

Youth Think Tank Competition for EAA Flyway Final Report

Instructions: Please complete all fields, and respond to all questions below before 1st October, 2022.

1. Project background information

Project Title: Dining wetland for humans and birds – an adaptive solution for bird conservation in paddy fields

Country of project implementation: China

Project Location: Nanqiao county, Fengxian district, Shanghai

Is it an EAAFP Flyway Network Site (check <u>here</u>)? No. Yes, Name of the Flyway Network Site:

No

Actual Project Start Date: 1th Jan, 2022

Actual Project End Date: 7th October, 2022

Project summary (max. 250 words, including background, project objectives and deliverables)

Birds, our flying neighbours, are liked and inspire curiosity among citizens. However, they can also cause problems, especially in farmland communities. This project focused on a modern farm site in Nanqiao county, located in the suburbs of the mega-city, Shanghai, where the study site is typical of urban agricultural communities - affection for their flying neighbours but also worry about the damage they cause to crops.

Our aims were to:

- Collect baseline data about biodiversity and community perspectives
- 2. Build capacity for the Nanqiao community and the broader public about knowledge of birds and their importance
- 3. Increase awareness and motivate action for bird conservation



To achieve our aims, we delivered:

- 1. Four baseline ecological surveys, using a mixture of camera traps and transects. These surveys recorded 61 bird species and 3 mammals species, filling the data gap and laying the foundation for conservation actions.
- 2. Two in-person meetings with the local stakeholders to understand the local situation, build a common understanding and agree to collaborate. Received 102 completed questionnaires from the citizens, with 40% from local community.
- 3. Hosted a "birds in cropland" theme photo contest, attracting 300 votes and reaching a readership of over 1,000 by two articles.
- 4. Designed and produced stickers, postcards and shopping bags of local bird species of Shanghai, to increase awareness of bird conservation.
- 5. Published six popular science articles on social media to promote bird knowledge, reaching 2,200 readers.
- 6. Hosted one online webinar, featuring two keynote speakers from this team and local partners, reaching 800 people. Our post-event survey showed that the webinar significantly increased the audience's knowledge of birds.

2. Project Rationale:

Project purpose:

2.1. What was your identified 'Project purpose' in your proposal (i.e. what is the problem(s) you want to solve, what was the overall change you aimed to achieve in the project) (Max. 200 words)



Our aim was to tackle a common tension between agricultural communities and wildlife conservation, to find ways to ensure farming and bird conservation can be carried out in harmony.

Through this project we aimed to build a strong understanding of the needs and perspectives of agricultural communities, the issues caused by birds and the community's level of knowledge about the importance of biodiversity. Using this understanding, we explored solutions to ease the tension between agricultural production and bird conservation that could be applied locally and further afield in communities facing similar issues.

The project team combined complementary strengths in scientific research, protection policies, economic management, community cooperation, and landscape planning and design, to:

- 1. Conduct a systematic investigation and analysis of local bird habitats, including at least four site surveys during the migration season in 2022;
- 2. Improve residents' understanding of the importance of birds and the significance of agricultural land as an important bird habitat, including capacity building through online activities reaching at least 1,000 people in 2022.
- 3. Explore how to increase tolerance levels among the local community, including by adding value to ecological products and developing eco-tourism.
- 2.2. Describe the new situation (and the change you achieved) you created through your project. What did you achieve in the context of Science, Society, Education, and awareness-raising (Max. 150 words)

Over 1,200 citizens live at or near our site, and a further 800 people from across the country learned more about the situation faced by migratory birds in agricultural land through articles via our Wechat public account and via the online seminar about community birds and conservation.

According to the questionnaires completed before and after the online seminar, there was an average rise of 30% in the ability of the participants to recognise local bird species. More than 90% of participants stated that they supported human-bird co-existence under the question "to what degree you agree to protect birds in



cropland". Participants' main concerns were the damage to cropland production, so we suggested balanced measures such as organic farming, multifunctional agriculture, agroforestry, and other biodiversity-inclusive agricultural approaches under appropriate conditions.

Our photographic competition about birds in the agricultural environment reached 1,000 readers and attracted more than 300 votes.

Project objectives:

2.3 List your 'SMART objectives' again as included in your proposal: (Max. 150 words)

Objective 1: At least 4 site surveys in 2022

To gain a thorough understanding of the site and summarise its key problems, causes, and possible solutions, we aim to provide a series of investigation reports of the site, including on ecological background, the bird-agriculture conflict in the village, and the citizen's willingness, attitudes to bird conservation and farming production. We plan to invite local community members to join the surveys.

Objective 2: Science communication and community capacity building cover 50% villagers by 2022

We aim to increase recognition of the importance of bird conservation in farmland among the local community and the wider public. We will hold several participatory community workshops, with 40 participants, and an open lecture for at least 100 people; combined with other community activities, we expect that at least 50% of the participants will know the common bird species in community and understand their conservation needs.

Objective 3: Propose a human-bird conflict solution within the duration of the project

1. Provide a systematic landscape design for the site according to the conservation requirements of the birds, combining seasonal elements.



- 2. Develop adaptive conservation measures together with local community, including seasonal management methods with reference to the stay of the migrant birds.
- 3. Evaluate and share our efforts to the public through social media. We plan to reach a page view of at least 1,000 on our Wechat public account and other social media.
- 2.4 Did you achieve these objectives? Use your project indicators to describe the progress. (Max. 150 words for each objective)

Objective 1:

In 2022, we carried out four site surveys: two surveys took place in January and February, before the severe Covid-19 outbreak in Shanghai in March; one during the lock-down period in Shanghai, which was conducted by our great local volunteer Yixuan SU; and one after the travelling ban was lift in October. These four surveys covered different aspects of Nanqiao, including the overall environment, bird population (especially migratory water birds), and the social aspects. During the surveys, we walked through the whole site, searched for birds, and interviewed local villagers and government officials as shown below. These experience provided us with precious first-hand information.

Objective 2:

Over 1,200 citizens live at or near our site, and a further 800 people from across the country have learned more about the situation faced by migratory birds in agricultural land through articles via our Wechat public account. More than 800 people participated in the online seminar about community birds and conservation. According to the questionnaires completed before and after the online seminar, there was an average rise of 30% in the ability of the participants to recognise local bird species.

The articles displaying the entries to our photographic competition about birds in the agricultural environment reached over 1000 readers and attracted more than 300 votes in total.

Objective 3:

We proposed land planning suggestions in order to increase ecological space in paddy fields, such as

- 1. Use infrastructure to minimize surface runoff;
- 2. Slow down the land slope;
- 3. Build a tree island to provide resting and nesting sites;
- 4. Build a bird-watching tower.



We used zoning planning methods and diversified management suggestions according to different seasons, e.g., keeping some rice in the cropland after November for wintering birds.

Project activities and deliverables:

2.5 List your activities from your proposal. date, target audiences, number of participants respectively, etc. You can include photos or links of videos. (Max. 150 words for each activity)

Activity 1.Community interview Date: 2022/02/17-02/19

We interviewed 10 villagers, including managers of rural cooperatives, leaders of villagers' groups, employees of agriculture companies, and ordinary villagers. We discussed the human-bird conflicts they are facing, and they shared their willingness and worries about bird conservation in cropland. They filled in questionnaires of understanding of birds and birds-cropland conflicts.





We interviewed 9 major government officials in Nanqiao county and Huayan village to discuss the development plan of the area, and the possibility of bird conservation in cropland. We showed our pilot plan promoting eco-friendly products and human-bird co-existence.





We published a wechat article to introduce the project and the village. (See: https://mp.weixin.qq.com/s/PBUuhxQ4qZQ7ZAaTn7K95A)

Activity 2. Online seminar Date: 2022/09/24

We invited local residents and online audience to participate in our online seminar. Members in our team include HSY as host, BXC as speaker, in collaboration with another speaker from Shan Shui Conservation Center. The online seminar was held on Tencent Meeting and Bilibili, which attracted more than 800 audiences nationwide. Before and after the seminar, participants were asked to fill in a survey to evaluate the seminar's effects.

There were two presentations:

1. Take a meaningful walk: what you can do for bird conservation (Speaker 1: Song Yuexin from Shanshui Conservation Center)

Main contents: introduction to bird-building collision; prevention methods; citizen science projects to monitor and reduce bird-building collision.

2. Nature nearby: common birds in and around our communities (BXC/Speaker 2) Main Contents: introduction to ecological groups of birds; identification of common birds; birdwatching; award-winning quiz.





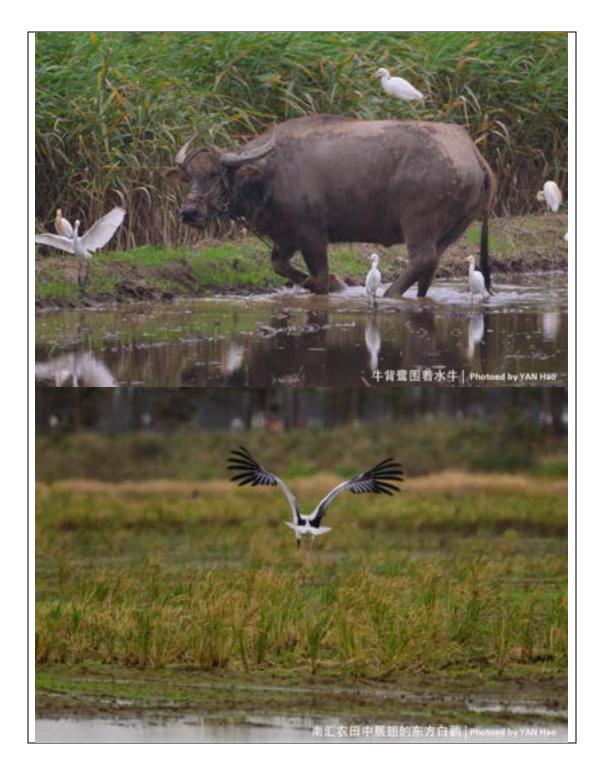
(See: https://mp.weixin.qq.com/s/ RnfomQI84Yf4jK6RQYHfQ)



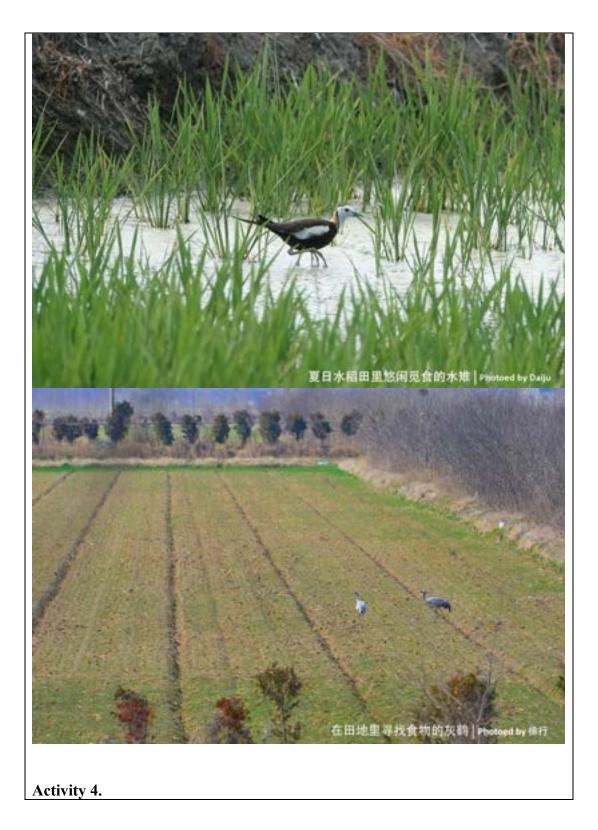
Activity 3. Photograph competition themed "birds in cropland"
We organized a photographic competition with the theme "birds in cropland" together with students' associations from Tsinghua University and Shanghai Ocean University. Three Wechat public accounts shared our "call for entries" article, including the EAAFP official account. The page view was more than 600 in total.
We received many amazing photographs with birds in cropland; overall we reached over 1000 readers. We also printed them as postcards and sh1ared them with the citizens who participated in our activities.













We chat public account promotion of the activities and related knowledge We published 6 articles in We chat, and received over 2,200 page views in our own account and those forwarded our articles.

Encounter the nearby nature and take a walk to conserve it https://mp.weixin.qq.com/s/ RnfomQI84Yf4jK6RQYHfQ

"Birds in cropland" photo contest https://mp.weixin.qq.com/s/sfB3BkBHGs1evKDXNYOI5g

Contribute youth power to water bird conservation in Nanqiao county - overview of the area

 $\underline{https://mp.weixin.qq.com/s/PBUuhxQ4qZQ7ZAaTn7K95A}$

"Birds in cropland" photo display https://mp.weixin.qq.com/s/p2K9NH6ExbVJ3Y2x369jJQ

Ten common migratory waterbirds that you need to know https://mp.weixin.qq.com/s/tWBwHTRNW1qwVKpJ6d-43Q

The world of bird and conservation in the eyes of Shanghai youth https://mp.weixin.qq.com/s/NwSFWQvwreJ4NoXM9EM0FA

- 2.6 List and describe the project deliverables, such as publications, materials developed, and multi-media materials such as photos and videos, you can submit the digital materials as attachments in session 5.
- 1) A field report including the following elements:
- -Ecological survey of local environment. (See attachments)
- -Current status of the local cropland. (See attachments)
- -Analysis of local eco-products and markets. (See attachments)
- -A survey covering local residents and the public (eight in-depth intervews with local farmers and 102 questionnaires on public understanding of birds and support for bird conservation in cropland.)



- 2) A spatial planning proposal with bird-friendly designs (see video), which includes:
- -Improvements to the physical environment
- -Modifications of local native and agricultural vegetation
- 3) Communication materials:
- -Featured products including stickers, postcards, and canvas shopping bags
- -Popular science articles which presented knowledge of birds and advocated for bird conservation
- -Participation certificates for volunteers and local people











Popular science book used in our activities: Interesting Birds around Us



Popular science booklet used in our activities: Oberservation Guidance of Waterfowl in Shanghai





Participation certificate

- 4) A down-to-earth community collaboration
- -We shared survey results and science communication materials with the community on a regular basis and via online presentations.
- -We will continue to present our planning and design work to the community and make major decisions together, keeping in close contact when the chosen plan is being implemented.





Example: Before



Example: After

We published 6 articles on our Wechat Public account, the links are as follows:

Encounter the nearby nature and take a walk to conserve it https://mp.weixin.qq.com/s/_RnfomQI84Yf4jK6RQYHfQ

Call for entries for "Birds in Cropland" photo contesthttps://mp.weixin.qq.com/s/sfB3BkBHGs1evKDXNYOI5g

Contribute youth power to water bird conservation in Nanqiao county - overview of the area

https://mp.weixin.qq.com/s/PBUuhxQ4qZQ7ZAaTn7K95A

"Birds in Cropland" photo display https://mp.weixin.qq.com/s/p2K9NH6ExbVJ3Y2x369jJQ

Ten common migratory waterbirds that you need to know https://mp.weixin.qq.com/s/tWBwHTRNW1qwVKpJ6d-43Q



The world of bird and conservation in the eyes of Shanghai youth https://mp.weixin.qq.com/s/NwSFWQvwreJ4NoXM9EM0FA

Other public accounts forwarded our articles, including:

- "EAAFP" (Article: Call for entries for "Birds in Cropland" photo contest),
- "SHOU 爱自然" (Articles: Call for entries for "Birds in Cropland" photo contest; "Birds in Cropland" photo display),
- "自然家 Nature+" (Article: Encounter the nearby nature and take a walk to conserve it).

Altogether the page view reached 2,200 from Wechat.

3. bxc-cly-Lessons learned

3.1 Describe what worked well in your project (Max. 150 words)

The project has been well planned and organized, and our team has shown strong team spirit, despite the challenges presented by covid restrictions. Each participant played his/her part and delivered satisfying results. Our connection with Shanshui Conservation Center added a valuable element to our project. Also, our advisor Terry Townshend, busy though he is, has given us so much useful advice during the whole life span of the project. Despite all the challenges we faced, our online activities were very successful: our articles on WeChat public account attracted thousands of citizens nationwide, especially citizens around Shanghai area, and encouraged them to care more about surrounding birds and the environment. Moreover, our online seminar has proven to be effective: more



than 800 participants have improved their awareness of, and the ability to identify, surrounding birds. This is a good start which can lead to greater public conservation in communities.

3.2 Describe what didn't go so well in your project, and how you addressed the challenges you encountered. (Max. 150 words)

The severe COVID-19 pandemic in Shanghai this spring was one of the greatest challenges for our project. At that time, we had just finished our first on-site survey, and were planning for an ambitious project. Then suddenly there was the outbreak, and all subsequent on-site research and community activities had to pause during the lockdown. Nevertheless, thanks to our strong and stable connection with local organizations and individual birdwatchers, bird surveys continued throughout spring 2022. Besides, since offline options were unavailable, we decided to hold the community workshop online. These adaptations and flexibility saved our project, otherwise the project may well be left unfinished. Of course, if there had not been the pandemic, we would have been able to spend more time and do more things for the project and for conserving migrating birds.

3.3 If you have a chance to improve your project, what would you do? (Max. 150 words)

We hope that:

We can hold our planned activities in the local area, and encourage the local people to understand the value of ecosystem services brought by waterbird conservation.

Share our fieldwork sample line with the local birders, continue to improve the database and integrate more people's efforts into the monitoring.



We can try to make the natural education route complete and systematic. First, by supporting tasks can be made to form point-to-point line to line environmental services. Second, to help Nanqiao Town become a national demonstration area, with the model of nature education extended to the whole country.

3.4 Do you have any future plan developed from this project? If yes, please briefly tell us how you would sustain the project. (Max. 150 words)

We plan to:

Continue the partnership with Shanshui Conservation Center and local birding groups, to carry out scientific and long-term monitoring of local birds, and the adaptive implementation of cropland planning strategies. Design a stable communication channel with the local government, so they can collect bird-friendly planning and design suggestions through the form of a competition.

In collaboration with our local partners, we will continue our seminars and photo contests, and they will become established annual events which highlight the local culture and ecological ideas.

We would like to rent an experimental field in the community and work with the community to explore ways for bird-friendly farming and environmental education if there were further funding.

We also aim to expand the activities to other parts of Shanghai, and more broadly, more provinces in China, and form an environmental education system of bird-cropland solutions throughout the country.



4. Hsy-Financial report

4.1 Fill in the form of table to show the actual project expenses

	Items	Unit	Amount (USD)
1. Transportation	For round trips to	150 per trip per person	1183.36
	Shanghai, for 3 persons	× 6 persons trips	
	outside Shanghai		
	Local transportation cost	Trip 1: 74.68	433.45
	·	Trip 2: 185.64	
		Trip 3: 173.13	
2. Equipment	Shanshui Conservation Center sponsored during the project		0
3 Activity materials	Activity materials printing	A4 size \times 400 \times 0.16; A3 size \times 50 \times 0.32	78.49
	Activity related books	14.13 × 7	247.36
	about birds	10.99 × 8	
		5.49 × 4	
		6.44 × 6	
4. Venue booking	Local community provided		0
5. Deliverable production	Postcards and certificates	0.63 × 7 0.16 × 500	89.17
•	Key chains and	100 ×1.21 (average price for different sizes)	120.88
	decorations Canvas bags and cushions	100 × 3.65 (average price for different materials)	365.46
	Bird stickers	0.14 × 500	70.64
6. Others – specify	Accommodation	35.3 (average price) per room per night × 10 room·night	353.04
	Mailing	Packages and postcards	55.57
		Total (USD)	2997.43



4.2. Did you get funding of financial resources to continue this project?
\Box Yes
\sqrt{No}

5. Attachments

Links of a shared folder of your project's digital deliverables (photos and videos could be shared as zip files)

Link: https://cloud.tsinghua.edu.cn/f/55e00b30b89b4112ab51/?dl=1

List:

- 1. Photots and videos
 - 1-1 Site survey photos
 - 1-2 Interview photots
 - 1-3 Online seminar screenshots
 - 1-4 Competition winners' work
- 2. Reports
 - 2-1 Ecological report
 - 2-2 Qestionnair summarize
 - 2-3 Activity summary
- 3. Deliverable products
 - 3-1 Pictures of the deliverable products
 - 3-2 Primary proposals and design for the site's adaptive management

Link of project video in mp4 format (3-5 mins, this video will be shared publicly)

https://cloud.tsinghua.edu.cn/f/264abf8b5720482a8266/?dl=1

6. Declaration

Click the boxes below if you agree:



- ✓ Consent to disclosure of personal information: The project team's personal information (such as contact information) will not be publicly disclosed, but will be disclosed to the judging panel for review.
- ✓ Consent to the permission of the use of project-related materials to EAAFP: The project team agreed to grant the EAAFP Secretariat free access to any project materials developed under the Youth Think Tank Competition for the EAA Flyway. Ownership of the materials still belongs to the project team.
- ✓ I confirm the truth of all statements made by me in this report, and agree to all the terms, conditions, responsibilities, and obligations as set out above.

	(Signature)
Name of Team leader:	
侯妹彧	
Name of Team:	
陈笳遥	
李丽虎 布斯/	良
3长3	

Date: Otc. 8th, 2022

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