The Rufford Small Grants Foundation

Final Report

Congratulations on the completion of your project that was supported by The Rufford Small Grants Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. The Final Report must be sent in **word format** and not PDF format or any other format. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. Please note that the information may be edited for clarity. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to jane@rufford.org.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details	
Your name	Liu Peiqi
Project title	Studies on scaly-sided merganser (*Mergus squamatus*) breeding population and habitat selection in the Changbai Mountains, China.
RSG reference	22.10.08
Reporting period	2009
Amount of grant	£5,975
Your email address	peiqil@126.com
Date of this report	8th October 2009

1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Breeding pair survey			√	From April 14th to May 6th, 13 river stretches totalling 639 km were surveyed.
Brood survey			√	During the second half of August, 9 river stretches in 290 km were surveyed.
Nest site selection study			√	We spent a month looking for the wild nests of scaly-sided merganser. We successfully found 7 wild nests and measured more than 15 parameters of these nests. Then we use Factor Analysis to study the main factors the scaly-sided merganser prefers when selecting their nests.
Pre-migratory congregation sites survey			√	At the end of September and the middle of October, we surveyed the congregation sites of scaly-sided merganser. Four big congregation sites containing more than 200 scaly-sided mergansers were found.

2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

We went to field and started the survey on schedule in the first 10 days of April. But the late coming spring in this year obviously delayed the scaly-sided mergansers arriving at the Songhuajiang River system in Changbai Mountain range. There were still some of the scaly-sided mergansers staying in some stretches on the lower reach of the Yalu River until the middle of April. So, we had to pause our implementation plan. After a week, we restarted our survey again, but we had to make repeat surveys in three different stretches.

Another unforeseen difficulty relates to the habitat selection study. In this spring, we bought some tools for climbing trees for the study on nest site selection. This climbing system is absolutely new to us. Except for some limited instruction manuals of these tools, we had no special guidance from any specialists. Then how to throw the heavy rope through the high tree crown became a problem for us. We spent nearly a week undertaking tests in the forest trying to find an effective way to solve this problem. Finally, we did it. We used a piece of light thin nylon rope (50m) connected to our heavy climbing rope at one end. At the other end, we bundled it with a metal weight (or weights, such as iron nuts). We used a slingshot to shoot the weight(s) linking with light nylon rope firstly crossing the right tree limbs, and then pull the heavy climbing rope crossing the limbs. We think the key factor is the size of the weights. It is better for the weights to be 90 - 120 g. If the weight is too light, it was easy for the nylon rope to be entangled by branches and very difficult to pull the nylon

rope through. But if it is too heavy, it could be difficult to shoot the weight high enough and difficult to be solved when entangled by branches.

3. Briefly describe the three most important outcomes of your project.

Pursuing the monitoring progamme, this project surveyed the scaly-sided merganser densities in some rivers in the Changbai Mountain range in a second year and compared the results with the data from last year. Some fluctuation reasons were analysed.

The western distribution boundary of the scaly-sided merganser in the Changbai Mountain range was detected and some threats were found.

The most important is that we successfully found 7 natural nests of scaly-sided merganser and we made some studies on its nest site selection. This may provide us very useful guidance in artificial nest programme for conserving the scaly-sided merganser.

4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).

We contacted some leaders of two forestry bureaus which cover most habitats of scaly-sided merganser trying to increase their attention to the conservation to Scaly-sided Merganser. One bureau is considering establishing a scaly-sided merganser natural reserve. They even have set up six scaly-sided merganser observation shelters.

My documentary film - *The Scaly-sided Merganser in the Changbai Mountain Range* - was finally finished in March 2009. It had been broadcasted by the local TV station of Songjianghe Forestry Bureau and in a middle school. Now many local people know this endangered species.

5. Are there any plans to continue this work?

We plan to pursue the monitoring programme next year. At the same time, we will make studies on habitat selection and develop the artificial nest programme.

6. How do you plan to share the results of your work with others?

According to our survey results, we have developed a suggestion report to the leaders of related administrative departments of wildlife conservation and management of Forestry Bureau of Jilin Province and State Forestry Administration. We are doing our best in suggesting establishing natural reserves especially for the conservation of the scaly-sided merganser in the Changbai Mountain range.

We have forwarded our results to related international experts on scaly-sided merganser conservation to let them know the current situation of this bird in this area. We firmly believe that our results are much valuable to international conservation programme of this species.

7. Timescale: Over what period was the RSG used? How does this compare to the anticipated or actual length of the project?

The RSG was used during all the period of our study. It is coincident with the anticipated length of the project.

8. Budget: Please provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Transportation				
Train and bus tickets	50	270	220	To decrease the expense of hiring a car, we travelled mainly by bus in congregation site survey.
Car rent, £24 per day including fuel and driver payment	1,560	1,992	432	As the abnormal climate and long-lasting rains this year, the fieldwork was often paused. We had to increase the amount to use a car and pay the excess expense (18 days).
Subsistence				
Field per diem (food and accommodation, £17/day/person) P Liu - 80 days, J Tang - 15 days, Boat driver - 50 days	2,465	3,315	850	As the abnormal climate and long-lasting rains in this year, the fieldwork was often paused. An extra 50 workdays were used.
Equipment				
Tools for climbing trees	350	420	70	We selected safer imported descending equipment.
Telemetric equipment (one trx-48s-folding receiver plus 10 hlbp-3800 transmitters) (should be imported)	1500	0	-1500	Considering the change of foreign exchanges in this spring, we decided not to buy this equipments and looking for the natural nests by directly climbing trees instead.
Communication	50	120	70	
TOTAL	5975	6117	142	The excess amount of expense was provided by Ms. Zhang Haixia.

9. Looking ahead, what do you feel are the important next steps?

For the conservation to the scaly-sided merganser in the Changbai Mountain range, the studies on its habitat are urgently needed. The results of these studies could provide guidance to the establishment and the work of a natural reserve especially for this globally threatened species. At the same time, some positive conservation actions, such as an artificial nests programme and propaganda to the local people, should be carried out as soon as possible.

10. Did you use the RSGF logo in any materials produced in relation to this project? Did the RSGF receive any publicity during the course of your work?

Yes, we have used the RSGF logo and clear declaration that this project was supported by the RSGF in my reports to Dr. Baz Hughes, Head of TWSG, and Dr. Diana Solovieva, Russian specialist on scaly-sided merganser, as well as the head of Wildlife Conservation Administrative Department of Forestry Bureau of Jilin Province, China.

11. Any other comments?

We must express our appreciation to the Rufford Small Grant Foundation for providing two-year continuous supports to our projects. This made us understand the current situation of the scaly-sided merganser in the Changbai Mountain range. We believe that our study results are very important and valuable to the conservation of this species. We are going to apply the Rufford Booster Grant for pursuing the studies on population trend and habitat selection, as well as some conservation actions for the scaly-sided merganser in the Changbai Mountain range in 2010.

Also, we would like to take this opportunity to acknowledge Dr. Baz Hughes, Head of TWSG, and Dr. Diana Solovieva, Russian specialist on scaly-sided merganser, for their always long time supervising and guiding to our projects.