli	937
			2												1*	Southern Giant-Petrel, Macronectes giganteus	929
																Giant-Petrel, Macronectes sp	
																South Georgian Diving-Petrel, Pelecanoides georgicus	910
		1														Common Diving-Petrel, Pelecanoides urinatrix	085
		13	7			2		2		2	2	35				Little Penguin, <i>Eudyptula minor</i>	005
ec Jan	Nov Dec	Feb	Oct	Feb	Jan	Dec	Nov	Oct	Feb	Jan	Nov	Oct	c Feb	Dec	Oct	Species	Sp No
pusseiloii	מם	ū	Fortiditu			Sydiley			BILDE	Pirofilorion			₫	DIISDAILE	0		

Please Note

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Possible sighting /not confirmed. Per Tony Palliser * Southern Giant Petrel White phase bird released after rehabilitation by SEAWORLD.

		-	-											-			Common Noddy, Anous stolidus	122
					ω	2	10-14	2		-				8	_	112	Sooty Tern, Sterna fuscata	120
													-			2	Bridled Tern, Sterna anaethetus	121
		-														2	Little Tern, Sterna albifrons	117
						10+	40+					_	10		-	1	Common Tern, Sterna hirundo	953
			ŀ	-													White-fronted Tern, Sterna striata	114
`	\		ō	12	8+	2	3-4	4		ე ე	50+	50+	75+	6	32	66	Crested Tern, Sterna bergii	115
. <	\ \		15	-	50+	10+	ē	₽		20+	40+	100+	150	-	-	_	Silver Gull, Larus novaehollandiae	125
	+									ω	ω	6	2				Kelp Gull, Larus dominicanus	981
			-	2										-			Pacific Gull, Larus pacificus	126
		-	2	`				ω		3-4	2		-		-		Long-tailed Jaeger, Stercorarius longicauda	933
	2		10	-	10-15	7	4	4		5	3	3	8	-	_		Arctic Jaeger, Stercorarius parasiticus	128 ,
			2		6	5	G	51		30+	3	ω		-	==		Pomarine Jaeger, Stercorarius pomarinus	945
	ω																Great Skua, Catharacta skua	980
		-	2												_		South Polar Skua Catharacta maccormicki	979
		-	-		5		ω	ω	8	7	3	သ	6	-	-		Australian Pelican, Pelicanus conspicillatus	106
					2				2				_				Great Cormorant, Phalacrocorax carbo	096
		-			_	2			1								Little black Cormorant, Phalacrocorax sulcirostris	097
<	<				4				2						-	-	Pied Cormorant, Phalacrocorax varius	099
		+	50	75													Black-faced Cormorant, Phalacrocorax fuscesens	1 860
									<	2			-				Little Pied Cormorant, Phalacrocorax melanoleucos	100
							_										Brown Booby, Sula leucogaster	102
8	-														-		Red-tailed Tropicbird, Phaethon rubricauda	107
•	5	+	8000	8000				4		6-10		9	50				Australasian Gannet, Morus serrator	104 /
															-	4	Black-bellied Storm-Petrel, Fregetta tropica	066
			2														Grey-backed StormPetrel Nerris garrodia	064
			4						6+		_	ω	2			28	Wilson's Storm-Petrel, Oceanites oceanicus	063
			80														White -faced Storm Petrel Pelagodroma marina	065
			-														Sooty Albatross Phoebetria palpebrata	092
	ω		80	6													Indian yellow-nosed Albatross, Thalassarche bassi	864
Ì	,			-													Salvin's Albatross, Thalassarche salvini	862
			25	150										-			Shy Albatross, Thalassarche cauta	091
																		- (0
			4					-									Buller's Albatross, Thalassarche bulleri	931
			2					1	_			4	_				Campbell Albatross, Thalassarche impavida	859 (
		-	23	40				15-20	12				-				Black-browed Albatross, Thalassarche melanophrys	1 880
	-		3											-			Black-browed Albatross, Thalassarche sp	
								6-8				2	-				Gibson's Albatross, Diomedea gibsoni	847 (
				51				2-3									Antipodean Albatross, Diomedea antipodensis	846
													_		-		Wandering Albatross, Diomedea exulans	086
				7				12+	12+						-		Wandering Albatross, Diomedea sp	
vail	Dec	NOV	Γeβ	č	rep	Jan	Dec	Nov	Ç	Feb	Jan	Nov	S C	Feb	Dec	ဝင္ရ	Species	Sp No
			ב ב	2	7-2-1		7	1	2]		. 5	VVOIIOLIGOTIG		4	DISDAILE		© Copyright SOSSA 1998 - DSOSSA-BIDS-V1.9-04111998 I 990-1999	© Copyri
2	Busselton	_	Portland	ם כ			Vanbve	· (2	Malland	_		2	ם י		