2022 EAAFP Small Grant Fund Application Form

Part A.

A. Personal Details of Applicant

Title:	Prof	Klaassen	Marcel Rudolf Johannes			
(Mr, Ms etc		Family name	Given Name/s			
Institution: Deakin U		Deakin University, Centre for Integr	ative Ecologhy			
Instituti	_	Locked Bag 20000				
address Degree		Street address or GPO Box				
	•	Geelong	Australia	VIC 3220		
type:	_	Suburb or town	State or country	Postcode		
	+61 4 88255	992 +61 4 882	55992			
	Primary contact	number Mobile phone	number			
Email a	ddress:					
	ma	arcel.klaassen@deakin.edu.au				
B. Rele	evant Workir	ng Group or Task Force Chair/Co	pordinator - DETAILS			
			l guidance is needed in relation to this section	1		
(progra	amme@eaafly	way.net)				
Name o	of Working Gro	up or Task Force: Shorebird Work	ing Group			
	_					
Title of Chair/	(Mr, Ms etc)	Lanctot Family name	Richard Given Name/s			
Coordi		rainily name	Given Name/S			
nator:						
richard_lanctot@fws.gov						
Email address:						
C. Eligibility of Projects						

Please select "Yes" or "No" for each of the following questions:

The focus of the project is migratory waterbirds and their habitats?
The project will improve the understanding of factors important for the conservation of migratory waterbirds and their habitats in the EAAF?
The applicant agrees to provide a final report within 3 months of the completion of the project?
The applicant agrees to submit 1-2-page article and photographs for inclusion on the EAAFP's website and/or write a brief article for the EAAFP's newsletter. Photographers will be acknowledged?

 The applicant will acknowledge the support of the EAAFP in any publications, Yes presentations and reports arising from this work?

D. Project Details

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

Growing the legion of citizen scientists reading leg flags and supporting shorebird conservation

Project Proposal:

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

1. Objectives:

BirdMark aims to enthuse observers and grow the legion of citizen scientists (**CS**) along the EAAF to observe shorebirds with colour marks and submit these observations to a repository facilitating the banders' research into the birds they have marked with the ultimate aim to support flyway wide shorebird conservation efforts.

We seek funding to upgrade our current import form (www.birdmark.net) to also allow submissions of photographs of colour-marked birds only. This is to also engage fledging shorebirders and those that "only" like taking pictures.

Next, the funding sought will be used to make an additional page that will provide an overview of recent submissions with photographs, including any details on the observation and the bird's history (if available). Anyone visiting this page will be invited to leave their comments on these observations (i.e. help vet the observations) and leave their appreciation of the photographs and the observations on display. The latter will be used to highlight observations and photographs, which can be used in e.g. media releases and delivery of certificates; i.e. anything to increase reach out and engagement.

2. Background:

The BirdMark portal (www.birdmark.net) was specifically designed to allow keen ornithologists reading leg flags and other colour marks on shorebirds along the EAAF to submit these sightings to a central and easy to use repository. In 4 different languages, which we hope to increase further in future, it offers the possibility to enter and submit observations both interactively or as a file. Videos on the various ways in which one can do this are included in the site's "Help Guides". Feedback on observations, including a history of the birds that have been observed, are being returned to each observer within a couple of days of submitting their data (see https://vhost2009.hosted-sites.deakin.edu.au/r_reports/FeedbackExample.html for an example). Also others that are interested in sightings, but the observers themselves, can view recent sightings and data collations of observations in a variety of ways, serving a multitude of interests (e.g. https://www.birdmark.net/birdmark/overviewSubmittedPictures.php and https://www.birdmark.net/birdmark/overviewPlainFlags.php). Data is added to the database and shared with the banders of the birds observed.

The portal was launched in January 2021 and developed and built by Aaron Spence and Marcel Klaassen from Deakin University in close collaboration with the Victorian Wader Study Group (VWSG) and Australasian Wader Study Group (AWSG).

The portal adds to the database that has been collated by VWSG and AWSG since the 1980s. It builds on the services already provided by AWSG and VWSG to banders and observers along the EAAF over the past four decades.

The portal has been set up such that it can also cater for other (water) bird species with colour marks and can be extended to serve other flyways. It has not been widely advertised but the software that we developed also allows observers to submit their observations using the BirdRing mobile app.

3. Project plan, timeline and methods:

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.

Below a sketch of how we envisage the new import form to look (for refence please consult current import page at www.birdmark.net):

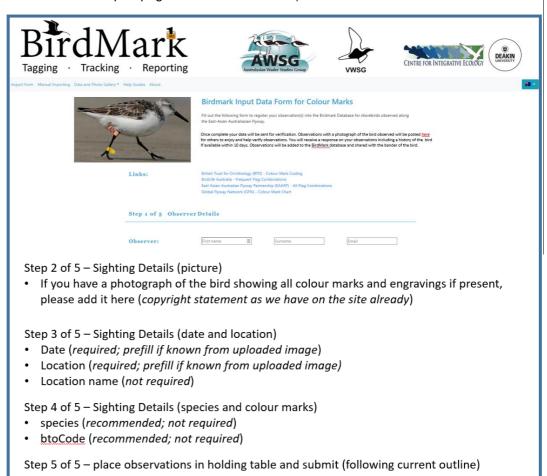


Figure 1 Mockup of the adjusted import form for leg-flagged birds in BirdMark

Below a sketch of how we envisage the entirely new "vetting" page to look that will present the latest observations with photographs and invites CS to help identify species and colour marks. Feedback by viewers will be stored in a database and will be used for automated improvement of observations.

BirdMark has been set up as a multi-lingual site (currently four) but not all content has yet been translated in all the languages currently covered. The proposed changes will be provided in English only but the site will be set-up such that it accommodates for multi-lingual use.

A a high-level overview of the development process is provided along with a breakdown of the costs under E below.

We anticipate the upgraded site to be ready for launch by mid-year 2022.



Figure 2 Mockup of the new "Vetting" page for leg-flagged birds in BirdMark

 Likely benefit to the conservation of migratory waterbirds and their habitat / or key research outputs:

In addressing this question, please also identify which EAAFP Key Result Areas the project will contribute to (see the EAAFP Strategic Plan 2019 – 2028).

- Collecting data of colour-marked birds helps identify key areas where birds
 reside during their annual cycle and therewith helps in building a comprehensive
 and coherent Flyway Network of Sites for migratory waterbirds, including sites
 that are not currently Protected Areas (KRA1.1).
- With the proposed changes to the BirdMark portal we endeavour to draw more people into enjoying, studying and conserving shorebirds, growing the membership and support of the EAAFP (KRA 1.7).
- An enhanced BirdMark portal contributes directly to enhance national monitoring systems to assess the status of migratory waterbirds and their habitats (KRA 3.1 and other KRAs under objective 3).
- 5. Alignment with EAAFP Working Groups and Task Forces priorities:

Please indicate which of the EAAFP Working Groups and Task Forces priorities are addressed in this project.

The data collected through BirdMark, which our project will help grow and improve, assists EAAFP Shorebird Working Group's priority

1. Support identification and monitoring of internationally important shorebird sites.

and

2. Support conservation of shorebird species.

With respect to this aspect not only the objectives of the Shorebird Working Group but also of existing task forces within the EAAF Partnership are being supported (e.g. Spoonbilled Sandpiper, Far Eastern Curlew, Yellow Sea Minitoring Task Force). Our project will notably facilitate sub-priorities

- 2.4. Coordinate and promote collaborative migration ecology studies along EAAF and
- 2.6. Develop a flyway shorebird conservation strategy / plan that would emphasize important issues and needs throughout the EAAF

Given the project's aim to engage more people into enjoying and learning about shorebirds and understanding their plights, our project also contributed to priority 3. Support Capacity building for shorebird conservation and management BirdMark may notably be an interesting tool to share with stakeholders when addressing priority 3.1. Organize training workshops to enhance efforts to monitor, band, track, and manage sites (e.g., Spartina control, other wetland restoration, and hunting) for shorebirds in the EAAF. Likewise, the BirdMark tool will assist in collating data and thus specifically supports priority 3.2 Use existing field studies to broaden the experience of shorebird biologists throughout the flyway (e.g., NW Australia Shorebird expedition, Russian and Alaska breeding study sites, ASEAN Flyway Network Project). It should also be considered that BirdMark could also host shorebird data (and data from other bird species) from other flyways. This, it could be considered to have it support priority 3.3 Learn, share experiences and develop best managing practices with groups operating in other flyways (Western Hemisphere Shorebird Group, International Wader Study Group) or parts of the EAAF (Australasian Wader Study Group, Russian Wader Study Group, Alaska Shorebird Group). Finally, given BirdMark also serves as a place for shorebirders to meet and exchange information, it generally supports priority 4. Enhance communication relating to shorebird conservation 6. Explain the part We are seeking funds to pay IT expert Aaron Spence to allocate an estimated 94 hours of your project of his time to this project @ US\$40/hour = US\$3760 - US\$800 contribution AWSG = for which you **US\$2960** are seeking **EAAFP** funds in this Application (provide details in the Project Budget section below): 7. Scientific NA References cited in the Application: 8. How will any NA continuing COVID restrictions be managed for project delivery?:

Part B. FOR CONFERENCE APPLICANTS ONLY

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

Conference Title:	Location:	Date:
Presentation Abstract (250 word maximum):		
NA		

Part C. FOR ALL APPLICANTS

Experience Relevant to Project:

0.5 page maximum

Marcel Klaassen and Aaron Spence have been the initiators, designers and builders of BirdMark as it stands and have therewith shown to have the expertise to further enhance the site as proposed here. Moreover, since age 14, Marcel has been a keen birder and bander himself and has also used banding data in a great number and

variety of research projects (https://scholar.google.com.au/citations?user=OrKqLoAAAAAJ&hl=en), assuring that the technical solution this project provides will adequately serve the shorebird community as intended.

For a brief academic biography of Marcel see https://www.deakin.edu.au/about-deakin/people/marcel-klaassen

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.

E. Project Budget (please outline costs of your entire project, not just the component(s) for which funds are being sought from EAAFP)

	Item (Please list)	Budget (USD)	Co-funding acquired (source and amount in USD)	Co-funding applied for (source and amount in USD)	Support requested from EAAFP (USD)
Equipment: (details)					
Consumable items (details)					
Travel and accommodation (details)					
Computing & clerical (details)		3760	AWSG 800		2960
Other (details)					
		Total a	mount requested from EA	AAFP Small Grants Fund:	2960

Total amount requested from EAAFP Small Grants Fund: (in USD)

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):

Development tasks		
Step 1. Observer uploads an image		
Facility for an observer to upload an image. They may provide minimal or ample initial data about the present bird (date, location, species, etc.). Required details are date and location.	4	
Adjust already existing leg flag input webpage on Birdmark.net (see Fig. 1)	10	
Step 2. Image is added amongst the 'pool' of other uploaded images		
A database table is required to keep track of uploaded images, such as: contact details of the observer who uploaded it, date of upload, name of image, etc.	2	
Observer details should save to the database	2	
Another table is required to keep track of the image details for vetting purposes, such as: species, location, date taken, BTO code, etc.	2	
Step 3: Vetting process		
When a CS visits the vetting webpage, they will be presented with uploaded images in reverse chronological order (starting with the newest). Algorithm to determine which images will be presented needs to be developed. For example, images may no longer	15	

be presented if voting period has passed and when the image has been vetted a set	
number of times.	
An algorithm will determine which details need to be shown alongside each image (e.g.	5
voting buttons will only remain open for a set period of time after the image was	
uploaded)	
CS will add details, or agree/disagree with existing details, for each image shown to	10
them. CS will also be able to vote on the quality of the submission. A database table will	
need to keep track of each CS and their vetting, for each image	
Step 4: Threshold of vetted details	
A tally of each answer provided by the CS will need to be tracked, so a table will need to	10
be developed and this process needs to be refined	
Perhaps each detail has an individual threshold counter. For example, maybe btoCode	5
has met a threshold of 10, but <i>species</i> has been more contentious and is only at a 7, so	
the image overall continues to stay in the 'pool'	
Step 5: Details incorporated into BirdMark database	
Once thresholds are met, data will be sent to a holding table. Need to create this table.	4
Data can then be imported into the BirdMark database via some R scripts (done by	0
Marcel Klaassen)	
Step 6: Testing and maintenance	
Thoroughly test the entire process with the involvement of a few dedicated volunteers.	10
General maintenance and scope changes that happen along the way	15
	94

Total: 94 hours @ US\$40/hour = US\$3760 - US\$800 contribution AWSG = **US\$2960**

F. 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 box you are agreeing to the above statement: X

G. Application Checkilst				
All relevant sections of this Application have been completed.	Yes	No		
Full payment details have been provided on the final page.	Yes	No		
Application is being submitted electronically as one single document.	Yes	No		
Application is being submitted in MS Word format.	Yes	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	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

EAAFP will acknowledge the receipt of your Application.

Applications close at 5pm (Seoul Time) on 6 February 2022 Results will be announced on 7 March 2022 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 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.