

## 2021 EAAFP Small Grant Fund Application Form

### Personal Details of Applicant

**Title:** Ms. Ren Xiaotong  
(Mr, Ms etc) Family name Given Name/s

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### Relevant Working Group or Task Force Chair/Coordinator - DETAILS

*Please contact the EAAFP Programme Officer if additional guidance is needed in relation to this section (programme@eaaflyway.net)*

**Name of Working Group or Task Force:** Shorebird Working Group

**Title of Chair/Coordinator:** Dr. Richard Lanctot  
(Mr, Ms etc) Family name Given Name/s

**Email address:** richard\_lanctot@fws.gov

### Eligibility of Projects

- The focus of the project is migratory waterbirds and their habitats. Yes  No
- The project will improve the understanding of factors important for the conservation of migratory waterbirds and their habitats in the EAAF. Yes  No
- The applicant agrees to provide a final report within 3 months of the completion of the project. Yes  No
- The applicant agrees to submit 1-2-page article and photographs for inclusion on EAAFP's website and/or write a brief article for the EAAFP's newsletter. Photographers will be acknowledged. Yes  No

- The applicant will acknowledge the support of the EAAFP in any publications, presentations and reports arising from this work. Yes  No

## Project Details

**Project Title:** Please provide a concise and informative title of your entire project (not just the component for which funds are sought)

Revealing an unknown EAAF shorebird migration: The wood snipe

### Part A. Project Proposal

**Details of your entire project (not just the component for which funds are sought) (2.5 page maximum)**

- |                       |   |
|-----------------------|---|
| <b>1. Objectives:</b> | <p>1: Identify the migratory route and wintering grounds of the wood snipe population that breeds in the EAAF in the Hengduan Mountains</p> <p>2: Investigate the population size and distribution of Wood Snipes in the Hengduan Mountains.</p> <p>3: Characterise the habitats and threats to Wood Snipe at breeding site in the Hengduan Mountains.</p>  |
| <b>2. Background:</b> | <p>The wood snipe (<i>Gallinago nemoricola</i>) is a threatened and extremely poorly known long-distance migratory shorebird in the EAAF. It breeds in SW China (and also west to the Himalayas), and in winter, it has been observed in India, Bangladesh, Myanmar, N &amp; C Laos, N Vietnam and N Thailand (Gils et al., 2020). It is arguably the least known of all EAAF migratory shorebirds, with not a single scientific paper published on its biology, migration or conservation. The information on this species is so sparse that the only material about it are unpublished reports of observations of its population and breeding in one national park in Nepal (Khatiwada et al., 2008; Basnet et al., 2020). It has never been formally studied in the EAAF and there is no information about the population size or breeding habitat of the breeding population in Hengduan mountains. The wood snipe is currently classified as Vulnerable by the IUCN Red List, with a population estimated to be less than 10,000 mature individuals with a decreasing trend (BirdLife International, 2017). It is suggested that high grazing pressure and tourism, both lead to habitat degradation and disturbance, are important threats at its breeding site, while hunting and habitat loss at non-breeding sites might be also key threats (BirdLife International, 2017). Thus, the study and conservation on breeding population of wood snipe in Hengduan mountains are important for the survival of this species.</p> <p>There is no information on migratory routes for the Wood Snipe. It was historically considered rare and local across most of its range. It is assumed that birds breeding in the Himalayas travel to south India in the non-breeding season, and possibly that there is also some altitudinal migration in the region (BirdLife International, 2017). However, migratory connectivity in the EAAF population is impossible to assess, and there is no information on the non-breeding destinations of the birds breeding in the Hengduan mountains of SW China. All the sighting records by Chinese birders (Birdtalker and Birdreport databases) are from the breeding season (April to August) as are almost all the eBird records from SW China, except one at Potatso National Park in December and a possibly erroneous record at Balang Shan in October. Sightings in SE Asia, central and southern India, Sri Lanka and Bangladesh are only from the non-breeding seasons (September to March), suggesting that the EAAF population is predominantly a long-distance migrant rather than a short distance altitudinal migrant. Given that this species is rare and possibly highly threatened, <b>resolving the migration routes of wood snipe with tracking is an urgent issue so that threats throughout the species annual cycle can be identified and conservation efforts can be directed toward the most pressing issues.</b></p> <p>Although adult Wood Snipe has never been captured for research, we have the local knowledge and demonstrated ability to locate nests needed to achieve this goal. Breeding of wood snipe in the Hengduan Mountains was reported at two major sites (Gils et al., 2020; Eaton &amp; Duff, 2013). The breeding records at Huya Xiang, Pingwu County, Sichuan, China are quite reliable since 2009 (Que, P., personal communication, 2020). Team members from Chengdu Birdwatching Society conducted surveys for wood snipes in 2012 and located six birds at the site we are planning to do this project. Based on the information that we got from the recce in November 2020, the habitat at Pingwu is alpine meadows with patches of high-density <i>Rhododendron</i> shrubs (Figure 1a) and the snipes generally do display flights at the beginning of the breeding season (April to July), so we are confident to find snipes in this region. One juvenile of the wood snipe was caught in June 2012 by team member Zhang Ming (Figure 1b). Moreover, local herders have recent experience (2019) of finding two nests, thus, we are confident of successfully locating nests at the site.</p> |

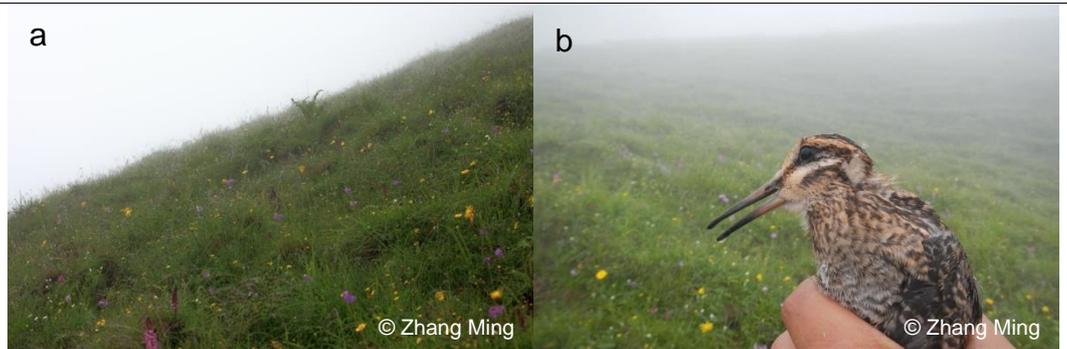


Figure 1. a: Wood Snipe in its breeding habitat at Pingwu; b: Juvenile Wood Snipe at Pingwu.

### 3. Project plan, timeline and methods:

#### Project plan:

The project will be conducted by staffs from Peking University (Ren Xiaotong, Dr. Hua Fangyuan), Dr. Que Pinjia from Chengdu Research Base of Giant Panda Breeding, Dr. Brad Woodworth and Prof. Richard Fuller from University of Queensland and members of Chengdu Birdwatching Society. Current support including University of Queensland, Chengdu Research Base of Giant Panda Breeding and SEE foundation (China).

We will conduct a full survey for breeding wood snipes and locate as many nests as possible early in the 2021 breeding season (April to early May) in order to investigate population size and distribution of Wood Snipes at Zhengyuan mountains. We will try to catch the birds at the early stage of the breeding season first using mist-netting and playback at night. If the catch is successful, we will deploy tags on some adults first with leg-loop harness. As the body weight of wood snipe is 142–198 g (Gils et al., 2020), we use PinPiont GPS Argos 40 tags (Lotek UK Limited, personal communication, 2021), which weigh 3.2 g (1.9% of average wood snipe body weight). Then during the breeding season, we will search in the areas where the habitat is suitable or where the displaying birds are located to find nests. Up to 10 nests of snipes will be selected for catching adults using mist-nets and also any additional catching techniques that look feasible based on the behaviour of the birds (e.g., Johnson et al. 2020). Tags will also be deployed on captured snipes at this stage. Detailed breeding habitat character including vegetation structure would also be investigated. After receiving the tracking data, we would be able to reveal at least the non-breeding ground and hopefully the first ever migration routes for the cryptic and threatened Wood Snipe. Through the analysis with tracking data and habitat data from remote sensing imagery, we would be able to identify the threats *en route* during migration. Large-scale interview with local herders across the Hengduan mountains about the sighting records of wood snipes for mapping breeding distribution will be conducted in non-breeding season as this species is hard to be misidentified in those areas at certain time of the year. Winter field survey at certain sites are also planned.

#### Timeline:

Early April 2021: Pre-survey and interview for determining exact study area site

Late April 2021: Recruit volunteers to help and conduct online training

5 May-15 May 2021: Field survey at Pingwu county, transfer banding equipment, set up capture plan, onsite training for volunteers

Mid May-June 2021: Survey and capture at Pingwu county, deployment of satellite tags

July - Aug 2021: post-breeding field survey and interview to identify threats at breeding season.

Oct 2021: Winter field survey at certain sites in Hengduan mountains.

Nov - Dec 2021: Identify staging and wintering sites based on tracking data, habitat analysis based on remote sensing imagery.

Jan-Feb 2022: Breeding and migration report writing.

Mar – May 2022: Large scale interview across Hengduan Mountain area and field survey for mapping distribution.

Jun – Aug 2022: report writing on species distribution and habitat selection.

#### Methods:

Field survey: observation and sound collection at dusk/dawn, playback, thermal infrared imaging before dawn

Bird catching: 1) Mist-netting and playback at night when birds are flying around with poor eyesight (Pinchuk, 2006); 2) Thermal infrared imaging to locate displaying birds at night and dip-net in daytime (Sikora, 2005).

Tag deploying: tags will be deployed using leg-loop harness with magic-stretch based on the results that we tested with closely related Common Snipes (*Gallinago gallinago*).

Interview at local communities: interview and questionnaire survey at the communities near the breeding site to identify the presence of the snipes and potential threats.

	<i>Please include the proposed timing of project commencement, start and completion of fieldwork (if applicable), project completion. Please also comment on the flexibility of the timeline of the project.</i>
<b>4. Likely benefit to the conservation of migratory waterbirds and their habitat / or key research outputs:</b>	<p>This sentinel project will reveal a previously unknown migration, and transform our understanding of the migration ecology and conservation status of this highly threatened and little-known species. It will reveal the nature and severity of threats faced along its migration route, and identify conservation actions that could be taken to reverse declines, as has been successfully achieved with a number of other EAAF migratory shorebirds.</p> <p>The Wood Snipe is a very specialized shorebird species that needs alpine meadow to breed, and this kind of wetland habitat has received very little research and conservation attention in the EAAF. During the non-breeding seasons, we have almost no information on the habitat utilization of this species. Thus, we see great potential to identify new important habitats for this species during non-breeding season.</p> <p>The other key research output would be identifying the possible migration route taken by shorebirds in inland EAAF connecting China and Indochina or Southeast Asia which would better inform the conservation of shorebirds taking this route.</p>
<b>5. Alignment with EAAFP Working Groups and Task Forces priorities:</b>	<p>Wood snipe is listed as a key species of Shorebird Working Group.</p> <p>This project is strongly aligned with EAAFP Shorebird Working Group priorities 1.1, 2.4, 2.6, 3.1, 4.3, and will further the goals of the EAAFP Shorebird Working Group by identifying an international sites that support this threatened migratory shorebird, reveal substantial new information on threats that could be used to guide conservation, contribute much new data to the Red List assessment for this species, provide an example of a collaborative migration study, and constitute a great opportunity for communication about the discovery of a previously unknown migration to the public around the EAAF.</p> <p><i>Please indicate which of the EAAFP Working Groups and Task Forces priorities are addressed in this project.</i></p>
<b>6. Explain the part of your project for which you are seeking funds in this Application:</b>	<p>Equipment (satellite tags): tracking devices are important for revealing the migration route and habitat use preference of wood snipes. In the project, five snipes are expected to be tagged with satellite tracking devices. UQ has already provided 4 tags so we are seeking for one more tag, DLC2-USB Interface and Argos fees from this application.</p> <p>Local labor fee, subsidies and insurance for team members, volunteers and experts: the breeding site of wood snipe at Pingwu is hard to access and the range is quite large, thus we need enough local labor and volunteers to ensure successful catching.</p>
<b>7. Scientific References cited in the Application:</b>	<p>Basnet, H., Shrestha, M. B., Thakuri, D. C., Pun, T., Tamang, R., &amp; Chaudhary D. (2020) Ecology and Conservation of Wood Snipe <i>Gallinago nemoricola</i> in Lauribina-Gosainkunda area in Lamtang National Park, Nepal (Unpublished report)</p> <p>BirdLife International. (2017) <i>Gallinago nemoricola</i> (amended version of 2016 assessment). The IUCN Red List of Threatened Species 2017: e.T22693082A117048348. <a href="https://dx.doi.org/10.2305/IUCN.UK.2017-3.RLTS.T22693082A117048348.en">https://dx.doi.org/10.2305/IUCN.UK.2017-3.RLTS.T22693082A117048348.en</a>. Downloaded on 20 October 2020.</p> <p>Eaton, J. A., &amp; Duff, A. G. (2013) Wood Snipe <i>Gallinago nemoricola</i> in Bhutan's Phobjikha valley. <i>BirdingASIA</i>, 20: 82-83.</p> <p>Gils, J. V., Wiersma, P., &amp; Kirwan, G. M. (2020, March 4). Wood Snipe (<i>Gallinago nemoricola</i>), version 1.0. In <i>Birds of the World</i> (J. del Hoyo, A. Elliott, J. Sargatal, D. A. Christie, and E. de Juana, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA. <a href="https://doi.org/10.2173/bow.woosni1.01">https://doi.org/10.2173/bow.woosni1.01</a></p> <p>Johnson, J.A., L.H. DeCicco, and N.R. Hajdukovich. (2020). Using playback of chick vocalizations to locate and capture breeding Red Knots. <i>Wader Study</i> 127:252-256.</p> <p>Khatiwada, J. R., Chaudhary, H., Ghimire, D., Thakuri, J. J., Chalise, M. K., &amp; Kyes, R. C. (2008) Conservation status of Wood Snipe <i>Gallinago nemoricola</i> in Langtang National Park, Nepal. (Unpublished report)</p> <p>Pinchuk, P., &amp; Karlionova, N. (2006). Use of playback calls for catching migrating Common Snipe <i>Gallinago gallinago</i> in autumn. <i>Wader Study Group Bulletin</i>, 110, 64-65.</p> <p>Sikora, A. (2005). Catching Jack Snipe with dip-nets in the non-breeding season. <i>Wader Study Group Bulletin</i>, 108, 70.</p>

**Part B. FOR CONFERENCE APPLICANTS ONLY**

*(For Task Force or Working Group members delivering their own work as a presentation, paper or poster)*

<b>Conference Title:</b>	<b>Location:</b>	<b>Date:</b>
<b>Presentation Abstract</b> (250 word maximum):		

**Part C. FOR ALL APPLICANTS**

**Experience Relevant to Project:**

*0.5 page maximum*

8 years of migratory shorebird research and conservation experience. A recce to the project site in Nov 2020 to investigate the breeding habitat of wood snipe and general socioeconomic status of local community and nature reserve. Testing different catching methods and harness systems on closely related Common Snipes (*Gallinago gallinago*) in Dec 2020.

**ACADEMIC EXPERIENCE (CV is attached at the end of the form)**

**Peking University**

Large-scale bird survey in the Hengduan Mountains at different elevation bands from 700 meters to tree line with over 200 points surveyed (1-month point count survey in breeding season from Daxiangling mountain range to the north most of Minshan mountain range).

**University of Queensland**

Project “Measuring exposure to habitat loss in migratory birds”: built a framework by utilizing information from satellite and geolocator tracking of two migratory shorebird species combined high-resolution remote sensing of their intertidal habitat to investigate the pattern and extent of exposure to habitat loss along the migration routes of individuals. Participated in catching and deploying tracking tags on Far Eastern Curlew at Moreton Bay.

**Fudan University**

Project “Related factors of global shorebird (Charadriiformes) population trends”. Participated in fieldworks and data analysis works for both shorebirds and woodland birds including bird census, mist-netting, bird banding, radio-tagging (Great knot), camera traps, etc. at Chongming Dongtan Nature Reserve, Shanghai, China.

Please **also** attach a maximum 2-page CV or list non-academic research experience and experience with migratory waterbirds/conservation e.g. work experience, volunteer experience, bird banding, birdwatching.

**Project Budget (please outline your entire project, not just the component for which funds are being sought)**

	<b>Item</b> (Please list)	<b>\$ Budget</b> (in USD)	<b>Current support / Requested Support</b> (source and amount)	<b>Requested support from EAAFP</b> (source and amount)
Equipment: (details)	Satellite tags Mist nets and accessories TIR imaging devices and dip-nets Banding equipment Generator and cell phone signal booster	\$13,000	University of Queensland (\$6,800) Chengdu Research Base of Giant Panda Breeding (\$3,200) SEE foundation (\$1,000)	\$2,000
Consumable items (details)	Printing (questionnaires, posters, reports and other materials) Stationaries	\$500	Chengdu Research Base of Giant Panda Breeding (\$500)	
Travel and accommodation (details)	Car hiring for 2.5 months Accommodation for 2.5 months Food	\$7,500	Chengdu Research Base of Giant Panda Breeding (\$2,000) SEE foundation (\$5,500)	
Computing & clerical (details)	Laptop computers	\$2,000	Self-funded	
Other (details)	Local labor Subsidies and insurance for team members, volunteers and experts	\$7,000	SEE foundation (\$4,000)	\$3,000

**Total amount requested from Small Grants Fund:**  
(All amounts in USD)

\$5,000

**Budget justification:** Please provide brief description and justification of all major budgetary items requested, indicating any that are essential to the project and/or conference for which you are applying (250 word maximum):

Equipment: Satellite tags are used for retrieving the migration route of the species. Mist nest and dip nets are used for catching birds, while TIR imaging device is essential for night-time searching based on the species' habit. Generator and signal booster are essential as the site has no power supply with unstable mobile reception. Consumable items: Questionnaires are the main survey method for the distribution of the species. Travel: As the road to the breeding site at Pingwu is very poor, a 4WD vehicle is needed throughout the whole project. Computing: Laptops are needed for setting up tracking devices, field GIS work and data analysis. Other: We need 10 volunteers for bird catching and banding as the site is very large. For all team members, volunteers, and experts, field work subsidies and insurance are provided. Local labor will be needed for transporting supplements from the end of road to the site.

## Declaration

I have discussed the contents of this Application with the relevant Chair/s and Coordinator/s of relevant Working Group and/or Task Forces and I certify that to the best of my knowledge all documentation and information submitted or made available by me is true, accurate and complete.

By ticking the following box you are agreeing to the above statement:

## Application Checklist

All relevant sections of this Application have been completed.	Yes	<input checked="" type="checkbox"/>	No
Full payment details have been provided on the final page.	Yes	<input checked="" type="checkbox"/>	No
Application is being submitted electronically as one single document.	Yes	<input checked="" type="checkbox"/>	No
Application is being submitted in MS Word format.	Yes	<input checked="" type="checkbox"/>	No
Application has been discussed with the relevant Chair/s and Coordinator/s of relevant working Group and/or Task Forces and these have been carbon copied (cc) to this application submission as evidence they have seen and approved this Application.	Yes	<input checked="" type="checkbox"/>	No

Applications that do not comply with these guidelines will be returned to the applicant.

## Application Submission

Please email your Application as a single document to:  
[secretariat@eaaflyway.net](mailto:secretariat@eaaflyway.net)

EAAFP will acknowledge the receipt of your Application.

**Applications close at 5pm (Seoul Time) on 5 February 2021**  
**Results will be announced on 3 March 2021 on EAAFP Webpage and via email**

### OFFICE USE ONLY:

Decision: \_\_\_\_\_

Authorised:                    \_\_ / \_\_ / \_\_ \_\_\_\_\_

Entered:                        \_\_ / \_\_ / \_\_ \_\_\_\_\_

Comments: \_\_\_\_\_

Lead Investigator Advised:                    \_\_ / \_\_ / \_\_ \_\_\_\_\_

**PLEASE COMPLETE PAYMENT DETAILS ON FINAL PAGE**

## PAYMENT DETAILS

To ensure prompt payment of successful applications please complete the following details and submit with your Application.

### PREFERRED PAYMENT METHOD

Electronic funds transfer (EFT)

### GRANT CONDITIONS

**In accordance with the application criteria, the following conditions must be met:**

- Funds are to be strictly exempt from organisational administration charges.
- You are required to submit one copy by email of the final report within 3 months of the completion of the project.
- You are required to acknowledge the EAAFP and the Small Grant Fund in any presentations, publications, reports or promotional material arising from this work. Please email [secretariat@eaaflyway.net](mailto:secretariat@eaaflyway.net) in order to obtain an electronic copy of EAAFP logo for use on any display material you will be preparing.
- You may be requested to write a brief article for the EAAFP newsletter.
- You are required to provide EAAFP with an electronic copy of your final report at the completion of your project, as well as a copy of any publications that result from your grant.