

Enhance the breeding capacity of  
the reintroduced Rimatara Lorikeet  
(*Vini kuhlii*) by reducing harassment by  
Common Myna (*Acridotheres tristis*)

JANUARY 2011

BIODIVERSITY  
CONSERVATION  
LESSONS LEARNED  
TECHNICAL SERIES

10



CONSERVATION  
INTERNATIONAL

Pacific Islands



# BIODIVERSITY CONSERVATION LESSONS LEARNED TECHNICAL SERIES

# 10

Enhance the breeding capacity of the reintroduced Rimatara Lorikeet (*Vini kuhlii*) by reducing harassment by Common Myna (*Acridotheres tristis*)

Biodiversity Conservation Lessons Learned Technical Series is published by:

Critical Ecosystem Partnership Fund (CEPF) and  
Conservation International Pacific Islands Program (CI-Pacific)

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Conservation International Pacific Islands Program. 2011. Biodiversity Conservation Lessons Learned Technical Series 10: Enhance the breeding capacity of the reintroduced Rimatara Lorikeet (*Vini kuhlii*) by reducing harassment by Common Myna (*Acridotheres tristis*).

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Conservation International is a private, non-profit organization exempt from federal income tax under section 501c(3) of the Internal Revenue Code.

ISBN 978-982-9130-10-5

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# ABOUT THE BIODIVERSITY CONSERVATION LESSONS LEARNED TECHNICAL SERIES

This document is part of a technical report series on conservation projects funded by the Critical Ecosystem Partnership Fund (CEPF) and the Conservation International Pacific Islands Program (CI-Pacific). The main purpose of this series is to disseminate project findings and successes to a broader audience of conservation professionals in the Pacific, along with interested members of the public and students. The reports are being prepared on an ad-hoc basis as projects are completed and written up.

In most cases the reports are composed of two parts, the first part is a detailed technical report on the project which gives details on the methodology used, the results and any recommendations. The second part is a brief project completion report written for the donor and focused on conservation impacts and lessons learned.

The CEPF fund in the Polynesia-Micronesia region was launched in September 2008 and will be active until 2013. It is being managed as a partnership between CI Pacific and CEPF. The purpose of the fund is to engage and build the capacity of non-governmental organizations to achieve terrestrial conservation. The total grant envelope is approximately US\$6 million, and focuses on three main elements: the prevention, control and eradication of invasive species in key biodiversity areas (KBAs); strengthening the conservation status and management of a prioritized set of 60 KBAs and building the awareness and participation of local leaders and community members in the implementation of threatened species recovery plans.

Since the launch of the fund, a number of calls for proposals have been completed for 14 eligible Pacific Island Countries and Territories (Samoa, Tonga, Kiribati, Fiji, Niue, Cook Islands, Palau, FSM, Marshall Islands, French Polynesia, Wallis and Futuna, Eastern Island, Pitcairn and Tokelau). By late 2010 more than 35 projects in 9 countries and territories were being funded.

The Polynesia-Micronesia Biodiversity Hotspot is one of the most threatened of Earth's 34 biodiversity hotspots, with only 21 percent of the region's original vegetation remaining in pristine condition. The Hotspot faces a large number of severe threats including invasive species, alteration or destruction of native habitat and over exploitation of natural resources. The limited land area exacerbates these threats and to date there have been more recorded bird extinctions in this Hotspot than any other. In the future climate change is likely to become a major threat especially for low lying islands and atolls which could disappear completely.

For more information on the funding criteria and how to apply for a CEPF grant please visit:

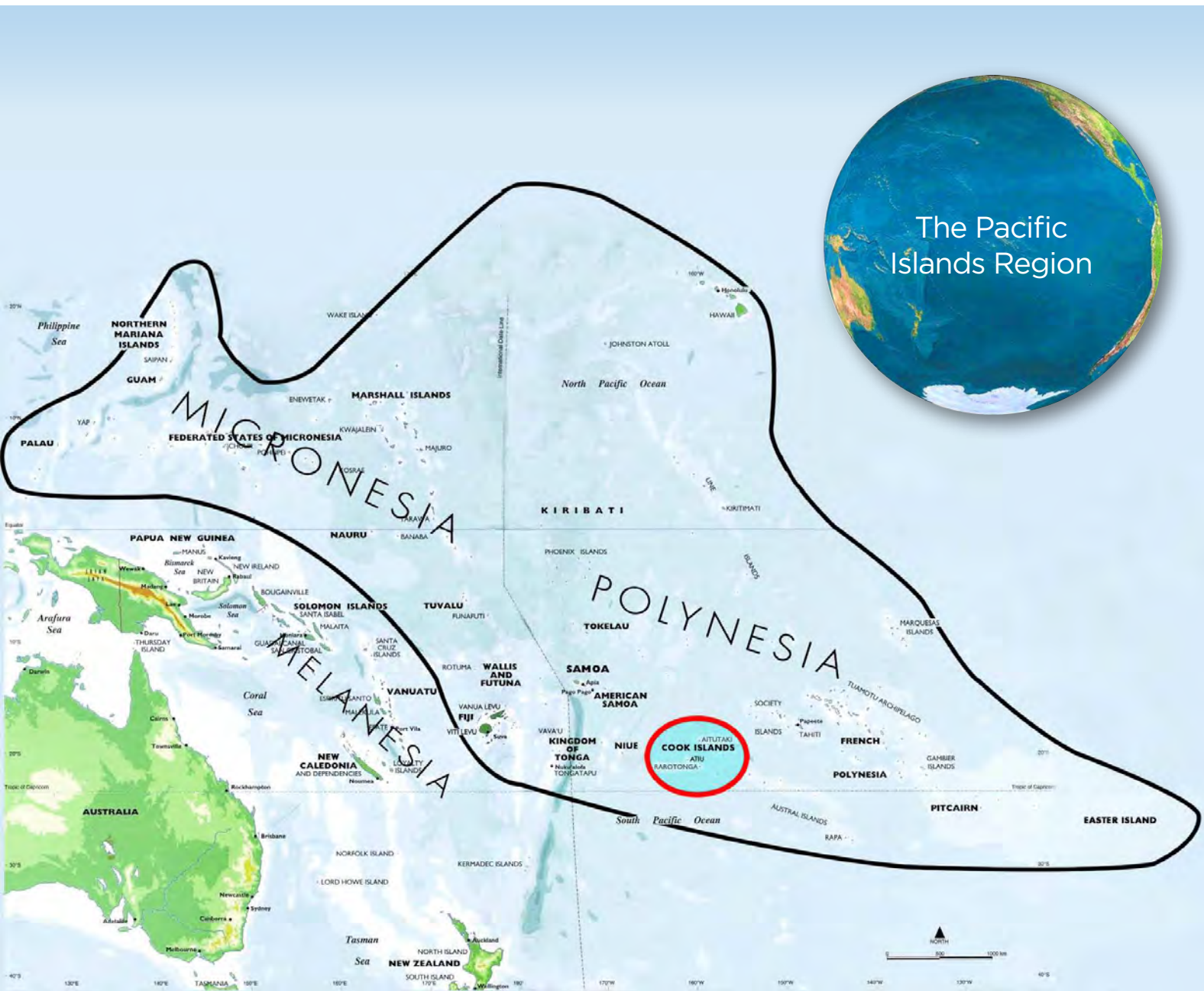
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- [www.cepf.net](http://www.cepf.net)

For more information on Conservation International's work in the Pacific please visit:

- [www.conservation.org/explore/asia-pacific/pacific\\_islands/pages/overview.aspx](http://www.conservation.org/explore/asia-pacific/pacific_islands/pages/overview.aspx)

or e-mail us at [cipacific@conservation.org](mailto:cipacific@conservation.org)

# Location of the project in the Polynesia-Micronesia Biodiversity Hotspot



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PSITTEACULA KUHLII.

Kuhl's Parrakeet.

# ENHANCE THE BREEDING CAPACITY OF THE REINTRODUCED RIMATARA LORIKEET (*VINI KUHLII*) BY REDUCING HARASSMENT BY COMMON MYNA (*ACRIDOTHERES TRISTIS*)

## Lessons Learned

As a ground breaking project we focused on experimentation, adaptation and capacity building - see above. It must be emphasized that this project was undertaken by residents with monthly monitoring and encouragement from a scientist. The focus was on community participation and capacity building. The Atiu college students were used to find the 38 myna roosts. The Trust arranged for a University of Leeds (UK) student to do her masters thesis on the myna population in June 2009 and her estimates of the total number of mynas were important background information.

The initial plan of poisoning at winter roosts proved ineffective and after that it was a project of discovery - poisoning at piggeries, on freshly mown or cultivated fields, and along roads; poisoning on the ground and on elevated trays; mixing poison with rice and various fruits; ways to reduce the intake of poison by roaming chickens; the use of airguns; using traditional chicken traps; using different designs of myna traps from Australia; destruction of nests - and this project is continuing with further strategies of killing mynas. If these new strategies are successful we should be in a position to discuss moving onto an eradication campaign around September, and then we will initiate further new strategies to kill more birds and to reduce their nesting capacity.

### Project Design Process

*Aspects of the project design that contributed to its success/shortcomings.*

The non-eradication objective was realistic considering the small amount of funds, and the fact that an initial 65% reduction was achieved was more than expected. In addition to this reduction the project was mainly one of learning and capacity building.

### Project Implementation

*Aspects of the project execution that contributed to its success/shortcomings.*

The project achieved its primary objective. This could have been achieved by importing an overseas team of pest control experts, but the idea here was to build the capacity of the community and have them execute the project with periodic monitoring and advice from a visiting scientist (myself). Around 80% of the funds went directly to the Atiu community.

It was known that this approach would make the control programme much slower but not more expensive.

In the larger conservation picture it would have been best to have had the time to apply for a major CEPF grant so that more people in the Atiu community could have been employed and then we could have realistically sought to eradicate the myna. However, with the experience gained over the course of the present project we are now continuing to achieve a further reduction of mynas for the coming breeding season and, depending upon the success of the reduction, it might be realistic to change the programme into an eradication project.

# Other lessons learned

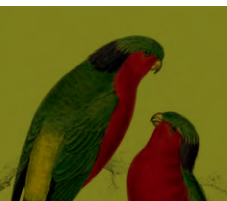
*relevant to the conservation community*

Work with local residents rather than bring in overseas 'experts'. This has the advantage that most of the funds directly support community livelihoods, along with capacity building and increasing awareness of the harm done by invasive species. Although local communities are very used to waiting for overseas experts to implement projects we felt that it was better to implement the project more slowly with plenty of time for experimentation and capacity building.



COOK ISLANDS **NATURAL HERITAGE TRUST**





# Project Update

NOVEMBER 2010

## Techniques

To the end of June and the end of the CEPF small grant project we focused on poisoning with DRC1339 (a.k.a. Starlicide), supplemented with a bounty system of NZ\$1 (later \$2) to encourage community trapping and shooting.

Initially we used the college students to find the winter roosts because we were hoping to find preroosting feeding areas nearby where we could prefeed with rice for a couple of days and then poison. Native birds were not attracted to rice but we were concerned about 'free range' fowls. To keep fowls away from the poison we laid the rice on polythene attached to sheets of roofing iron and this was covered by a tunnel of wire mesh that allowed mynas to enter but excluded fowls. This worked well and we killed most of the mynas entering the roost over the feeding area, but the next evening not a single myna approached the rice. There were no other suitable poisoning sites near the roost so we moved on and had one evening of moderate success at another roost. At this point we realised that most roosts did not have suitable poisoning areas nearby and the system was too complex.

We then started putting poisoned rice on recently slashed or mown fields, and developed a system using small mobile trays (~40x25cm with 3cm border) which could be put on sheds, outhouses, pig shelters, etc. Poisoned rice was also put into opened pawpaw/papaya and also directly on the ground beside roads where mynas were seen feeding.

The basic preparatory system was two mugs of rice (~500ml) boiled in excess water until al dente then washed in cold water and left to dry for a couple of hours. In the afternoon before distribution, 2.5g of DRC1339 was dissolved in 50ml water and thoroughly mixed into the rice. Various mixtures of flavourings and diced fruits were trialled but freshly poisoned plain rice was not only the easiest and it worked well. Later (Nov 2010) this was enhanced by the addition of two tablespoons of sugar to the cooking water.

The reason that poison in rice was ideal for use on Atiu was that no native birds was attracted to the rice so we did not have to develop elaborate exclusion systems. In initially approving the project the Island Council had accepted that feral and 'free range' fowls would also be poisoned. Interestingly, it was very rare to see or hear of dead fowls, and we concluded that they were protected by their much larger body mass and maybe by less sensitivity.

## Starlicide control method

In relation to the use of Starlicide as a basic method I must mention that this would probably be inappropriate on islands such as Rarotonga because there is a large rural population of families with children and pet cats and I know that there are several very vocal people strongly against the use of toxins (even a biofriendly one like Starlicide) and some who are simply opposed to killing a naturalised bird.

One of the main lessons learned is that there is a big difference between people saying they want the myna eradicated and actually accepting the processes necessary to eradicate it. After the initial approval is given, organisers and sponsors want to efficiently achieve the proposed endpoints, but any project involving the mass killing of a bird, even if most people consider it to be an invasive bird, can easily encounter increasing resistance as the killing proceeds.

In our case we were able to openly discuss concerns as they arose because I have had a 30year association with Atiu and visited every month or two, and the implementers (George and Maara) are members of the Atiu Community. As concerns were raised we were always able to offer to halt the killing, because the desired reduction and benefit to the Rimatara Lorikeet had been achieved within a few months. After that we continued to experiment with ways to dispose of mynas as a learning and capacity building exercise. In June 2010 I had intended to halt the project and organised the community trapping contest of July and August as a tipping point. Although the trapping gave disappointing results I realised that the community really wanted the reduction project to continue so we started poisoning again and undertook a shooting experiment.

It was not until Nov 2010 that I approached the Island Council and asked them to approve the use of 12ga shotguns as an essential part of moving from a reduction project to an eradication project. There was no time in this project that I could not have called a halt, if that was the emerging opinion of the community. I am aware that some outsiders would see such a decision as a failure, while I would see it as responding to the emerging opinion of a community in the light of recent experience. Interestingly enough, in this particular case, the community remains firmly behind the emerging eradication project.

## Bounty programme

When the project started we introduced a bounty system of NZ\$1 for each right foot of dead mynas paid at the beginning of each month. Although Atiu people often had 'traditional' fowl traps we provided free wire mesh to encourage the construction of more traps. Some people had airguns and .22 magnums, and we provided two advanced airguns, which were available upon request through George Mateariki. This system killed a few hundred mynas.

## Fate of equipment purchased

The two airguns are registered under the Natural Heritage Trust and they will remain on Atiu for as long as we continue working on the myna. The raw materials from the traps built by people on Atiu and by myself remain with the builders. A major item was the Starlicide and rice and these are consumed by the mynas any Starlicide remaining after the myna work ceases will be kept by the Trust for other similar projects although it has a shelflife on only about a year. Shotgun ammunition was purchased to open the way for a shooting ingredient and this is being implemented now.

## Ongoing activities

The CEPF smallgrant was only enough to seriously reduce the number of mynas and that was achieved under the project to the end of June. Since then the Trust has been scratching around to find funds to continue. Looking at the number of mynas still present in June 2010 it really looked as though the project should be satisfied with the reduction achieved and terminate. For various reasons it was not realistic to simply stop the poisoning and bounty system, so a twomonth community trapping contest was organised as a tipping point. The contest ran in July and August with NZ\$4perdeadmyrna and a \$400 monthly prize. Despite these 'tremendous'

## Incentives

Casual workers are typically paid NZ\$6perhour. The contest fizzled in the second month because mynas would not approach the traps. In hindsight, it would have helped to include instructions on when captured birds should be removed.

However, it also emerged that the community wanted the project to continue so we started poisoning again mainly by distributing the poison from a moving vehicle to areas of feeding birds, and in October (with Island Council approval) we undertook a few days of shooting mynas with a silenced .22 and a 12ga shotgun with #7.5 and #6 shot. The shooter found the .22 to be inefficient, while with the shotgun he killed 310 mynas with 330 shots.

In November 2010 the Island Council approved an eradication project involving poisoning, community systems at \$4perrightfoot, and the use of the 12ga shotgun for about fivedays a fortnight with the shooter working in prenotified sectors so people would not be surprised by the noise of the gun. We estimate the myna population at about 2,000 birds and hope the gunner can shoot 1,000 by the end of the year. This should seriously disrupt the myna breeding success in the rural areas, which are less easily disrupted by the poisoning and community systems.

If all goes well and mynas continue to be in low numbers in February we will work to eradicate them before the next breeding season.

## Bounty for each active nest

1. Each active nest reported to Birdman George will be recorded once only for a \$2 (two dollar) bounty for one person. The landowner and Birdman will decide on the best way to destroy the nest.
2. The monthly closure, payments, and termination of the nest-bounty will be as for the dead myna system.

## Airguns

Two airguns will be managed by Birdman George. He will provide the guns at times suitable for the shooters and himself.

1. A contest will be held to identify the most accurate shooters from those available and considered eligible to use an airgun by the Police. Shooters available only after 4pm will also be considered.
2. Each contestant will have 5 (five) shots at the target and the score will be based on how close the pellets are clustered to each other and not on their distance from the bull's-eye.
3. The most accurate shooters can register with Birdman to be on-call, and those registering will be given a briefing on the safe use of the airguns. Any shooter reported to be using a gun in an unsafe or careless manner shall be disqualified immediately. A disqualified shooter can only be re-instated with the support of the Police.
4. Anyone considered eligible by the Police who was not available for the contest can undertake the test at a time convenient to Birdman George and the Police.
5. Shooters will not be paid an allowance but they will be paid \$1 (one dollar) for each right-foot or dead myna given to and recorded by Birdman George. They will be paid fortnightly per the Public Service system.



The Maara Akava and Teokotai Ngaroi families share the first bounty payment of \$235 for June.



# 'Ātiu Myna Control Project

To help the Kura nest  
without interference

Implemented by the Cook Islands Natural Heritage Trust  
and Te Ipukarea Society

Sponsored by the Critical Ecosystem Partnership Fund  
(CEPF), British BirdFair, Natural Heritage Trust,  
Air Rarotonga and Atiu Villas.

For further information please contact  
Gerald McCormack: [gerald@nature.gov.ck](mailto:gerald@nature.gov.ck)

This myna control programme was initiated to increase the breeding success of the Kura by reducing interference by mynas.

The primary objective is to drastically reduce the number of mynas, but if possible, we will attempt an eradication.

Mynas have never been eradicated on this scale before so the challenge is great and there is much to learn.

## Poisoning

The Atiu Myna Control Project is based mainly on the use of the bird-poison Starilicide (DRC 1339).

Starilicide is an ideal poison for use against mynas on Atiu because:

- 1) it can be delivered in rice and other foods which are not eaten by native birds.
- 2) it is very toxic to mynas but essentially non-toxic to mammals, except cats, which are susceptible. Cats should not eat poisoned bait.
- 3) it is rapidly decomposed inside the myna so that secondary poisoning is very unlikely.



Even a cat would need to live entirely on poisoned mynas for a month to obtain a fatal dose.

- 3) it is rapidly decomposed in the environment by sunlight and by soil microbes to non-toxic components.
- 4) the mynas die humanely, that is, without any obvious signs of stress. They become sleepy, lose consciousness and die because of kidney failure.
- 5) the mynas die 1 to 3 days after taking a lethal dose which makes it difficult for survivors to associate the death of birds with feeding at the poison station.
- 6) young chickens are susceptible and they will die if they eat the poisoned rice. Adult fowls can also be killed, although they need to eat a lot more poisoned rice than a myna. We expect some chickens and fowls to be poisoned and **nobody should eat any chicken or fowl that is found sick or dead.**

Birdman George is in-charge of using the Starilicide. He has the knowledge and the equipment to safely mix and use the poison. Birdman will collect all the dead birds he can find but any dead birds found by other people can be used to claim a bounty (see below).

## Bounty for each dead myna or its right foot

1. Each dead myna or right foot given to Birdman George will be recorded in his book under your name for a \$1 (one dollar) bounty.
2. The bounty list for each month closes at 8pm on the last day of the month; and the payments will be made within 7 (seven) days of the monthly closure.



3. Dead mynas eligible for the bounty include those found dead from poisoning and those you kill by other means. The most efficient way to capture mynas for the bounty is to use the traditional chicken/fowl trap. If you are unsure of the best way to kill your trapped mynas talk to Birdman George.

4. The bounty system shall finish by a public announcement on Atiu. After that announcement the system will operate for **one more calendar month** and then cease.

Right foot of Myna



# WANTED



## REWARD

### Bounty for each dead myna or its right foot

1. Each dead myna or right foot given to Birdman George will be recorded in his book under your name for a \$1 (one dollar) bounty.
2. The bounty list for each month closes at 8pm on the last day of the month; and the payments will be made within 7 (seven) days of the monthly closure.
3. Dead mynas eligible for the bounty include those found dead from poisoning and those you kill by other means. The most efficient way to capture mynas for the bounty is to use the traditional chicken/fowl trap. If you are unsure of the best way to kill your trapped mynas talk to Birdman George.
4. The bounty system shall finish by a public announcement on Atiu. After that announcement the system will operate for **one more calendar month** and then cease.



### Bounty for each active nest

1. Each active nest reported to Birdman George will be recorded once only for a \$2 (two dollar) bounty for one person. The landowner and Birdman will decide on the best way to destroy the nest.
2. The monthly closure, payments, and termination of the nest-bounty will be as for the dead myna system.

Implemented by the Cook Islands Natural Heritage Trust and Te Ipukarea Society.

Sponsored by the Critical Ecosystem Partnership Fund (CEPF), British BirdFair, Natural Heritage Trust, Air Rarotonga and Atiu Villas.

For further information please contact Gerald McCormack: [gerald@nature.gov.ck](mailto:gerald@nature.gov.ck)

# 'Ātiu Myna Control Project

# BIODIVERSITY CONSERVATION LESSONS LEARNED TECHNICAL SERIES

## CEPF Small Grant Interim Project Completion Report

Enhance the breeding capacity of the reintroduced Rimatara Lorikeet (*Vini kuhlii*) by reducing harassment by Common Myna (*Acridotheres tristis*)

### *Organization Legal Name*

Te Ipukarea Society

### *Project Title*

Enhance the breeding capacity of the reintroduced Rimatara Lorikeet (*Vini kuhlii*) by reducing harassment by Common Myna (*Acridotheres tristis*)

### *Date of Report*

Preliminary report: 10 April 2010

Final report: *to come*.

### *Report Author and Contact Information*

Gerald McCormack, [gerald@nature.gov.ck](mailto:gerald@nature.gov.ck)

### *CEPF Region*

Polynesia-Micronesia Hotspot

### *Strategic Direction*

1. Prevent, control, and eradicate invasive species in key biodiversity areas.

### *Grant Amount*

US\$19,220

### *Project Dates*

Initial project 1 February 2009 to 31 January 2010, with extension to 31 April 2010

## Implementation Partners for this Project

*Please explain the level of involvement for each partner*

Natural Heritage Trust – the project was implemented by the Trust with the community of Atiu.

## Conservation Impacts

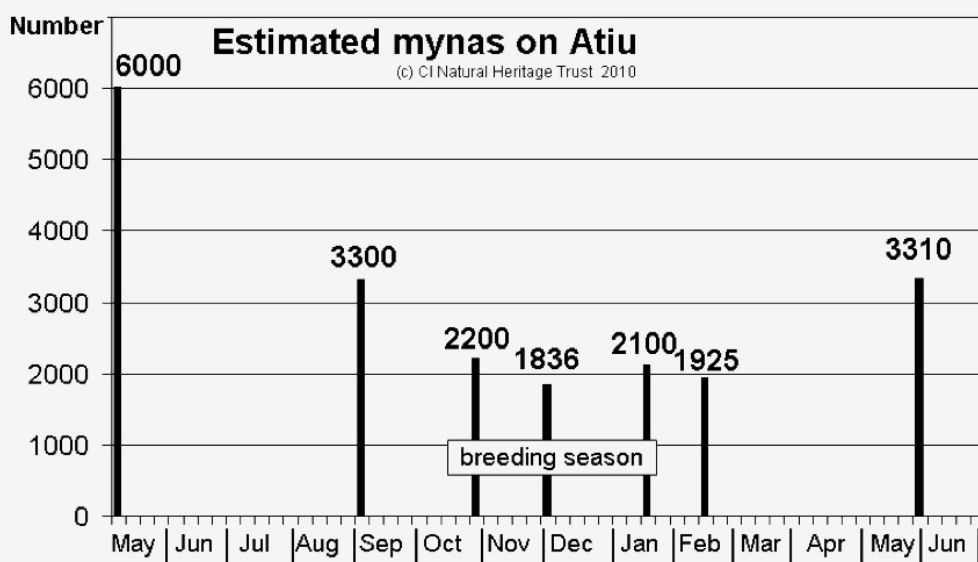
*Please explain/describe how your project has contributed to the implementation of the CEPF ecosystem profile*

The project was proposed under CEPF strategic direction: 1. Prevent, control, and eradicate invasive species in key biodiversity areas.

Per the proposal this project reduced mynas on Atiu and thereby reduced the level of harassment by Common Myna on the reintroduced Rimatara Lorikeets during the breeding season.

During the 2008 breeding season mynas were seen to constantly harass the lorikeets at the only two known nests and in one case they attacked a fledgling as it left the nest. Although there are still too few lorikeets to accurately sample and estimate the population we have some indicative estimates, which indicate an increase from the 23 reintroduced in mid-2007 to at least 90, and possibly around 120, by June 2010. And although we are not able to quantify the effect, we believe that reducing the number of mynas made a positive contribution to increasing the number of lorikeets.

Although this project was implemented under CEPF strategic direction of controlling an invasive, it equally enhanced the survival of the Rimatara Lorikeet, a CEPF priority species for CEPF investment, and it benefited other birds on the island of Atiu, which is a priority site for CEPF investment.



*Please summarize the overall results/impact of your project against the expected results detailed in the approved proposal*

The project was to drastically reduce the number of common myna on Atiu. The project reduced the population to about 30% at the peak of the Atiu bird breeding season.



Various efforts were made to estimate the myna population and we think there were at least 6,000 when the project started in May 2009. By December, the middle of the bird breeding season of Atiu birds, the mynas were down to about 2,000. Although the programme continued the surviving mynas breed relatively successfully and in the New Year mynas had too much alternative food to be very interested in poison rice. Despite this the project managed to keep the number down to about 3,000 by June 2010.

The reason for proposing a reduction rather than an eradication was that from an earlier feasibility study on Mangaia it was estimated that it would take \$NZ100,000 (USD70,000) to have a reasonable chance of eradication with no guarantee of success. Because of the urgency to start the reduction programme on Atiu to assist the breeding of the few reintroduced Rimatara Lorikeets it was decided to apply for a Small Grant because CEPF literature indicated that this could be granted in a shorter timeframe. Therefore we applied for a USD20,000 grant to reduce myna numbers and thus reduce the level of harassment on the breeding lorikeets.

Although we have come to the end of the small grant the myna reduction project on Atiu is continuing with a major change of strategy launched on the 1st July. This new strategy sets certain community goals and if these are achieved then we will open discussions on changing the reduction project into an eradication campaign. Although there is plenty of talk and theorising about eradicating mynas on islands, this has never been achieved on the scale of the Atiu situation and there is no doubt that eradication will be a formidable task for a community-based project.

*Please provide the following information where relevant*

- No new areas were established as 'protected', however, the project was successful in getting Department of Forestry to demarcate the boundary; the Department of Agriculture/Provincial Office to prevent encroachment. Most importantly several landowners have now started removing settlers who are encroaching within the Reserve on their lands.
- *Hectares Protected:* N/A
- *Species Conserved:* N/A
- *Corridors created:* N/A

*Describe the success or challenges of the project toward achieving its short-term and long-term impact objectives*

Such a project on mynas has not been attempted on a Pacific tropical island before, so the project was one of continual experimentation and adaptation. The primary system was poisoning with Starlicide (DRC1339) and this was implemented by two Atiu workers employed around two hours each afternoon. In this way the project helped with poverty alleviation on the island, was well accepted by the local community, and the workers knew the protocols concerning access to land under traditional ownership. The coordinator visited Atiu seven times in the course of the project to monitor progress and suggest changes to the poisoning methodology. Although the coordinator travel was factored into the project proposal the local airline decided to become a major sponsor and this enabled all air travel funds to be used to fund the actual reduction work. We were also able to reduce administration costs by not appointing an assistant supervisor.

### Poisoning:

On Mangaia the mynas were in only a few roosts and for some, at least, there were clear areas nearby for afternoon poisoning. On Atiu the college students found mynas in 38 roosts and most had no areas nearby for evening poisoning. Initial experiments were undertaken near an accessible roost with pre-feeding for three evenings in a wire cage to exclude roaming chickens. The poisoning killed most of the feeding birds but the next evening no birds would approach the feeders and it appeared that more than 50% of the birds in the roost had not visited the feeders having come to the roost from other directions. A couple more attempts of poisoning at roosts were trialled and then this method was mainly abandoned.

After abandoning the poisoning at roosts, the poison was made available in different ways: on the ground after cultivation or mowing of fields without pre-feeding; at known feeding areas there was pre-feeding on small trays followed by one evening of poisoning; and putting poison rice inside papaya and coconuts. Poison was primarily dispensed in boiled rice but many combinations of fruit and rice were trialled - the system was under constant development.

### Bounties:

The community was offered a bounty for dead mynas (\$1, later \$2) or reported myna nests (\$3) and they participated with variable success.

### Trapping:

In December the co-coordinator constructed experimental traps based on simplified Australian designs. They worked well on Rarotonga mynas but failed to catch any mynas on Atiu. By this time the reduced number of mynas meant there was much ripe fruit on plants and the mynas were not interested in open fruit in the cages, and gradually their interest in poisoned rice also waned.

### Air-guns

Two air-guns with telescopic sights were provided to the workers in August but they proved ineffective because inhabitants did not like the telescopic sights, and even after these were removed the patience to use the guns effectively against mynas was an obstacle.

By December about 30% of the original mynas remained and this remained the case through to February. However the June count showed that the population had increased to about 50% of the original, showing the effect of the last breeding season.

Despite the increase of mynas after their breeding season, the project achieved an excellent result for a grant of only US\$20,000.

Although the small grant has finished, the project is ongoing to drastically reduce the mynas for a second lorikeet breeding season. A new strategy was launched this month and after the first week the results are very encouraging. If the success continues we will be in a position to consider starting an eradication campaign in September.

*Were there any unexpected impacts (positive or negative)?*

None that I know of.

## Lessons Learned

*Describe any lessons learned during the design and implementation of the project, as well as any related to organizational development and capacity building. Consider lessons that would inform projects designed or implemented by your organization or others, as well as lessons that might be considered by the global conservation community.*

As a ground breaking project we focused on experimentation, adaptation and capacity building - see above. It must be emphasized that this project was undertaken by residents with monthly monitoring and encouragement from a scientist. The focus was on community participation and capacity building. The Atiu college students were used to find the 38 myna roosts. The Trust arranged for a University of Leeds (UK) student to do her masters thesis on the myna population in June 2009 and her estimates of the total number of mynas were important background information.

The initial plan of poisoning at winter roosts proved ineffective and after that it was a project of discovery - poisoning at piggeries, on freshly mown or cultivated fields, and along roads; poisoning on the ground and on elevated trays; mixing poison with rice and various fruits; ways to reduce the intake of poison by roaming chickens; the use of airguns; using traditional chicken traps; using different designs of myna traps from Australia; destruction of nests - and this project is continuing with further strategies of killing mynas. If these new strategies are successful we should be in a position to discuss moving onto an eradication campaign around September, and then we will initiate further new strategies to kill more birds and to reduce their nesting capacity.

*Project Design Process: (aspects of the project design that contributed to its success/shortcomings)*

The non-eradication objective was realistic considering the small amount of funds, and the fact that an initial 65% reduction was achieved was more than expected. In addition to this reduction the project was mainly one of learning and capacity building.

*Project Implementation: (aspects of the project execution that contributed to its success/shortcomings)*

The project achieved its primary objective. This could have been achieved by importing an overseas team of pest control experts, but the idea here was to build the capacity of the community and have them execute the project with periodic monitoring and advice from a visiting scientist (myself). Around 80% of the funds went directly to the Atiu community.

It was known that this approach would make the control programme much slower but not more expensive.

In the larger conservation picture it would have been best to have had the time to apply for a major CEPF grant so that more people in the Atiu community could have been employed and then we could have realistically sought to eradicate the myna. However, with the experience gained over the course of the present project we are now continuing to achieve a further reduction of mynas for the coming breeding season and, depending upon the success of the reduction, it might be realistic to change the programme into an eradication project.

*Other lessons learned relevant to conservation community:*

Work with local residents rather than bring in overseas 'experts'. This has the advantage that most of the funds directly support community livelihoods, along with capacity building and increasing awareness of the harm done by invasive species. Although local communities are very used to waiting for overseas experts to implement projects we felt that it was better to implement the project more slowly with plenty of time for experimentation and capacity building.

## Additional Funding

*Provide details of any additional donors who supported this project and any funding secured for the project as a result of the CEPF grant or success of the project.*

| Donor         | Type of funding* | Amount   | Notes                           |
|---------------|------------------|----------|---------------------------------|
| Air Rarotonga | A                | US\$8000 | Most air travel for coordinator |

*\*Additional funding should be reported using the following categories:*

- A Project co-financing (Other donors contribute to the direct costs of this CEPF project)*
- B Grantee and Partner leveraging (Other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF project.)*
- C Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)*

## Sustainability/Replicability

*Summarize the success or challenge in achieving planned sustainability or replicability of project components or results.*

The project outcome was not expected to be sustainable. It was explained above why we applied for only a small grant knowing that this could not achieve a sustainable eradication of the common myna on Atiu. Depending on the outcome of new strategies now underway, we will be applying for further funds to attempt an eradication of the myna on Atiu, which will be sustainable, because the myna is not known to colonize over ocean gaps as wide as those that surround Atiu.

*Summarize any unplanned sustainability or replicability achieved. Nil*

## Safeguard Policy Assessment

*Provide a summary of the implementation of any required action toward the environmental and social safeguard policies within the project. Nil*

## Performance Tracking Report Addendum

CEPF Global Targets (01 February 2009 – 31 January 2010)

*Provide a numerical amount and brief description of the results achieved by your grant. Please respond to only those questions that are relevant to your project.*

| PROJECT RESULTS   | Is this question relevant? | Provide your numerical response for results achieved during the annual period. | Provide your numerical response for project from inception of CEPF support to date. | Describe the principal results achieved from 1 February 2009–31 January 2010. (Attach annexes if necessary)   |
|---|----------------------------|--|---|---|
| 1. Did your project strengthen management of a protected area guided by a sustainable management plan? Please indicate number of hectares improved.   | N/A                        |  |   |   |
| 2. How many hectares of new and/or expanded protected areas did your project help establish through a legal declaration or community agreement?   | Nil                        |  |   |   |
| 3. Did your project strengthen biodiversity conservation and/or natural resources management inside a key biodiversity area identified in the CEPF ecosystem profile? If so, please indicate how many hectares. | No                         |  |   |   |
| 4. Did your project effectively introduce or strengthen biodiversity conservation in management practices outside protected areas? If so, please indicate how many hectares.                                    | Yes                        |  |   | Members of the community became more aware of managing invasives.   |
| 5. If your project promotes the sustainable use of natural resources, how many local communities accrued tangible socioeconomic benefits? Please complete Table 1 below.  | Yes                        |  |   | Much of the community participation was funded by the project, especially the two part-time staff who poisoned most days. The local motel benefited by seven visits of the organiser. |

TABLE 1 Socioeconomic Benefits to Target Communities

Please complete this table if your project provided concrete socioeconomic benefits to local communities. List the name of each community in column one. In the subsequent columns under Community Characteristics and Nature of Socioeconomic Benefit, place an X in all relevant boxes. In the bottom row, provide the totals of the Xs for each column.

| NAME OF COMMUNITY: ATIU ISLAND COMMUNITY   |   |          |
|--|---|----------|
| Community Characteristics  |   | TOTAL    |
| Small landowners   | X | 1        |
| Subsistence economy  | X | 1        |
| Indigenous/ ethnic peoples   | X | 1        |
| Pastoralists/nomadic peoples   |   |          |
| Recent migrants  |   |          |
| Urban communities  |   |          |
| Communities falling below poverty rate   |   |          |
| Other  |   |          |
| Nature of Socioeconomic Benefit  |   |          |
| Increased food security due to the adoption of sustainable fishing, hunting, or agricultural practices | X | 1        |
| More secure access to water resources  |   |          |
| Improved tenure in land or other natural resource due to titling, reduction of colonization, etc.      |   |          |
| Reduced risk of natural disasters (fires, landslides, flooding, etc)                                   |   |          |
| More secure sources of energy  |   |          |
| Increased access to public services, such as education, health, or credit                              |   |          |
| Improved use of traditional knowledge for environmental management                                     |   |          |
| More participatory decision-making due to strengthened civil society and governance.                   |   |          |
| Other  |   |          |
| Increased Income due to:   |   |          |
| Adoption of sustainable resources management practices (agricultural production, fishing, forestry);   |   |          |
| Ecotourism revenues  | X | 1        |
| Park management activities   |   |          |
| Payment for environmental services   | X | 1        |
| <b>TOTAL</b>   |   | <b>6</b> |

## Information Sharing and CEPF Policy

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned, and results. Final project completion reports are made available on our website, [www.cepf.net](http://www.cepf.net), and publicized in our newsletter and other communications.

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