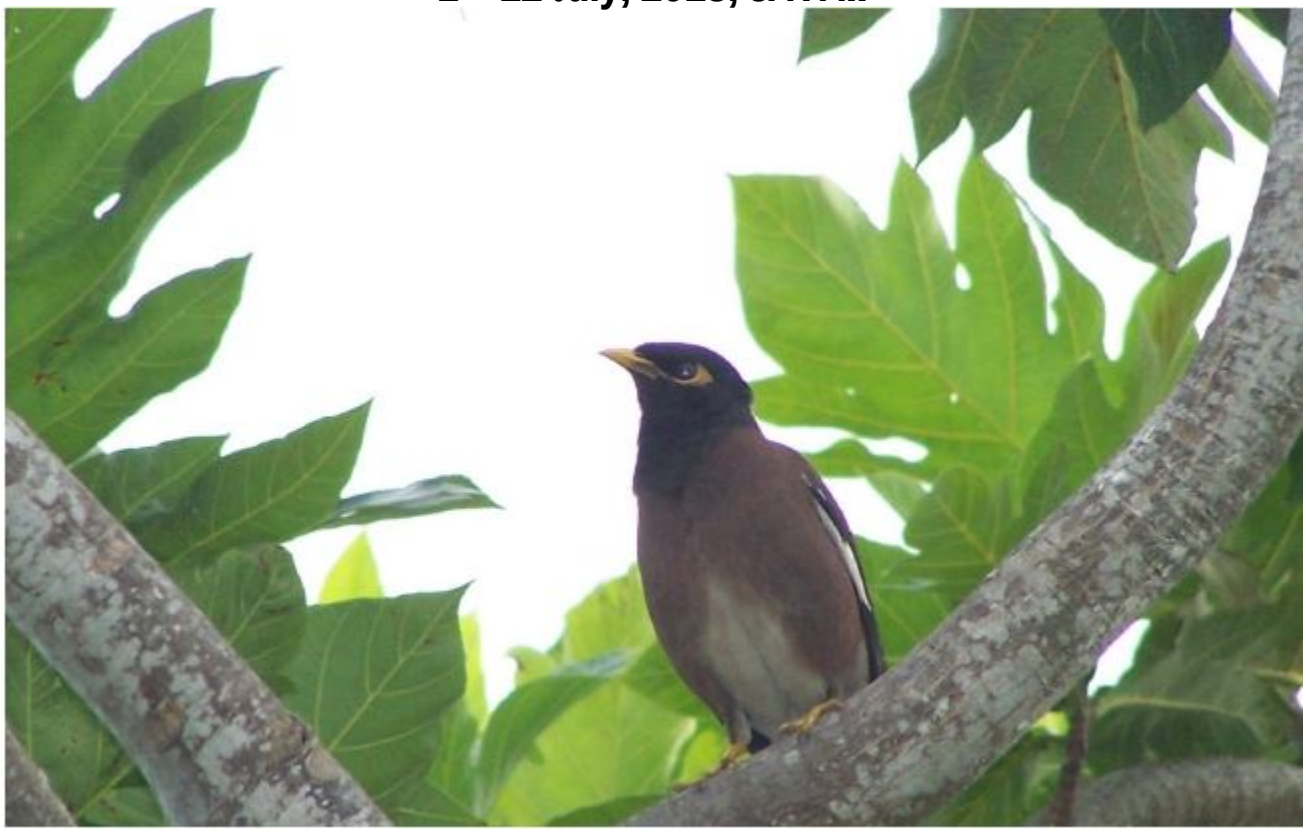
Myna Bird Control Project

Phase 10 Report

1 – 12 July, 2013, SAVAII



Terrestrial Conservation Section
Division of Environment and Conservation

Background:

The Indian myna is native to India. It was introduced in Samoa in different period of time to control livestock ticks but unexpectedly become an invasive species. Indian Mynas breed from September to March, mate for life and can breed more than once a season. There are two species of myna present in Samoa; the Common myna and the Jungle.

Controlling and/or eradicating of invasive species in the country is one of the priorities for the Ministry of Natural Resources and Environment through the Division of Environment and Conservation. This work is done in collaboration with its key stakeholders under the Samoa national Invasive Task Team (SNITT).

Introduction:

Myna birds are now found at high population around Samoa. They were at sight everywhere but seem more frequent around people's compounds and personal properties as well. upon completion of the 9th poison baiting operation, the team conducted its 10th phase of baiting operation in Savaii for two weeks. This work marked as the second control work to be done in the big island.

The operation teams were divided into two sets of teams allocated on the east and the western side of Savaii. This will ensured the whole island could be covered during two weeks of the operation with the ease of access for baiting throughout certain stations from one area to the other.

Objectives:

To increase number of myna birds killed during poison baiting operation.

To observe and record other negative impacts of myna on our biodiversity.

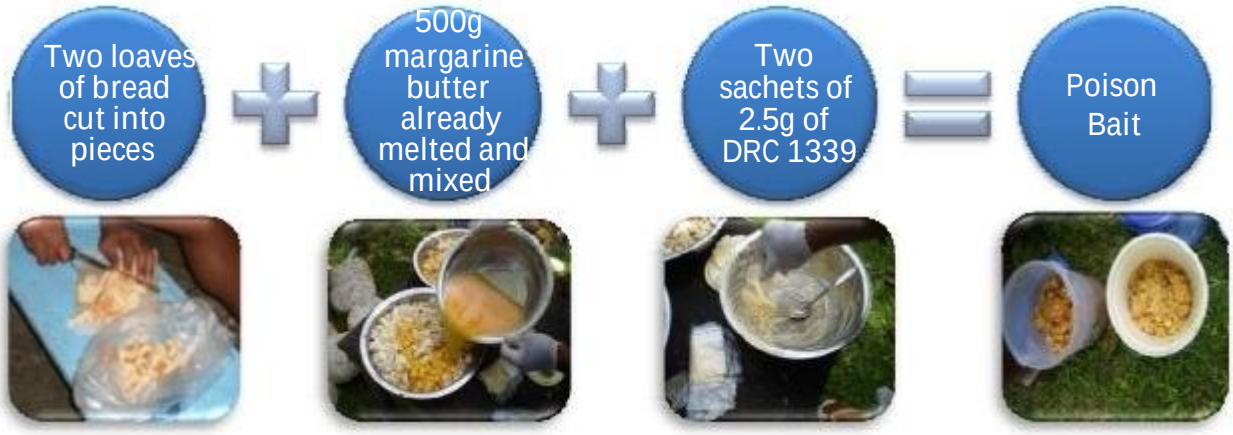
Materials & Methods:

Poison baiting was the only suitable method been used during the operation in terms of using a chemical poison powder in a mixture of bread and butter. This course of actions requires a mixture of two loaves of bread cut into pieces and soaked in 500g of butter already mixed with two sachets of 2.5g of DRC1339 powdered chemical. These poison baits mix will be hand baited at most of the targeting sites where myna bird locates.

There was no exact targeted location for baiting in terms of any field to cover but the only option was to apply bait alongside of the road then mark them in stations accordingly. Moreover, baits were mainly given out in bush areas but not in front of houses or any areas contain livestock's and people.

Some of the most habitat areas or villages were seen with numbers of mynas in front of houses or being mixed up with chickens and pigs on a large field. This considered no baiting areas due to safety conditions for the wellbeing of livestock's and people's as well. So as to avoid any apprehensions during the operation no poison bait is to contribute in these areas all around the island. Poison was distributed in certain time whereas the first distribution takes place in the early morning and the second distribution occurred at the late afternoon. Previous baiting operations encountered that mynas were mainly seen in large numbers in the early morning but hardly in the afternoon then seen again in huge numbers in the late afternoon around 4pm and approximately 6pm.

Figure 1: Poison bait procedures



Results and Discussions:

Table 1: **Numbers of mynas fed on bait within two weeks; Team 1**

STATIONS	WEEKS		TOTAL EST. Nō OF MYNAS FED ON BAIT
	WEEK1	WEEK2	
1. Taga	75	55	130
2. Gataivai	52	81	133
3. Satuipaitea	58	112	170
4. Vailoa	42	79	121
5. Tafua	88	60	148
6. Maota	105	91	196
7. Salelavalu	125	109	234
8. Fusi	98	121	219
9. Fogapoa	25	48	73
10. Saipipi	47	76	123
11. Pu'apu'a	42	53	95
12. Samalaeulu	63	55	118
13. Saleaula	28	30	58
TOTAL	848	970	**1,818**

In table 1 indicates the total numbers of mynas fed on bait by Team 1. It indicates a surprisingly increase distribution of myna birds at each village considered as key major station on this side of Savaii. It illustrates several stations with an increase numbers of mynas from the first week to the second week, whereas some indicates a fall down from one week to the other.

The village of Salelavalu has the highest population of mynas fed on poison baits throughout two weeks of the operation. It only suggested a small decline but still above one hundred in contrast to other stations over all. There are several stations in Table 1 with an increase in numbers of myna birds been fed on bait from the first week to the second week. In a total of five stations been experience a slightly decrease in numbers from one week to the other.

In determining the main cause of increased and decreased in numbers of mynas fed on bait within each certain station varies with certain conditions. If considered a fall in numbers during week two perhaps a portion of the total amounts of mynas from week one was being exterminated or whether the population of mynas was on the move to another area as a results of the poison baiting in place.

<u>Table 2</u>: Numbers of mynas fed on bait in two weeks; Team 2

STATONS	WEEKS		TOTAL EST. Nō OF MYNAS FED ON BAIT
	WEEK 1	WEEK 2	
1. Satoalepai	3	8	**11**
2. Samauga	10	5	**15**
3. Letui	2	8	**10**
4. Aopo	6	15	**21**
5. Asau	11	12	**23**
6. Vaisala	9	10	**19**
7. Fagasa	45	20	**65**
8. Papa	5	6	**11**
9. Tufutafoe	2	7	**9**
10. Neiafu	6	15	**21**
11. Falelima	22	30	**52**
12. Fagafau	29	50	**79**
13. Fogatuli	11	2	**13**
14. Salailua	35	15	**50**
15. Lata	3	18	**21**
TOTAL	199	221	**420**

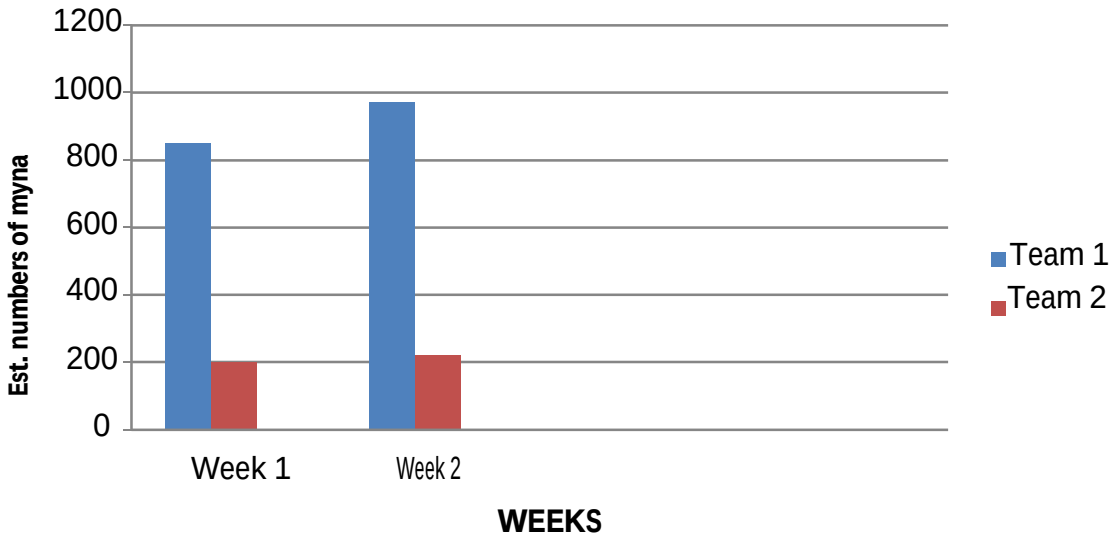
Table 2 illustrated the outcome of feeding process administered by team two whom covered the western side of Savaii. The data presented a small numbers of mynas situated at this part of the island with some feeding stations with small numbers of mynas been recorded. Especially at the villages of Tufutafoe, Letui and Satoalepai but the village of Fogatuli being experienced a drop of mynas population been recorded as well. On the whole, all feeding stations point out with a small population of mynas at sight but being recommended by the team, whereas in duration of the operation there were not so many mynas within the areas been covered. These were the only appropriate areas or stations for the poison bait to be distributed but exclusive of settled areas.

Table 3: Total estimated numbers of mynas fed on poison bait within two weeks (Team 1 + Team 2)

TEAM	WEEKS		TOTAL EST. Nō OF MYNAS FED ON BAIT
	WEEK 1	WEEK 2	
TEAM 1	**848**	**970**	**1,818**
TEAM 2	**199**	**221**	**420**
TOTAL			**2,238**

Table 3 indicates the overall populations of mynas fed on poison baits within two weeks of the operation by both teams. The first week of poison baiting extorted a large numbers of mynas fed on bait by Team 1 whom covered the eastern side of Savaii but slightly quite a small numbers covered by Team 2. The second week of the operation indicates surprising increase of numbers extracted by both teams. The total populations for certain teams indicates a huge population of mynas been fed on poison baits in results by team one but team two with a quarter of the population in comparison to team one. These transformations in mynas population enlightens further in Figure 2 from week one to week two with team one still in the lead with the highest extractions of mynas been fed on poison baits.

Figure 2: Estimated trend of myna been fed on poison bait in two weeks by both teams



ISSUES:

Several numbers of problems were encountered during the operation and the first problem we have come across with was facing difficulties with weather conditions. In particular raining conditions caused suspension with the operation because it would consider such a waste when the poison powder turns out to be dissolved in water and resulted to be no use for the baiting operation.

The other common problem was that mynas were seen in huge numbers all muddle up with pigs, chickens and some were seen on horses as well. These usual scenes were likely took places in front of families' lawn which were strictly excluded in duration of operation within two weeks

RECCOMENDATION:

It is recommended that:

Consult people living around particular baiting stations for their support during the operation. The idea possibly assists the security of people.

Discuss with villagers of knowing any myna birds roosting sites in their lands so that the survey team could assess the population of mynas at sight.

Consult people and make them understand the process and details of the myna operation in order to gain their support for upcoming operations.

CONCLUSION:

It is recommend that mynas were undoubtedly exterminate when eating the poison bait been distributed throughout each stations. This operation state a surprising huge numbers of myna birds recorded being fed on the poison baits throughout certain stations covered by the two teams. In comparison to the first operation at the big island of Savaii last year it is clearly reported that the total population of mynas for the recent operation is substantial than the previous one. Then by monitoring each stations whereas both teams indicates negative results of dead mynas but in fact mynas were 100% exterminate when fed on poison baits because it takes a few hours before the poison is effective. There is a high possibility of dead myna birds expected to be found long distance at unallocated myna birds roosting sites in Savaii.

Even the public or the community involved must be well informed through the highest authority within the community for their kindly support mostly needed of operations been carried out. Specifically it will hence valuable collaboration between rural communities and

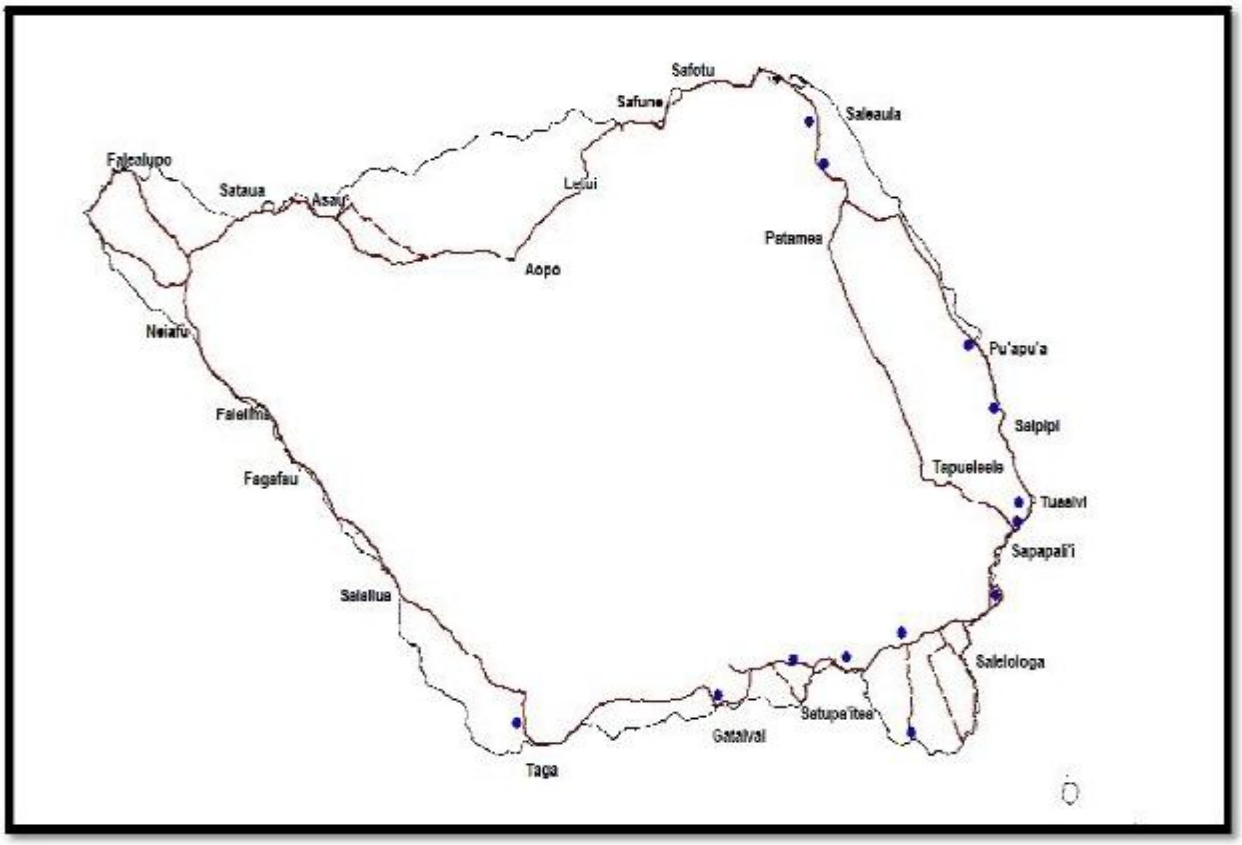
the Ministry of Natural Resources and Environment through security in many levels for the wellbeing of all people, especially within our environment as a whole.

ANNEX 1: Baits breakdown in details within two weeks

WEEKS	BREAD(s)	MARGARINE(s) 500g	DRC 1339 (1 sachet = 2.5g)
WEEK 1	**460 breads**	**230 margarines (500g)**	**460 sachets**
WEEK 2	**420 breads**	**210 margarines (500g)**	**420 sachets**
TOTAL	**880 breads**	**440 margarines (500g)**	**880 sachets**

APPENDIX:

Map of Savaii: Baiting Stations (Team 1)



Source: National Mapping Section (MNRE)