GLOBAL BIODIVERSITY INFORMATION FUNDS (GIBiInF)

Concept Note Template

Concept notes must be emailed to GIBiInF@gbif.org by 30 February 2019, 11:00pm UTC.

Submission checklist

Please confirm the following by checking the box provided:

☐ Statement of endorsement from a GBIF Head of Delegation or Node Manager (when the applicant is located in a GBIF Participant country or area) is provided as an email attachment

1. Project title

Mobilizing and mapping the Ha'rar Mountains' endemic gelfling.

2. Project category

Indicate the grant type for this proposal (select only ONE):

✔ **Collections data mobilization**

☐ Ecological monitoring data mobilization

3. Main contact person for the project

Name	Dr Jarra Jen
Institution[1]	Center for Environment Knowledge, Thra University
Address	Thra University, Dousan city, Mithra
E-mail	J-Jen@CEK.zz
Phone	+004.123.456.987
Role in project	Project Manager

4. Partners involved in the project

Country	Institution	Role of the partner in the project	Confirmed participation? (yes/no)
Mithra	Natural History Museum of Ha'rar	Specimen data and Advisory role	Yes
International	Global Conservation of Endangered Species - working group	Advisory role	No

1

Mithra	Forest Planning Institute	Specimen data and genetic analysis	Will be contacted if invited to next stage
Mithra	Institute for Natural Resources Studies	Specimen data and genetic analysis	Will be contacted if invited to next stage

5. What are the issues that this project seeks to address?

Explain why this project is needed and the problems it aims to solve. Pay particular attention to the priority of addressing taxonomic and geographic gaps in data availability (max. 250 words)

The Ha'rar mountains are a poorly-known region and the home of the endemic gelfling species, which is one of the least-known mammals in the world. Conservation plans for this highly endangered species are based on incomplete and poorly documented data. Taxonomic uncertainty and lack of sufficient data have caused delays in the development of conservation policies.

Information on the location from which known gelfling specimens were collected is only available as the location's common name or the coordinates of a hunter's village. The highly complex topographical features of this mountainous area and the fact that local hunters often travel long distances across provincial and national boundaries mean that the uses of the available information about the origin of the specimens are limited.

Over the past decade, researchers have started to collate data about known specimens in a database for future conservation initiatives. However, this database is still missing data about many samples collected during the last two decades that are scattered across several institutions, such as the Forest Planning Institute and the Institute for Natural Resources Studies. In addition, the inclusion of genetic data in the database is critical as it would help the identification of the gelfling's numerous sub-species.

Our team has gathered extensive information on local place names and village use-areas on community mapping surveys throughout the Ha'rar Mountains which could supply usable location data for future georeferencing work.

6. What activities will be included in the project?

Explain the activities proposed for this project – what will each partner do? (max. 250 words)

The project team will finalize the gelfling records database and the gazetteer. Two junior researchers at the Center for Environment Knowledge will complete this work.

These two researchers will update the database structure to make it compatible with the DarwinCore standard, and create a shareable SQL version. They will check existing records against the literature, particularly Mithran-language sources, and crosscheck these with the people involved in the original work.

Finalizing the place name gazetteer and georeferencing work will involve crosschecking community maps and creating final ESRI Shapefile datasets. With the help of the Global Conservation of Endangered Species working group, polygons will be generated for each record.

Through a review of relevant literature and collaboration with colleagues at other Mithran institutions, the core team of two researchers will assemble a dataset of key specimens of the *Ghel-lflainnk* gelfling in the Mithran Ha'rar Mountains.

Where possible, gelfling genetic material will be analyzed (DNA barcoding). We have limited co-financing for the analyses, and are working on securing more. Appropriate permits will be obtained. The aim will be to identify key specimens to sub-species level.

Lastly, a fully georeferenced occurrence dataset will be shared for gelfling species via GBIF.

7. Why are these the right activities to address the issues?

Explain how the activities listed under question 6 are expected to address the issues listed under question 5. ***Identify any risks and explain how these will be addressed****. (max. 300 words)*

These activities will provide standardized, documented occurrence data to support research and conservation policies for a critically endangered species. They will also provide a template for further species occurrence datasets in the Ha'rar Mountains.

Claims about the status, range and ecology of this endemic species are based on sparse, incomplete, and sometime inaccurate data. A standardized, documented occurrence dataset for gelfling species is crucial, especially now that Mithra's Sustainable Land Management Strategy is being developed.

Conservation planning needs are to be based on a standard set of specimens with clearly documented location data.

The place name gazetteer, while not directly publishable through GBIF, would enable the interpretation and georeferencing of numerous specimen records held in Mithran's collections. This would be particularly useful for the forest vertebrates for which specimens collected by hunters are the main source of records.

Because most of the specimens are held in governmental institutions, such as the Forrest Planning Institute and the Institute for Natural Resources Studies, there is a risk that these institutions refuse to share their data openly. However, preliminary discussions with contacts within these two institutions have been positive and we are hopeful that they will accept sharing their data if the project is funded.

Another risk is the lack of support from the local communities, as illegal poaching of gelfling is a non-negligible source of income for the local population. We will make sure to hold information meetings with the heads of the local villages to explain the importance of gelfling for the local ecosystem and the urgent need to ensure their conservation.

Lastly, we may not receive all the funding needed for the genetic analysis, but we are currently investigating alternate sources of funding for this activity

8. What will the project deliver?

a. Data

Use the table to describe the datasets expected to be published via GBIF.org as an outcome of the project – see guidance on data publishing here and especially guidance on classes of datasets supported by GBIF here. Add rows as required

Title of dataset	Taxonomic/ geographic/ temporal scope	Approximate number of records	Sampling methodology/protocol used (if relevant)	Current format (e.g. undigitized, digitized)
Ghel-lflainnk -group Gelfling specimen data	Recently-described or rediscovered Ha'rar mountains endemic species	70		Undigitized
Gelfling historical data	Ha'rar Mountains	1000		Partly digitized

b. Other deliverables

Describe other deliverables expected from the project (e.g. publication of data papers, analysis, reports etc.) (Max: 100 words)

The place names gazetteer is a key output which can be used to generate further occurrence metadata and georeferenced other specimens from the region.

We will submit a data paper to an open access journal, describing the datasets published through GBIF.

Dependent on co-financing, genetic work will lead to publications on taxonomy and population genetics of *Ghel-lflainnk* gelfling.

9. How much funding will be required?

Provide details on the approximate cost of the activities and purchases planned. Indicate an estimate of matching funds to be contributed to the project, either directly or in terms of staff time or resources allocated to the project on an in-kind basis. All costs should be expressed in Euros. Maximum funding available per selected project: €15,000. Note that overheads may not be charged to GIBiInF. Project may request a maximum of €3,000 from GIBiInF for IT services or purchases, covering a maximum of 50% of total cost for such services. Attendance of the GIBiInF capacity enhancement workshop will be funded separately and does not need to be included here. Add rows as required.

Activity/expense	Funding requested (in Euros)	Co-funding offered (in Euros)
Team leader salary		2,500
Field data manager salary (2 weeks)	1000	
GIS data manager salary (4 months)	2,000	
Record data manager stipend (4 months)	1,000	
Database developer (consultant) (2 weeks)	1,000	

Research assistants at other Mithran collections Consultant spatial data (2 weeks)	3,000	800
Consultant, *Ghel-lflainnk* Gelfling records (10 days)	2,000	
Purchase of two laptops Consultant genetic analysis (6 months) National travel TOTAL	2000 2,000 1,000 15,000	25,000 28,300

Note to Assessors following eligibility check by GBIF Secretariat

Specific requirement for IT equipment:

No co-funding is indicated for the purchase of IT equipements (2 laptops) –

According to IT eligibility rules *"Project may request a maximum of €3,000 from GIBiInF for IT services or purchases, covering a maximum of 50% of total cost for such services"*. Co-funding is thus mandatory

This will need to be corrected if the project team is invited to submit a full proposal