First Set.

Date	4/12/20			Rain (0-5)	0	Temp (1-6)	4
Transect	Medland			Wind (0-1)	2	Noise (1-3)	
Observers	JO, Jenni O, Lotte M			Cloud (0-4)	2		

cold wind.
variable

Transect point	1			Time started	7.[illegible]	Time finished	7.16
Species	Seen	Heard	Inside 25m	Outside 25m	Fly over	Additional birds (Key or new) recorded between points	
~~Kereru~~	~~1~~	~~1~~		~~1~~			
Tui	1 same	1		1			
~~Kaka~~ Kaka	1	1		2			
~~Kereru~~							
unknown							
~~Tui~~							
~~Blackbird~~							
~~Kakariki~~ L.B Sha						1	
~~Fantail~~							
~~unknown~~ Mallard						1	
RB Gull	1			1			
Yellowhen		1		1			
Harrier	1			1			
Kingfisher		2		2			
Fantail		1		1			
Skylark		1		1			
Kereru		1		1			
Blackbird						1	
Pateke						2	

Transect point	2			Time started	7.26	Time finished	7.32
Species	Seen	Heard	Inside 25m	Outside 25m	Fly over	Additional birds (Key or new) between points	
Kingfisher		1		4			
Kaka		1		1			
Y hammer		2		2			
Goldfinch		1		1			
Tui	1	1		1			
Fantail		1	1	[illegible]			
Skylark		1		1			
BB		1		1			
Pukeko		1		1			
B Rail		1		1			
Greywarb						1	
Chaffinch						1	

vehicle.

Transect point	3			Time started	7.44	Time finished	
Species	**Seen**	**Heard**	**Inside 25m**	**Outside 25m**	**Fly over**	Additional birds (Key or new) recorded between points	
K fisher		2	1	2			vehicle
Chaffinch		1		1			
B Bird		1		1			
Swallow	4		4				!
~~Stag~~ Kaka		1		1			
G. Warb		2		2			
Fantail	1			1			
Kaka						2	
R B Gull						3	
Starlings						1	
Pukeko						4	

Transect point	4			Time started	7.53	Time finished	8.02	
Species	**Seen**	**Heard**	**Inside 25m**	**Outside 25m**	**Fly over**	Additional birds (Key or new) between points		vehicle !! more than 1 per minute
~~K fisher~~								
~~Chaffinch~~								
Swallow	✓ ~~6~~ 6		~~6~~ 6					
Chaffinch		1	1					
Pukeko		2	1	1				
G finch		1		1				
Kaka		1		1				
warbler		1		1				
R B Gull		4		4				
Kingfisher		1		1				
B Bird		1		1				
Tui						1		

vehicles!

DO IT ON SUNDAY!!

Transect point	5			Time started	8.11	Time finished 8.16
Species	Seen	Heard	Inside 25m	Outside 25m	Fly over	Additional birds (Key or new) recorded between points
Kfisher		1		1		
Puheko		R		2		
Kaka		1		1		
Starling		1		1		
Chaff		1		1		
G finch	1		1			
Tui	R			2		
Swallow	4			'4'		

vehicles airplane

No Thrushes although abundant here
Mynas – None!

Any additional notes can be written down bottom of data sheet(s) e.g. If weather has a significant change during the transect: 'Rain has changed to a 3, time: 09:30, place: transect 3.

2nd Set.

Pt Hoop
Lotte

Medlands.

Date	4/12/20	Rain (0-5)	0	Temp (1-6)	5
Transect	Okiwanhi	Wind (0-1)	2	Noise (1-3)	3
Observers	JO Jenni O, Lotte M	Cloud (0-4)	2		

windy

Transect point	5			Time started	9.27	Time finished 9.32
Species	Seen	Heard	Inside 25m	Outside 25m	Fly over	Additional birds (Key or new) recorded between points
~~Kereru~~ Starling		1		1		
~~Tui~~ Chaffinch		1		1		
~~Kaka~~ G finch	✓1	1	1	1		
~~Kereru~~ RBG		1		1		
~~unknown~~ Pukeko		3		3		
~~Tui~~ Sparrow	1	1	1			
~~Blackbird~~ Mallard	1	1		1		
~~Kakariki~~ Skylark		1		1		
~~Fantail~~ B. Bird		1		1		
~~unknown~~ Tui	1	1		2		
K fisher						1
B Teal						1
B. Bird						1

vehicles > 1/min

Transect point	4			Time started	9.40	Time finished 9.45
Species	Seen	Heard	Inside 25m	Outside 25m	Fly over	Additional birds (Key or new) between points
Chaffinch		2		2		
Pukeko		3	1	3		
Mallard		1		1		
Sparrow				many a long way away – guess n = 10		
Tui	3			3		
G. Warb		1		1		
Mynah		1		1		
Unknown "finch"		1		1		

vehicles –

Ailanthus

9.52

Transect point	3			Time started		Time finished	9.57
Species	Seen	Heard	Inside 25m	Outside 25m	Fly over	Additional birds (Key or new) recorded between points	
Chaffinch		2		2			
B Bird		1		1			
K fisher		2		2			
Tui	1	2		2			
Puk				1			
Mynah						1	
Shag LB						2	
Skylark						1	
Wwable						1	

vehicles
11/1111
11/1111
11
17

Transect point	2			Time started	10.05	Time finished	10.10
Species	Seen	Heard	Inside 25m	Outside 25m	Fly over	Additional birds (Key or new) between points	
Starling		✓		∞ (10?)			
Grey wat		3		3			
Chaffinch		2		2			
Y hammer		1		1			
Silvereye		1	1				
Tui	1			1			
Fantail		1	1				
Mallard		1		1			
Kaka	1			1			
Puk		1		1			
K fisher		1		1			
Skylark		1		1			
Mynah						1	
L B Shag						1	
Kaka						1	

Plane
Vehicles + Quarry noise
1111111
1111
12

Transect point	1			Time started	10.17	Time finished	10.22
Species	**Seen**	**Heard**	**Inside 25m**	**Outside 25m**	**Fly over**	**Additional birds (Key or new) recorded between points**	
G finch		1	1				
Tit		1	1				
Chaffinch		1		1			
Silkange		1	1	1			
Kcrem	1			1			
K fisher	1	1	1	1			
G warb		1		1			
Kalea	1		1				
Yellow H.		2		2			
Skylark		1		1			

Quarry
Reple
Turkey -
vehicle
HHT
III

Any additional notes can be written down bottom of data sheet(s) e.g. If weather has a significant change during the transect: 'Rain has changed to a 3, time: 09:30, place: transect 3.

Comments on Bird Count 4/12/20
John Ogden.

The Medlands transect along the main road was very noisy - both times (7.11– 8.16AM and 9.27 – 10.22 AM). There were vehicles passing during every count – on average 2.5 vehicles per minute! This was very distracting. Also noises from quarry, people talking (not us!), hammering, and planes. Impossible to wait a minute between these noises.

Suggestion; Do transects on Sundays in future.

Recording methodology.
Despite much agonising over it - we think the recording data sheet is still rather complicated and liable to error. Our group method was for each of us to listen and jot down what we heard saw on a separate sheet then collate it all at the end of the 5 mins. Otherwise, if 2 observers were telling a recorder what they heard, how far away it was, and if it was a new individual of a previously recorded species – this was a further distraction from the job of listening.

So on our sheets a species is *listed once only* at any 5 min count, and again between points only if it was one of the four target species or a species not recorded at the last 5 min count.
Thus in our first set point 1
Tui was seen and heard at Outside 25m, but these were the same bird, hence recorded as 1 Outside 25m
Kaka was also seem and heard > 25 m, but these were different birds, thus recorded as 2 Outside 25m
At point 4, two different Pukekos were heard, but only one was within 25m
At point 5 (2nd set – repeat transect) A greenfinch was both heard and seen, once within 25m

On our sheets numbers throughout refer to the number of different individual birds.

The data 'inside 25m' is the only data used to estimate density. The other data (outside 25m) are used to estimate frequency. The frequency would be based on the 10 point data (both inside and outside). Additional 'between point' data can be used to add any species *for the site* otherwise missed. It is not clear to me how the additional between point data for the key species or species not seen at the last point can be used. This needs discussion in the light of how it was used in the analyses last year.

The 'fly over' data is not different from the 'outside 25m' data, and these should be amalgamated, getting rid of one column in the data sheet.

The 'seen' and 'heard' columns could also be elimninated if 's' or 'h' was added to the numbers in the 'Outside' and 'Inside' columns, but if Serena has a spread sheet she can use this may not be necessary – however, we (The Medlands Lot) think that if the data sheet is simplified there will be fewer 'entry errors'.

It would be valuable to get Serena's input on this, but in the end we need to think what the outcome is – what is the most relevant and reliable data?

Density is clearly best – ***IF*** it can be obtained reliably when 'conspicuousness' is so important in its estimation.
Frequency is very simple and has fewer assumptions, but it is also less able to pick up abundance changes especially at both low and high actual densities.