



PACIFIC INVASIVES INITIATIVE

## **TRAINING COURSE REPORT:**

### **Island biosecurity**

National Trust of Fiji Islands

Suva, Fiji

28 June – 01 July 2010



Prepared by: Pacific Invasives Initiative (PII)

Written by: Marleen Baling and Bill Nagle

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## Summary

Pacific Invasives Initiative's Island Biosecurity Training was held for National Trust of Fiji Islands (NTF) in Suva, Fiji, in 28 June - 01 July 2010. NTF is undertaking conservation projects for the Fijian crested iguana (*Brachylophus vitiensis*) on Yadua Taba and Monuriki Islands, and wants to improve biosecurity for these islands. The aims of the training were 1) to enhance the understanding of island biosecurity, its purpose and how to maintain effective biosecurity programmes; 2) to enhance the knowledge and skills necessary to undertake basic biosecurity prevention, surveillance and incursion response; and 3) to collate information required for development of a biosecurity plan for Yadua Taba. This 4-day training course was attended by NTF staff, who also invited participants from the land-owning community of Yanuya Island, the Provincial Councils of Bua and Nadroga/Navosa, Fiji Quarantine Division, and Birdlife International (BI).

The training covered basic concepts and processes of three components of biosecurity; prevention, surveillance, and incursion response. The importance and function of these components were reinforced with several activities, one of which was a fieldtrip to Mabualau Island, to learn the continued biosecurity measures conducted by the land-owners after a successful rat eradication (by BI and land-owners with support from PII).

The participatory approach of this training encouraged interaction, personal opinions and experiences to be shared within the group, and all discussions were made in both English and Fijian languages. Overall, participants demonstrated an increased level of understanding on the basic concepts of invasive species and island biosecurity. Participants agreed that a greater grasp of invasive species issues and more communication between different parties were needed to develop biosecurity for Yadua Taba and Monuriki Islands. There were also agreements for the need for biosecurity inspections on local and international researchers and other visitors to the islands.

## Introduction

The species recovery plan<sup>1</sup> for the critically endangered Fijian crested iguana, *Brachylophus vitiensis* requires the protection of their habitat via invasive species management. One important aspect of invasive species management is island biosecurity, which aims to prevent eradicated invasive species from returning, controlled ones from dispersing, or new ones from establishing on the island. The recovery plan also has identified the need for establishing an island biosecurity programme and that NTF staff and the island community will need to be aware of and up-skilled on biosecurity measures.

The Pacific Invasives Initiative (PII) was approached by the NTF to run an island biosecurity training course for key staff involved in the project. This report presents results of the island biosecurity training held in Suva, Fiji, between 28 June and 01 July 2010.

## Purpose

1. To enhance an understanding of island biosecurity, its purpose and how to maintain effective biosecurity programmes.
2. To enhance the knowledge and skills necessary to undertake basic biosecurity prevention, surveillance and incursion response actions.
3. To collate information required for development of a biosecurity plan for Yadua Taba.

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<sup>1</sup> National Trust of Fiji Islands 2008. Fijian crested iguana *Brachylophus vitiensis* species recovery plan 2008-2011. National Trust of Fiji Islands.

## Training course programme

Day	Time	Activity	Key responsibility
Monday 28 June 2010	9.00am	Opening	PII/NTF
		Self-assessment questionnaire	PII
		Excercise 1: Spot the difference	PII
		Yadua Taba Project	NTF
		Biosecurity: Why is it important?	PII + participants
		Prevention: Island risk analysis	PII + participants
		Exercise 2: Identify Biosecurity issues	Participants
		Prevention: Prevention measures	PII + participants
	5.30pm	end	
Tuesday 29 June 2010	8.30am	Recap of previous day	PII
		Fiji Quarantine Division's view on biosecurity	Quarantine
		Surveillance: Areas of high risk	PII + participants
		Surveillance: Passive monitoring	PII
		Exercise 3: Identify potential incursion signs	Participants
		Surveillance: Active monitoring	PII
		Scenario 1: Pre-departure inspection	Participants
		Scenario 2: Monitoring plan	Participants
	5:30pm	end	
Wednesday 30 June 2010	7.00am	Scenario 2 (continued): trap checking	Participants
		Island trip: Depart for Mabualau	Participants
		Scenario 3: Incursion reporting	Participants
		Incursion response: Response process	PII
	4.00pm	end	
Thursday 1 July 2010	8.30am	Recap of previous day	PII
		Scenario 2 (continued): trap checking	Participants
		Scenario 4: Incursion response plan	Participants
		Self-assessment questionnaire and answers	PII+ participants
		Discussion: key points, lessons learnt	PII+ participants
	3.30pm	end	
	6.00pm	Welcoming of Taukei Yanuya	NTF
		Signing of MOU between NTF and Taukei	NTF
		Closing speeches	NTF and PII
Closing of training course			

## Training days

The island biosecurity training course began on the Monday of 28th June 2010 and was attended by 12 participants from NTF, the land-owning communities of Yanuya, Provincial Councils of Bua and Nadroga/Navosa, Fiji Quarantine Division and BI (see [Appendix 1](#)). The training course, led by Marleen Baling and Bill Nagle, used an interactive learning approach where participants were encouraged to ask questions and discuss the topics amongst themselves in their own language (Fijian). Presentations were also given by a NTF staff member and a Fiji Quarantine Service staff member in the first two days to generate discussion regarding the current island conservation projects and biosecurity issues in their country.

The course covered three components of biosecurity: prevention, surveillance and incursion response. The basic concepts within each component were defined and linked to the participants' day-to-day activities and own perceptions, to provide an appreciation of the importance and application of biosecurity to both island biodiversity and community livelihoods. The cost-benefit

(cost, time, labour) of each component and that prevention as the preferred option was also emphasised.

The application of these concepts was reinforced by several activities, which included identifying day-to-day biosecurity risks via photographs, analysing island biosecurity risks for Yadua Taba Island, conducting a pre-departure inspection scenario, planning rat and ant surveillance for an island, reporting a suspected incursion, and planning rat incursion responses for Yadua Taba and Monuriki Islands. Additionally a fieldtrip to Mabualau Island, a successful rat eradication project conducted by BI and the local land-owners, presented an opportunity to see biosecurity being applied on the island.

A questionnaire was given to the participants prior the course to assess the overall level of understanding of biosecurity. The questions were divided into four main sections: participants' opinions, basic concepts, biosecurity processes, and biosecurity application (see [Appendix 2](#)). This structure was designed to aid facilitators in identifying any particularly weakly-understood topics to focus on during the course. The same questions, in different order, were given on the last day to assess changes in opinion, knowledge or understanding after the course.

## Outcomes

### *Understanding the importance of biosecurity*

The first section of the questionnaire targeted the participants' opinion on five aspects related to island biosecurity (Table 1). On average, the participants ranked the dependence of people's livelihood to a healthy environment, and importance of preserving the biodiversity of the island as the two highest. The importance of biosecurity and the level of threat of invasive species were however ranked the lowest. This overall opinion significantly<sup>2</sup> changed after the training course, and all five aspects were ranked almost equally high. This may indicate an increased awareness on the link between the role of biosecurity and the sustainability of their livelihood and island biodiversity.

Table 1. Overall participants' opinion on several aspects related to island biosecurity. The level scales are 1-5 (low to high importance). The table lists the mean values for 10 participants, with the range of the levels recorded for each aspect.

	Pre-training		Post-training	
	Mean	Range	Mean	Range
Threat of invasive species to Fiji islands	4.09	2-5	4.78	3-5
Importance of biosecurity for Fiji islands	3.91	1-5	4.78	3-5
Importance in preserving the biodiversity of Fiji islands	4.64	3-5	4.67	2-5
Dependence of people's livelihood to healthy natural environment	4.78	4-5	4.89	4-5
Importance of invasive species management to the community/ organisation	4.40	2-5	4.78	3-5

The importance (and preservation) of their islands was also discussed amongst participants in the first day of the training course. Some of the comments include:

- The Roko of Bua (Mr. Jale Singarara) suggested that the lack of appreciation for the Fijian crested iguana and their islands from the community of Bua is because they have never seen one before. People place higher value on something that they have seen or touched.
- Mr. Apisai Susu of Monuriki and the Roko of Bua questioned the value of protecting the Fijian crested iguana at Yadua Taba, as the high-cost of the project did not seem to provide any monetary returns (landing is restricted on Yadua Taba).

<sup>2</sup> Paired t-test,  $p=0.03$ . NB: Participants who answered only one questionnaire were omitted from the statistical analysis.

- Mr. Jone Nuikula (NTF) explained the value of the iguanas is that they are unique to Fiji and will be irreplaceable if they go extinct. Fiji needs to change its perspective by trying to prevent extinctions from occurring rather than realising their importance when it's gone.
- NTF expressed that besides the communities, local and international organisations, strong support from the Fiji government is essential for the iguana's conservation. NTF have been working on creating community awareness by their rangers presenting in villages and District meetings, but the current training course may provide an opportunity to gain support from the Provincial Office as well.
- The Roko of Bua seemed very keen and interested to learn more about the current issues of these island projects. He commented that by knowing the background of these projects, he would be in a better position to make judgements if any problem arises in his Office.
- The discussion on "what is biosecurity" by the participants revealed that they see the concept generally as 'guarding ("yadrā") of the boundary', where it 'looks after [their] natural resources (Fijian heritage)' or protects the values of their island (income, biodiversity, heritage for the future generation).

### ***Enhancing knowledge and skills in biosecurity***

The questionnaire also tested the participants' understanding of basic biosecurity concepts, processes and its application. As anticipated, on average the participants seemed to know least in basic concepts, followed by biosecurity processes (Figure 1). The high scores achieved for the application section of biosecurity were assumed to be as a result of the participants' experience in their practical day-to-day work. During the training course facilitators ensured that all basic concepts were well understood by allowing more time to discuss these 'novel' concepts in Fijian language. The processes of biosecurity were taught by facilitators and more time was spent on the activities, to give the participants an environment to expose any problems that they may encounter while going through these processes and how to solve them.

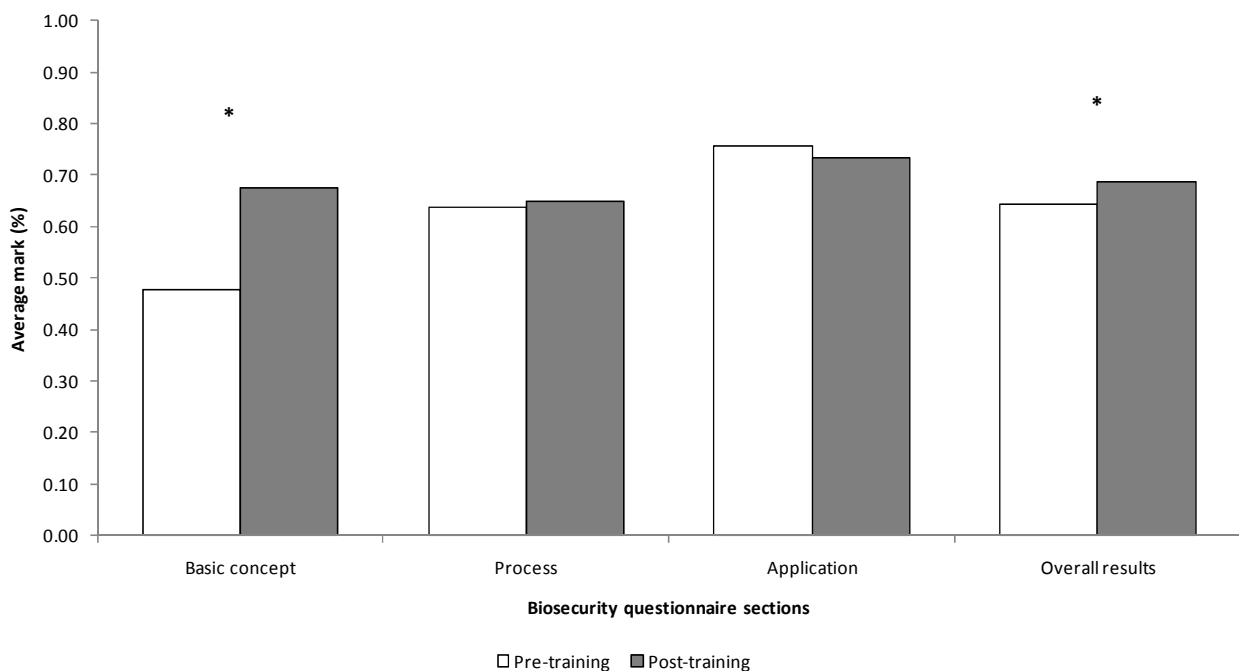


Figure 1. The average score (in percentage) for the island biosecurity pre-training and post-training course questionnaires. Questionnaire is divided into three sections: basic concepts of biosecurity, biosecurity processes and application of biosecurity. Asterisks indicate significant differences between pre-training and post-training questionnaire ( $p < 0.05$ ).

The post-training questionnaire showed a significant<sup>3</sup> increase in the participants' understanding of the basic concept, with slight increase in the understanding of biosecurity processes. There was a slight, but negligible decrease in the understanding in application of biosecurity. Generally, results from the questionnaire indicate that the average participants' understanding of all three sections is now on par.

The highest score was from staff of BI, followed by Provincial Council officers for the pre-training questionnaires. NTF staff increased in the average score to second highest in the post-training course questionnaires. Additionally NTF's range of the scores was smaller in the post-training questionnaire (56-81 vs. 69-88). The questionnaires were set in English only and, even though discussion of questions in Fijian was encouraged, this may have disadvantaged Yanuya Island community members who did not achieve the same level of increase as other participants.

Table 2. Average scores (in percentages) and ranges for each group of participants in the pre-training and post-training course questionnaires. n indicated the number of participants.

	Pre-training			Post-training		
	n	Mean (%)	Range	n	Mean (%)	Range
National Trust of Fiji Islands	3	67	56-81	4	78	69-88
Birdlife International	2	80	81-88	1	100	
Provincial Council	2	72	69-75	1	69	
Fiji Quarantine	1	50		1	56	
Community members	3	48	44-50	3	50	44-56

Throughout the course, participants were given opportunities to raise issues that they were concerned with in each component. Some of the main comments or issues raised were:

- Realisation that the current focus of biosecurity (including international borders) has not been (but should have been) on prevention measures. Most of the biosecurity measures that are in place have mainly applied to the surveillance and incursion response stages, such in the case of the green iguanas found in Taveuni and termites in western parts of Fiji.
- Biosecurity prevention would require enforcement and the ability to identify species incursions. But by whom? Suggestions for Monuriki Island were that any reports can go through the landowner committee members to the Provincial Government Office.
- Concerns were also focused on visitor cruising permits. There is a protocol currently in place for visiting yachts to obtain permits for island visits at the main port of entry in Fiji. However several issues were raised on the logistics and enforcement of these permits – most landowners or council officers in one district are not informed of permits issued for another district, it is unsure if land-owners or other public figures have the right to demand show of permit from any visitors, and the possibility of including a condition of mandatory biosecurity checks by the yacht owners prior to permit approval.
- Identification of one major biosecurity risk for Monuriki Island was visitors from approved resorts. Suggestion was to strengthen the partnership between the resort and land-owners to ensure all resort companies (including their visitors) comply with biosecurity prevention (e.g. cleaning and checking of boats and equipment, biosecurity awareness to all visitors landing on the island). NTF will approach the Mamanuca Environmental Society to seek potential support.
- Participants agreed that producing a visitor checklist and proper pre-departure inspections may be practical for Yadua Taba Island, which has more controlled access compared to Monuriki Island.

<sup>3</sup> paired t-test,  $p=0.005$ . NB: Participants who answered only one questionnaire were omitted from the statistical analysis.

- Awareness that surveillance and reporting of an invasive species incursion require careful observation, not only at the site of the suspected invasive species but also its surrounding area. Detailed information should be gathered as much as possible but Mr. Apisai Susu indicated that it can be limited to the experience of the observer. The capability of a photo to capture good, reliable information (vs. inexperienced observer) was discussed, and a suggestion that community could be provided with resources to collect such information (e.g. sample data form, digital camera) was raised.
- Importance of rapid response to a suspected incursion and the complexity of an incursion plan. Participants were made aware that incursion response options can be complex and can cut into the response time if not pre-planned. The plan can be either be another eradication attempt (i.e. high cost in the short-term) or control management (i.e. high cost in the long-term), and both require much research, decision-making, equipment, labour and funding allocations. NTF realised that their investment for each project is high, and therefore will require further careful thought and planning.
- Importance of information-sharing and networking. NTF staff realised in incursion response planning activity that they have little experience in some technical aspects like eradication operations, and the presence of experienced organisations at-hand like BI (and PII) were helpful in providing guidance on processes like the incursion response planning. They foresee possibly approaching such organisation more often to help them in their future projects.

### ***Collating information for Yadua Tabu Island's biosecurity plan***

Some information were collected for the island biosecurity risk analysis, however this requires further confirmation from NTF due to the lack of detailed knowledge in some aspects (e.g. invasive species present on Yadua).

## **Participants' satisfaction**

The island biosecurity training course had positive responses from the participants. The satisfaction survey was returned with high scores within the scale of 1-4 (lowest to highest), Table 3. Overall most participants found the course interesting and appreciated the interactive learning approach, especially the group activities and the opportunity to converse in their own language. There were also comments or requests for more island biosecurity training courses to be conducted, including follow-up workshops. The full, unedited comments given by the participants are listed in [Appendix 3](#).

Table 3. The average participant satisfaction scores for the island biosecurity training course. Scores are at a scale of 1 to 4 (lowest to highest) and also average percentage in participants' agreement to the statement provided.

	Average score
Training course met participants' expectations.	3.82
Facilitators helped participants to understand biosecurity.	3.64
Methods in this course will help participants in their work.	3.91
There was adequate time to cover all issues of concern.	3.18
The course material was useful and easy to follow.	3.91
Participants had opportunities to their contribute knowledge and skills to the course.	100%
Facilitators provided clear explanations and instructions throughout the course.	100%
Participants found course manual useful.	100%

## Lessons learnt

The island biosecurity training course for NTF is regarded as a success, however not without issues or revelations.

1. **Pre-course communication between facilitators and host.** Constant communication to plan for the logistics and content of the course is important to ensure all expectations are met. The lack or delay in gaining information from the host organisation (e.g. organisation expectations, participants list, course venue) subsequently meant the delay in producing and providing information from facilitators (course timetable, flight and accommodation booking).
2. **Language barrier between participants and facilitators.** Encouragement of the participants to conduct discussions in their own language (Fijian) was very productive; however there were occasions where little translation was done back to the facilitators in English. This meant that the facilitators were not able to add comments to the discussion at hand. The questionnaire and satisfaction survey were not prepared in Fijian, which may have led to mis-interpretation of some of the questions influencing the overall evaluation of the participants' progress. Possible solutions could be to translate the questionnaire into the host country's language, or have a representative host to translate orally in the training room.
3. **Adaptive course content.** Normally a standard training course would have a set location and course programme for each event. However due to the nature of PII's courses being held at the host country, details of the course programmes can change according to the project and situation (e.g. limited resources available at the venue, fieldtrip site selection, limited information received, language differences, cultural perceptions, different background and experiences of participants). The course purpose or components do not differ, however the facilitators should be flexible enough to modify the programme, tone and speed according to the participants at hand. For example, upon knowing the presence of a representative from the Fiji Quarantine Division the facilitators suggested the officer give a presentation in the course to provide Quarantine Division's perspective on biosecurity; longer discussions were allowed for some important topics raised, and the complexities of some activities were simplified as necessary.
4. **Activities to enhance understanding or experience of the participants.** Activities held for this course were very well received. There were some difficulties in understanding the processes at times, but a discussion about these difficulties were raised or discussed at the end of each activity. In a normal 'lecture-type' approach course, issues on applying the concepts taught may not appear until participants are in their normal workplace, and would not have such support to deal with them.

## Next course of actions

The following list of actions was recommended from the biosecurity training course:

1. An island biosecurity checklist will be developed for Yadua Taba and Monuriki Islands (Action by: NTF)
2. Discuss with Mamanuca Environment Society for possible partnership to establish (and enhance) biosecurity measures for Monuriki Island (Action by: NTF).

## Appendices

### *Appendix 1: List of people in the island biosecurity training, Suva Fiji. 28 June – 01 July 2010.*

#### Participants

<b>Name</b>	<b>Affiliation</b>	<b>Occupation/position</b>
Pita Biciloa	National Trust of the Fiji Islands	Ranger of Yadua Taba
Elizabeth Erasito	National Trust of the Fiji Islands	Director of NTF
Ilaitia Kurisaru	Nadroga/ Navosa Provincial Council	Assistant Roko Tui Nadroga/Navosa
Jone Niukula	National Trust of the Fiji Islands	Project Officer
Sia Rasalato	Birdlife International	Conservation Assistant
Maika Ratu	Yanuya Village	Mataqali Vunaivi representative
Milika Ratu	National Trust of the Fiji Islands	Project Officer
Joep Samila	Yanuya Island	Turanga ni Koro
Elenoa Seniloli	Birdlife International	Conservation Officer
Jale Sigarara	Bua Provincial Council	Assistant Roko
Apisai Susu	Yanuya	Mataqali Vunaivi representative
Isikeli Toutou	Fiji Quarantine Service	Quarantine

#### Facilitators

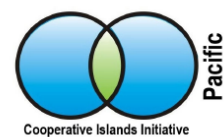
<b>Name</b>	<b>Affiliation</b>	<b>Occupation/position</b>
Marleen Baling	PII	Project Coordinator
Bill Nagle	PII	Project Coordinator

## Appendix 2: Self-assessment questionnaire

### Pacific Invasives Initiative

#### Island Biosecurity Training Course: Self-assessment questionnaire National Trust of Fiji Islands

(Fiji, 28 June – 01 July 2010)



The purpose of this questionnaire is to assess your knowledge of biosecurity. Please circle the answer that you think is most appropriate.

1.	<p>Please rate the following, <b>in your personal opinion</b>:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="text-align: center;">Low</th> <th colspan="3" style="text-align: center;">-----</th> <th style="text-align: center;">High</th> </tr> <tr> <th></th> <th style="text-align: center;">1</th> <th style="text-align: center;">2</th> <th style="text-align: center;">3</th> <th style="text-align: center;">4</th> <th style="text-align: center;">5</th> </tr> </thead> <tbody> <tr> <td>How serious is the threat of invasive species to Fiji islands?</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> </tr> <tr> <td>How important is biosecurity for Fiji islands?</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> </tr> <tr> <td>How important is it to preserve Fiji islands' biodiversity?</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> </tr> <tr> <td>How much do people's livelihoods depend on a healthy natural environment?</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> </tr> <tr> <td>How important is invasive species management to your community or organisation?</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> </tr> </tbody> </table>		Low	-----			High		1	2	3	4	5	How serious is the threat of invasive species to Fiji islands?	1	2	3	4	5	How important is biosecurity for Fiji islands?	1	2	3	4	5	How important is it to preserve Fiji islands' biodiversity?	1	2	3	4	5	How much do people's livelihoods depend on a healthy natural environment?	1	2	3	4	5	How important is invasive species management to your community or organisation?	1	2	3	4	5
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2.	<p>What is the purpose of biosecurity?</p> <ol style="list-style-type: none"> <li>a. Stops any animals or plants reaching the island.</li> <li>b. Prevents any invasive species from establishing on the island.</li> <li>c. Detects and trap any new species before they breed on the island.</li> <li>d. All of the above.</li> </ol>																																										
3.	<p>What are the components of biosecurity?</p> <ol style="list-style-type: none"> <li>a. Prevention.</li> <li>b. Prevention and surveillance.</li> <li>c. Prevention, surveillance and incursion response.</li> <li>d. Prevention, surveillance, incursion response and control.</li> </ol>																																										
4.	<p>What is an invasive species?</p> <ol style="list-style-type: none"> <li>a. An animal that is new to an area.</li> <li>b. Animals and plants that are introduced to new area.</li> <li>c. Any species that are introduced to an area and cause harm to biodiversity and livelihood.</li> <li>d. Any species that are introduced to an area and do not cause any harm.</li> </ol>																																										
5.	<p>What is the best method to stop invasive species getting to the islands?</p> <ol style="list-style-type: none"> <li>a. Eradication.</li> <li>b. Prevention.</li> <li>c. Surveillance.</li> <li>d. Incursion response.</li> </ol>																																										
6.	<p>What does an island biosecurity risk analysis involve?</p> <ol style="list-style-type: none"> <li>a. Identifying areas that have high risk of invasion and develop prevention methods.</li> <li>b. Monitoring existing invasive species on the island.</li> <li>c. Identifying existing invasive species and develop eradication methods.</li> <li>d. Setting up traps and bait stations to ensure invasive species are caught.</li> </ol>																																										
7.	<p>What should you do before going to an island?</p> <ol style="list-style-type: none"> <li>a. Plan route, clean and check gear and boat, and depart.</li> <li>b. Plan route, plan meals, and depart.</li> <li>c. Plan meals, pack gear, and depart.</li> <li>d. Pack gear, store gear in boat overnight, and depart.</li> </ol>																																										
8.	<p>Why is it important to detect a new species as soon as it arrives on an island?</p> <ol style="list-style-type: none"> <li>a. To increase chances of catching the species before it establishes on the island.</li> <li>b. To identify and record the species as a new organism on the island.</li> </ol>																																										

	<ul style="list-style-type: none"> <li>c. To follow the species and learn its impact on the island's biodiversity.</li> <li>d. To ensure that all visitors leave the island, following the discovery of the new invasive species.</li> </ul>
9.	<p>What does biosecurity surveillance include?</p> <ul style="list-style-type: none"> <li>a. Looking for anything unusual occurring on the island.</li> <li>b. Setup a monitoring grid on the island.</li> <li>c. Identify high risk areas on the island to target potential incursion.</li> <li>d. All of the above.</li> </ul>
10.	<p>What do you do after sighting of an invasive species?</p> <ul style="list-style-type: none"> <li>a. Planning, control, eradicate, report sighting.</li> <li>b. Report sighting, confirm incursion, plan, eradicate.</li> <li>c. Report sighting, eradicate, plan, control.</li> <li>d. Confirm incursion, report sighting, plan, eradicate.</li> </ul>
11.	<p>What is the most important reason for having a response plan for high risk invasive species?</p> <ul style="list-style-type: none"> <li>a. To get rid of the invasive species before it breeds on the island.</li> <li>b. To ensure that there is money available.</li> <li>c. To make sure that everyone knows what they are doing.</li> <li>d. To get more funding for the biosecurity of the island in the future.</li> </ul>
12.	<p>One traveller refuses to give you their gear to check before leaving for an island. What do you do?</p> <ul style="list-style-type: none"> <li>a. Let the traveller continue.</li> <li>b. Let the traveller continue but pay a fine.</li> <li>c. Do not allow the traveller to continue</li> <li>d. Do nothing.</li> </ul>
13.	<p>You found ants in your boat just before departure at the wharf. What do you do?</p> <ul style="list-style-type: none"> <li>a. Do nothing and continue for the island.</li> <li>b. Check gear on boat, collect ant samples and continue for the island.</li> <li>c. Spray insecticide in areas where ants are seen before leaving.</li> <li>d. Spray insecticide in boat and check all gear in boat for ants again before leaving.</li> </ul>
14.	<p>You found most of your rat snap-traps in the field have rusted. What do you do?</p> <ul style="list-style-type: none"> <li>a. Do nothing.</li> <li>b. If the traps are still working, continue using it.</li> <li>c. If the traps are still working, oil them and continue using them.</li> <li>d. Throw away all the traps and buy new ones.</li> </ul>
15.	<p>You found broken abandoned eggs in a seabird colony. What information do you collect?</p> <ul style="list-style-type: none"> <li>a. Take pictures or samples of the broken eggs.</li> <li>b. Record time of day and inspect the surroundings for potential predators.</li> <li>c. Mark the location and return to the area at a later date for a follow-up.</li> <li>d. All of the above.</li> </ul>
16.	<p>One of the visitors says that they saw a goat on a goat-free island. How do you respond?</p> <ul style="list-style-type: none"> <li>a. Ignore him, it's not true because all goats have been eradicated.</li> <li>b. Record his sighting, but deal with it later as you have other more important things to do.</li> <li>c. Record his sighting and start a preliminary response to confirm sighting.</li> <li>d. Run a full-scale trapping and hunting to catch and kill that goat.</li> </ul>
17.	<p>You see a rat running past you in a rat-free island. What do you do?</p> <ul style="list-style-type: none"> <li>a. Record the sighting of the animal and inform authorities.</li> <li>b. Start setting up traps and baits in the area.</li> <li>c. Try to catch it and kill it.</li> <li>d. All of the above.</li> </ul>

### Appendix 3: Satisfaction survey

## Pacific Invasives Initiative

**Island Biosecurity Training Course: Satisfaction survey**  
**National Trust of Fiji Islands**  
Fiji, 28 June – 01 July 2010



Please tell us about your experience with this course, so that we can improve the course in the future. Please complete all questions.

1.	<p>What were you hoping to learn from the course?</p> <ol style="list-style-type: none"> <li>1- Invasive species</li> <li>2- To learn measures + action to be undertaken to protect undergeooous [indigenous] species from fecing [facing] problem + extinction.</li> <li>3- More about biosecurity.</li> <li>4- Identify high risk area, knowing your enemy.</li> <li>5- Prevention, surveillance, response.</li> <li>6- What is bio-security and steps involved and in addition to this why its a must to be implemented.</li> <li>7- Steps that the organisation or govt is taking to safeguard or resource.</li> <li>8- Aspects of biosecurity.</li> <li>9- Protecting native/ Fiji species.</li> <li>10- What is biosecurity + how to develop tools for use in management.</li> <li>11- Conserving Fiji species to prevent it from extinction.</li> </ol>
2.	<p>What did you like most about the course?</p> <ol style="list-style-type: none"> <li>1- It was really interesting</li> <li>2- Steps to be implemented and actions undertaken that the island + species are free from invasive species.</li> <li>3- Detailed format</li> <li>4- Incursion response/ biosecurity prevention.</li> <li>5- About the different species.</li> <li>6- Course contents meeting my expectations.</li> <li>7- The fact finding tour to</li> <li>8- Group activity.</li> <li>9- Why it is important to conserve target native species.</li> <li>10- Interactive scenarios, fieldtrip.</li> <li>11- Learn a lot of new things from technical experience.</li> </ol>
3.	<p>What did you like least about the course?</p> <ol style="list-style-type: none"> <li>1- No.</li> <li>2- When the snap trap didn't snap any rat.</li> <li>3- Late course timetable</li> <li>4- Biosecurity surveillance</li> <li>5- 1. Presentation, 2. Monitor</li> <li>6- None.</li> <li>7- Travelling early from home – traffic jam.</li> <li>8- Overall it was interesting.</li> <li>9- None.</li> <li>10- n/a</li> <li>11- none.</li> </ol>

*Please circle ones that you think most appropriate:*

Highly Disagree.....Highly  
Agree

4.	<p>Did the course meet your learning expectations?</p> <p>Please explain -</p> <ol style="list-style-type: none"> <li>1- The course it was really interesting for me as quarantine officer to learn more how invasive species and how we draw response plan to control invasive.</li> <li>2- It gives me knowledge to a dealing with invaded species in invading our protected areas.</li> <li>3- n/a</li> <li>4- Of course, as field staff it does.</li> <li>5- n/a</li> <li>6- Biosecurity methods/ practical methods.</li> <li>7- n/a</li> <li>8- n/a</li> <li>9- Learning things that I do not know.</li> <li>10- Was able to understand concepts.</li> <li>11- Gaining skills – conserving environment.</li> </ol>	1	2	3	4
5.	<p>Did the explanations of the facilitators help you to understand biosecurity?</p> <p>Please explain -</p> <ol style="list-style-type: none"> <li>1- Yes, facilitators is very good and really target the point where we lacking in our control measures as Fiji biosecurity.</li> <li>2- Yes all theories were put into exercise.</li> <li>3- Activities helped a lot for my friends.</li> <li>4- Some times were quick.</li> <li>5- I know the meaning BIO – means life security – guard.</li> <li>6- Through process given during presentation.</li> <li>7- n/a</li> <li>8- n/a</li> <li>9- Pace and well-spoken – no accent.</li> <li>10- Reasiled [realised] its a lot more complex.</li> <li>11- Pace is slow, easy to understand.</li> </ol>	1	2	3	4
6.	<p>Will the methods learned in this course help you in your work?</p> <p>Please explain -</p> <ol style="list-style-type: none"> <li>1- Yes, as the quarantine officer it really helped me in control invasive species at border.</li> <li>2- We now steps + works to be taken so that any else to be harmed except invaded species.</li> <li>3- Very much so are I plan to formulate quick responses for certain species.</li> <li>4- Helps me a lot.</li> <li>5- Yes give more knowledge in different species.</li> <li>6- Able to draw up bio-security plan.</li> <li>7- To tell our people the importance y preserving &amp; protecting our resource.</li> <li>8- n/a</li> <li>9- Able to protect what’s back home.</li> <li>10- Will be able to work thru dev. [developing] materials for use in the field.</li> <li>11- Working with communities protecting Monuriki.</li> </ol>	1	2	3	4
7.	<p>Was there enough time to cover all the issues in this course?</p>	1	2	3	4

	<p>Please explain -</p> <ol style="list-style-type: none"> <li>1- Yes, we really cover all the issues for</li> <li>2- Yes everything was clearly explained.</li> <li>3- n/a</li> <li>4- I'm happy with we've covered, 1 week will be ok.</li> <li>5- Yes more presentation done.</li> <li>6- Refresher courses/ more time to discuss with those who have skills.</li> <li>7- n/a</li> <li>8- n/a</li> <li>9- One week (4 days) is enough.</li> <li>10- No. We spent too long on some aspects – participants discussion (not facilitators).</li> <li>11- If they could be allocated refresher courses.</li> </ol>				
8.	<p>Was the course material useful and easy to follow?</p> <ol style="list-style-type: none"> <li>1- n/a</li> <li>2- Yes</li> <li>3- It was okay.</li> <li>4- Simple, easy to understand.</li> <li>5- n/a</li> <li>6- n/a</li> <li>7- n/a</li> <li>8- n/a</li> <li>9- n/a</li> <li>10- n/a</li> <li>11- n/a</li> </ol>	1	2	3	4
9.	<p>Did you have the opportunity to contribute your knowledge and skills to the course?</p> <p>Please explain -</p> <ol style="list-style-type: none"> <li>1- I have express the biosecurity interest in the course. Regarding quarantine invasive control on the border security.</li> <li>2- Through taking part on group discussion.</li> <li>3- I think I did, especially in interpretation.</li> <li>4- n/a.</li> <li>5- So interesting.</li> <li>6- Able to share the implication occur when invasives are present.</li> <li>7- Allowed to speak in my language. Fijian.</li> <li>8- n/a</li> <li>9- Participating in Fijian.</li> <li>10- n/a</li> <li>11- Sharing community experience.</li> </ol>		<b>Yes</b>	<b>No</b>	
10.	<p>Did the facilitators give clear and understandable explanations and instructions during the course?</p> <p>Please explain -</p> <ol style="list-style-type: none"> <li>1- Yes, explanation was very good and exercise we are doing are really challenging.</li> <li>2- By explaining + showing pictures at the same time.</li> <li>3- Yes for me.</li> <li>4- Simple English. Easy to understand.</li> <li>5- Improve my knowledge.</li> </ol>		<b>Yes</b>	<b>No</b>	

	<p>6- The explanations was a clear and simple me. 7- Do a lot of examples. 8- Presentation and activities were well conducted. 9- Every resources provided. 10- n/a 11- No fancy accent.</p>
11.	<p>Did you find the course manual useful? <span style="float: right;"><b>Yes</b> <b>No</b></span></p> <p>Please explain -</p> <p>1- Manual is useful because it cover all invasive methods how we control. 2- We followed it step by step. 3- A little bit. 4- It about my work area. 5- Give me more interesting things. 6- Able to read them during my own time to remind me of what to do. 7- Simple and easy to understand. 8- Simple to follow and easy to understand. 9- Able to take it with me. 10- n/a 11- Able to take it with me.</p>
12.	<p>Do you have any further comments or suggestions that may help us improve our support to you (Continue over page if necessary)?</p> <p>1- I have recommended if you could arranged the same biosecurity course to Fiji Quarantine. 2- If we could put everything learned into reality during the w/shop. 3- Please prepare and send off programme well before it starts. 4- I think awareness workshop to rural area's/ provincial or village. 5- Yes we need more training in biosecurity. 6- If those who have already conducted eradication e.g. Birdlife and monitoring process to give presentation to see how they were monitoring theirs/ on other sites. 7- Thanks National Trust of Fiji &amp; PII. Thanks fellow participants for being friendly. 8- Probably another workshop to be conducted in the near future. 9- Send me some case studies video for the village. 10- Developing the incursion resp. Was difficult for some. This topic might need a bit more facilitation. 11- n/a</p>

**THANK YOU for helping to improve this and future training workshops!**