



TIRITIRI MATANGI ISLAND

COMMON COASTAL BIRDS - BREEDING SURVEY

Breeding season
Spring and summer
2015-2016

Survey Report for year three:

Breeding season 2015 -16

Observations were recorded on 10 visits to the Island between 24th September 2015 and 15th January 2016. The DOC/OSNZ national census of Red-billed gulls prompted a concentration on that specie, and the large number of Red-bills attempting to breed on Tiritiri Matangi this year took the bulk of the time available for observation. As a result data on other species is more limited than is desirable. Northwest point was used for the first time as an additional viewing station (SITE 9).

- 1. RED BILLED GULL** In contrast to the 2 previous years breeding birds used several locations. Emergency Landing Rock Pinnacles held a similar number to previous years – about 100 pairs. Two other sites held good numbers and small groups used suitable rocks and ledges nearby. The rocks just south of Seat Promontory supported almost 60 pairs and the rock flats below the promontory, where Black-backed gulls regularly nest, held another 25 pairs at the northerly end of the flats. Another concentration was on the Curl Rock, north-east of the Fog Horn Shed, where more than a 100 pairs bred. Together with several smaller ‘overflow’ groups, this gave total counts ranging from 283 to 428, with a likely number around 340 breeding pairs. A report with this collected data has been sent to the co-ordinator of the National Red-billed Gull Project and is included in this report within RBG section.
- 2. BLACK BACKED GULL** Small concentrations of nesting birds were again present on the Rock Flats below Seat Promontory (Site 3), at the ‘Five Rocks’ east of the North East Bay Track (Site 7) and at the Pohoutokawa Promontory (Site 5). North West Point (Site 9) held a further 6 nests and other single pairs were scattered around other parts of the coast. The total of breeding pairs is around 45, similar to the previous two years.
- 3. PIED SHAG** Birds continue to occupy the Pohutakwa tree on the cliff side near Emergency Landing (sites 3 & 4). Although it appeared there were 7 nests in use, only six were visible from Emergency Landing in January. Taken together with the observation of 22nd October it looks as though 6 pairs bred successfully, and a 7th may have done so.
- 4. LITTLE SHAG** The rocks visible from North East Bay Track (Site 7) again held Little Shag whenever visited. No nest was detected but the presence of immature birds in company with adults during January suggests that a single pair nested in this area again this year.
- 5. REEF HERON** There was only one sighting of a single Reef heron during survey visits and no evidence of breeding.

6. **WHITE FRONTED TERN** Numbers built up into mid November encouraging hopes of a sizable breeding colony, but by the end of that month most birds had left the area. Unless a few stragglers attempt breeding later in the season, significant nesting on Tiritiri seems unlikely this year.
7. **CASPIAN TERN** Sighting of an adult fishing near the wharf in December and accompanying an immature bird on the Reef shingle on 7th January suggest breeding nearby in The Gulf but there was no indication that nesting was on Tiritiri Matangi.

COMMON COASTAL BIRDS - BREEDING SURVEY

Survey Purpose: The aim of this survey is to measure population fluctuations and trends among the common species utilising the coast of Tiritiri Matangi. Annual counts, using the method described here, commenced in the 2013-14 breeding season. Conclusions for the 2015-16 season are shown above with supporting data below .

Field observation: Most sightings were made by scanning cliff faces and off-shore rocks from established observation stations through a 20x telescope or 8x binoculars. At each station the total number of birds present was counted and a further count made of those that appeared to be 'sitting'. Less frequent visits to other coastal areas produced a few additional records. Birds were gauged to be sitting if they were on obvious nesting material or if their attitude was 'hunkered down'. Distance from the observation point and vegetative cover meant eggs were not usually seen. When chicks began to appear they were counted with any accompanying adult as a single family unit and added to the number of birds that appeared to be still sitting and without chicks.

Evaluation of data: Field notes were entered into the tabular format recorded below. With larger species individual nests were usually well separated and obvious resulting in a simple count of nests and family groups. But the colonial nesting sites of red-billed gull were usually both rather distant and too densely populated to allow exact identification of nests. Estimating their numbers has relied upon averaging counts over several visits, looking for a degree of consistency in the number of sitting birds during the peak period of incubation and hatching and, to a lesser extent, some reasonable proportionality between total numbers and sitting numbers at each site.

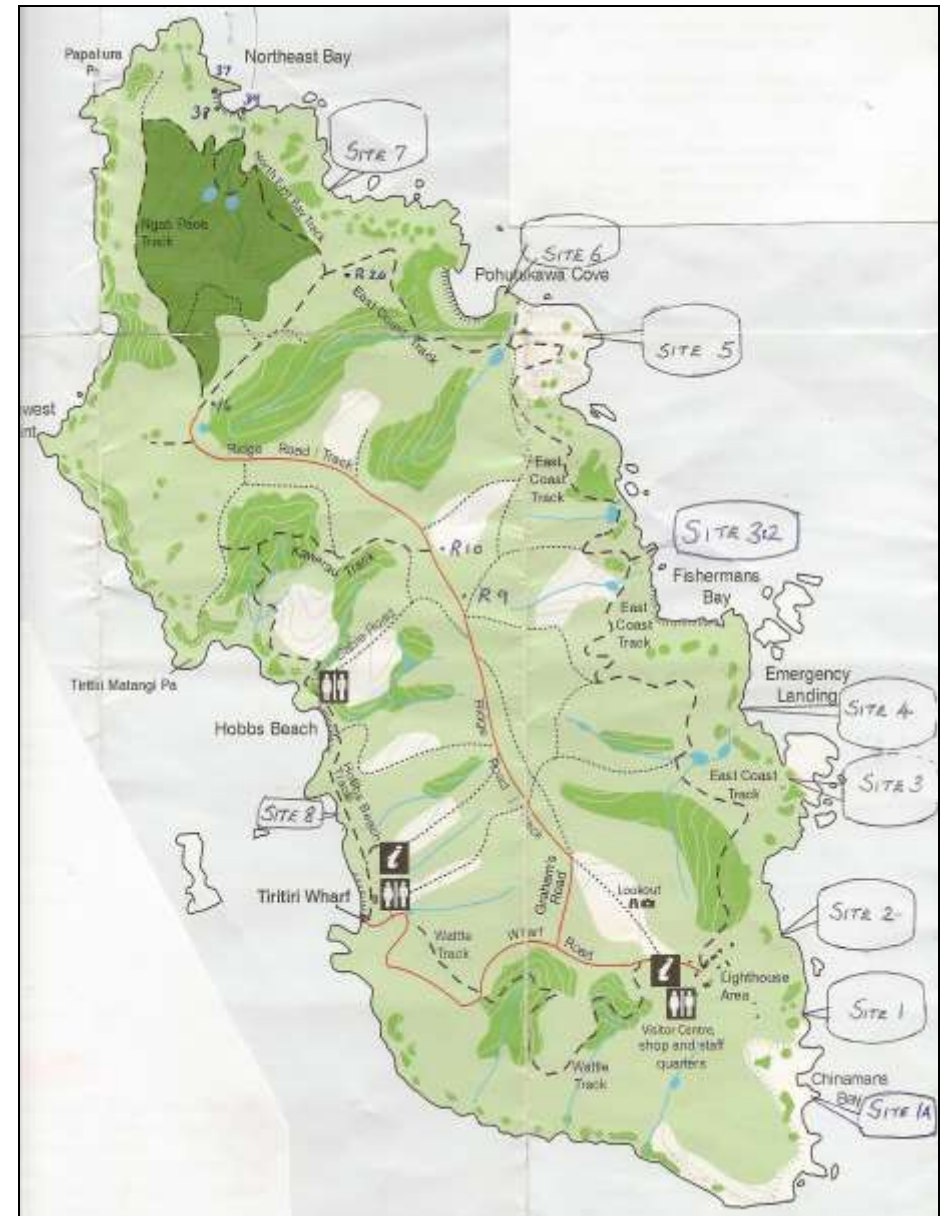
Text Notes: Where 'sitters' are recorded with two numbers (EG: 4+4) the second number will refer to family groups (chicks and accompanying adult or a pair or trio of separated fledglings. Abbreviations used: 'ch' indicates chick; 'grps' & 'g' indicates chick group; 'juv' indicates larger downy & part feathered young; imm & im indicates immature fully feathered fledgling; 'prs' indicates obvious breeding pairs.

Species included:

Red billed gull. Black backed gull. White fronted Tern. Caspian Tern. Pied Shag. Little Shag. Reef Heron.

Viewing Stations:

1. Fog Horn Shed - eastern slope below shed
- beside cliff top pohoutakwa - North to **Curl Rock**, SW to **Twin Peak**.
- 1A. Chinaman's Bay - southern arm of Bay - north to **Bay rock**.
2. Bach Garden - cliff top garden - north to coastal rocks sitting south-east of Seat promontory - **Bach Garden rocks**.
3. Seat Promontory - by two seats - north to rocks running NE of Emergency Landing (Fisherman's Point) – **Emergency Landing Pinnacles**.
- on cliff-top at NE extreme of grass - looking below to **Rock Flats**.
- 3:2 Arches Outcrop
- end of rocky promontory between The Arches and Fishermans Bay
- looking Southeast to **Emergency Landing Pinnacles** (northern face only)
4. Emergency Landing - rocky shore
- looking up to trees lining northern cliff face
5. Pohutukawa Promontory - promontory running east of Pohutukawa Cove
- accessed from U bend on track – viewing from bottom of grass slope:
– looking below to East & NE at **Promontory Rocks** platform.
6. Pohutukawa Cove - on SE point by 'rock stack' - looking NW and East.
7. North East Bay Track - grass slope east of track at its halfway level between junction with east Coast track and the wetlands sign
– down slope behind flax looking NE to Five **Rock Cluster**
8. Little Hobbs Beach - access path at northern end
- looking to the **Reef** beyond the wharf.
9. North West Point – down zig-zag path from NW bend of Ridge Road track
- **Beach Rock & Chimney Stone**.



TIRITIRI MATANGI ISLAND		COMMON COASTAL BREEDING BIRDS				SURVEY DATA 2015 -2016	
SPECIE :	RED BILLED GULL <i>Larus novaehollandiae</i>						
LOCATIONS OF BREEDING BIRDS							
VIEWING SITE : →	FOG HORN SHED - <i>Site 1</i>						
	Curl Rock (to N)		Cliff base opposite Rock		Twin Peak Rock (to SE)		
	<i>Total number</i>	<i>Sitting birds</i>	<i>Total number</i>	<i>Sitting birds</i>	<i>Total number</i>	<i>Sitting birds</i>	<i>Notes</i>
24 Sept	110 - 140	0					<i>Resting area? Flushed by harrier.</i>
9 Oct	78	15					<i>(Viewed from Site 3)</i>
16 Oct	130	36					<i>(Viewed from Site 3)</i>
22 Oct	171	89	48	21			<i>Count @ 12.00 noon</i>
	+60	+30					<i>Curl Rock North face from EC track</i>
5 Nov	152	83	45	27	8	4	
13 Nov	Not counted	69	50	30	12	5	
	89	+44					<i>Curl Rock North face from EC track</i>
28 Nov	111	29 + 36 ch grps	58 +	20 + 10 ch grps	14	4	
	+ circa 120	+ 30 + 22 ch grps					<i>Curl Rock North face from EC track</i>
18 Dec	circa 62	8 + 61 ch grps	29	8 + 14 ch grps	11	3 + 3 ch grps	
	Circa 45	+ 5 + 21 ch grps					<i>Curl Rock North face from EC track. Hurried count before ferry departed</i>

SUMMARY: The large curving face of Curl Rock was counted in 5 sections from the Fog horn station, and a single count from Arches outcrop discounting the landward face which is visible from both stations. Ridge dwelling birds could also be seen from both counting stations so these were generally excluded from the Arches count. The average count is based on 13 & 28 Nov & 18 Dec – 67 from Shed side plus 41 from Track side. Breeding pairs about 108. Cliff base site, the closest to any viewing station held 27 pairs and Twin Peak rock appeared to have just 5.

VIEWING SITE : →	FAR SEAT VIEW TO FOG HORN BAY - Site 1:1				
VIEWING DATE ↓	North east Rock		Cliff face		NOTES
	<i>Total</i>	<i>Sitting</i>	<i>Total</i>	<i>Sitting</i>	
28 Nov	0	0	15	9 + 1 ch grp	
18 Dec	0	0	17	10 + 4 ch grps	

SUMMARY: Small group of nests on cliff face only discovered late in the season. Probably 12 pairs breeding here.

VIEWING SITE : →	BACH GARDEN - Site 2												
VIEWING DATE ↓	North rock 1		North rock 2		North rock 3		North rock 4		North rock 5		Whole site		<i>Notes</i>
	<i>Total</i>	<i>Sitting</i>	<i>Total</i>	<i>Sitting</i>	<i>Total</i>	<i>Sitting</i>	<i>Total</i>	<i>Sitting</i>	<i>Total</i>	<i>Sitting</i>	<i>Total</i>	<i>Sitting</i>	
9 Oct	36	16	22	8	36	14	84	33	5	3	183	74	
16 Oct	34	17	3	2	1	0	6	0			44	19	
22 Oct	37	15	4	2	0	0	6	4	1	0	48	21	
5 Nov	36	19	13	9	16	4	32	14	6	1	103	47	<i>Calm & sunny. pm</i>
12 Nov	30	16	10	7	8	5	43	19	2	1	93	48	<i>Heat haze</i>
28 Nov	30	10+7g	14	8	13	8	65	32	17	4	139	62+7	<i>Sun & shower</i>
18 Dec	13+	1 + 9g	7	1 + 2g	17	9	42	23 + 1g	15	8	94 +	42+12	<i>Windy with sun</i>

VIEWING SITE : →	SEAT PROMONTORY - Site 3																
VIEWING DATE ↓	Main Cliff & Thumb rock		EL Pin 1		EL Pin 2		EL Pin 3		EL Pin 4		EL Pin 5		EL Pin 6		Whole site		Notes
	Total	Sitting	Total	Sitting	Total	Sitting	Total	Sitting	Total	Sitting	Total	Sitting	Total	Sitting	Total	Sitting	
9 Oct							34	9	6	2	8	1			48	12	<i>Sunny & still</i>
16 Oct	0	0	28	5	80	15	87	18	15	4	32	10	0	0	242	62	<i>Cloud & breeze</i>
22 Oct			39	12	94	32	97	31	15	7	27	11	0	0	272	93	
13 Nov	0	0	24	16	70	42	84	46	12	6	26	14	0	0	216	124	
28 Nov	0	0	24	6+5g	72	20+4g	92	9+8g	10	2+2g	28	4+4g	0	0	226	41+23	
18 Dec	0	0	23	6+8g	40	16+9g	c 60	5+18g	1	1g	15	3+3g	0	0	136	30+39	
7 January			10		32		42		0		4		0		88		<i>Blustery NE</i>

SUMMARY: Interpretation of data: A difficult area to count because views are hampered by distance between the observation points and the breeding site, by the lack of a sight-line to some rock faces and by the cover of vegetation available to nests and chicks. In blustery conditions 'grey immatures' difficult to separate from adults. Counts suggest in the region of 70 pairs, but totals present in November suggest there may have been additional nests in obscured areas. Pairs using the seaward rock faces are accounted separately from "Arches Outcrop".

SEAT PROMONTORY - Site 3		
VIEWING DATE ↓	Promontory Flats (rocks below NE cliff face)	
	Total number	Sitting
16 Oct	6	2
22 Oct	37	15
28 Nov	38	14 + 5 chick groups
18 Dec	26	16 + 11 chick groups

7 January	250+		8 sitters in nesting materials		Adults and fledged young in sheltered lagoon adjacent to Prom rocks										
<p><i>SUMMARY: The closest area to monitor from the Promontory above. Most nests clearly visible. Nesting numbers increased through November into early December. Some sitting birds at the December count may have only been monitoring chicks. Breeding likely to be about 25 pairs.</i></p>															
VIEWING SITE : →	ARCHES OUTCROP - Site 3:2														
VIEWING DATE ↓	EL Pin (seaward face W) – sequence as viewed inshore to offshore														
	Main Cliff & Thumb rock		Inshore rock		EL pin 1 masking 2		EL pin 4 behind 7		EL pin 3		EL pin 5 masking 6		Whole Site		<i>Notes</i>
	<i>Total</i>	<i>Sitting</i>	<i>Total</i>	<i>Sitting</i>	<i>Total</i>	<i>Sitter</i>	<i>Total</i>	<i>Sitter</i>	<i>Total</i>	<i>Sitter</i>	<i>Total</i>	<i>Sitter</i>	<i>Total</i>	<i>Sitting</i>	
24 Sept	3	0	35	0									38	0	
9 Oct					0	0	2	0	8	1	8	1	18	2	
16 Oct	4	0			20	9	8	2	20	6	17	6	69	23	
22 Oct	1	1	0	0	27	14	8	2	27	10	17	3	79	30	<i>wind afternoon</i>
12 Nov	1	1	0	0	30	18	12	7	23	9	9	5	80	40	
28 Nov	0	0	0	0	25	8+2g	11	2+1g	35	5+0	17	3+1g	88	18+4	
18 Dec															<i>No time for visit</i>
<p><i>SUMMARY: Counts between 22 and 40 pairs suggest a further 30 pairs to add to the 70 estimated from the "Seat promontory" station. An overall total of 100 pairs at these Emergency Landing rocky pinnacles, compared with very similar numbers here over the previous 2 years.</i></p>															
VIEWING SITE : →	LITTLE HOBBS BEACH - Site 8														

VIEWING DATE ↓	Wharf Bay Rocks		Notes
	Total number	Sitting	
24 Sept	60 +	0	
<i>SUMMARY: Regular monitoring throughout the season indicated this area only used for resting. No breeding here.</i>			

RED-BILLED GULL	BREEDING SURVEY 2015-2016	TIRITIRI MATANGI ISLAND
<u>REPORT for national breeding census of Red-billed Gull</u> (sent to Peter Frost OSNZ) :		PAGE 1
<p><i>Counts were undertaken on 8 visits to the island of Tiritiri Matangi between 24th September and 18th December. Dispersal of most young birds was evident on 7th January. Observations were usually from cliff top locations by means of a Kowa 20x telescope. This is the third year that members of the Supporters of Tiritiri Matangi have attempted to assess breeding numbers of common coastal breeding birds, including Red-billed gull.</i></p> <p><u>Locations:</u> <i>Main breeding sites were on off-shore rocks with smaller numbers on the rocky base of steep island cliffs. All sites were in the southern half of the east coast of Tiritiri Matangi. The previous two years have seen breeding birds concentrated in the rocks just north of Emergency Landing with around 100 breeding pairs. This year birds have nested in 3 main areas with some smaller 'overflow' units. The main sites are Curl Rock (viewed north from the Fog Horn Shed), Bach garden rocks (lying south of Seat Promontory and viewed from the cliff top garden of the rangers small bach), and the traditional site north of Emergency Landing. Four other smaller areas nearby were also utilised.</i></p> <p><u>Methodology:</u> <i>Numbers were recorded for each rock at each site and larger rocks were counted on a sectional basis. Counts were made for the total of birds present and then for the number that appeared to be sitting and well settled. Once chicks appeared at any site they were counted by family groups and added to the remaining sitting birds. Breeding numbers were estimated by comparing the counts on different dates at each of the sites. The September and October counts were used only as a guide to the build up of numbers. On 18th December many chicks were present and in some locations older fledglings had moved off the immediate site, so this count was likely to already show declining numbers. November 13th and 28th appear to cover the peak period and offer the most reliable guide to breeding numbers. However, 'sitting' birds may not all be breeders; some clearly were surrounded by nesting materials, others were too hidden in vegetation to be sure, and some rocks were necessarily viewed from a considerable distance. Results are summarised for each area firstly as the range of numbers over 3 optimum dates ; secondly as the average over those dates and finally as a selected number from the two November peak counts.</i></p>		

RED-BILLED GULL**BREEDING SURVEY 2015-2016****TIRITIRI MATANGI ISLAND**

REPORT sent to Peter Frost OSNZ

PAGE 2

BREEDING SITE	VIEWING STATIONS	BREEDING PAIR NUMBER RANGE	AVERAGE OF 3 COUNTS	OPTIMUM COUNT
<i>CURL ROCK</i> 36.605538 x 174.899820	<i>Fog Horn Shed & East Coast track</i>	95 - 117	108	112
<i>CLIFF BASE</i> 36.606388 x 174.899676	<i>Fog Horn Shed</i>	22 - 30	27	30
<i>TWIN PEAK ROCK</i> 36.607678 x 174.900260	<i>Fog Horn Shed</i>	4 - 6	5	5
<i>FOG HORN CLIFF FACE</i>	<i>Far seat</i>	10 - 14	12	10
<i>BACH GARDEN ROCKS</i> 36.602911 x 174.899045 <i>(Chinaman's Bay islet north)</i>	<i>Bach garden</i>	47 - 69	54	58
<i>EM. LANDING PINNACLES</i> 36.599595 x 174.897698 <i>(Fishermans Point)</i>	<i>Seat promontory & Arches outcrop</i>	86 - 164	118	100
<i>PROMONTORY FLATS</i> 36.601554 x 174.898495	<i>Seat promontory</i>	19 - 27	23	25
Numbers Totals		283 - 428	347	340

BLACK-BACKED GULL NEXT

TIRITIRI MATANGI ISLAND		COMMON COASTAL BREEDING BIRDS			SURVEY 2015 -2016	
SPECIE :	BLACK BACKED GULL <i>Larus dominicanus</i>					
LOCATIONS OF BREEDING BIRDS						
VIEWING SITE : →	CHINAMANS BAY - <i>Site 1:2</i>					
	Bay Island		Southerly Face		<i>Notes</i>	
	<i>Total number</i>	<i>Sitting</i>	<i>Total number</i>	<i>Sitting</i>		
18 Dec	0	0	0	0		
<i>SUMMARY: No nesting observed here.</i>						
VIEWING SITE : →	BACH GARDEN - <i>Site 2</i>					
VIEWING DATE ↓	Rocks East of Seat Prom (adjacent NE prom rocks)					
	<i>Total number</i>		<i>Sitting</i>			
16 Oct	2		0			
13 Nov	2		1		<i>Sitting bird on Bay Rock</i>	
28 Nov	1		1		<i>Sitting bird on Bay Rock</i>	
18 Dec	2		0		<i>No sign of any chicks. Maybe under vegetation?</i>	
7 January	1		0 + 1imm			
<i>SUMMARY: 1 pair reared young on Bay rock.</i>						

VIEWING SITE → SEAT PROMONTORY - Site 3				
VIEWING DATE ↓	Promontory Rocks (below NE cliff face)		Notes	
	Total number	Sitting		
9 Oct	6	0		
16 Oct	9	0		
22 Oct	17	0		
13 Nov	18	7	<i>Flats Right to Left contained 4, 1, 1, & 1 (thin close rock) sitters.</i>	
28 Nov	15	7 + 2 ch grps	<i>Flats Right to Left contained 4, 1, 1, & 1 (thin close rock) sitters, plus 2 pairs of chicks.</i>	
18 Dec	16	7 + 3 ch grps	<i>Flats Right to Left contained 2, 2, 2, & 1 sitters, plus 2 pairs of chicks on far right rock</i>	
7 January	11	1 + 7 ch grps	<i>Flats Right to Left contained, 3, 1,2,1 fledglings sitters, plus 1 sitter on R2</i>	
<i>SUMMARY: 8 – 10 pairs bred successfully</i>				
VIEWING SITE → ARCHES OUTCROP - Site 3:2				
VIEWING DATE ↓	Main Cliff to NW		Main Cliff to East	
	Total number	Sitting	Total number	Sitting
16 Oct			0	0
28 Nov	1	1	1	1
<i>SUMMARY: At least 2 pairs nested at this site</i>				

VIEWING SITE : →	POHUTUKAWA PROMONTORY - Site 5				
VIEWING DATE ↓	Rocky Point				
	Total number	Sitting			
24 Sept	5	2			
16 Oct	24	0	<i>Birds rose from lower rocks as cliff edge approached, circling and calling alarm</i>		
12 Nov	10	8 +	<i>8 clearly sitting on nests, others may be hidden lower. Closer approach would disturb sitters. One bird re-positioning revealed 2 eggs.</i>		
7 January	20	0 + 21 juvs	<i>Juvs in 9 or 10 family groups along cliff top. Lower cliff not visible.</i>		
<i>SUMMARY: About 10 pairs successful at this site. No attempt was made to climb down to the nesting area because of inevitable disturbance. Steep shelving of lower cliff conceals some possible nesting locations.</i>					
VIEWING SITE : →	POHUTUKAWA COVE - Site 6				
VIEWING DATE ↓	Lower Cliff Slope N end of Pohutukawa Prom flats		Cove West End Cliff		Notes
	Total number	Sitting	Total number	Sitting	
24 Sept			2	0	
16 Oct	5	2	7	1	
12 Nov			5	3	<i>Lower cliff added in with Site 5 above</i>
7 January			3	1 group of 2juv	<i>Lower cliff added in with Site 5 above. Blustery NE wind.</i>
<i>SUMMARY: Two or three breeding pairs on the west End Cliff</i>					

VIEWING SITE : →	NORTH-EAST BAY TRACK - Site 7														
VIEWING DATE ↓	Five Rock Cluster														
	Rock 1 (far Right)		Rock 2		Rock 3		Rock 4 (twin peak)		Rock 5 (in-shore)		Cliff Base		= Whole site		Notes
	<i>Total number</i>	<i>Sitting</i>	<i>Total number</i>	<i>Sitting</i>	<i>Total number</i>	<i>Sitting</i>	<i>Total number</i>	<i>Sitting</i>	<i>Total number</i>	<i>Sitting</i>	<i>Total number</i>	<i>Sitting</i>	<i>Total number</i>	<i>Sitting</i>	
24 Sept	4	1	0	0	1	0	2	0	1	0			8	1	
16 Oct	9	1-2	6	2	0	0	3	1	2	1	1	0	20	5-6	<i>Some obvious prs</i>
12 Nov	3	1	5	4	1	0	2	1	2	0	-	-	13	6	
7 January	3	2+1g2	6	4+1im	0	0	3	1+1im	0	0	3	2	15	9+3g	<i>Blustery NE wind</i>
14 January	3		4		3		4		0	0	-	-	<i>Sitting birds probably watching juvs. 2 fledged imms. In water.</i>		
SUMMARY: <i>Between 6 and 9 pairs successful at this site</i>															
VIEWING SITE : →	LITTLE HOBBS BEACH - Site 8														
VIEWING DATE ↓	Wharf Bay Reef										Notes				
	<i>Total number</i>					<i>Sitting</i>									
SUMMARY: <i>No breeding here</i>															

VIEWING SITE : →	NORTH WEST POINT - Site 9				
VIEWING DATE ↓	Point Rock		Beach chimney-stone		Notes
	Total number	Sitting	Total number	Sitting	
12 Nov	10	5	1	1	Nest materials evident 4 Point + 1 chimney

SUMMARY: 6 pairs on nests here

ADDITIONAL BLACK-BACK RECORDS

VIEWING DATE ↓	VIEWING SITE ↓	Observation	Deduction
24 Sept	NE Bay	1 bird at NW end rock	
16 Oct	NE Bay	1 bird at NW end sitting in last grass flat above water	
12 Nov	NE Bay	Total 3, 2 sitting, nest material – Bay rock & N point	
	Old 3:2 site with seat	1 sitting bird on NW rock	
	Wharf – grass point to east	1 sitting bird	
28 Nov	Wharf – grass point to east	1 sitting bird	
18 Dec	Fog horn view to twin peak	1 sitting bird	
7 January	NE Bay	2 adults with 1 brown imm	
14 January	NE Bay	2 imm birds flying in bay and returning to beg from adult on beach	
15 January	Wharf – grass point to east	3 juvs with adult on waters edge just past Point	

SUMMARY: 4-5 pairs nesting

OVERALL SUMMARY: Visits to some breeding areas have been curtailed by concentration on counting the larger numbers of red-billed gulls using Tititiri Matangi this year. Breeding was evidently successful for most pairs. The short stretch of coast between Papakura Pa and the northern tip above North East Bay has not been accessed but the assistant ranger reports more gulls present in the upper half of this area. Additional nesting is possible in that area, west from the visible point of North east Bay. Numbers around the island coast may therefore be up to 50 pairs but gathered observations point to 40- 45 pairs.

TIRITIRI MATANGI ISLAND		COMMON COASTAL BREEDING BIRDS		SURVEY 2015 -2016	
SPECIE :		PIED SHAG <i>Phalacrocorax varius</i>			
LOCATIONS OF BREEDING BIRDS					
VIEWING SITE : →		SEAT PROMONTORY - <i>Site 3</i>			
	<i>Total number</i>	<i>Sitting</i>	<i>Notes</i>		
24 Sept	12	5	<i>7 nest clearly visible from below(5 occupied) and 1 slender collection of twigs with a bird alongside</i>		
16 Oct			<i>Only 5 nests visible – all occupied, 4 with young ‘grey’ birds, 1 with deep-sitting adult</i>		
VIEWING SITE : →		EMERGENCY LANDING - <i>Site 4</i>			
	<i>Total number</i>	<i>Sitting</i>	<i>Notes</i>		
22 Oct	12	3 +	<i>7 nests – all occupied. 3 sitting adults, 3 nests with young- 2 each. One pair adding nest material.</i>		
7 January			<i>Only 6 nests evident, plus the ‘slender collection’. 3 adult, none sitting, and several full sized ‘grey birds’</i>		
SUMMARY: <i>Insufficient visits to be confident of breeding numbers. Limited observations suggest successful breeding by 6 pairs.</i>					

TIRITIRI MATANGI ISLAND		COMMON COASTAL BREEDING BIRDS		SURVEY 2015 -2016	
SPECIE :	LITTLE SHAG <i>Phalacrocorax melanoleucos</i>				
LOCATIONS OF BREEDING BIRDS					
VIEWING SITE :	NORTH-EAST BAY TRACK - <i>Site 7</i>				
	Five Rock Cluster				
	<i>Total number</i>	<i>Sitting</i>	<i>Observation</i>		
24 Sept	1	0	<i>Single bird perched in tree on rock 4, joining previously present Pied Shag</i>		
16 Oct	1	0	<i>Single bird perched in tree on rock 4 for some time before flying</i>		
12 Nov	1	0	<i>Single bird perched in tree on rock 5.</i>		
7 January	3	0	<i>2 adult birds and 1 fledged immature in Rock 5 trees</i>		
14 January	3	0	<i>1 imm. sat in Rock 4 tree, displaced by adult and flying to Rock 2 tree where 2nd imm. was perched. An adult bird also observed at NE Bay north point tree, flying in from south, sitting for 30 mins before returning towards Five Rock Cluster.</i>		
VIEWING SITE →	EMERGENCY LANDING - <i>Site 4</i>				
VIEWING DATE ↓	<i>Total number</i>	<i>Sitting</i>	<i>Observation</i>		
<i>SUMMARY: Although no nest was located, it seems likely that a single pair of Little Shag bred again this year somewhere within this location.</i>					

TIRITIRI MATANGI ISLAND		COMMON COASTAL BREEDING BIRDS	SURVEY 2015 -2016
SPECIE :	REEF HERON Egretta sacra		
LOCATIONS OF BREEDING BIRDS			
VIEWING SITE : →	NORTH-EAST BAY TRACK - Site 7		
	Five Rock Cluster – Rock 2		
	<i>Observation</i>		
14 January	A single adult flew north west across NE Bay and round the point towards the north coast, coming from direction of Five Rock Cluster. None observed on earlier visits during September, October and November.		
<i>SUMMARY: No evidence of breeding in this area.</i>			

WHITE-FRONTED TERN NEXT

TIRITIRI MATANGI ISLAND		COMMON COASTAL BREEDING BIRDS				SURVEY 2015 -2016	
SPECIE :	WHITE FRONTED TERN <i>Sterna striata</i>						
LOCATIONS OF BREEDING BIRDS							
VIEWING SITE : →	FOG HORN SHED - <i>Site 1</i>						
VIEWING DATE ↓	Curl Rock (to N)		Cliff Base opposite Rock		Twin Peak Rock (to SE)		<i>Notes</i>
	<i>Total number</i>	<i>Sitting</i>	<i>Total number</i>	<i>Sitting</i>	<i>Total number</i>	<i>Sitting</i>	
5 Nov	0	0	54	22	40	23	
12 Nov	0	0	?	4	?	25 + 12	<i>Too much activity for useful totals</i>
28 Nov	0	0	0	0	2	1	
15 January	9	2					<i>Nesting possible ?</i>
VIEWING SITE : →	FAR SEAT VIEW TO FOG HORN BAY - <i>Site 1:1</i>						
VIEWING DATE ↓	North East Rock				<i>Notes</i>		
	<i>Total number</i>		<i>Sitting</i>				
13 Nov	81		43		<i>Large flat rock with little elevation, possible nesters by flattened impression of sitter?</i>		
28 Nov	0		0				
18 Dec	3		2 ?		<i>Possible nesting pair on cliff face ledge</i>		

VIEWING SITE : →	SEAT PROMONTORY - Site 3														
VIEWING DATE ↓	EL Pin 1		EL Pin 2		EL Pin 3		EL Pin 4		EL Pin 5		EL Cliff Base		Remote Rock		<i>Notes</i>
	<i>Total number</i>	<i>Sitting</i>	<i>Total number</i>	<i>Sitting</i>	<i>Total number</i>	<i>Sitting</i>	<i>Total number</i>	<i>Sitting</i>	<i>Total number</i>	<i>Sitting</i>	<i>Total number</i>	<i>Sitting</i>	<i>Total number</i>	<i>Sitting</i>	
24 Sept											3	0			
28 Nov															

VIEWING SITE →	SEAT PROMONTORY - Site 3														
	Promontory Rocks (below NE cliff face)								<i>Notes</i>						
VIEWING DATE ↓	<i>Total number</i>				<i>Sitting</i>										
9 Oct	77				4				<i>Plus 40 birds on low water rocks adjacent to EL Pin 6</i>						
16 Oct	16				2				<i>Although 2 sitting, thought to be settled rest</i>						
22 Oct	79				7				<i>Sunny, wind getting up after noon</i>						
13 Nov	63				41				<i>Counted in 3 groups – 25 + 12 + 4</i>						

VIEWING SITE →	ARCHES OUTCROP - Site 3:2																
VIEWING DATE ↓	EL Pin (seaward face W)																
	Main Cliff & Thumb rock		EL Pin 1 (Inshore rock)		EL pin 2		EL pin 3		EL pin 4		EL pin 5		EL pin 6		Whole Site		<i>Notes</i>
	<i>Total</i>	<i>Sitting</i>	<i>Total</i>	<i>Sitting</i>	<i>Total</i>	<i>Sitting</i>	<i>Total</i>	<i>Sitting</i>	<i>Total</i>	<i>Sitting</i>	<i>Total</i>	<i>Sitting</i>	<i>Total</i>	<i>Sitting</i>	<i>Total</i>	<i>Sitting</i>	
16 Oct									4	0			7	0			

<p><i>SUMMARY: The build up of numbers into mid November suggested breeding might occur in 3 locations. So it was disappointing to find most birds had moved out by the end of November. No breeding pairs were detected by mid January. None thought to have used Tiritiri Matangi this year</i></p>				

TIRITIRI MATANGI ISLAND	COMMON COASTAL BREEDING BIRDS		SURVEY 2015 -2016
MISCELLANEOOUS RECORDS			
SPECIES	LOCATION	DATE	OBSERVATION
OYSTERCATCHER	Seat promontory	18 Dec	Pair present, 1 sitting.
CASPIAN TERN	Wharf area	18 Dec	Single bird hawking over bay
CASPIAN TERN	Wharf Reef shingle	7 January	One adult and one fledged immature
<p><i>SUMMARY: The presence in early January of an immature Caspian tern with an adult bird indicates successful breeding but there is no conclusive evidence that this occurred on Tiritiri Matangi. Variable Oystercatcher nest in a number of well know locations, like Hobbs Beach and South of the Wharf. Although they have not been included in this survey pairs have been noticeable at Rock Flats below Seat Promontory and at North east Bay.</i></p>			