Applicant: **Hamilton, Martin** Organisation: **Royal Botanic Gardens, Kew**

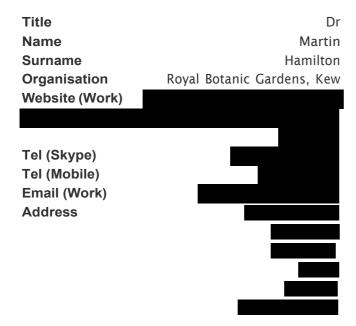
Funding Sought: £19,834.00

CV19RR\1026

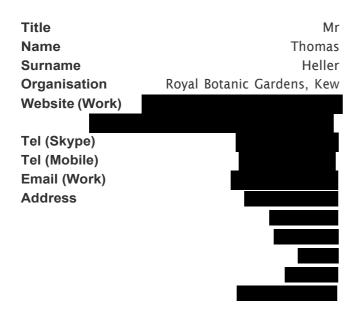
Impacts and consequences of Covid-19 on conservation in the BVI

Through field visits on four islands, surveys of ex-situ collections on two islands, and desk-based analyses of those data collected, the project will document the impacts and consequences of Covid-19 on conservation in the British Virgin Islands. The results will improve our understanding of these impacts and provide evidence for the most appropriate and resilient responses to minimise negative and maximise positive outcomes for the territories' unique biodiversity in the face of future perturbations.

PRIMARY APPLICANT DETAILS

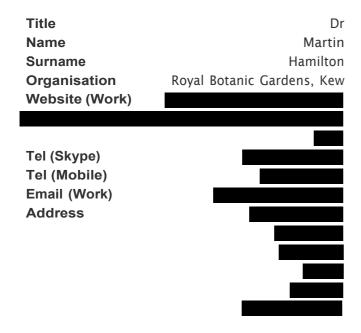


OTHER DETAILS

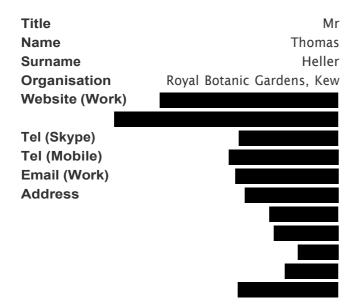


Section 1 - Contact Details

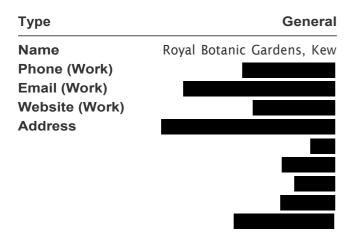
PRIMARY APPLICANT DETAILS



OTHER DETAILS



GMS ORGANISATION



Section 2 - Project Title & Previous Applications

Q3. Project Title:

Impacts and consequences of Covid-19 on conservation in the BVI

Q4. Existing project

Q4a. Does your organisation have an existing (or recently finished) project under either Darwin Initiative, Darwin Plus or Illegal Wildlife Trade Challenge Fund?

☐ Yes

If yes, please list the project reference and title of relevant projects (e.g. 25-001, DPLUS090, IWT099).

DPLUS080, DPLUS084, DPLUS114 Securing South Georgia's native habitats following invasive species control, Identifying and conserving resilient habitats in the British Virgin Islands, Tropical Important Plant Areas and Important Plant Species in TCI	Reference of current/recent project:	Title of current/recent project:
	DPLUS080, DPLUS084, DPLUS114	invasive species control, Identifying and conserving resilient habitats in the British Virgin Islands, Tropical Important Plant Areas and Important Plant

Q4b. Is this proposal directly relevant to one of the projects listed above?

☐ Yes

If yes, please list the relevant project reference and title.

DPLUS084 Identifying and conserving resilient habitats in the BVI

Section 3 - Countries, Dates & Budget Summary

Q5. Which Fund's objectives will your project most directly address? (please only select one)

□ Darwin Plus

Q6. Country(ies)

Which eligible country(ies) will your project be working in?

Country 1	British Virgin Islands	Country 2	No Response
Country 3	No Response	Country 4	No Response

Do you require more fields?

□ No

Q7. Project dates

Start Date:	End date:
01 January 2021	31 March 2021

Q8. Budget summary

Darwin/IWT Funding Request Total request 2020/21:

Please note all spending must fall between 1st

January 2021 - 31st March 2021

Q8a. If any matched funding arrangements are proposed, please detail them here.

Kew overheads for Mr Heller and Dr Hamilton totalling for are included as secured match-funding. Match-funding for salaries for Mr Grant and Ms Harrigan between January and March 2021 has been applied for through a grant submitted to the Mohamed bin Zayed Species Conservation Fund.

19,834.00

Section 4 - Project Outcome and Summary

Q9. Outcome

What is the expected Outcome of this project?

Conservationists working in the British Virgin Islands are better able to adapt and respond to changing circumstances, increasing prospects of success in securing the territories' unique biodiversity for the future.

Q10. Summary of project

Please provide a brief summary of your project, its aims, and the key activities you plan on

undertaking. Please note that if you are successful, this wording may be used by Defra in communications e.g. as a short description of the project on GOV.UK.

Through field visits on four islands, surveys of ex-situ collections on two islands, and desk-based analyses of those data collected, the project will document the impacts and consequences of Covid-19 on conservation in the British Virgin Islands. The results will improve our understanding of these impacts and provide evidence for the most appropriate and resilient responses to minimise negative and maximise positive outcomes for the territories' unique biodiversity in the face of future perturbations.

Section 5 - Project Partners

Q11. Project partners

Please list all the partners involved (including the Lead Organisation) and provide a summary of their roles. Please upload letters, emails or other confirmation of support from any new partners.

Lead Organisation name:	Royal Botanic Gardens, Kew (RBG Kew)
Other partners involved:	National Parks Trust of the Virgin Islands (NPTVI); Fort Worth Zoo (FWZ)
Summary of roles and responsibilities in project:	Kew will work closely with NPTVI, FWZ and other in-country stakeholders (e.g. Government of the VI, local communities). Kew will lead desk-based studies and provide technical support for field visits and stakeholder surveys to ensure successful implementation of the project. Mr Tom Heller will lead the project and be responsible for partner engagement and overall project management. Kew Finance will provide financial oversight and lead financial claims and reporting.
	NPTVI will work closely with Kew, FWZ and other in-country stakeholders. Mrs Nancy Pascoe will lead NPTVI's local project management including desk-based studies, field visits, supervision of local project staff and collection of data from field visits, stakeholder surveys and inventories.
	FWZ will work closely with Kew, NPTVI and other in-country stakeholders. Mrs Kelly Bradley will assist desk-based studies and provide technical support for field visits and stakeholder surveys to ensure successful implementation of the project.
If you have not provided evidence of support from the Lead Organisation or partners above, please explain why:	Evidence through letters of support from the lead organisation and partners provided as a combined PDF.

Please provide a combined PDF of letters of support from the lead organisation and partner(s) as relevant.

□ <u>Kew-NPTVI-FWZ_LoS_Covid-19-Rapid-Response</u> <u>-proposal</u>

□ 30/10/2020

17:26:20

□ pdf 1.02 MB

Section 6 - Project Staff

Q12. Project staff

Please identify the core staff on this project, their role and what % of their time they will be working on the project. Further information on who should be classified as core staff can be found in the guidance. Please provide a 1 page CV for the proposed Project Leader and any co-Project Leader if relevant.

Name (First name, surname)	Role	% time on project	1 page CV attached?
Mr Thomas Heller	Project Leader	100	Checked
Mr Michael Young	Field technician	100	Unchecked
Mrs Nancy Pascoe	Co-investigator	20	
Mrs Natasha Harrigan	Co-investigator	25	

Do you require more fields?

 $\; \square \; Yes$

Name (First name, surname)	Role	% time on project
Mrs Kelly Bradley	Co-investigator	10
Dr Martin Hamilton	Co-investigator	10
Mr Keith Grant	Co-investigator	25
Dr Cassander Titley-O'Neal	Steering Group Co-chair	5
Dr Colin Clubbe	Steering Group Co-chair	5
No Response	No Response	0
No Response	No Response	0

Please provide 1 page CVs for the proposed Project Leader and any co-Project Leader listed above as a combined PDF.

Ensure the file is named clearly, consistent with the named individual and role above.

- □ <u>CV_2020 T_Heller</u>
- 27/10/2020
- 11:45:03
- □ pdf 127.41 KB

Section 7 - Problem, Method and Change Expected

Q13. Problem the project is trying to address

Please describe the problem your project is trying to address in terms of Covid-19 and its impact on biodiversity or IWT and sustainable livelihoods. For example, what are the drivers of loss of biodiversity that the project will attempt to address? Why are they relevant, for whom? How did you identify these problems? Please cite the evidence you are using to support your assessment of the problem (references can be listed in an additional attached PDF document).

NPTVI have statutory responsibility for conservation of BVI's biodiversity and ensuring safe access to National Parks. The collaboration between NPTVI, Kew and Fort Worth Zoo on DPLUS084 Identifying and conserving resilient habitats in the British Virgin Islands brings together several key areas of research to strengthen biodiversity conservation in the BVI. The Covid-19 pandemic and governmental responses has had far-reaching impacts on the ability to meet these responsibilities.

With no international tourists and local restrictions to businesses and recreation over the past six months, the pattern of use of BVI's National Parks has altered dramatically, with an observed shift in use by local residents. There is an urgent need to understand this shift, ensuring the National Parks are best positioned to serve visitors while conserving biodiversity.

With international and inter-island travel severely curtailed, the pandemic has also impacted conservation research and practice, with progress on DPLUS084 halted, including monitoring and survey work, and challenges in the maintenance and development of ex-situ conservation collections of flora and fauna. BVI has faced two major catastrophes recently (2017 Hurricanes, Covid-19) with severe impacts on conservation action. Preparedness for future events is critical for the territories' resilience and the ability of local organisations like NPTVI to react appropriately to maintain effective biodiversity conservation.

This project will provide a better understanding of the nature and extent of the impacts and consequences of Covid-19 to inform the development of measures to recover and adapt to new ways of operating, focusing on two areas:

- 1. What kinds of consequences will disruptions to field and lab work during the pandemic have for the species and ecosystems we are studying, monitoring, and protecting?
- 2. To understand the wider impact of Covid-19 on projects, organisations, communities, and the wider environment, and the overall impact of this crisis on conservation.

Q14. Methodology

Describe the methods and approach you will use to achieve your intended Outcome. Provide information on:

- How you have analysed historical and existing initiatives and are building on or taking work already done into account in project design. Please cite evidence where appropriate.
- The rationale for carrying out this work and a justification of your proposed methodology.
- If relevant, how this project links to an ongoing Darwin/IWT project.
- How you will undertake the work (materials and methods).
- How you will manage the work (roles and responsibilities, project management tools etc.).

Projects should also consider how best they can address inequality, especially gender inequality, as per the existing guidance for each fund.

Please make sure you read the Guidance Notes, particularly Section 3, before answering this question.

Project will consist of three main components to determine consequences of Covid-19 pandemic disruptions (e.g. Kew/FWZ unable to bring supplies/assist development of ex-situ collections/monitoring; limited funding meant NPTVI staff working reduced hours/unable to travel between islands; local restrictions limited access to ex-situ collections/ability to travel between islands for monitoring) on conservation in the BVI: Public engagement of National Parks, Triage of ex-situ collections and Field-based monitoring of equipment, species and habitats.

- 1. Public engagement of National Parks and wider impact of Covid-19 on National Parks and NPTVI used to raise awareness in local communities.
- New resident audience that emerged since the territory's borders closed is engaged through social media, specifically new digital cartoon about the importance of national parks.
- 2. Triage of ex-situ collections to determine consequences of disruptions on the species we are studying and protecting.
- ·Stock check and health assessment of botanical collections (seed/living plants) at J.R. O'Neal Botanic Gardens
- ·Assess status of seed storage equipment/facilities at J.R. O'Neal Botanic Gardens.
- ·Assess seed storage behaviour studies and germination experiments started for DPLUS084.
- ·Health surveys to record morphometrics of animals using established protocols at the Anegada Rock Iguana Headstart Facility.
- ·Risk register of ex-situ collections of flora and fauna.
- ·Builds on work done and uses capacity gained as part of DPLUS030 Building systems and capacity to monitor and conserve BVI's flora, Anegada Rock Iguana programme and ongoing activities of DPLUS084.
- 3. Field-based monitoring of equipment and globally threatened species to collect evidence on the consequences of disruptions to monitoring and field work during the pandemic for the species and ecosystems we are studying, monitoring, and protecting.
- ·Status and processing of monitoring equipment (21 data loggers, 32 camera traps, 18 ink traps, 20 artificial retreats).
- Rapid assessment of key sites for globally threatened species (27 plants, 14 animals) identified through previous fieldwork on four islands (Anegada, Fallen Jerusalem, Tortola, Virgin Gorda) to assess threats (e.g. new developments, illegal farming, pest and disease outbreaks) and reproductive output (e.g. plant seedlings, iguana hatchlings).

We will engage local government/communities through two virtual stakeholder meetings: 1) at project outset raising awareness and encouraging engagement; 2) following completion of field and survey activities to present findings and gather feedback. We will use NPTVI's established social media and email networks to engage stakeholders and increase participation in meetings. Once established, the project

methodology will be shared directly with other Caribbean OTs via Kew's established networks. The survey results and stakeholder feedback will be collated for the final report and submitted for open access publication. The project will enable partners to understand the wider impact of Covid-19 on collaborative projects, the wider environment, and the overall impact of the crisis on conservation.

Overall project management provided by Kew under project leader actively engaged with BVI since 2009, ensuring project starts immediately and is successfully delivered. The project team and activities are gender

balanced with five men and four women involved across all project levels from Steering Group Co-chairs to co-investigators undertaking data collection/surveys.

Q15. Change expected

Detail the expected changes this work will deliver. You should identify what will change and who will benefit a) in the short-term (i.e. during the life of the project) and b) in the long-term (after the project has ended). Please describe the changes for biodiversity/environment and for people in developing countries, and how they are linked. If you are proposing building on a current or past project, be clear how additional benefits will be delivered through this project.

When talking about people, please remember to give details of who will benefit and the number of beneficiaries expected. The number of communities is insufficient detail – number of households should be the largest unit used. If possible, indicate the number of women who will be impacted.

In the short term, the DPLUS084 project will benefit by having current information to base decisions as it adapts to the on-going Covid-19 disruptions, ensuring the desired outcomes are achieved. In the long term, increased awareness will strengthen support for the role of National Parks for resident's recreation and health. This harnesses newly found attention on the park system and the BVI's unique biodiversity that is being shared via social media postings following park visits. This will provide justification for increased resourcing, inform adaptive management strategies for future conservation projects, and highlight the need for financial resilience.

Triage of ex-situ collections will identify resilient species, vulnerabilities in the collection management systems and highlight risks for threatened species in the collections. Botanical species gaps will be identified and subsequently filled when the DPLUS084 resumes activity, improving collections. Collection management systems will be adapted based on identified vulnerabilities resulting in more resilient collections and improved responses to future events. Wild animal reproductive assessments and captive animal health assessments will enable the project to compare previous reproduction, mortality, growth rates, and body condition scores to adjust management systems leading to improved responses to future events.

Field-based monitoring of equipment and globally threatened species will provide a status report on equipment and sites that will be used to identify vulnerabilities in the equipment used and monitoring protocols in place. Vulnerabilities identified will be used to adapt monitoring protocols and seek new equipment, where appropriate, leading to better monitoring systems/protocols and adaptation of ongoing projects, including DPLUS084.

This project will strengthen relationships between international partners and local stakeholders through engagement and evaluation of the impacts of Covid-19 leading to more resilient projects and practices to conserve the unique species of the British Virgin Islands.

If necessary, please provide supporting documentation e.g. maps, diagrams, references etc., as a PDF using the File Upload below:

No Response

Section 8 - Aims, Objectives and Exit Strategy

Q16. Aims and objectives

Clearly outline the aim and objectives of the project and how the achievement will be measured. Use SMART objectives if possible.

A National Park awareness campaign centred around a cartoon aimed at BVI residents will be created in January-February 2021. The cartoon will be shared on social media sites where BVI residents have been posting their park visit and BVI biodiversity photos.

An Inventory and risk register of ex-situ collections of flora at J.R. O'Neal Botanic Gardens and fauna at the Anegada Rock Iguana Headstart Facility report will be compiled in March 2021 through data collected and analysed in January-February 2021.

A Status report on monitoring equipment and globally threatened species during the Covid-19 pandemic will be compiled in March 2021 using data collected and analysed in January-February 2021. The report will include an assessment of monitoring equipment (21 data loggers, 32 camera traps, 18 ink traps, 20 artificial retreats), and key sites for globally threatened species on four islands (Anegada, Fallen Jerusalem, Tortola, Virgin Gorda).

The two reports and one cartoon mentioned above will be publicly available on the open access Kew Research Repository (https://kew.iro.bl.uk/) by the end of March 2021. These reports will be widely publicised using Kew's network of collaborators and social media to ensure that other countries and territories can benefit from the methodology developed.

A paper on the Impacts and consequences of Covid-19 on conservation in the BVI will be prepared for submission to a peer-reviewed, open access journal.

Q17. Exit strategy

State how the project will reach a stable and sustainable end point, and explain how the outcomes will be sustained, either through a continuation of activities, funding and support from other sources or because the activities will be mainstreamed in to "business as usual".

The project will provide two reports that will fill major gaps in our current understanding of the impacts and consequences of Covid-19 on conservation in the BVI. A National Park awareness campaign centred around a cartoon will harness momentum for continued park visitation and interest in the BVI's biodiversity. The project will inform adaptive management of DPLUS084 that will resume activities in April 2021 ensuring that this project will still attain its outputs and outcome. The project reports will also inform monitoring protocols and management strategies for National Parks, future collaborative projects and conservation facilities (seed bank, iguana headstart). These new protocols and strategies will recognise the need for resilience in the financial and resource implications of major external factors, like Covid-19, and adapt accordingly our business as usual approaches. The impact of border closures in March 2020 has forced BVI residents to explore the local environment as most residents have not left the Territory and are in search of affordable recreational activities that comply with COVID-19 social distancing criteria. This project will assist NPTVI to attract new supporters who can assist financially and as future volunteers.

Section 9 - Budget

Q18. Budget

Provide a detailed breakdown of costs to be funded by the Darwin Initiative/Darwin Plus/IWT Challenge Fund in GBP.

See Finance for Darwin/IWT for which costs sit under which budget line.

Budget Line	Cost in £ (GBP)
Staff costs	
Consultancy costs	0
Overhead costs	
Travel and subsistence	
Operating costs	0
Capital equipment*	0
Other costs	
Total (Must be less than or equal to £60,000)	19,834.00
*If you are proposing to purchase any capital items over £1,000 please detail these here and provide justification below	Not applicable.

Q19. Financial Risk Management

This question considers the financial risks to the project. Explain how you have considered the risks and threats that may be relevant to the successful financial delivery of this project. This includes risks such as fraud or bribery, but may also include the risk of fluctuating foreign exchange and internal financial processes such as storage of financial data.

Risk of fraud/bribery will be mitigated through partners' fiscal control mechanisms, aligned with financial reporting standards required and strictly implemented by Kew. Given the relative simplicity of the budget and established reputations of partners involved, we consider this risk to be very low. There is a currency exchange risk for our partners receiving funds from the UK. The project team have, therefore, used a conservative conversion rate of £1=\$1.2.

Q20. Capital items

If you plan to purchase capital items with Darwin/IWT funding, please indicate what you anticipate will happen to the items following project end. If you are requesting more than 10% capital costs, please provide your justification here.

The project is not proposing to purchase any capital items over £1,000.

Q21. Value for Money

Please describe why you consider your application to be good value for money including justification of why the measures you will adopt will secure value for money.

The project team developed the budget through a consultative process. The long-term collaboration between the partners has enabled fieldwork costs to be calculated using much-reduced rates for transport through established contacts (i.e. reduced ferry costs and only purchasing fuel as boats and vehicles are owned by the project partners). Utilising team skills has eliminated the need for consultants. Kew has invested significantly in the BVI and has a close working relationship with the NPTVI and FWZ staff. Kew costs were developed using actual salary costs. Kew contributes overheads for Mr Heller and Dr Hamilton to support this project and includes advisory services such as policy, ethics and biodiversity conventions. By synergising with the current endemic iguana conservation programme, substantial costs of salary for FWZ staff have been avoided. Match-funding has been applied for through a grant submitted to the Mohamed bin Zayed Species Conservation Fund to cover the salaries for Mr Grant and Ms Harrigan between January and March 2021.

Overall, this project delivers value for money by ensuring that BVI's tourism and green economy, which are built around the environment, is secured for the future.

Section 10 - Ethics and Safeguarding

Q22. Ethics

Outline your approach to meeting Darwin/IWT's key principles for ethics as outlined in the guidance note. Additionally, are there any human rights and/or international humanitarian law risks in relation to your project? If there are, have you carried out an assessment of the impact of those risks, and of measures that may be taken in order to mitigate them?

The project will ensure all legal/ethical obligations of the UK and the BVI are met, including access and benefit sharing, through established Memoranda of Collaboration. Internal oversight is provided through multiple Kew departments, including Policy and Conventions. The partners will protect health and safety of all staff, specifically undertaking risk assessments to ensure all activities are Covid-19 safe. The project will follow established Monitoring and Evaluation plan from DPLUS084 project and hold two Steering Group meetings (January and March 2021).

NPTVI will be involved in all activities ensuring strong participation from local communities while respecting their rights, privacy and safety.

Q23. Safeguarding

Projects funded through the Darwin Initiative/IWT Challenge Fund must fully protect vulnerable people all of the time, wherever they work. In order to provide assurance of this, projects are required to have appropriate safeguarding policies in place. The award Terms and Conditions set out clear requirements on safeguarding. Please confirm you have read and understand these and that you comply with them all.

Checked

Section 11 - Key Milestones

Q24. Provide an overview of your proposed project, outlining key milestones.

N.B. This should cover the period of your requested project only and the start/end dates should match with those provided in Question 7.

Date	Key Milestone
01 January 2021	START
08 January 2021	First steering group meeting held to draft methodologies and cartoon design started.
22 January 2021	Methodologies agreed and surveys/assessments underway.
12 February 2021	Surveys/assessments completed with data compiled and shared between partners. First draft of cartoon ready for steering group review.
19 February 2021	Survey/assessment data analyses completed.
05 March 2021	Drafts of two reports circulated between partners for feedback. Feedback for cartoon consolidated and final draft circulated to steering group for sign-off.
12 March 2021	Draft of peer-reviewed paper circulated between partners for feedback. Feedback for two reports received and consolidated. Final version of cartoon agreed.
19 March 2021	Final draft of two reports circulated between partners for sign-off. Feedback for peer-reviewed paper received and consolidated.
26 March 2021	Final draft of peer-reviewed paper circulated between partners for sign-off. Cartoon released on social media sites in the BVI and shared on partner sites.
30 March 2021	Edits consolidated into paper for peer-reviewed journal submission.
No Response	No Response

No Response	No Response
31 March 2021	FINISH

Section 12 - Certification

Q25. FCDO notifications

Please check the box if you think that there are sensitivities that the Foreign, Commonwealth and Development Office will need to be aware of should they want to publicise the project's success in the Darwin/IWT competition in the host country.

Unchecked

Please indicate whether you have contacted your Foreign Ministry or the local embassy or High Commission (or equivalent) directly to discuss security issues (see Guidance Notes) and attach details of any advice you have received from them.

□ No

Q26. Certification

On behalf of the

trustees

of

The Royal Botanic Gardens, Kew

I apply for a grant of

£19,834.00

I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the project schedule should this application be successful.

(This form should be signed by an individual authorised by the applicant institution to submit applications and sign contracts on their behalf.)

• I have enclosed a CV for the Project Leader/co-PL and letters or confirmation of support (uploaded at appropriate points in application)

Checked

Name	COLIN CLUBBE
Position in the organisation	Head of Conservation Science
Signature (please upload e-signature)	 Kew-BVI_rapid-response-round-application-form_CERTIFICATION - signed 02/11/2020 10:43:26 pdf 181.18 KB
Date	02 November 2020

Section 13 - Submission Checklist

Checklist for submission

	Check
I have read the Guidance, including the "Guidance Notes for Applicants" and "Finance for Darwin and IWT Challenge Fund".	Checked
I have read, and can meet, the current Terms and Conditions for the relevant fund.	Checked
I have provided actual start and end dates for my project.	Checked
I have provided my budget in GBP.	Checked
The application has been signed by a suitably authorised individual (clear electronic or scanned signatures are acceptable).	Checked
(If copying and pasting into Flexi-Grant) I have checked that all my responses have been successfully copied into the online application form.	Checked
I have included a 1 page CV for the Project Leader (and co-Project Leader if relevant).	Checked
I have included a letter or electronic confirmation of support from the lead organisation and main partner organisation(s) identified at Question 11, or an explanation of why not.	Checked
I have checked the website on GOV.UK immediately prior to submission to ensure there are no late updates.	Checked
I have read and understood the Privacy Notice on GOV.UK.	Checked

Data protection and use of personal data

Information supplied in this application form, including personal data, will be used by Defra as set out in the latest copy of the Privacy Notice for Darwin, Darwin Plus and the Illegal Wildlife Trade Challenge Fund available here. This Privacy Notice must be provided to all individuals whose personal data is supplied in the application form. Some information may be used when publicising the Darwin Initiative including project details (usually title, lead organisation, location, and total grant value) on the GOV.UK and other websites.

Information relating to the project or its results may also be released on request, including under the 2004 Environmental Information Regulations and the Freedom of Information Act 2000. However, Defra will not permit any unwarranted breach of confidentiality nor will we act in contravention of our obligations under the General Data Protection Regulation (Regulation (EU) 2016/679).				