

Applicant: **Taylor, Andrew**
Organisation: **James Hutton Institute**
Funding Sought: **£7,206.19**

DIR27PP\1085

Utilisation of Mycological Resources by Local Communities in Georgia

Section 1 - Contact Details

PRIMARY APPLICANT DETAILS

Title	Dr
Name	Andrew
Surname	Taylor
Tel (Work)	[REDACTED]
Email (Work)	[REDACTED]
Address	[REDACTED]

GMS ORGANISATION

Type	Organisation
Name	James [REDACTED]
Phone (Mobile)	[REDACTED]
Email	[REDACTED]
Address	[REDACTED]

Section 2 - Title & Location

Q3. Working title of the proposed Darwin project

Utilisation of Mycological Resources by Local Communities in Georgia

Q4a. Host country (of proposed Partnership Project trip)

Georgia

Q4b. If this is not the intended host country for the proposed Darwin project, please justify here

Georgia is the intended host country

Q4c. Other collaborating country/ies

No Response

Q5. Is this a resubmission of a previous scoping/Partnership application?







No

Section 3 - Partnership Project Principals & Lead Organisation Summary

Q6. Principals in Partnership Project work

Please give the details of the individuals (up to 2) who would be directly involved in the Partnership Project work – i.e. making a visit to a host country, or leading on the collaboration.

One page CVs must be uploaded below.

Details	Project Leader	2nd individual
Surname	Taylor	Bitsadze
Forename(s)	Andrew Forsyth Scott	Nana
Post held	Senior Researcher	Associate professor
Organisation	The James Hutton Institute	Agricultural University of Georgia
		
		
Have you included an one page CV?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> Yes

Please upload one page CVs for all Principals involved in Partnership Project work as a combined PDF.

 [Combined Cvs](#)

 19/01/2021

 09:06:17

 pdf 135.96 KB

Q7a. About the lead applicant organisation

Briefly discuss your expertise in sustainable use or conservation of biodiversity and/or development. Please refer to recent track record you have in this field. You may be asked to provide evidence of this track record.

The James Hutton Institute (JHI) undertakes research and engagement to deliver evidence-based solutions to the global challenges facing land and natural resource use both now and in the future. A major area of multidisciplinary research is sustainable natural resource management. It has a successful history of coordinating international projects and has appropriate financial management systems. Conservation projects involving a wide range of organism groups in diverse habitats around the globe have been carried out. Sustainable experience includes the previous Darwin Initiative funded project 'Building mycological capacity for sustainable resource management in Lao PDR' (April 2013-March 2017), led by the PI on the current proposal, Andy Taylor, This project built infrastructure and improved local knowledge facilitating mycological research within Lao PDR by running workshops, establishing national reference collections and introducing basic molecular facilities and skills. The ecological and economic importance of wild fungi harvesting were also investigated.

The JHI has a large Social, Economic and Geographical Sciences Department (SEGS) who conduct social science and interdisciplinary work with a wide range of stakeholders. Research topics include sustainability,

rural economies, local food transport, land management, and natural resource use. The involvement of SEGS personnel will be integral for the follow-up main application.

Q7b. Have you obtained a letter of support from the lead applicant organisation?

(If yes, please upload with the partner letters of support on the next page)

Yes

Section 4 - Project Partners

Q8. About the partner organisation(s)

Please list all the partners involved and explain their roles and responsibilities in the Partnership Project work. Briefly discuss your partner's expertise in sustainable use or conservation of biodiversity and/or development. Please refer to recent track record they have in this field. You may be asked to provide evidence of this track record. If there is more than 1 partner organisation, you can enter the details of more partners below. Please specify which of the partners is new to the partnership.

Partner name:	Agricultural University of Georgia (AUG)
Website address:	http://agruni.edu.ge/en/
Details of anticipated roles and responsibilities:	Georgian partners will be from the Agricultural University of Georgia and will have responsibility for hosting the lead partner, organising trips, workshops and meetings between multiple stakeholders interested in conservation of the fungal biodiversity and development of mycological resources in Georgia.
Expertise in sustainable use or conservation of biodiversity and/or development:	<p>The mycological herbarium (fungarium) and Laboratory of Mycology and Plant Pathology at the Agricultural University of Georgia have many years experience in fungal biodiversity conservation. The fungarium contains 18821 dried herbarium specimens (269 type specimens among them) of micro and macro fungi collected from 1885 until now by Georgian and foreign mycologists. In addition, there are ca. 300 living strains of phytopathogenic fungi.</p> <p>Within the framework of a local foundation (SRNSFG) grant (FR/571 /7-120/14), the collections were renovated, and databases of the collections were created. Historical collections were in great danger of being lost due to the ongoing socio-economic fluctuations in the country. Funding from the National Foundation gave the collections a second life and renewed their place and importance.</p> <p>The collection is continuously filling with new specimens and strains. The main goal of the Georgian fungarium is to increase and diversify the mycological collections (herbarium and fungal living culture collection); to record and curate mycological natural capital, to create suitable conditions for conservation of specimens for research purposes and for sustainable use for national benefits. The creation of edible and medicinal culture collections is a priority as the collections represent a natural resource with great potential of practical use.</p>


Name of main contact and post held: Nana Bitsadze, Manager of Mycological Herbarium and Fungal Culture Collection

Letter of support submitted? Yes


Do you have more than one partner involved in the Partnership Project work?

No

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

 [Combined letters of support](#)

 19/01/2021

 09:11:48

 pdf 282.58 KB

Q9. Can you confirm that at least one of the partners have not previously been in receipt of Darwin funds from the same lead partner?

Yes

Section 5 - Justification & Concept Notes

Q10. Justification of need for a Partnership Project

Please provide written details of why alternative funding is not available from within your own organisation or from other sources. Will matched funding be provided?

There are few opportunities for developing partnerships available. The only scientific foundation in Georgia is the Shota Rustaveli National Scientific Foundation of Georgia (SRNSFG) and due to the current difficult socio-economical situation in Georgia, the budget of the SRNSFG has been cut and the foundation was not able to announce recent grant competitions. In addition, the level of funds available would not cover a project of the size, scope, duration and costs required to achieve the desired outcomes of carry out the proposed work. For the successful implementation of the project, it is very important to collaborate with peers from other countries and share the experience of fungal identification using the latest techniques and on methods of long-term preservation of the living cultures.

Within the UK there are few opportunities for funding for developing collaborations with Georgia. Similarly, there are no funds within the JHI for establishing overseas partnerships which could seed larger applications. However, the JHI are supporting the application through matched funding to cover the reduced rate of overheads.

Q11. Concept note for the Partnership Project

This question concentrates on the Partnership Project work and should demonstrate the objectives of the project including:

- objectives of the visit
- what work (including research, remote communications or other collaborations) has been carried out prior to applying for this project
- what work will be carried out under the Partnership Project – please see the guidance for advice on what type of activity can be funded
- evidence of the proposed partners' intentions to collaborate in your Partnership Project work

The main objectives of the visit are to:

- 1) Enhance and develop the working relationship between JHI and The Agricultural University of Georgia,
- 2) To develop a clear understanding by both partners of the processes involved in applying for a Darwin project,
- 3) To establish the infrastructure, logistical and administrative complexities which would be involved in setting up and running a Darwin project in Georgia,
- 4) To hold a workshop where interested parties, stakeholders and University staff meet to discuss the development of the proposed Darwin project,
- 5) To establish links with in-country aid agencies (e.g. UNDP [<https://www.ge.undp.org/>]) to benefit from local knowledge and to seek synergies with existing programmes,
- 6) To visit a number of villages in the mountainous districts to gain first-hand experience and an understanding of the social complexities, physical logistics, training requirements and equipment involved in working with local communities for the production of edible fungi,
- 7) To visit local sawmills to assess availability of waste material substrates and the logistics of access.

What work (including research, remote communications or other collaborations) has been carried out prior to applying for this project?

In preparation for the proposal and for the visit to the partner country, members of the Agricultural University of Georgia have met to discuss the potential for a Darwin project and the needs of the University within a project. By using remote communication, meetings between Georgian mycologists discussed fungal biodiversity in different parts of the country. Target places and sites suggested where fungal samples could be collected. Places and organizations to include in the visit of the leading organization to Georgia have been considered. The most vulnerable groups in Georgian highlands and their needs have been considered and what possibilities exist for reducing poverty by raising income and food production using edible fungi cultivation. The ecological situation in highlands where sawmills are located and the possibilities of involving them in the mushroom production business have been discussed. How to associate ecological, economical, and scientific interests in a frame of the Darwin initiative project is recognised as complex and will form the major focus of the partnership project.

The project PI has contacted mycologists in Europe, with whom he has worked previously on a Darwin project, and they have committed their support for the project and for a main Darwin project. One UK mycologist who has worked closely with the PI for many years is an expert in small scale production of edible fungi and will act as an unpaid consultant on the partnership project.

Evidence of the proposed partners' intentions to collaborate in your Partnership Project work.

Both partners have invested considerable time and energy in developing the application for the partnership project and are fully committed to collaborating in the partnership project.

Q12. Concept note for the resultant project

This question concentrates on the full Darwin application you intend to submit after the Partnership Project and should discuss:

- the expected Outcome and Outputs of the resultant Darwin project
- how the resultant Darwin project would meet a need in the host country (and the wider region if applicable e.g. if the proposed project would be based in a UMIC)
- how the project would contribute to any or all of the Conventions and Treaties supported by Darwin, including the SDGs
- how the project will contribute to sustainable development in the country concerned
- briefly explain the proposed partner role(s) in the resultant Darwin project
- briefly the expected role of the Partnership Project travellers in the resultant Darwin project.

Outcome: There will be an increased academic and technical capacity in Georgia to deliver mycological research and resources thereby contributing to supporting local communities in utilising natural assets, while safeguarding the national fungal capital.

Output 1: Training workshops in edible fungi production involving international experts and trained Georgian national training villagers.

Output 2: Basic training manuals for preparing materials for mushroom production

Output 3: Culture collection of edible Georgian fungi

Output 4: Fungarium of reference material of Georgian edible and medicinal fungi

Output 5: Data generated on occurrence and consumption of edible fungi in Georgia uploaded into database

Identified need: Poverty in mountainous regions of Georgia is widespread with many people leaving the countryside for the cities. The project aims to provide a potential source of income to villagers by enabling them to use local waste materials from sawmills to grow edible fungi. The fungi would also represent a food source. The conversion of waste materials into mushroom production also helps safeguard the environment from disposal of the materials in landfills etc. Forestry and timber production is a major industry in Georgia with 40% of the land surface forested and disposal of waste is a serious issue.

This project addresses the following CBD articles: 6 (Conservation & sustainable use); 7 (Identification and Monitoring), 12 (Training); 16 (Access and transfer of technology).

The long-term outcome of the project will be a practical use of the collected information about biodiversity and in vitro collection of macromycetes. Project implementation will enable us to translate our knowledge into the economic and societal benefit of the countries by increasing awareness of village communities, agricultural/forestry sector, and mushroom growers about the practical use of fungal biodiversity. In addition, the training given to the representatives of the agricultural and forestry sector, including farmers and sawmill company owners, will work to heighten their interest in the conservation of fungal diversity and sustainable business development.

Roles: Scientists from the UK and from other partner countries will share their knowledge and will enable Georgian partners to create fungal living culture collections and repository for conservation. The creation of the fungal gene bank of edible and medicinal mushrooms would be the basis for the development of mushroom production as a science in Georgia. Lack of productive strains is a major problem for mushroom growers. Non-Georgian partners will also provide training for trainers in mushroom production and support the production of training materials for locals. Taxonomic experts will also provide training in fungal identification using morphological and molecular approaches. Georgian partners will provide in-country logistics, local knowledge and ensure regular support for local production schemes.

The PI on the Partnership project who would travel to Georgia as part of the project, will be the lead PI on the Darwin project and will be responsible for maintaining oversight of the project's progress, reviewing outputs, working to ensure effective project integration and collaboration and act as final decision-maker for issues arising within the project.

Section 6 - Costs

Q13. Costs

Provide a detailed breakdown of costs to be funded by the Darwin Initiative in GBP.

	Project Leader	Second individual	Total
Airfare including travel to airport	█	█	█
Visas and other travel documents	£ █	█	█ 0
Daily subsistence rate per day	£ █	£0.00	
Number of days subsistence claimed (max 30 days per traveller)	█	█	
Total daily subsistence claimed (please provide details below)	£ █	█	█
Workshop costs (please provide details below)			£ █
Other costs (please provide details below)			£ █
		Total request from Darwin (must not exceed £10,000)	£ █

Additional details to support the figures above

	Project Leader	Second individual
Average expected subsistence rate per day	£ █	£0.00
Number of days subsistence claimed	█	█

Workshop costs

Please provide further details on your workshops costs (N/A if not relevant).

There will be ca. 20 people attending the workshop
 Venue hire = £ █

Refreshments @ £■■■■ head = ■■■■

Lunch @ £■■ per head = ■■■■

Other costs

Please provide further details on Other costs e.g. subscription to communications platforms, purchase of tablets for local partners etc (N/A if not relevant).

Car and driver hire for 5 days at £■■ per day = ■■■■

Estimated fuel costs for covering ca. 800km for visits to mountain regions and villages = ■■■■

Subsistence for Georgian personnel - total 16 person days at £■■ per day = ■■■■

Hotel 6 nights in Tbilisi @ £■■ per night = ■■■■

Hotel 1 night for 4 people away from Tbilisi @ £■■ = ■■■■

Staff costs (9 days) = ■■■■

Overheads (40% of staff costs) = ■■■■

Total other costs = ■■■■

Section 7 - Timetable & Activities

Q14. Provide anticipated dates of travel (start and finish) and activities to be undertaken on your trip.

N.B.: this question is specifically about your travel plans – your dates and specific milestones during travel – NOT your timetable to Stage 1 application. Your application will be considered ineligible if this section does not specifically cover your planned Partnership Project trip.

Date	Milestone
01 August 2021	START
02 August 2021	Initial remote communication between partners, maintained weekly thereafter as required.
23 August 2021	Remote communication between stakeholders
02 October 2021	Visit to Agricultural University of Georgia by lead partner
03 October 2021	Visit at Institute of Botany and Tbilisi Botanical Garden
04 October 2021	Visit in highland village communities and sawmills - Tetrtskaro district
05 October 2021	Visit in highland village communities and sawmills – Tianeti district
06 October 2021	Two day visit in highland village communities and sawmills - Imereti region, Chiatura municipality
08 October 2021	Workshop in Agricultural University of Georgia
09 October 2021	Return to UK
05 November 2021	Preparation and submission of project report

No Response

No Response

28 February 2022

FINISH

Q15. In what year would you expect to submit the full Darwin project application?

Round 28

Section 8 - Certification

Q16. Certification

On behalf of the

company

of

James Hutton Institute

I apply for a grant of

£7,206.19

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 Partnership 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 uploaded CVs for project principals
- I have uploaded letters of support from the lead application organisation and the partner(s)


Checked


Name Hugh Darby

Position in the organisation DIRECTOR OF FINANCE & COMPANY SECRETARY

Signature (please upload e-signature)  [Signature from Finance](#)

 19/01/2021

 11:06:40

 pdf 81.38 KB

Date 19 January 2021

Section 9 - Submission Checklist

Checklist for submission

	Check
I have read the Guidance Notes for Main projects as well as the Guidance for Partnership Projects and am satisfied that this concept would be eligible for a main project application.	Checked
I have read, and can meet, the current Terms and Conditions for this fund.	Checked
I have provided anticipated start and end dates for my Partnership Project trip.	Checked
I have checked that my budget is complete and correctly adds up.	Checked
My application has been signed by a suitably authorised individual (clear electronic or scanned signatures are acceptable).	Checked
I have included one page CVs and letters of support as required.	Checked
I have checked the Darwin website immediately prior to submission to ensure there are no late updates.	Checked
I have read and understood the Privacy Notice on GOV.UK.	Checked

We would like to keep in touch! Please check this box if you would be happy for the lead applicant (Flexi-Grant Account Holder) and main traveller/project leader (if different) to be added to our mailing list. Through our mailing list we share updates on upcoming and current application rounds under the Darwin Initiative and our sister grant scheme, the IWT Challenge Fund. We also provide occasional updates on other UK Government activities related to biodiversity conservation and share our quarterly project newsletter. You are free to unsubscribe at any time.

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, but not personal data, may be used when publicising the Darwin Initiative including project details (usually title, lead organization, 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).