



BID Africa 2017 – National Grant Template

Midterm narrative report

Instructions

- Fill the template below with relevant information. If no result has been achieved on a specific point, please indicate it as “no result achieved yet” and **indicate 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 BID@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

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2. Project Information

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

Livingstone Museum

2.2. Main contact person and role:

Clare Mateke – Project Lead

2.3. BID proposal identifier:

BID-AF2017-0301-NAC

2.4. Project title:

Mobilising Bat Occurrence Data in Zambia

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

1st October 2017 – 31st May 2018

2.6. Country in which the activities take place:

Zambia

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)

The activities implemented so far during the project are as follows:

- 1) Two Research Assistants were recruited for the project. Advertisements were sent out in October and this was followed by interviews and the two successful applicants started work on 1st November 2017 and are employed for 12 months. They will be assisting with the digitisation and cleaning of the bat biodiversity data that is to be published, as well as collating literature on Zambian bats and helping to prepare distribution maps for the different bat species.
- 2) The capacity self-assessment form was filled and submitted in November.
- 3) A project kick-off meeting was held on 9th November 2017 with one project advisor from project partner Bats without Borders and Livingstone Museum staff present, including newly recruited Research Assistants, Natural History Department Staff and administrative staff. The meeting resulted in revised project schedule and a schedule of activities and responsibilities for the project. Training plans, financial issues and reporting criteria and deadlines were also discussed.
- 4) Two computers, measuring equipment and some molecular extraction materials were acquired for the project. The computers are being used for collating literature and will be used for digitising and cleaning the biodiversity data, while the measuring equipment is being used for confirming identities and measurement details relating to the bat specimen collection. The molecular extraction equipment will be used to extract tissue samples for molecular analysis to help confirm the species identity of the specimens, thereby improving the quality of the data.
- 5) The Project Lead attended the GBIF Capacity Enhancement Workshop on Biodiversity Data Mobilisation in Cape Town from 4-7 December 2017 as well as associated online learning before and after. Much useful knowledge and new skills



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were learnt concerning project planning, digitisation, data cleaning and publishing of biodiversity data. New contacts were also made which are likely to prove very useful in future both during and beyond the project.

- 6) The Project Lead and two Research Assistants attended training workshops in Graphic Information Systems (GIS) and molecular methods in Portugal at the CIBIO In-Bio research centre and laboratory, which is one of the project partners, from 11-19th December 2017. Skills learnt will be put to use later in the project when confirming the identities of bat specimens through molecular analysis and when preparing distribution maps for the species.
- 7) An extensive collation of literature on Zambian bats is currently underway and has been the key focus for the Research Assistants so far. It is not yet complete, but is making good progress. It is helping to give the project and the new Research Assistants useful background information for the project and it is hoped some of the literature can be used to extract data for mobilisation.
- 8) The Project Lead conducted a workshop on Biodiversity Data Mobilisation at the Livingstone Museum from 10-12 January 2018 to disseminate the knowledge acquired at the GBIF workshop in Cape Town. Participants included 5 members of staff from Livingstone Museum and one from the Department of National Parks and Wildlife, a local project partner. This will assist the staff members helping with the digitisation, cleaning and publishing of the data in the current project and hopefully will assist and guide others who may plan future data mobilisation projects.
- 9) Experts from the Harrison Institute and Bats without Borders, both project partners, conducted a training workshop in bat identification and taxonomy at the Livingstone Museum from 15-19 January 2018 for the Project Lead, Research Assistants and other Natural History Department staff. During the workshop the trainees learned skills in using various kinds of identification keys, were introduced to new resources and learnt about important features for identifying bats as well as various standards and techniques used in measuring specimens. During the workshop the identities of about 50% of the bat specimens in the Museum were confirmed. The team also had the opportunity to catch and learn how to identify live bats in the field during a one-day field trip. The trainers also held a meeting with the Livingstone Museum Director and Natural History staff to discuss future collaboration possibilities including improved online presence and publicity, capacity building, funding options for future projects, and staff development. These were both within and beyond the capacity of the project.
- 10) From mid January to early May 2018 the project team worked on checking and updating the identities and taxonomy of the bat specimens in the Museum using morphometric methods and latest available reference materials.
- 11) From March to May 2018 the project team collected tissue samples from 483 bat specimens in the collection which will be sent for molecular analysis to help confirm the species identities of the bats. The tissue samples are to be sent to the CIBIO In-Bio research centre and laboratory, University of Porto in Portugal, but the team is still processing an export permit through relevant authorities.
- 12) From February to March 2018 the project team prepared a project website to increase publicity about the project and hopefully improve networking and chances of future collaborative projects.
- 13) The Project Lead attended the GBIF Capacity Enhancement Workshop on Data Use for Decision Making in Cape Town from 9-13 April 2018 as well as the associated



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online learning before and after the workshop. Useful skills relating the data use were learnt, including mainstreaming biodiversity data, ecological niche modelling and assessing the conservation status of species. New contacts were made with other workshop participants which will prove useful during later parts of the project.

- 14) The project team continued collating literature relating to Zambian bats.
- 15) In May 2018 the project team georeferenced the bat data from the Livingstone Museum, as much of it did not have coordinates. The team then started cleaning up the data in preparation for publishing.
- 16) The Project Leader continued discussing a data publishing agreement with the South African Biodiversity Institute (SANBI). This was due to be ready by the end of May or early June 2018.
- 17) By the end of May 2018 the first dataset, "Livingstone Museum Bat Collection", was being prepared for publishing by transforming it to the Darwin Core Standard and cleaning up the data.
- 18) Meanwhile, the team was provided with login details for publishing through SANBI's IPT and the dataset will be published by the first week of June 2018.

The outcomes of these activities are as follows:

1. Staff have been trained in GIS, molecular methods, data mobilisation, bat identification and taxonomy, and data use. These skills will go a long way towards achieving the aims of the project, particularly in improving the quality of the data that will be published.
2. Project team members have had the opportunity to network with other project leaders, participants, mentors, trainers and project partners, which will be very beneficial during and beyond this project in terms of technical support, ideas for new projects, staff development and capacity building.
3. At least one local project partner benefitted from the dissemination workshop on biodiversity data mobilisation.
4. Through networking and literature collation, the project team have discovered new materials relating to the subject matter that will help in improving the quality of the data by confirming the identity of the specimens as well as discovering new sources of data held in various institutions.
5. The bat collection at the Livingstone Museum is now updated taxonomically and the identifications are more accurate. The project is still awaiting the results of molecular analysis to further confirm the species identities. Tissue samples are ready for this process.
6. Publicity of the project has been improved through the creation of a project website.
7. The biodiversity data on bats in the Livingstone Museum has been georeferenced and cleaned, ready for publishing.
8. The first dataset will be accessible online for data users by the first week of June 2018.



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3.2. Progress against expected milestones:

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

Expected milestones/activities	Completed? Yes/No	Explanatory notes	Sources of verification
Completed capacity self-assessment questionnaire for national biodiversity information facilities https://www.gbif.org/document/82277/capacity-self-assessment-guidelines-for-national-biodiversity-information-facilities (EN) https://www.gbif.org/document/82782/auto-evaluation-des-capacites-pour-les-systemes-nationaux-dinformation-sur-la-biodiversite (FR) (Early Progress report milestone)	Yes		Submitted to GBIF
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	Livingstone Museum was registered and endorsed	Visible as a publisher on GBIF website
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	Workshop attended. Assignments completed.	Workshop photos at: https://www.flickr.com/photos/44353813@N02/sets/72157667087850829/page3 . Assignments submitted through e-learning portal.
Knowledge dissemination activities have been scheduled following the first BID Capacity Enhancement workshop (Early Progress report milestone)	YES	Carried out dissemination workshop for staff and one project partner. Dropbox with resources shared with collaborating partners.	Training report
At least one dataset has been	NO	Data publishing agreement	Dataset "Livingstone Museum Bat





published to GBIF.org (Midterm report milestone)		with host SANBI still in progress. IPT access provided.	Collection" to be accessible by first week of June.
The data users identified in the full proposal have documented their intended use of the mobilized data and provided early feedback (Midterm report milestone)	NO	Discussions with the Department of National Parks and Wildlife are underway. Meanwhile, Bats without Borders and Livingstone Museum are ready to work on the Zambian Bat Atlas as soon as the datasets are published.	



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
Two research assistants recruited	Recruitment of research assistants	Yes	Advertisements sent out, applications received, interviews conducted, 2 research assistants recruited on 1 st November 2017.	Interview report
Project roles, responsibilities and timescales agreed at kick-off meeting	Kick-off meeting	Yes	One staff member from Bats without Borders met with Livingstone Museum staff to discuss project logistics, training plan, assignment of reporting duties and deadlines	Meeting minutes Detailed roles/ responsibilities and Gantt chart with timeline
Tissue samples collected from existing museum specimens and core team (3 people) trained in basic molecular methods to verify species identification.	Molecular training and analysis	Yes	CIBIO-InBIO provided introductory training to core team in molecular methods. 483 tissue samples were extracted from the bats in the Livingstone Museum collection.	Training report List of tissue samples collected
Core team trained in GIS and data mobilisation methods	Core team GIS training workshop	Yes	CIBIO-InBIO and Bats without Borders provided training to core team in geographic information systems.	Training report
List of Zambian bat research literature documented	Bat literature collation	No	List of publications on Zambian bats is being compiled	
Core team (1 researcher and 2 research assistants from Livingstone Museum trained in bat identification by morphological methods	Bat identification training workshop	Yes	Two other staff members joined in for part of the training. In addition to training on identification of museum bat specimens, the team carried out one day of field work to supplement the training.	Training report
Record of bat collections in the Livingstone Museum taxonomically updated and expanded to include morphometric	Update Livingstone Museum specimen data	Yes	Remaining records of bat specimens were digitised. Bat morphometric data was collected and the taxonomy of the	Livingstone Museum bat collection fully digitised and taxonomically updated using



data.			specimens was updated in line with most recent taxonomic information.	morphometric data.
Digital record of Zambian bat occurrence data held by museums outside of Zambia and research carried out in Zambia	Collation of additional Zambian bat records	No	A few museums with African bat collections have been contacted to ask if the project can get hold of their data relating to Zambian bat specimens.	
Occurrence dataset for ~500 bat specimens from Livingstone Museum published online.	Transforming, uploading and publishing occurrence data	No	Hosting agreement with SANBI in progress. Bat data from ~500 Livingstone Museum specimens in process of being transformed and cleaned for publishing. IPT login details received for publishing data Dataset to be published by first week of June.	

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
Livingstone Museum Bat Collection	Livingstone Museum	South African National Biodiversity Institute (SANBI)	First week of June 2018	Hosting agreement under discussion. IPT login details provided. Dataset being prepared for publishing.

3.5. Examples of use of biodiversity data available through GBIF

Use the table to document use or planned use of data available through GBIF as part of your project. You may want to refer to the section 2.5 “Plan to support the integration of biodiversity information into policy and decision-making processes” of your BID full proposal. Please provide the DOI for datasets downloaded from GBIF in the “Contributing dataset(s)” column. Briefly describe how the data contribute or are planned to contribute in the “targeted application” column (ca. 50 words). Provide the date or approximate timeframe in months for the completion of activity in the “Date/time frame” column. Timeframe indicated may be after the completion of the project unless targeted application is one of the deliverables 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.



Targeted application	Data user	Contributing dataset(s)	Date/time frame	Sources of verification	Notes
All datasets	Livingstone Museum and Bats without Borders	Creation of Zambian bat species distribution maps, resulting in an atlas of Zambian bats	By Dec 2018	Not yet done	Awaiting publishing of data
	Livingstone Museum/DNPW	Development of species checklist of Zambian bats for the country and selected national parks	By Dec 2018	Not yet done	Under discussion with DNPW
	Livingstone Museum/project partners	Promoting the use of openly accessible biodiversity data on Zambian bats	By Dec 2018	Not yet done	

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
Kick-off meeting	Livingstone Museum	9 th November 2017	7	Minutes
GIS Training Workshop	CIBIO In-BIO/Bats without Borders	11-17 December 2017	3 trainees + 2 trainers	Training report
Molecular Methods Training Workshop	CIBIO-In-BIO	12-19 December 2017	3 + 5 trainers	Training report
Biodiversity Data Mobilisation Dissemination Workshop	Livingstone Museum	10-12 January 2018	6 participant + 1 trainer	Training report
Bat Identification and Taxonomy Training Workshop	Harrison Institute/Bats without Borders	15-19 January 2018	5 trainees + 2 trainers	Training report
Collaboration meeting	Harrison Institute/Bats without Borders/Livingstone Museum	18 January 2018	8	Minutes





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
Recruitment of research assistants	X	X														Done
Fill capacity self-assessment forms		X														Done
Kick-off meeting		X														Done
BID Capacity Enhancement workshop – data mobilization and publication			X													Done
Molecular training and analysis/Core team GIS training workshop			X	X	X	X										In progress
Zambian bat literature collation			X	X	X	X	X	X	X							In progress
Dissemination workshop on data mobilisation and publication				X												Done
Bat identification training workshop				X												Done
Early Progress evaluation & Reporting				X												Done
Update Livingstone Museum specimen data				X	X	X										Done
Collation of additional Zambian bat records				X	X	X	X	X	X	X	X					In progress
BID Capacity Enhancement workshop – Data use							X									Done
Creation of DNA Library for Zambian bats							X	X	X	X						
Transform, cleaning and publishing specimen occurrence data						X	X	X	X	X	X	X				In progress



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<BID project id>

<Start and end date of the reporting period>



Mid-term evaluation & reporting									X								Done
General GIS training workshops														X	X		
Creation of call data Library											X	X	X				
Preparation of maps and atlas for Zambian bats											X	X	X	X	X		
Preparation of Zambian bats paper											X	X	X	X	X	X	
Stakeholder meeting														X			



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<BID project id>

<Start and end date of the reporting period>



Evaluation period start date and end date (dd/mm/yy)				
Activity	1	2	3	Notes
Evaluation and reporting meeting		X		
Final evaluation and reporting	X	X	X	

4.1. Explanatory notes:



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5. Beneficiaries/affiliated entities and other cooperation

5.1. 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.

The relationship with project partners has been good and productive. Local project partner Copperbelt University, helped advertise for the research assistant position for the project, which resulted in good candidates for recruitment.

The project team has been in discussion with local project partner Department of National Parks and Wildlife concerning historic research data in form of literature and research permits.

For the workshop organised by the Project Co-ordinator to disseminate knowledge gained during the BID Biodiversity Data Mobilisation workshop in South Africa, one participant was invited from local project partner Department of National Parks and Wildlife.

International project partners, including Bats without Borders, CIBIO-InBio (University of Porto) and the Harrison Institute have provided capacity building in form of several training workshops, both in and outside the country. There have also been fruitful discussions concerning ways of increasing the publicity about the project and future collaboration ideas.

5.2. 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) ?

Discussions have been ongoing with representatives from the South African National Biodiversity Institute (SANBI) concerning hosting of the biodiversity data to be published.

The Project Leader benefitted from meeting with other project leaders, mentors, trainers and GBIF personnel during the Biodiversity Data Mobilisation workshop and the Data Use of Decision Making workshop, both held in Cape Town, South Africa. These links are likely to prove useful in future, both within and beyond the project period.

6. Visibility

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

6.1. Visibility of the BID project

How is the visibility of your BID project being ensured?

Short summary

The project has been publicized through the Project Co-ordinator's (Livingstone Museum) Facebook page

Project partners Bats without Borders, the Harrison Institute and CIBIO have also publicized the project through their websites and social networks

Information has been sent to BID to update the project website on GBIF



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An independent project website has been created in order to improve publicity about the project. The link has been shared with all project partners.

Sources of verification

<https://www.facebook.com/livingstone.museum/>

<http://www.facebook.com/batswithoutborders/>

<https://www.gbif.org/project/32mmLbZEtiGQgiayAg6QQ/mobilizing-bat-occurrence-data-in-zambia>

<https://batprojectzambia.wordpress.com>

<https://cibio.up.pt/projects-1/page/563>

<https://www.facebook.com/Harrison-Institute-Centre-for-Biodiversity-Research-193357067346886/>

6.2. Visibility of the EU contribution

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

Short summary

We are using the EU logo in public communications wherever possible and stating that the BID programme is being funded by the European Union.

Sources of verification

Training reports sent with early progress report

<https://www.facebook.com/livingstone.museum/>

<https://batprojectzambia.wordpress.com>

Director signature _____

Project Lead signature _____

Name of the contact person for the BID Project: __Clare Mateke_____

Date report sent by email in Word format to bid@gbif.org for pre-approval: __30-05-2018__

Date report sent by post to GBIF Secretariat: _____



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An independent project website has been created in order to improve publicity about the project. The link has been shared with all project partners.

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<https://www.facebook.com/livingstone.museum/>

<http://www.facebook.com/batswithoutborders/>

<https://www.gbif.org/project/32mmLbZEtiGQgiayAg6QQ/mobilizing-bat-occurrence-data-in-zambia>

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Director signature _____

Project Lead signature _____

Name of the contact person for the BID Project: Clare Mateke

Date report sent by email in Word format to bid@gbif.org for pre-approval: 30-05-2018

Date report sent by post to GBIF Secretariat: 18/09/2018



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