

CEPF FINAL PROJECT COMPLETION REPORT

Organization Legal Name:	University of Minnesota Foundation
Project Title:	Community-based Conservation of Sandbar-nesting Birds in Cambodia
Date of Report:	30 June 2014
Report Author and Contact Information	Andrea Claassen, PhD Student Researcher; Project Field Coordinator (claas004@umn.edu)

CEPF Region: Indo-Burma

Strategic Direction: CEPF Strategic Direction 4. Empower local communities to engage in conservation and management of priority key biodiversity areas. 4.2 Pilot and amplify community forests, community fisheries and community-managed protected areas.

Grant Amount: \$18,871

Project Dates: 1 March – 30 June 2014

Implementation Partners for this Project (please explain the level of involvement for each partner):

Project Partners / Stakeholders

WWF, Cambodia – Key partner: The project was linked to a WWF bird nest protection program. WWF was involved in some joint field activities on the Mekong River between Stung Treng and Kratie. WWF provided logistical and technical support for this project and facilitated communication with local communities on the Mekong River.

Royal University of Phnom Penh (RUPP) – Key Partner: The project was linked to a RUPP community-based bird conservation initiative. RUPP was involved in some joint field activities on the Mekong River between Stung Treng and Kratie. RUPP provided some logistical and technical support for this project and facilitated communication with local communities on the Sekong and Sesan Rivers.

Local communities along Mekong River and Major Tributaries (Sekong and Sesan Rivers) – Local community members participate in training workshops, and were employed to monitor and protect nests. Community members also participated in interviews to assess attitudes and effectiveness of the nest protection program.

Additional Project Partners: The project also dialogued with other NGOs working in the project area, such as Conservation International and 3S Rivers Protection Network, as

well as with relevant government agencies, such as Cambodian Forestry (FA) and Fisheries (FiA) Administrations. We also communicated with other wildlife NGOs working in Cambodia (e.g. WCS, FFI, BirdLife International), as well as experts in the fields of wildlife biology and community-based conservation (e.g. Rob Timmins, Will Duckworth, Fred Goes, Ian Baird).

Conservation Impacts

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

Please summarize the overall results/impact of your project.

Planned Long-term Impacts - 3+ years (as stated in the approved proposal):

Planned long term impacts of the project were to: 1) increase populations of declining sandbar-nesting bird species, 2) improve conservation awareness among local communities, 3) empower and improve participation in conservation activities by local communities, and 4) improve capacity of communities, and project partner organizations and government agencies to conserve biodiversity.

Actual Progress Toward Long-term Impacts at Completion:

We made progress towards all of the long-term impacts stated above. This project has been part of an ongoing effort for the past 5 years to protect nests and increase populations of declining sandbar birds. Preliminary results from this year indicate that the project has improved breeding success of River Terns, the species of highest conservation concern, and has led to a slight, increase in the breeding population.

The project worked to improve conservation awareness among local communities. During interviews, responses from project participants and non-participants indicated that conservation awareness of project focal species has increased as a result of awareness and education campaigns by project partners (WWF and RUPP), and as a result of project implementation. Interviews with project participants suggested a shift in attitudes, values, and potential future behaviors in support of conservation goals for project focal species. Attitudes shifts towards conservation values appeared to be linked to the number of years that community members participated in the program; community members who participated for at least 2 years articulated long-term commitments to protect project focal species and appeared likely to make long-term behavior changes benefitting these species. The project was successful in improving direct participation in conservation by local communities, including participation by women, children, elders, and Indigenous Peoples. The project conducted training workshops for community members in nest monitoring and conservation methods (including setting up exclosures to protect nests from predators). These training workshops were generally successful, in that following the trainings, several community members were able to independently set up exclosures

at River Tern nests; the use of exclosures significantly improved survival rates of River Tern nests and fledglings.

Planned Short-term Impacts - 1 to 3 years (as stated in the approved proposal):

Planned short-term impacts of the project were to: 1) Implement a community-based nest protection program, through voluntary agreements and financial incentives, 2) raise community awareness of conservation issues, 3) reduce incidence of humans taking eggs of project focal species, 4) develop effective predator exclusion methods for use by communities and partner organizations, 5) develop training materials for community nest monitoring and conservation methods, and 6) conduct training workshops to build capacity of communities and partner organizations to protect nests.

Actual Progress Toward Short-term Impacts at Completion:

We made progress towards all of the short-term impacts stated above. We successfully implemented a community-based protection program, enlisting 47 community members to protect at least 265 nests of eight species. The project worked with partner organizations (WWF, RUPP) to raise community awareness of the nest protection program and conservation issues more broadly. The project effectively reduced incidence of humans taking eggs of focal species; the reduction on egg harvesting was accomplished through awareness activities and implementation of the nest protection program. The project developed predator exclusion devices (fencing) to protect nests of River Terns. We developed training materials for community nest monitoring and guidelines for using predator exclosures. We provided communities with nest exclosure materials and conducted training workshops for community nest protectors in the proper deployment of predator exclosures. The use of predator exclosures effectively increased survival rates of River Tern nests and chicks.

Please provide the following information where relevant:

Hectares Protected: N/A

Species Conserved: River Tern (*Sterna aurantia*), Great Thick-knee (*Esacus recurvirostris*), Indian Thick-knee (*Burhinus indicus*), River Lapwing (*Vanellus duvaucelli*), Small Pratincole (*Glareola lactea*), Little Ringed Plover (*Charadrius dubius*), Green Peafowl (*Pavo muticus*), and Cantor's Giant Softshell Turtle (*Pelochelys cantorii*).

Corridors Created: N/A

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

The community-based nest protection, through the use of conservation incentives to individual community members, was an effective way to engage community members in conservation. Nest guards effectively reduced incidents of humans harvesting eggs of project focal species, but nest guarding alone was not effective against animal predation.

Therefore, we tested the use of predator exclosures (fencing) to protect nests. During the project implementation, we erected predator exclosures around as many River Tern nests as possible. We learned that predator exclosures, in conjunction with nest guarding, was the most effective way to protect Tern nests, and that due to high chick mortality from rat predation, exclosures need to remain in place until chicks fledge. The nest exclosure training workshops that we conducted were successful; following training, community members were able to properly set up exclosures and protect River Tern nests from animal predators. However, proper training in exclosure set up is extremely important, and despite our best efforts, communities and project partners sometimes went ahead with erecting exclosures before being properly trained. In one instance, due to a scheduling conflict, our team was not able to conduct a training workshop, but a project partner conducted exclosure training for the communities without us, even though they themselves lacked the proper training. Improper exclosure use led to the failure of at least one nest. In the future, we will clearly instruct community participants and project partners that they must not erect any exclosures until after receiving proper training. Also, we will enlist community nest protectors who are experienced with setting up exclosures to train new, inexperienced nest protectors to ensure that all new participants receive proper training at the beginning of the field season.

The project also experienced additional communication-related challenges. Poor communication with project partners sometimes resulted in exclosures being removed too early; project partners were attempting to be cost effective regarding nest protection payments. However, removing exclosures too early led to predation of chicks by rats. Also, we learned that we needed to communicate better with community participants prior to exclosure use, to discuss the possible risks of nest abandonment by adult birds as a result of exclosure use, and that we needed to have a solid plan in place regarding payment levels to community members in the event of abandonment, and to discuss this with community participants prior to exclosure use.

Were there any unexpected impacts (positive or negative)?

Interview results indicated attitude shifts among community members participating in the nest protection program. We did not expect there to be such an apparent shift in the attitudes of project participants, and the strong positive responses regarding conservation attitudes and behaviors were encouraging. Most interviewees expressed appreciation for the species they were protecting, and several people professed that they now “love” the species they are protecting, while some said they now “feel sorry for” (feel empathy towards) the species they are protecting. Several respondents expressed that they want their children and grandchildren to be able to see these species in the future.

A number of respondents confessed to previously taking eggs of project focal species; however, 100% of respondents said that even if they were no longer paid to protect nests, they would not take any eggs of sandbar-nesting birds in the future. Although it is possible that not all respondents answered completely truthfully, most respondents appeared to give very genuine answers. Although they were not asked this question, many respondents volunteered that even if they were no longer paid to protect nests, they

would still protect them to the best of their ability, and would tell other people not to take eggs of the project focal species.

Thus, interview responses suggested that direct participation in conservation activities during the course of this project have positively shifted individuals' attitudes in the direction of conservation, and may also potentially affect future behavior towards conservation goals. Interview results also indicate that conservation incentives, in the form of direct payments for nest protection, were an effective way to engage local community members to actively participate in conservation. Although financial incentives were the initial motivation for community members to participate in this project, we believe that direct participation in conservation activities has led to real shifts in attitudes, and we are optimistic that this will also lead to behavioral shifts among project participants and result in long-term benefits to conservation beyond the extent of the direct financial incentives.

Project Components

Project Components: *Please report on results by project component. Reporting should reference specific products/deliverables from the approved project design and other relevant information.*

Component 1 Planned: Raise conservation awareness and capacity.

Component 1 Actual at Completion:

- 1) We co-led community presentations together with project partners regarding the nest protection project and conservation issues.
- 2) We led workshops for community members in bird nest monitoring and protection methods.

Deliverables: We produced training materials in bird nest location and monitoring methods and nest protection methods (instructions for setting up predator exclosures).

Component 2 Planned: Implement a community-based nest protection program.

Component 2 Actual at Completion:

- 1) We identified key nesting sites, and located and monitored approximately 265 nests of sandbar birds.
- 2) We enlisted 47 community members to protect sandbar-nesting birds via voluntary agreements and incentives for conservation.
- 3) We monitored nests and community conservation activities.
- 4) We tested the use of nest exclosures (fencing) at 10 of 22 River Tern nests.

Deliverables: We prepared a short summary report identifying key sites and participating communities, and describing project activities. The deliverables for Components 2 and 3 were combined into a single summary project report.

Component 3 Planned: Assess effectiveness of the community-based nest protection program.

Component 3 Actual at Completion:

1) We conducted a preliminary analysis of project data to assess project effectiveness in terms of biological variables (e.g., nest success rates).

2) We conducted interviews to assess project effectiveness in terms of social variables. We interviewed 21 of 32 community nest protectors on the Mekong River (project partner RUPP will interview project participants on the Sekong and Sesan Rivers).

Deliverables: We prepared a short summary report describing preliminary project results, including a preliminary assessment of project effectiveness for bird conservation and in terms of social aspects. The deliverables for Components 2 and 3 were combined into a single summary project report.

Were any components unrealized? If so, how has this affected the overall impact of the project?

No components went completely unrealized. Although we would have liked to realize some components more comprehensively (e.g., education and training component), all components were realized to the best of our ability, given logistical and time constraints of the project.

Please describe and submit (electronically if possible) any tools, products, or methodologies that resulted from this project or contributed to the results.

The following documents will be submitted as electronic attachments to this final project report:

- 1) Training document that describes how to locate and monitor bird nests.
- 2) Training document that provides instructions/guidelines for setting up predator exclosures around nests.
- 3) Summary (technical) report that describes key project sites, participating communities, project activities, and preliminary project results.

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.

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

The community-based nest protection program, through the use of conservation incentives to individual community members, was an effective way to engage community members in conservation. Because the project focused on nesting sites of River Terns, the species of highest conservation concern, community participation was rather limited in areas where River Terns did not occur. However, community participation was broadened by including fairly common species such as Small Pratincole and Little Ringed Plover. Including these species significantly increased participation by women

and children in conservation activities. Nest payments were set low for these species. Therefore, the extra project expense of including these species was minimal. The increased community participation was worth this small additional expense.

Community nest guards effectively reduced incidents of humans harvesting eggs of project focal species, but nest guarding alone was not effective against animal predation. Therefore, we tested the use of predator exclosures (fencing) to protect nests. During project implementation, we erected predator exclosures around as many River Tern nests as possible. We learned that predator exclosures, in conjunction with nest guarding, was the most effective way to protect Tern nests, and that due to high chick mortality from rat predation, exclosures needed to remain in place until chicks fledge.

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

The project benefited from having project staff spend most of their time in the field. Field staff were thus able to have frequent monitoring of nest outcomes and interaction with participating community members. Frequent monitoring of nests and community activities was crucial to project success.

Other lessons learned relevant to conservation community:

We learned that the best ways to achieve project results were not only to engage as many community members as possible, but to also try to engage those same community members in multiple years of program implementation (i.e., at least two years); interview responses suggested that community nest protectors who were first-year participants did not have strong emotional connections to the species they were protecting or strong conservation values, but those who had participated for ≥ 2 years had experienced shifts in attitudes towards having stronger conservation values and beliefs.

Close monitoring, with frequent site visits, and working to establish mutual trust between communities and conservation staff will improve the effectiveness of community-based conservation programs. Establishing trust includes treating community members with respect, and giving them benefit of the doubt (within reason) in regards to claims for conservation payments. We believe it is best to assume that community members are being truthful and acting in good faith, and to disburse conservation payments accordingly; to assume otherwise will be counterproductive.

Additional Funding

Provide details of any additional funding that supported this project and any funding secured for the project, organization, or the region, as a result of the CEPF investment in this project.

Donor	Type of Funding*	Amount	Notes

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

- A** *Project co-financing (Other donors or your organization contribute to the direct costs of this 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 funded 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.

We conducted trainings in nest searching and monitoring techniques, and proper set up of nest enclosures. Following training, participating community members were able to locate and monitor numerous nests, and at several sites, community members successfully set up enclosures to protect River Tern nests. However, due to logistical and time constraints, we were not able to conduct as many training workshops as planned. In the future we will enlist experienced nest protectors to assist with training of new nest protectors.

Nest protection improved nest success of focal species. The project developed predator enclosures for use at River Terns nests, and developed guidelines for enclosure use; the enclosures effectively increased survival rates of River Tern nests and chicks. During this project, we collaborated and communicated with government and civil society organizations to improve effectiveness and long-term sustainability of conservation activities.

The project has the potential to be replicated elsewhere in Indo-Burma and beyond. The bird nest protection methods that were developed can be used for sandbar-nesting bird species on other river systems elsewhere. The project's community-based conservation approach can also be replicated elsewhere. The lessons learned during this project can inform other community-based conservation initiatives.

Summarize any unplanned sustainability or replicability achieved.

None.

Safeguard Policy Assessment

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

Our partner organizations (WWF and RUPP) held formal meetings and discussions with participating communities in priority areas for key bird species to introduce the project and invite participation. In addition to these more formal meetings, the UMN team held numerous informal discussions with participating community members prior to and during their participation in the program. We introduced the project and made sure that participants understood the benefits as well as potential risks of participation in the program. We made sure that participants understood the grievance mechanism and had contact information for project staff and partners. During project implementation, we monitored social safeguards by checking in with project participants during each site visit (generally about twice per month). During each check in, we asked participants about status of nests they were protecting, if they had found any new nests, their protection activities, communication or visits from project partners, and if they had experienced any problems regarding the project or with project staff or partners. We sought to avert potential problems and conflicts before they arose, and when potential conflicts or disagreements arose (e.g., regarding number of days and payment levels for nest protection), we resolved them by working with participants to reach mutually satisfactory agreements. We conducted interviews with as many participants as possible, in order to better understand community attitudes about the program, to give participants a chance to air their grievances regarding the program, and to learn about potential issues with project design and implementation that need to be adjusted or rectified for future years.

Additional Comments/Recommendations
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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 Web site, www.ceph.net, and publicized in our newsletter and other communications.

Please include your full contact details below:

Name: Andrea Claassen (PhD researcher; project field coordinator)

Organization name: University of Minnesota

Mailing address: Department of Fisheries, Wildlife, and Conservation Biology, 135 Skok Hall,
2003 Upper Buford Circle, St. Paul, MN 55108, USA

Tel: (612) 624-3600

Fax: (612) 625-5299

E-mail: clas004@umn.edu

*****If your grant has an end date other than JUNE 30, please
complete the tables on the following pages*****

Performance Tracking Report Addendum

CEPF Global Targets

(Enter Grant Term)

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?	If yes, 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 July 1, 2007 to June 30, 2008. (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.	Yes	37,800 ha	37,800 ha	Bird biodiversity was improved and education and technical capacity of communities and local staff were strengthened to support protection of Mekong River habitats within the Mekong Aquatic Biodiversity Conservation and Management Area (35,400 ha) and Sekong River habitats within the Western Siempang Protected Forest (2,400 ha).
2. How many hectares of new and/or expanded protected areas did your project help establish through a legal declaration or community agreement?	No			Please also include name of the protected area. If more than one, please include the number of hectares strengthened for each one.
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.	Yes	62,200 ha	62,200 ha	Bird biodiversity was improved and education and technical capacity of communities and local staff were strengthened to support protection of the Mekong River (between Stung Treng town and Sambor) and major tributaries (Sekong and Sesan Rivers) in Cambodia.
4. Did your project effectively introduce or strengthen biodiversity conservation in management practices outside protected areas? If so, please indicate how many hectares.	Yes	24,400 ha	24,400 ha	Bird biodiversity was improved and education and technical capacity of communities and local staff were strengthened to support protection of areas of the Mekong River (between Stung Treng town and Sambor) and major tributaries (Sekong and Sesan Rivers) in Cambodia that are outside protected areas.
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	12 communities	12 communities	Members of 12 local communities participated in the project and received payments for ecosystem services (incentives for bird nest protection). See table below.

If you answered yes to question 5, please complete the following table

Total																				
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If you marked "Other", please provide detail on the nature of the **Community Characteristic and Socioeconomic Benefit**: