



BID Africa 2017 – Small Grant Template

Final narrative report

Instructions

- Fill the template below with relevant information. **please indicate the reason of the delay and expected date of completion.**
- Use the information included in your project Full proposal (reproduced in annex III of your BID contract) as a baseline from which to complete this template
- The information provided below must correspond to the financial information that appears in the financial report
- Sources of verification are for example direct links to relevant digital documents, news/newsletters, brochures, copies of agreements with data holding institutions, workshop related documents, pictures, etc. **Please provide access to all mentioned sources of verification** by either providing direct link or sending a copy of the documents.
- This report must first be sent as a **Word document** to GBIF@GBIF.org and be pre-approved by GBIFS
- Once this report is pre-approved in writing by GBIFS, it must be signed by the BID project coordinator and sent by post to:

The Global Biodiversity Information Facility Secretariat (GBIFS)
Universitetsparken 15
DK-2100 Copenhagen Ø
Denmark

Template

1. Table of Contents

1.	Table of Contents	1
2.	Project Information.....	2
3.	Overview of results	2
4.	Updated calendar for the BID project implementation and evaluation period	11
5.	Sustainability plans.....	13
6.	Beneficiaries/affiliated entities and other cooperation	14
7.	Visibility	14





2. Project Information

2.1. Project Coordinator: Institution/network/agency name:

Dr Moira FitzPatrick, Arachnid Collection, Natural History Museum of Zimbabwe, Bulawayo

2.2. Main contact person and role:

Dr Moira FitzPatrick, Arachnologist and Regional Director

2.3. BID proposal identifier:

BID-AF2017-0050-SMA

2.4. Project title:

To make the Matobo World Heritage Site Arachnid collectins at the Natural History Museum of Zimbabwe accessible through GBIF by end of 2018

2.5. Start date and end date of the reporting period:

1/6/2018-31/1/2019

2.6. Country in which the activities take place:

Zimbabwe

3. Overview of results

3.1. Executive summary

Give a short summary of the activities implemented and the outcomes of the project for the reporting period (500 words maximum)

4271 records of Arachnids (Scorpions, Solifugae and Araneae) from the Matobo World Heritage Site have been digitalized into excel. This data has been cleaned using geo-referencing and taxonomic cleaning is ongoing as there are still a number of specimens that information of their identity is still unclear. These digitalized records have been used to produce the checklist of eight species of scorpions from three families, eleven species of Solifugae from three families, and 267 species of Araneae from 42 families. This checklist has been published and available of the GBIF website. Of the 4271 records many are juveniles which cannot be identified to species, just genus level. Many species on this checklist are from single localities making the production of maps futile. There are indications that the abundance of species have changed over a ten year period highlighting the important of spiders as ecological indicator species. These finding will be published elsewhere and presented to the various stakeholders involved in the management of this landscape. There are a number of species new to science and will be described in further publications. Natural History and habitat preferences will be written up in a series of papers describing this important ecological group and will provide the baseline data for further studies. Monitoring of the Arachnid fauna in the Matobo Hills will continue and this GBIF project has been an important part of making this data assessable and usable for scientists wishing to understand the ecology, biodiversity and conservation of this faunal group.



3.2. Progress against expected milestones:

Give an overview of all the expected milestones for your project from the beginning until now (see Annex V of your contract)

Expected milestones/activities	Completed ? Yes/No	Explanatory notes	Sources of verification
Completed capacity self-assessment questionnaire for data holding institutions https://www.gbif.org/document/82785/self-assessment-guidelines-for-data-holding-institutions (EN) https://www.gbif.org/document/82813/modele-dauto-evaluation-pour-les-institutions-detentrices-de-donnees (FR) (Early Progress report milestone)	yes		
At least one national data publishing institutions are registered with GBIF.org Guidelines to become a publisher: https://www.gbif.org/become-a-publisher (Early Progress report milestone)	yes		
At least one person from the project team has completed the certification process following the BID Capacity Enhancement workshop on Data Mobilization organized as a part of the BID programme Africa 2015 or the BID programme Africa 2017 (Early Progress report milestone)	Yes		Attended workshop in Cape Town in April 2018
Knowledge dissemination activities have been scheduled following the first BID Capacity Enhancement workshop (Early Progress report milestone)	yes		Data Use and Decision making workshop 25-29 June 2018
At least one dataset has been published to GBIF.org (Midterm report milestone)	yes	This was achieved and updated in the final published data	
The data users identified in the full proposal have documented their intended use of the mobilized data and provided early feedback (Midterm report milestone)	yes		Final verification letters of intended data users are pending and will be provided in mid March
All mobilized data have been published to GBIF.org (Final report milestone)	yes		https://www.gbif.org/dataset/d98c3efe-983e-455f-8fdb-ccc76c7959c3 ¶



All published data meet the minimum requirements outlined in the Data Quality Requirements available at https://bid.gbif.org/en/community/data-quality/ (Final report milestone)	yes		Databases has been cleaned
The training outcomes of the project have been documented, including the number of people receiving certification through the BID Capacity Enhancement workshops, the number of people trained in nationally organized events, and the evaluation of the impacts of these training activities (Final report milestone)	yes		

Final capacity self-assessments for national biodiversity information facilities have been completed with sustainability plans. https://www.gbif.org/document/82785/self-assessment-guidelines-for-data-holding-institutions (EN) https://www.gbif.org/document/82813/modele-dauto-evaluation-pour-les-institutions-detentrices-de-donnees (FR) (Final report milestone)	Yes	See Attached report	
All uses of the mobilized data have been documented (Final report milestone)	In progress	Letters of data usage will be available in March 2019	
Best practices and lessons learned have been documented (Final report milestone)	Yes	Data is occurrence data only and does not include sensitive species or information	

3.3. Project deliverables and activities

Refer to the table in section 2.2 "Deliverables, activities and reporting criteria" of your BID full proposal. Provide updates on the status of each of planned deliverables. In the event of unexpected delay, please provide detailed explanatory notes and indicate planned completion date. Add as many rows as needed.

Deliverable	Related activity	Completed ? Yes/No	Explanatory notes	Sources of verification
4000 arachnid specimen records digitized and Geo-referenced into a functional	Digitization and data cleaning	Yes	4271 specimen lots have been digitized. Data cleaning completed. Identification of	☐ This work has been used to produce a checklist of species occurring in the Matobo hills available on the GBIF portal. Most species have only been recorded from a single locality making distribution maps futile.





database system and uploaded to GBIF			some specimens not finalised due to lack of taxonomic revisions in there groups.	
Training on biodiversity data mobilization and digitizing techniques.	Staff Trainig	Yes	Staff have attended various workshops during the course of the project	Data Quality, Data Cleaning and Data Sharing Principles Workshop16-19 January 2018 Data Use and Decision making Workshop 25-29 June 2018 Team building and report back meeting for Museum staff 22 January 2019 Stakeholders/end users report back meeting 22 January 2019

Production of species checklists for Araneae, Solifugae, and Scorpions across the entire Matopo World Heritage Site, including the National Park, and share this with Parks Managers, Medical personnel, stakeholders and policy makers	Data Publishing	Yes	Scorpion Data set of 8 species, Solifugae data set of 11 species and data set of 267 Araneae from 42 families have been published.	https://www.gbif.org/dataset/d98c3efe-983e-455f-8fdb-ccc76c7959c3 The production of a checklist of 286 species from the 4271 specimens has been completed, and will be updated as some of the outstading identifications have been done.



3.4. Datasets published on GBIF.org

Refer to the table in section 2.4 “Biodiversity data mobilization plan” of your BID full proposal. If the dataset is not yet published, please indicate the name of the institution that is expected to host the data when published in the column “DOI or URL/Planned hosting institution”. Add as many rows as needed.

Dataset title	Publishing institution	DOI or URL/Planned hosting institution	Date/expected date of publication	Explanatory notes
Scorpiones, Solifugae and Araneae of the Matobo World Heritage Site, Zimbabwe	Natural History Museum of Zimbabwe	Natural History Museum of Zimbabwe, IPT	Jan 2019 and ongoing	

3.5. Examples of use of biodiversity data available through GBIF

Data mobilised through the BID programme, ultimately, should guide natural resource conservation and management policy. We require you to report on how you have integrated these data into these policy-making processes. You may want to refer to the section 2.5 “Plan to support the integration of biodiversity information into policy and decision-making process” of your original proposal as a reminder of your original commitments.

As part of that process, we request you to provide us with a summary of how you have used these data within the decision-making process and we have included some guiding questions below to help with that process. Please note that if your dataset has been combined with other datasets in analyses that guide the decision-making process, then this should be recorded too.

Description

Has your project been successful in integrating data within the policy-making process?

Where did the demand for these data come from?

If yes, which policies have been developed using your data?

If no, what were some of the challenges you faced in getting your data into those processes?

Did you have a biodiversity data integration plan from the beginning of your project? If so, did you have to adapt your plan as the project progressed and why did you have to make those alterations?

In what format are your data being used i.e. what were the analyses, if any, that you needed to perform on the data to ensure that they was in a format accessible to policy-makers?

What level of communication has there been with the relevant policy stakeholders i.e. by which means? With what regularity? And, how critical have these interactions been for the development policy-relevant analyses?



This programme is funded by the [European Union](#)

What additional support (resources, tools, network, training) would be needed for your project to ensure the flow of information from mobilisation to decision-making?

How would you improve on your own processes in the future to improve data integration in the future?

Data may serve other purposes other than for policy-making and these are as valuable. How was your data used for other purposes e.g. development of training materials, scientific publications, communication activities etc?

Supporting materials

As part of our reporting, we request you to provide us with a copy of any materials highlighting data use on your dataset, either on its own or in combination with other datasets. This could be in the form of:

- Reports – governmental, ministerial, non-governmental organisations, international policy-making bodies
- Policy briefs
- Scientific publications
- Outputs from analyses that will be used in the future e.g. species distributions maps and other spatial analyses
- Education/communication materials

Please provide a valid dataset to the doi. Where the doi is not known, please state why.

Name of resource	Type of resource i.e. report, policy brief, scientific publication, analysis output, education materials, communication materials, other (please specify)	Dataset doi	Link to document or publication citation
Chapter 8 – Arachnida and other Invertebrates of the Matobo Hills	Annotated checklist and notes on the Arachnida of the Matobo Hills,	https://www.researchgate.net/profile/Moira_Fitzpatrick2	FitzPatrick, M.J. 2018. Arachnida and other invertebrates of the Matobo Hills in Cotterill, F.P.D., FitzPatrick, M.J, and Dupree, J. (eds). The Natural History of the Matobo Hills. Matobo Conservation Society. Pg 87-114
Dambari Wildlife Trust's Matobo Biodiversity Monitoring Project Newsletter	Educational and conservation programme conducted at schools in the Matobo Hills where the training has focused on insects and Arachnids.	See Attached Document	MBMP Newsletter 7(3): 1-8 https://www.facebook.com/Dambari-Wildlife-Trust-217258968296906/
Relationship between the Lycosidae and Ctenidae (Araneae) in the Matobo World	To be presented at RAYS Trust symposium	Abstract not available as yet	Publication of the Abstracts will be available in the future on www.naturalhistorymuseumzimbabwe.com



Heritage Site	Ethnozoology, a tool for research and conservation of Heritage: Case study Matobo World Heritage Site. 6 th March 2019 at the Natural History Museum		
The natural history and biogeography of the genus <i>Thomisus</i> (Araneae:Thomisidae) in the Matobo Hills	To be presented at RAYS Trust symposium Ethnozoology, a tool for research and conservation of Heritage: Case study Matobo World Heritage Site. 6 th March 2019 at the Natural History Museum	Abstract not available as yet	Publication of the Abstracts will be available in the future on www.naturalhistorymuseumzimbabwe.com
The habitat preferences and seasonal activities of <i>Stenaelurillus termitophagus</i> in the Matobo Hills	UZ BSc biological Sciences honours project by Tinashe Manyanhaire		This project is yet to be submitted as partial fulfilment of his honours degree.
Change in the Arachnid Fauna over a period of twelve years that has been revealed by this dataset.	This will be in a series of papers highlighting the change and reduction that has occurred in the abundance of species that this data set has revealed		On completion of this work it will be presented to National Parks, The Rural District Councils and the environmental agencies and all Matobo World Heritage Stakeholders as a matter of urgency to try and incorporate better management policies for the environment.
Through forums like the Matobo Management Committee, RDC environmental programmes and Education programs continued to inform	Attending regular meetings and continue with education programs		Matobo Conservation Society Newsletters, Dambari Wildlife Trust Education Programs, Newsletters and Research Council Meetings, Matobo Management and Stakeholders Meetings



the stakeholders and policy makers about environmental issues in in this World Heritage Site			
Description of New Species from the Matobo Landscape	A number of new undescribed species have been discovered in the Matobo Hills		These new species will be described in a number of publications and additional names added to the checklist.
General papers on the Natural History and habitat preferences of various Arachnids to gain an overall understand of the ecological roll of this important faunal group.			This will be a series of publications that will then be linked to the data set on the GBIF website.
Continuous and ongoing monitoring of the Arachnid fauna in the Matobo Hills			With BGIF the data set of Arachnids is available for scientists and conversations to use and feed into ecological and conservation programs. This data set will be continuous updated as we add to the collection.

3.6. Events organized as part of the project

List all the events that have been organized as part of your project. Please provide links to any documents or webpages documenting the use in the "Sources of verification" column. Add as many rows as needed.

Full title	Organizing institution	Dates	Number of participants	Sources of verification
Data Quality, Data Cleaning and Data Sharing principles	Natural History Museum of Zimbabwe	16-19 January 2018	35	https://www.facebook.com/NHMZimbabwe/
Data use and Decision making workshop	Natural History Museum of Zimbabwe	25-29 June 2018	22	https://www.facebook.com/NHMZimbabwe/
GBIF stakeholders feedback meeting	Natural History Museum of Zimbabwe	22 January 2019	30	https://www.facebook.com/NHMZimbabwe/





Museum Staff Feed back and capicity inhancenent meeting	Natural History Musuem of Zimbabwe	22 Januanry 2019	14	





4. Updated calendar for the BID project implementation and evaluation period

The calendar should be completed in the same way as in the Full Project Proposal, but should include any expected changes. Provide reasons for any expected changes in section 4.1 'Explanatory Notes'.

Implementation period start date and end date (dd/mm/yy)																
Activity	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Notes
Early Progress evaluation and reporting		x														Achieved
Mid-term evaluation and reporting							x	x								Achieved
BID Capacity Enhancement workshop – Data mobilization and publication (Online training - Participation is mandatory)																Waiver given
BID Capacity Enhancement workshop – Data user					x											Workshop attended in Cape Town
Update and Install the necessary software			x													Achieved
Capture undigitalized records into excel	x	x	x	x	x	x	x	x	x	x	x					4271 records captured
Clean and refine data, Geo-reference localities and confirm taxonomy with experts			x	x	x	x	x	x	x	x	x	x	x	x	x	Geo-referencing achieved. 280 species documented. Identification of some species still ongoing due to lack of updated taxonomic revisions
Data analysis and reports compilation									x	x	x	x				Achieved
Distribute reports to end users														x	x	Various Publications available to end users and future publications will be made available to end users
Publish data to GBIF								x	x	x	x	x	x	x		280 records published to GBIF from 48 families
Plan and host end users workshop													x	x		Hosted on 22 January 2019





Evaluation period start date and end date (dd/mm/yy)				
Activity	1	2	3	Notes
<Activity name>				
<Activity name>				

4.1. Explanatory notes:

The 4271 specimen lots that have been digitized comprising 286 species. This checklist has been published on the GBIF portal. Many of the species in this checklist were juvenile making identification to species difficult and many have been recorded from only one or two localities thus making the production of maps futile. There are plans to use this data in a different format and produce detailed publications on various aspects of the Arachnid fauna of the Matobo Hills. This will include notes on natural history, habitat preferences and will include distribution maps for those species that have been collected from more than one locality. Once this work has been completed, links to it will be included in the published checklist.



5. Sustainability plans

Explain the approach that will be taken to ensure the sustainability of the project's results after the end of your project (500 words maximum)

This project has been part of a long term biodiversity monitoring programme in the Matobo National Park and many research articles are therefore expected from this data set. These include annotated checklists, natural history and habitat preferences of the various species. This data set will also be updated constantly when new species are recorded from the hills and also when the taxonomy of some groups of spiders have been revised and our specimens can be identified. All the new species that have been recorded in the Hills will also need to be published. This project has allowed for baseline to be made assessable to those wishing to work on this faunal group and we will continue to working with students from the universities to help with analysis of the various aspects of this diverse group.

Regular stakeholder meetings are held concerning the management of the Matobo World Heritage site where updates on this and other projects are given, and join with Dambari Wildlife Trust for their conservation education programmes in the Matobo Hills.

The results from this dataset, now that the project has been completed, have revealed that there has been a change in the Arachnid fauna in the Matobo hills showing that spiders can be used as an indicator group. This change over time will be written up in a series of papers and presented to the Environmental Agencies responsible for the management of this landscape as this environmental change urgently need to be addressed. Therefore there will be close liaison with these agencies in the near future.



6. Beneficiaries/affiliated entities and other cooperation

6.1. Relationship with project partners

Please describe the relationship between your project coordinating team/institution and your project partners, and with any other organisations involved in implementing your BID project.

Education projects are conducted jointly with Dambari Wildlife Trust, as well as presentations made at their Research Advisory Group biannual meeting. Collaboration also exists between Matobo Conservation Society, ZimParks and the Natural History museum as we are involved in joint projects in the Matobo Hills. Students from the National University of Science and Technology and the University of Zimbabwe are on attachment and are assisting in these GBIF projects.

6.2. Links to other projects and actions

Where applicable, outline any links and synergies you have developed with other actions, e.g. GBIF nodes, other BID funded projects, etc. If your organization has received previous grants in view of strengthening the same target group, to what extent has your BID project been able to build upon/complement the previous project(s) ?

The Natural History Museum hosted a workshop which including all three GBIF projects from the Natural history Museum and the GBIF National Grant for Bindura University of Science Education, National Herbarium and Forestry Commission. This was an important opportunity to exchange information and form collaborations between all partners. Since this workshop members from the Natural History Museum have been working with Bindura University to create a GBIF node for Zimbabwe.

7. Visibility

Please refer to the [BID guidelines](#).

7.1. Visibility of the BID project

How is the visibility of your BID project being ensured?

Short summary

The project has been posted on the Natural History Museum of Zimbabwe website page and Facebook page

Sources of verification

<http://naturalhistorymuseumzimbabwe.com/arachnology/>

<https://www.facebook.com/NHMZimbabwe/?ref=bookmarks>

7.2. Visibility of the EU contribution

How is the visibility of the EU contribution being ensured within your project implementation?

Short summary

Sources of verification



This programme is funded by the [European Union](#)

<BID project id>

<Start and end date of the reporting period>



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