

Nuutele Ground Dove Expedition Report

Background Information

Protecting a species is an aspect of conservation which many organizations and individuals have put effort into so that the balance within the ecosystem can be maintained. Protection implement when factors of threats have been identify. Factors of pressure or predatory that may lead to competition and results in extinction. These are the sequence our world works since the beginning.

As time goes by ideas emerged on preserving and ideas to avoid extinction from any hazards occurred. Conservation is the key term, million species have lost and many more have emerged some are good and some are threats but all serves a purpose for our ecosystem and the environment.

Protection of a single species of dove brings in lots of different ideas on how to make it work. Time consuming but results will be satisfying.

Not many people known of the dove or the Tuaimeo only a few but most are bird watchers and bird experts.

Tuaimeo is labeled rare and is found on one of Samoa's uninhabited island with a topography read as small and easy to start a protection program on. An idea raise by Dr David Butler and was supported by the Ministry of Natural Resources, Environment and Meteorology, to capture the bird and eradicate the key stone predators on the island. Predators are rat as the primary target and pigs which is also a concern for. This idea comes up since it was suggested that the population of this bird in Nuutele and Nuulua is a national significant. The main threat for this bird at this stage is that it can be in harms way when dropping the poison to eradicate the rats from the island. The poison is in a form of rat food balls since the ground dove is known to be nesting on the ground it is also fed on the ground as well.

Summary

Project

A pilot survey for the proposed protection of the Friendly Ground Dove, it is used as post conservation program the Rat Eradication project in June – September 2006. A survey lead by the Ministry of Natural Resources, Environment and Meteorology, Division of Environment and Conservation with the support from other conservation agencies; PPCII, SPREP and others. The demonstration took place in the Island of Nuutele in which previous conservation projects have took place. Going back to 1994 funded by UNEP's, Regional Sea's Program.

Objective

To identify and estimate number of Friendly ground dove left on the island which will help justify reasonable actions before the rat eradication program in 2006.

Methods

The survey demonstrated the using of methods currently and previously used with the Ministry of Natural Recourses, Environment and Meteorology with inclusion of photo points and mist nets and bird cages brought over by Glen Holland and David Butler from New Zealand.

Results

- Number of people involved with the project were in limited
- Transect from Vini side to Nuutele side of the island established
- 2 days of bird count, data provided used to analyzed the growth of bird population over time
- Identifying an estimate of the ground dove population on the island
- Photographs taken of birds, reptiles and plants of the island.

Conclusion

Methodology used for the survey is generally tolerable but further alteration and careful consideration of the purpose of the upcoming eradication project would be a beneficial.

- For proposed eradication bird counts is to be continued before eradication implements. It's to identify the patterns of changes overtime before and after the eradication program.
- Collection of other fauna species and bringing in scientist or specialists to do studies on individual taxons on the island as many as we can. And for us to be attached so that methods and activities so that the expertise will stay within the ministry after the program. Studies will determine other small species that would be likely to be affected by the eradication.
- A full survey of the micro flora and stems on the island so that we can learn the ecosystem functioning within the island and to see if we can bring in other species to nurture and nested on the island and may be later developed as a bird centaury and other small animals.

Survey Program

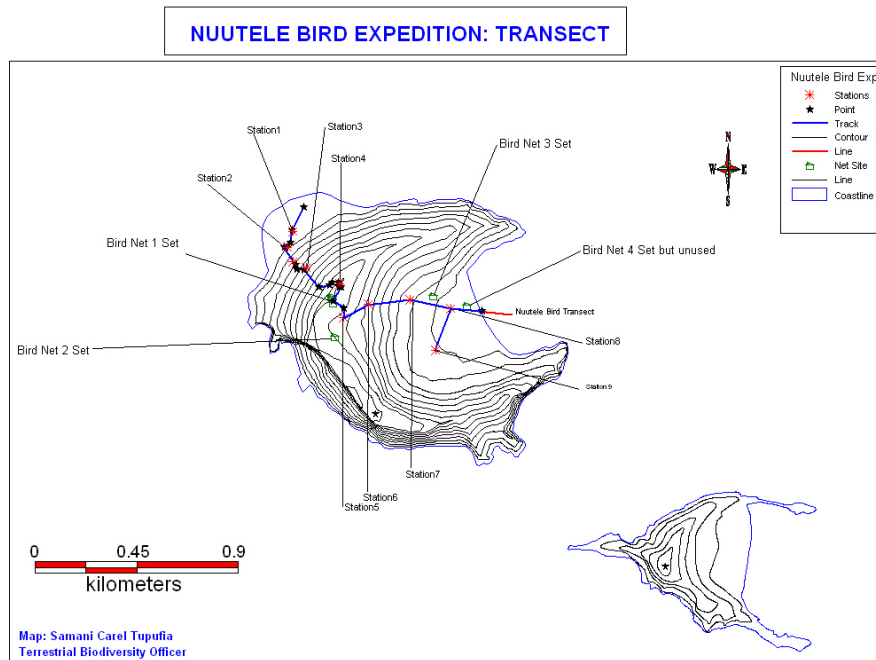
DATE	TIME	ACTIVITY	PLACE	COORDINATOR
02.09.05 FRIDAY	2.55am	Dave Butler & Glen Holland arrives fr NZ and picked up for Apia	Faleolo Airport	James
	10.00am	Ground Dove Team Briefing	MNREM Tamaligi	Tepa
	1.00pm	Meeting with CEO MNREM Tu'u'u Ieti Taule'alo	MNREM Tamaligi	Tepa
	2-4.30pm	Final preparations of GDT, equipments, materials, transport, etc. in Apia	MNREM	Tepa/Toni
03.09.05 SATURDAY	6.00am	GDT leaves for Aleipata MPA Centre then Nu'utele	Road to Aleipata	Tepa /Faafetai
	10.00am to 5.00pm	GDT sets up camp at Nu'utele & arrangements for dove trapping & bird surveying	Nu'utele Island	Dave & Glen / Faafetai
04.09.05 SUNDAY 12.09.05 MONDAY	5.00am to 12.pm	Ground dove trapping, holding, banding and sampling activities. Bird counting & monitoring activities	Nu'utele & Nu'ulua Islands	
12.09.05 MONDAY	1.00pm	GDT breaks up camp and prepares to leave Nu'utele for Upolu	Nu'utele Island	
	3.00PM	GDT leaves Nu'utele for Apia	-	
13.09.05 TUESDAY	9.00AM	Glen & David meeting with Tu'u'u	MNREM Tamaligi	Tepa

Study Area

Nuutele one of uninhabited island of Samoa with a significant population of the Friendly Ground Dove. Its highest peak is 215m above sea level with an estimate of 2.828mi spherical. (Estimation from Map info distance cal)

A place for most of Samoa's endangered birds.

Nuutele Island



Methods

The survey demonstrated using the using of methods currently and previously used with the Ministry of Natural Recourses, Environment and Meteorology with inclusion of photo points and mist nets and bird cages brought over by Glen Holland and David Butler from New Zealand

- Observational

Island as the specific location for the study, birds, reptiles and dominant tree species were been identify or photographed for records.

- Five Minute Bird Count Transect

A transect line from Vini to Nuutele side of the island is established. 5minutes bird count with in the radius of 100m for every station, 1 count station for every 200m. GPS was used to locate the coordinates for transect to be mapped.

- Mist Nets

Mists nets in length of 13m to 20m, was installed at the height of about 5m to 10m, coming from the ground. This is due to the fact that the bird after is a ground bird. Four nets used on the first and five nets used on the second and the third site.

- Photo-point

A compass and camera stand stretching up to one meter in height, and all camera shots were taken at a 90 degrees angle. Four shots for every station to record the current vegetation cover during this survey and other shot will be taken in a year when another survey takes place.

- GPS

Projection used Longitude/ Latitude, WGS72, Using Minutes Degrees for coordinates system.

Results

A detail of results is presented in appendixes but summary is highlighted at this section.

- **Observation**

Results given 16 species of birds were recorded and identify. Four sea birds and twelve land birds as categorized, 3 reptiles and 2 mammals with a number of butterflies seen but haven't identify or recorded and 4 coconut crabs.

- **Five minute Bird Count Transect**

As a result of the bird count 16 bird species identify, 1 is labeled invasive red vented bulbul. The most dominant bird heard and seen everywhere in the island are the Samoan Broad bill and Samoan Whistler and Wattle Honeyeater. Two days of bird count and shows an average of 5.3 seen and 11.7 heard on the first day and 5.5 seen and 9.8 heard on day two. Two days of counting include the time taken for cutting the trail. *Refer to figure 1 and 2 for amount of birds seen and hear during the data collection.*

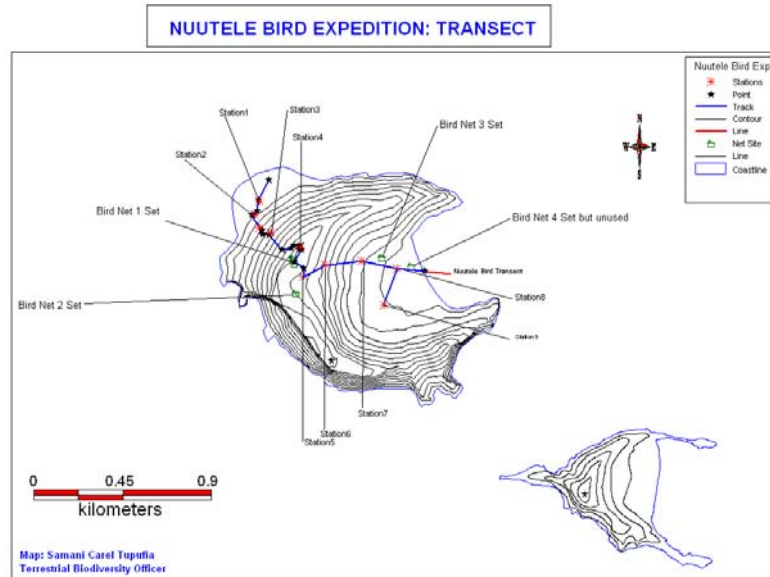
- **Mist Nets**

As a result for the mist nets no Ground dove was been able to catch but few other small birds get caught in the net. As for getting the bird to come down to the net, The team assembles and stretched parallel to the net at about 50m away, moving forward and making noises. After scouting from both sides of the net then tidy it back up, in theory that if the net is to be hang down over night birds can get strangled and killed if caught in the net.



GPS Readings

As a result transect was been able to put o the map, with location of each of the 9 stations.



Feed back from Team

Yoshida Capacity Building

1) Role of Media Unit

I believe that to record the whole project including the procedure is the responsibility of the media unit. In the field research, we could take many photos of the member's activities such as cutting bushes, setting some nets and trying to catch birds. Moreover, we could record the procedure with video camera. So, if we could continue to record about this project, we might make a video documentary about this project hopefully.

2) Role of Environmental Education

In addition, if we could record the procedure with reports, photos and a video, those would be a very good teaching material for Environmental Education. As for my conclusion, I'd like to mention that those materials must have very good effects on the students who want to know about wild birds and natural resources in Samoa

Reference:

Appendix1

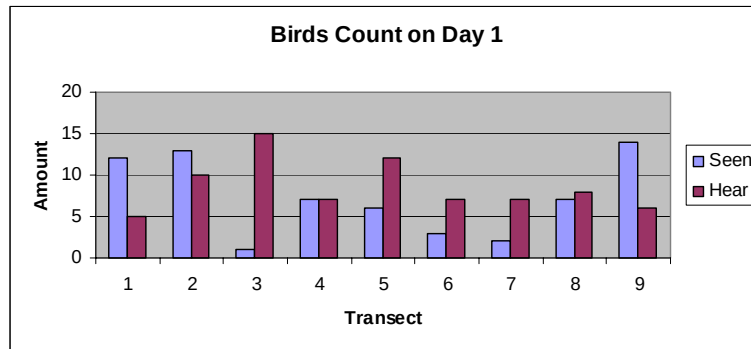


Figure 1 number of birds seen and hear during the first bird count in each station.

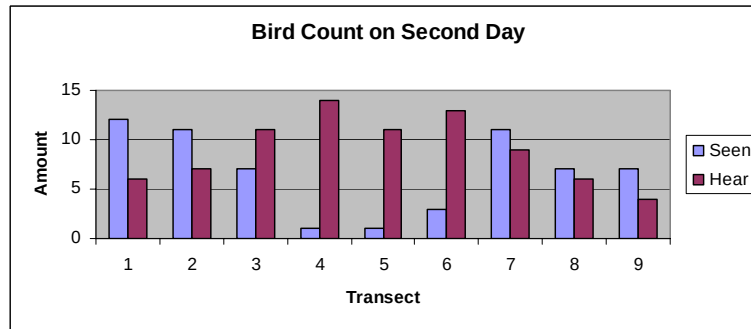


Figure 2 numbers of birds seen and hear during the second day count in each station.

Appendix2

Location: Nuutele

Mammals

Species	Note
Ratus Ratus	One seen in Nuutele side of the island and one seen on top of the island
Pigs	Seen around the house and others at the other side of the of the island.

Reptile

Species	Note	
Pacific Black Skink	Seen around our camping area and in the bush on trees	
Murphey's Skink	Seen around the house and on trees in small numbers	

Craps

Species	Note	Image
Coconut Crap	Two giant coconut craps found one in a decaying tree trunk and the other on a tree; other two were also seen together inside a tree trunk.	

Birds

Species	Common Name	Notes
	White Tern	

	Brown Noddy		
	Brown Booby		
	Great Frigate-bird		
	Wattled Honeyeater		
	Samoan Triller		
	Samoan Whistler		
	Samoan Broabill		
	Scarlet ribbon		

	Samoan Starling	
	Flat Billed Kingfisher	
	White rumped swiftlet	
	Barn Owl	
	Pacific Pigeon	
	Wandering Tattler	
	Red Footed Booby	
	Samoan Bat	

Appendix3 Day1

Total

	Seen	Hear	Seen	Hear	Seen	Hear	Seen	Hear	Seen	Hear	Seen	Hear	Seen	Hear	Seen	Hear	Seen	Hear	Seen	Hear
Eastern Reef Heron																				
Pacific Black Duck																				
Jungel Fowl																				
Peregrine Falcon																				
Band Rail																				
White Browed Crake																				
Spotless Crake																				
Purple Swamphen																				
Samoan Moorhen																				
Feral Pigeon																				
White Throat Pigeon																				
Friendly Ground Dove																				
Pacific Pigeon									1										1	
Tooth billed Pigeon																				
Many Color Fruit Dove																				
Crimson crowned fruit dove						1		2		3										6
Blue Crowned Iory																				
Long Tailed Cuckoo																				
Barn Owl																				
White Rumped Swiftlet	1		2																3	
Flat billed Kingfisher																				
Polynesia Starling																				
Samoan Starling	1		1	1		3							1	1			1		4	2
Common Myna																				
Jungle Myna																				
Red vented bulbul		1																		
Island Thrust																				
Scarlet Ribon	1		1																	
Samoan Fan Tail						2														
Samoan Broadbill			2	1	1	3			1	1	1	1	1	1		1	3	1	9	9
Samoan Whistler	1		2	2		2	2		1	2	1	2		1	1	2	1		9	11

Polynesia Triller																					
Samoan Triller		1																			
Samoan White Eye																					
Samoan Parrotfinch																					
Cardinal Honeyeater																					
wattled Honeyeater	2	3		6		4	4	5		2	6	1	4		4	4	4	7	5	20	41
Mao																					
Bat	2		1				1													4	
Great Frigatebird	2		1																	3	
Brown booby	2		3							1						1	1	1		8	1
brown noddy																1				1	
White tern																		1		1	
Total	12	5	13	10	1	15	7	7		6	12	3	7	2	7	7	8	14	6	65	77
																				5.73	11.7

Day 2

	Seen	Hear	Seen	Hear	Seen	Hear	Seen	Hear	Seen	Hear	Seen	Hear	Seen	Hear	Seen	Hear	Seen	Hear	Seen	Hear
Eastern Reef Heron																				
Pacific Black Duck																				
Jungel Fowl																				
Peregrine Falcon																				
Band Rail																				
White Browed Crake																				
Spotless Crake																				
Purple Swampphen																				
Samoan Moorhen																				
Feral Pigeon																				
White Throat Pigeon																				
Friendly Ground Dove																				
Pacific Pigeon					1	1					1	3					4	2		
Tooth billed Pigeon																				
Many Color Fruit Dove																				

Crimson crowned fruit dove																	1		1	1	1	
Blue Crowned lory																						
Long Tailed Cuckoo																						
Barn Owl													1							1		
White Rumped Swiftlet																						
Flat billed Kingfisher																						
Polynesia Starling																						
Samoan Starling				2	1			1	1	3			1	3	1					6	6	
Common Myna																						
Jungle Myna																						
Red vented bulbul								1					1								2	
Island Thrust																						
Scarlet Ribon																						
Samoan Fan Tail																						
Samoan Broadbill		2			1			1		3		3		1		1		2	1	2	12	
Samoan Whistler		1	1		1			4		3		4		3	3	1	2	2	1	4	22	
Polynesia Triller																						
Samoan Triller											1				1						2	
Samoan White Eye																						
Samoan Parrotfinch																						
Cardinal Honeyeater																						
wattled Honeyeater	3	3	3	4				3		5	1	3		6		3	1	3	1	1	9	31
Mao																						
Bat												1								1		
Great Frigatebird																						
Brown booby	6			3		2						1		1		5		1			19	
brown noddy						1															1	
White tern	3			2		3						1		3				1			13	
Total	12	6	11	7	7		11	1	14	1	11	3	13	11	9	7	6	7	4	61	78	
																				5.55	9.8	

