2021 EAAFP Small Grant Fund Application Form

Personal Details of Applicant

Title:	Ms (Mr. Ms etc)	Formby Family name	Amellia Joanne Given Name/s			
	(IVIF, IVIS etc)	ramny name	Given Name/s			
Institu	tion:	Wing Threads				
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address Degree type:		Hamilton	address or GPO Box New South Wales, Australia	2303		
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	Primary contact nu	mber Mobile phone nun	nber			
		lia.formby@wingthreads.com				
Releva	ant Working Gr	oup or Task Force Chair/Coordin	ator - DETAILS			
	e contact the EAA amme@eaaflywa		dance is needed in relation to this section	on		
Name	of Working Group	or Task Force: _CEPA Working Group_				
Title o	f Ms	Irving	Arkellah			
Chair/ Coordinator:	, ,	Family name	Given Name/s			
	address:	arkellah.irving.consulting@gmail.com				
Eligibi	lity of Projects					
	,					
			<u></u>			
•	The focus of the	e project is migratory waterbirds and the	eir habitats.	No		
 The project will improve the understanding of factors important for the conservation Yes No						
	of migratory wa	terbirds and their habitats in the EAAF.				
The applicant agrees to provide a final report within 3 months of the completion of the Yes No.						
project.						
•		agrees to submit 1-2-nage article and	photographs for inclusion on Yes	No		
 The applicant agrees to submit 1-2-page article and photographs for inclusion on Yes No EAAFP's website and/or write a brief article for the EAAFP's newsletter. 						
			I HE EAAFFS HEWSIEHEI.			
		will be acknowledged.		No		
 The applicant will acknowledge the support of the EAAFP in any publications, Yes 						

presentations and reports arising from this work.

Project Details

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

Wing Threads national online education package

Part A. Project Proposal

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

1. Objectives:

This innovative project will create a nationally applicable online education package to increase communication, education, participation and public awareness of the values of migratory shorebirds across all Australian states and territories. Australia provides critically important terminal habitat for six priority species listed under the EAAFP Shorebird Working Group. A lack of awareness is the number one threat to migratory shorebirds during their time in Australia and at present, no educational resources exist at a national scale. Through the creation of an online education package to accompany the upcoming children's book, *A Shorebird Flying Adventure* (publication date February 2022) and subsequent plans to fly a microlight around Australia to increase community engagement with migratory shorebirds in 2022, this project will contribute to implementation of Objectives 2 and 5 of the EAAFP Strategic Plan 2019-2028 and Targets 7-9 of the CEPA Action Plan 2019-2024.

2. Background:

The need for stronger engagement of the public to halt shorebird declines in the EAAF is explicitly recognised (Szabo et al. 2016, Weller et al. 2017). One of the biggest obstacles in shorebird conservation is capturing the attention of people to effectively communicate why shorebirds and their habitats are worth protecting. Targeting educators and schools to incorporate shorebirds into their curriculum is an ideal way to address this obstacle. However, educational resources about migratory shorebirds in the EAAF are sorely lacking in Australia, being limited to a few local initiatives. Further, understanding shorebird ecology and identification typically requires some training and/or research. Most educators are already time-poor and as such may find these challenges off-putting and prefer to seek out other ready-to-use high quality resources.

This project will directly address these issues through the creation of an online course on migratory shorebirds that meets objectives in the Australian national curriculum for primary students. The course will expand on topics from the upcoming children's book, *A Shorebird Flying Adventure*, and will provide educators with everything they need to confidently deliver lessons on migratory shorebirds without having to spend hours on lesson planning, research or searching for and preparing classroom activities. The book and online course together constitute the Wing Threads national online education package.

A Shorebird Flying Adventure is a 32-page, non-fiction children's book aimed at mid-primary students (Years 3 and 4; ages 8-10) based on my own dream to one day follow the shorebirds on migration by flying a microlight from Australia to Siberia. The book uses fun, illustrated cartoons and the thrill of adventure to educate students and teachers alike about wetland ecosystems using shorebirds as a model. The main character, Microlight Milly, takes the reader on a flying adventure through the EAAF in her microlight to show them why **shorebirds are awesome!** Along the way, they learn 'phenomenal flabbergasting fun facts' about shorebirds' amazing behavioural and migration ecology, the importance of wetland ecosystems and how and why we should protect them. A Shorebird Flying Adventure is written by acclaimed Australian author, Jackie Kerin, is illustrated by myself, Amellia Formby, and will be available in hardback and as an eBook in early 2022.

Storytelling and the creative arts have the power to captivate people's hearts and minds. While not everyone cares about shorebirds, most people are inspired by adventure and love funny cartoons. In this way, *A Shorebird Flying Adventure* and accompanying online shorebird course has the potential to engage a wide audience unfamiliar with shorebirds through the Australian education system and communicate a message that will translate into environmental stewardship.

The online shorebird course will consist of 10-weeks of lesson plans (based on a 1-hour lesson per week) structured around the following topics:

- 1. What is a shorebird?
- 2. How to ID shorebirds
- 3. Habitat where do shorebirds live?
- Food chains what do shorebirds eat?
- 5. Bill adaptations why do shorebirds have bills of different shapes and sizes?
- 6. Shorebird migration the East Asian-Australasian Flyway
- 7. Life cycles shorebird breeding strategies
- 8. Wetland ecosystems the value of wetlands and how and why we should protect them
- 9. Threats to shorebirds how can we minimise impacts to shorebirds?
- 10. Conservation in action how do scientists study shorebirds and what the data are used for?

For each topic, I will create:

- An interactive video using iSpring Suite eLearning software that teachers can present to students
- A downloadable PowerPoint presentation with presenter notes for each slide so that teachers have the option of delivering the presentation themselves
- An accompanying PDF of teacher notes with links to outside resources including World Wetlands Day and World Migratory Bird Day events
- Illustrated ready-to-go downloadable classroom activities

Where relevant, each of the videos will draw upon real-life examples from the EAAF to illustrate scientific concepts and promote the inspiring success stories of shorebird conservation (e.g. AWSG/VWSG satellite tracking, geolocators, banding and flagging protocols. floating roost trials, etc.). These resources will be developed with and tested by Australian primary school teachers to meet Australian Government school curriculum objectives. The online course will be available through the Wing Threads website and has the potential to be translated to other languages in the Flyway.

To bring the Wing Threads education package to the masses, I will undertake my own shorebird flying adventure in 2022 – Wing Threads: Flight Around Oz. Taking off in March from Broome, I will fly my microlight around Australia, stopping at over 60 key shorebird sites along the way to raise the profile of shorebirds at primary schools and libraries. Ongoing costs, donations and in-kind sponsorship associated with this aspect of the project, are included in the budget below.

3. Project plan, timeline and methods:

All tasks need to be completed before February 2022 to ensure delivery of the online course prior to the take-off date for Wing Threads: Flight Around Oz.

Project task	Methods	Completion dates
Write and record video scripts	Collaborate with primary teachers to develop and test scripts using simple, age-appropriate language Record scripts using Rode VideoMicro Compact microphone	November 2023
Create and illustrate classroom activity sheets for each lesson	Collaborate with primary teachers to develop and test classroom activities that directly meet points in the Australian National Curriculum.	November 2023
Build and illustrate PowerPoint (PP) presentations	Create slides with presenter notes in Microsoft PowerPoint	December 2023
Build eLearning videos in iSpring	Import slides from PP to Adobe Captivate and add sound recordings Export in HTML5 format	January-March 2024
Build online course on hosting platform, Thinkific	Upload videos and PDFs for each lesson and create interactive questions	March 2024
Launch online education package	Course available online through the Wing Threads website	April-May 2024

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

The Wing Threads national education package meets all actions under Objective 2 and Objective KRA 5.1 of the EAAF 2019-2028 Strategic Plan as well as Targets 7-9 in the CEPA Action Plan 2019-2024. KRA 2.1 Public engagement at important sites for migratory birds increased.

I will access established networks of teachers and stakeholders through Birdlife Australia to help roll out the educational package at key sites. The book's publisher, CSIRO Publishing, is Australia's leading science publisher of books, journals and magazines. CSIRO Publishing will also promote the education package alongside the book on their website, to email subscribers and network of education institutions and libraries on a national scale. They will also seek distribution of the book elsewhere in the Flyway through their international distribution networks.

In addition, I will personally visit and target primary schools in over 60 key shorebird sites around the coast of Australia listed in BirdLife Australia's Directory of Important Shorebird Habitat (Weller et al. 2019) in 2022. These include 18 of the 24 Australian Flyway Network Sites (e.g. Adelaide International Bird Sanctuary, Westernport and Corner Inlet) and the two Australian EAAFP Sister Sites at Hunter Estuary, New South Wales and Moreton Bay, Queensland. My flight around Australia will also begin and end at FNS, Roebuck Bay, Western Australia. It is my intention to use the flight to attract media attention to these key sites and promote them through my blog and social media channels during my travels thus meeting items under Targets 8 and 9 of the CEPA Action Plan.

KRA 2.2 Sharing of knowledge about conservation and sustainable management of migratory waterbirds enhanced.

KRA 2.3 Guardianship recognised as valuable mechanism to secure conservation and sustainable management of migratory waterbirds and their habitats.

KRA 2.4 Migratory waterbirds and conservation of their habitats included in school curricula. The Wing Threads national online education package: i) Uses storytelling and the creative arts to provide fun and engaging avenues for people to understand the value of wetland habitats and why biodiversity matters in relation to themselves, promoting environmental quardianship. ii) Directly addresses the need to create educational resources about shorebirds in the EAAF that have been designed for the Australian Curriculum as outlined under Target 7 of the CEPA Action Plan. iii) Will enhance sharing and knowledge about conservation and management by empowering teachers with a comprehensive and readily accessible online resource that illustrates these concepts in a way that is enjoyable and easy to understand, thus increasing the likelihood of teachers choosing to bring shorebirds into their classroom. KRA 2.5 EAAFP CEPA Strategy and Action Plan monitored and updated. Upon completion of the flight around Australia, I will be able to provide a case study on the lessons learned through implementation of the education package at a national level that will be relevant for any country looking to implement a similar education program. KRA 5.1 Partners actively collaborating to develop innovative and improved approaches to conserve migratory waterbirds and their habitats in the EAAF. Since its inception, Wing Threads has formed collaborative partnerships with 15 organisations in Australia including CSIRO Publishing, BirdLife Australia, Peel-Harvey Catchment Council, Remember the Wild, Recreational Aviation Australia and Australian Geographic, that will work together to increase community engagement with migratory shorebirds in Australia and throughout the EAAF through the delivery of this education package. 5. Alignment with EAAFP EAAFP CEPA Working Group - CEPA Action Plan 2019-2024: Target actions 7-9 (see section above) Working Groups and Task Forces priorities: I am seeking funds to purchase software and cover web hosting fees for the creation of the online 6. Explain the course on migratory shorebirds to accompany the book, A Shorebird Flying Adventure. part of your project for which you are seeking funds in this Application: Everett, D. R. (2015). Adding Value: Online Student Engagement. Information Systems Education 7. Scientific Journal, 13(6) pp 68-76. http://isedj.org/2015-13/ ISSN: 1545-679X. (Cited in budget) References cited in the Szabo, J.K., C.-Y. Choi, R.S. Clemens & B. Hansen (2016) Conservation without borders-solutions to Application: declines of migratory shorebirds in the East Asian-Australasian Flyway. Emu 116: 215-221. Weller, D. W., Kidd, L.R., Lee, C.V., Klose, S., Jaensch, R. and Driessen, J. (2019). Directory of Important Habitat for Migratory Shorebirds in Australia. Unpublished report prepared for Australian Government Department of the Environment and Energy by BirdLife Australia, Melbourne. Weller, D. R. & Lee, C. V. (2017) Migratory Shorebird Conservation Action Plan. BirdLife Australia unpublished report, September 2017.

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):		

Part C. FOR ALL APPLICANTS

Experience Relevant to Project:

Migratory Shorebird Program Officer – BirdLife Australia, 2019 - current

AWSG Committee Member 2019- current
BSc and MSc (Zoology) – The University of Melbourne
Bachelor of Visual Arts – Monash University
Recreational Pilot – passenger and cross-country endorsements

I am a qualified zoologist, illustrator and pilot with experience in the creation and delivery of eLearning materials. I have been involved in migratory shorebird monitoring and banding programs in a voluntary and paid capacity for over seven year with the Victorian and Australasian Wader Studies Groups and BirdLife Australia's Migratory Shorebird Program.

During this time, I also worked as a teaching assistant for an online course in Animal Behaviour on the Massive Open Online Course platform, Coursera, for The University of Melbourne, and was employed as an eLearning Project Officer with Pegasus Software, Newcastle, NSW. In both of these roles, I was responsible for developing and creating pedagogical content using eLearning software packages and administration of these courses through a learning management system similar to those proposed in this application.

It is an absolute joy to be able to bring these skills together in a unique synergy to see this project come to life.

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.

Please find CV attached at end of document.

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

Item (Please list)		\$ Budget (in USD)	Current support / Requested Support (source and amount)	Requested support from EAAFP (source and amount)	
Equipment: (details)	•	Microlight aircraft – acquired 2018	\$49,000	i) Crowdfunding (2017) = \$13,500 ii) Peel-Havey Catchment Council (2018) = \$14,580 iii) Anonymous donor (2018) = \$10,935 iv) Dick Smith (2018) = \$3,645 v) Australian Geographic (2017) = \$1910 vi) Airborne Australia (2018) = \$4,738 vii) Donations through website (2018-19) = \$1,602 viii) My own money = \$10,000	
	•	Helmets with headsets	\$2100	Crowdfunding (2021) = \$2,100	
	•	Transponder	\$3000	Crowdfunding (2021) = \$3,000	
Consumable items (details)	•	Fuel and maintenance costs for the microlight during flight around Australia	\$12,750	Crowdfunding (2021) = \$22,250	
	•	Fuel and vehicle servicing for ground crew - ~20,000km over 6 months	\$9,500		
Travel and accommodation	•	Food and accommodation for	\$30,000	i) Crowdfunding (2021) = \$30,000	

(details)	a 3 person ground crew over 6 months		ii) AMP Tomorrow Fund (2021) = \$30,000	
Computing & clerical (details)	Thinkific Prosubscription - online course hosting fees	3 years @ \$1188/year = \$3564		\$3564
	iSpring Suite subscription	1 year @ \$970		\$970
	 Ongoing website hosting, domain and maintenance costs 	\$150/year x 3 years = \$450		\$450
Other (details)	Flight training scholarships	\$9,822	i) Ninety-Nines International Organization of Women Pilots – Amelia Earhart Fly Now Scholarship (2016) = \$8,000 ii) Women In Aviation International Pan Air Flight Training Scholarship (2019) = \$1,822	
	 Upfront royalties for illustrating Shorebirds Are Awesome 	\$1458	CSIRO Publishing (2020) = \$1,458	
	 AvPlan EFB in- flight navigation software premium subscription 	\$183/year x 4 years	AvPlan EFB = \$732 (in-kind)	
	\$4984			

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):

To build an interactive online course on migratory shorebirds, I need a software package capable of incorporating sound, video, animations and interactive questions in PowerPoint slides and converting these to a HTML5 video format for uploading onto the web. iSpring suite is the most popular software option for this purpose on the market as it is easy to use and reasonably priced.

(All amounts in USD)

To distribute the course, the videos need to be hosted online. Thinkific is a leading hosting platform for eLearning courses and provides hosting for HTML5 interactive videos and unlimited student enrollment on their Pro plan for \$99 per month. This plan includes advanced interactive quiz options, which have been shown to boost student engagement with eLearning materials (Everett 2015). Thinkific also integrates with WordPress, which will allow me to offer the course through the Wing Threads website.

The book and online course will be available for purchase through the Wing Threads website. Funds towards ongoing hosting and maintenance fees will ensure seamless delivery of these resources for the next three years.

I will also be contributing over US\$60,000 of equipment and resources and donating my own time as I visit schools for the Wing Threads flight around Australia in 2022 to promote the children's book, A Shorebird Flying Adventure, alongside the migratory shorebird online course.

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:



Yes

No

Application Checkilst All relevant sections of this Application have been completed. Full payment details have been provided on the final page. Application is being submitted electronically as one single document. 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.

Please see submission email for explanation.

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 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 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.