



Angolan National Node Africa Regional Node Meeting



By Esperança da Costa

1

Domingos Neto - Supervising

Esperança da Costa - Node Manager

Domingos António Francisco - Member of data-base team

Manuela Pedro - Member of data-base team

Tomásia Saleth - Member of data-base team









Data mobilization plans and progress

Editores de dados

- Museu Nacional de História
 Natura
- Instituto Superior de Ciências da Educação da Huíla
- SASSCAL Angola
- Instituto de Investigação Agronómica – IIA
- Instituto Nacional de Biodiversidade e Áreas de Conservação, INBAC
- Instituto de Investigação Científica Tropical,
- ISCED do Lubango-Universidade Mandume ya Ndemufayo
- Centro de Botânica, UAN

Tipos de dados publicados sobre Angola no GBIF

Tipos de colecção	Num. de registos
Herbário	85 360
Fungos	601
Mamíferos	4641
Aves	58 821
Herpetológica	7269
Peixes	9227
Artrópodes	11 480
Invertebrados	5425
Microorganismos	220
Não classificados	1046
Total	148 573





Node services



Providing training in digitalyzing, publication, data quality, data use and improving



Helping others to publish the data (helpdesk support)



Support for participation project







Data cleaning at the node level

Needs, priorities and actions

NEEDS

- 1-capacity building in node strategic plan writing
- 2-capacity building in data use
- 3-capacity building in data cleaning for quality data achievement

PRIORITIES

- 1-Elaboration of Node Strategic
- 2- Purchase of IT equipment
- 3- Set a Communications strategy

ACTIONS

- 1-Organising a National workshop with
- 2-To have a Mentoring Project with African Partners an
 - Portuguese Node
- 3 -Liasion with others Institutions.





The Faculty of Science is using our data, during the Master Degree Programme on Environment Governance





Support for national and regional initiatives

Concept note made with Portugal Node collaboration and a final project proposal in a "Consolidation the Angolan participation in GBIF through community engagement at node strengthening"

Also with Benin Node Coordination we participate in a project proposal





Regional Vision

GBIF Africa is in a good way mobilising and using GBIF data and it is a big challenge









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Regional Vision

GBIF Africa is in a good way mobilising and using GBIF data and it is a big challenge







Updates about GBIF-ARCOS Network Node

Mr. Jean Paul Kubwimana, Node Manager Africa Regional Node Meeting, June 2020



Global Biodiversity Information Facility

Head of Delegation : Mr. Paul Mafabi (pmafabi2@gmail.com)

Node Manager: Mr. Jean Paul Kubwimana (jkubwimana@arcosnetwork.org)

Scientific Outreach / communication: Mr Janvier Hitimana (jhitimana@arcosnetwork.org)

Data manager: Mr Martin Sindikubwabo (<u>msindikubwabo@arconetwork.org</u>)

IT person: None (Still a gap)



Data mobilization plans and progress

Since 2012, more than 81,451 biodiversity records (occurrence, botanical collections, and sampling events) within 11 datasets published on http://arbmis.arcosnetwork.org/out.listdatasets.albertine.php, from 4 Institutions namely ARCOS Network, NBDB-Uganda, CRSN-Congo, and CoEB-Rwanda. The pick was in 2018 when we published data mobilized between 2016 and 2017 funded by BID programme though GBIF

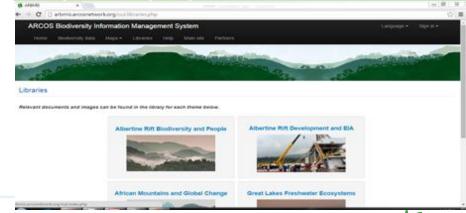


Node services

Helping others to publish their data (helpdesk support)	Yes
Providing training in digitization, publication, data quality, data use	Yes
Support for/participation in projects	Yes
Data cleaning at the node level	Yes
Node portal/website	Yes



Training of 16 fresh graduates on data quality and data use (2019). The plan is to train them of data digitization and publication (2020)





Needs, priorities and actions

NEEDS

- 1. Recruitment of an IT specialist to complete the team
- 2. Complete the training of the team on data quality, data use and publication
- 3. Produce the Rwanda Wetland Biodiversity status report, the National Wetland master plan and individual Wetland management plans
- 4. Identify National policies and strategies in the AR countries should be targeted to mainstream bioindicators

PRIORITIES

- Mobilize funds and complete the team
- Provide trainings, mobilize and publish data, papers and their metadata
- 3. Produce the Rwanda Wetland Biodiversity status report, The National Wetland master plan and individual wetland management plans

ACTIONS

- Identify potential partners, contact potential donors
- 2. Recruit an IT person and conduct trainings
- 3. Target relevant indicator species mobilize and publish data and reports.
- 4. Mainstream Bioindicators in key policies and strategies



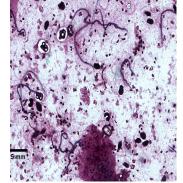
Data use

- •The Ministry of Environment (MoE) in Rwanda: Used data for development of the City of Kigali Wetland Master Plan (2019)
- •ARCOS: produced a technical report using biodiversity data collected from Rweru -Mugesera wetlands complex and the report informed REMA to produce Rwanda's Wetlands profile (2017).





Support for national and regional initiatives



- •The Ministry of Environment (MoE) in Rwanda: Will use the data to produce the National Wetland master plan, and Individual wetland management plans (2021-2022)
- •Rwanda Environment Management Authority (REMA): will use the data to inform the Environment and Outlook report (2019-2020) and the post 2020 NBSAP
- Master and PHD Students will use the data
- •The Ministry of Environment (MoE) and CoEB: Will use the data for the development of Rwanda Biodiversity Information System (RBIS)
- The plan is to explore the same for other 1 to 2 countries of the AR region



Regional Vision

GBIF Africa - A foundation for informed policies and management decisions and sustained economy built on availed and properly used biodiversity data, capacity development and experience sharing







Updates on the main achievements of GBIF Benin



Jean Cossi GANGLO, Node manager

- Node Manager: Prof. Jean C. GANGLO (ganglocj@gmail.com)
- Head of Delegation : Jean C. GANGLO (temporary)
- Outreach / communication: Dr. Augustin K. OUDJI (augustin.aoudji@gmail.com)
- Data manager: Dr. Kourouma Koura (kourakourouma@yahoo.fr)





Data mobilization plans and progress

- More than 260,000 occurrence data published since 2018
- We publish occurrence data, metadata, and checklists
- Data quality are assessed and improved before publication
- Data publications are on daily basis due to an active node team and national partners more and more collaborative



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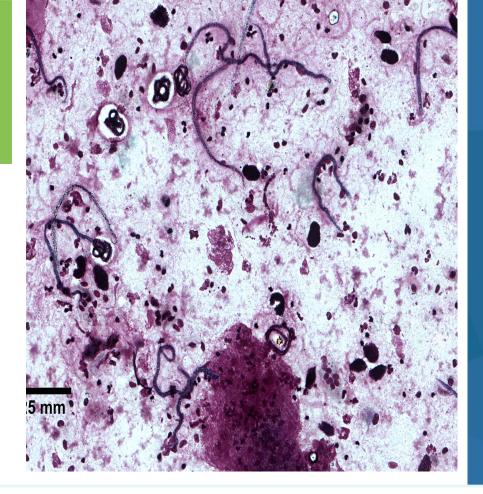


/ Information Facility of Benin (GBIF-Bénin ion et de formation sur la mobilisati la biodiversité pour la conservation le des ressources naturelles du Bén weil Sainte Apouarite d'Abomey-Calavi



Node services

Helping others to publish their data (helpdesk support)	Х
Providing training in digitization, publication, data quality, data use	Х
Support for/participation in projects	Х
Data cleaning at the node level	Х
Node portal/website	Х





Needs, priorities and actions

NEEDS

- 1: In-depth capacity building for more data quality improvement and use
- 2: Financial support
- 3: Infrastructure reinforcement at GBIF Benin level

PRIORITIES

- 1: Identify priority fields of data collection and research
- 2: Identify partners / funders at national, regional and global levels
- 3: Identify priority needs of infrastructure

ACTIONS

- 1: Achieve demand driven data collection and research works
- 2: Fundraising at national level to gain more recognition and funds
- 3: Elaborate and submit joint projects with regional and international

partners





29 use cases are actually available at the following links:

https://www.gbif.org/resource/search?contentType=literature&count riesOfResearcher=BJ

The users are researchers, teachers at universities, students etc.





Support for national and regional initiatives

GBIF Benin is contributing to NBSAP and CBD national reports through collaboration with the national focal point of CBD who was our late Head of delegation





Regional Vision

GBIF-Africa as an active, collaborative, and communicative network, sharing experience among the community members to achieve priority goals of more engagement, data mobilization and data use to support decisions across the continent







GBIF Cameroon

Jean-François MOUSSA



Node Manager:

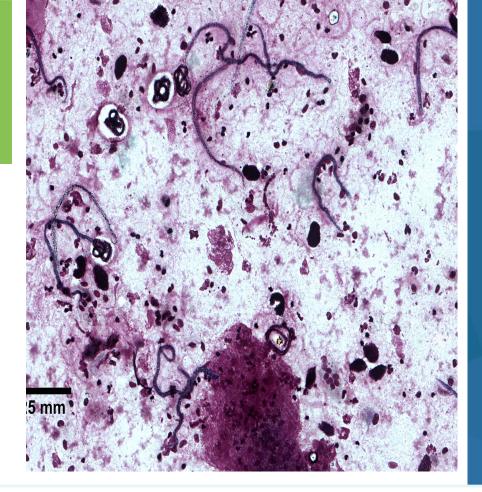
Name: Jean-François MOUSSA

Phone: +237698684584

Email: moussjf@yahoo.fr

IT Person:

Name: Jean-François MOUSSA Phone: +237698684584 Email: moussjf@yahoo.fr





Data Manager:

Name: Jean-François MOUSSA

Phone: +237698684584

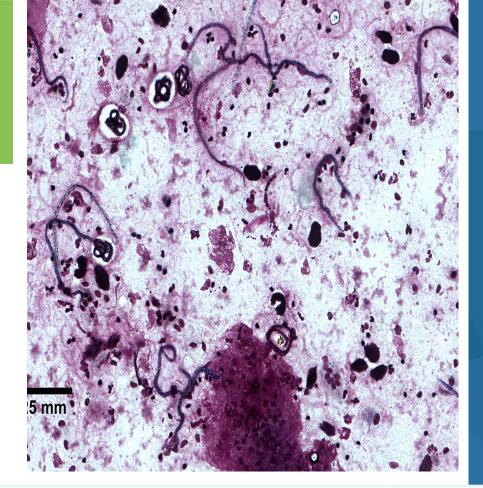
Email: moussjf@yahoo.fr

Scientific Outreach and Communication:

Name: Prof Maurice TINDO

Phone: +237699548324

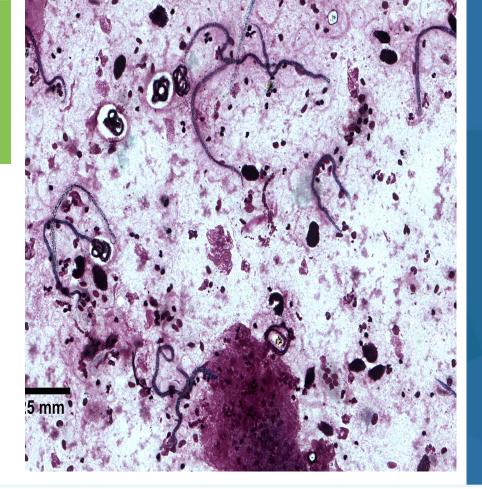
Email: tindodouala@yahoo.com





Head of Delegation: Name: Sylvie FANTA Phone:(+237)697313169/676115001 Email: mfantasylvie@yahoo.com

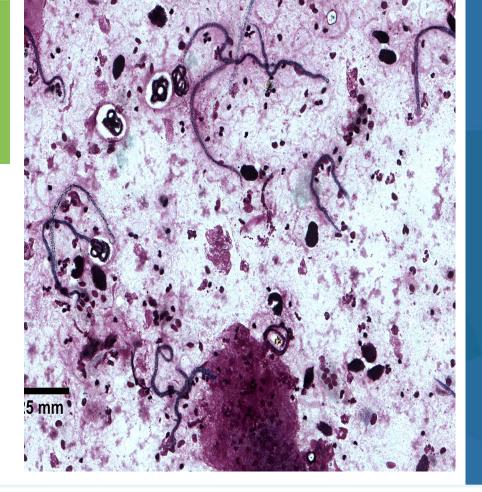
This team is not efficient enough, because you can see, the node manager alone has three roles;





Team and Roles

The strengthening of the node team is envisaged for the near future, with the of the hierarchy.





Number of occurrences published between 2018 and 2020: 7022 occurrences (5218 by eBird, 1644 occurrences by other international institutions and 160 by the Faculty of Sciences of the University of Douala, member of the Cameroon network);





Number of datasets published between 2018 and 2020: 16 datasets including 1 published by a Cameroonian institute (Faculty of Sciences of the University of Douala).

Organization of a capacity building workshop and the mobilization of biodiversity data holding institutions in November 2018.





Enrollment of three new institutions holding data on the national network;

Proposal for a capacity building project on the publication of data for members of the national network.

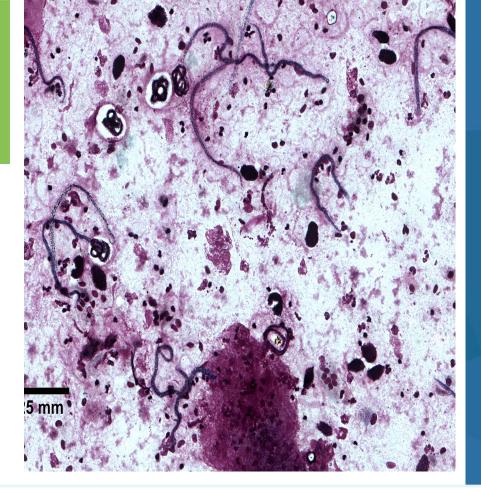
No abundance data, photo trap data or DNA sequences have been published.





Node services

Helping others to publish their data (helpdesk support)	х
Providing training in digitization, publication, data quality, data use	
Support for/participation in projects	х
Data cleaning at the node level	
Node portal/website	Х





Needs, priorities and actions

NEEDS PRIORITIES ACTIONS

1

2

Capacity building of network members on cleaning and publishing data on the GBIF portal.

Operationalization of the national biodiversity information management committee

- Organization of a capacity building workshop for members of the GBIF national node.
- Regular work sessions organization for the scientific committee and validation commission



Needs, priorities and actions

NEEDS PRIORITIES ACTIONS

3

Upgrading of Cameroonian's Biodiversity Information System. Development of new modules and functionalities integrating national needs.



Data use

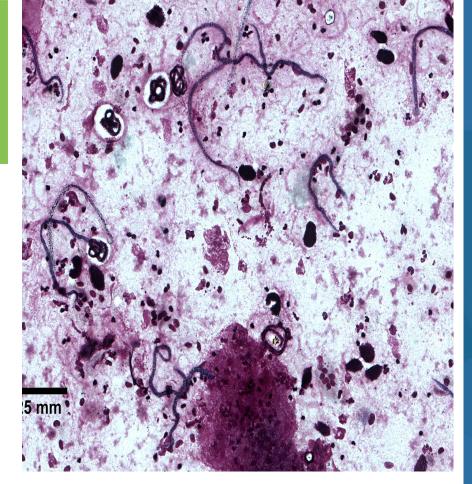
For the moment, the data mobilized by the national node is partially used by the technical departments of the ministry in charge of the environment. They are used to understand some phenomena such as the invasion of watercourses by invasive species.





Support for national and regional initiatives

Although some members of the node participate independently in regional initiatives, the Cameroon node has only participated in a few initiatives at national level. It is in this context that a steering committee bringing together researchers and biodiversity data holders was set up. This node have also set up the national biodiversity information system.





Regional Vision

For the sharing of traditional knowledge on the species of African biodiversity, it will be important to set up a platform including researchers and the various actors of biodiversity on the continent.

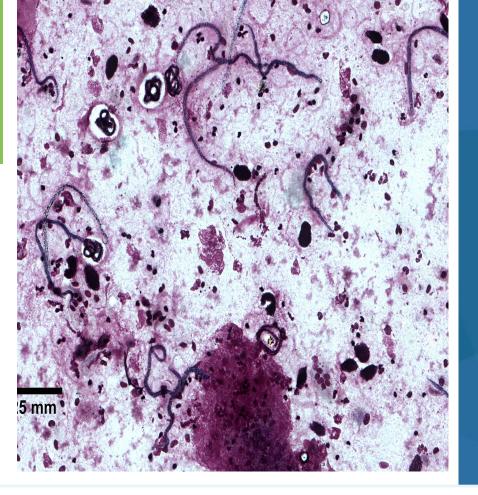








Team and Roles









Node services

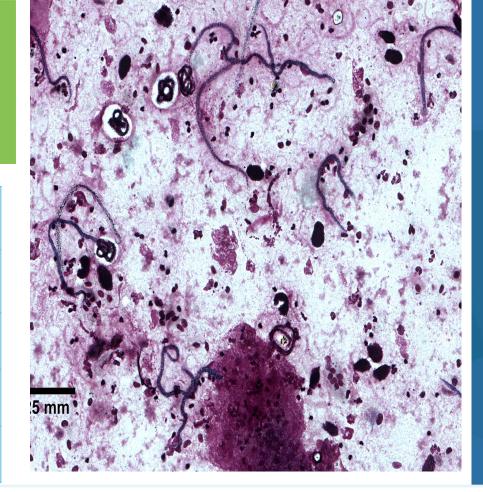
Helping others to publish their data (helpdesk support)

Providing training in digitization, publication, data quality, data use

Support for/participation in projects

Data cleaning at the node level

Node portal/website





Needs, priorities and actions



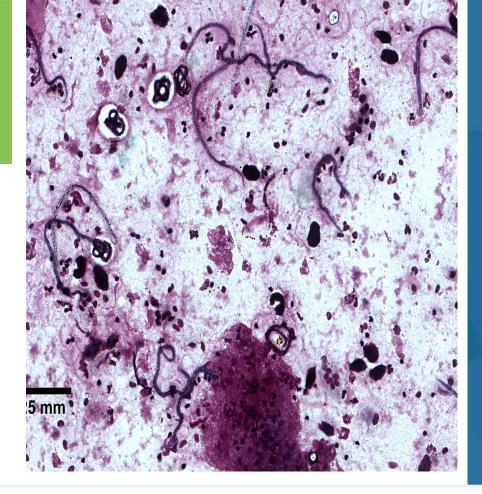








Support for national and regional initiatives





Regional Vision







Angolan National Node por a bandeira **Africa Regional Node Meeting**



Global Biodiversity Information Facility

By Esperanca da Costa

Team and Roles

Domingos Neto-Supervising

- Esperança da Costa
- Node Mannager --
- Domingos António Francisco-Member of data base team
- Manuela Pedro- Member of data base team
- Tomásia Saleth- Member bof data base team



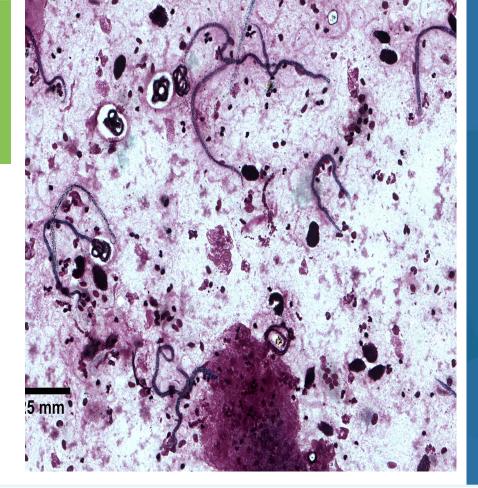
Domingos escrever aqui os dados já publicados, ocorrências desde 2018 Referir os esforços para data quality





Node services

Helping others to publish their data (helpdesk support) Domingos mostrar fotos dos workshops com o Dr Rui Figueira e Daniel	X
Providing training in digitization, publication, data quality, data use	Х
Support for/participation in projects	Х
Data cleaning at the node level	
Node portal/website	





Needs, priorities and actions

NEEDS

- 1-capacity building in node strategic plan writing
- 2-capacity building in data use
- 3-capacity building in data cleaning for quality data achievement

PRIORITIES

•

•

- 1-Elaboration of Node Strategic
- 2- Purchase of IT equipment
- 3- Set a Communications strategy

ACTIONS

- 1-Organising a National workshop with
- 2-To have a Mentoring Project with African Partners an
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The Faculty of Science is using our data, during the Master Degree Programm on Environment Governance



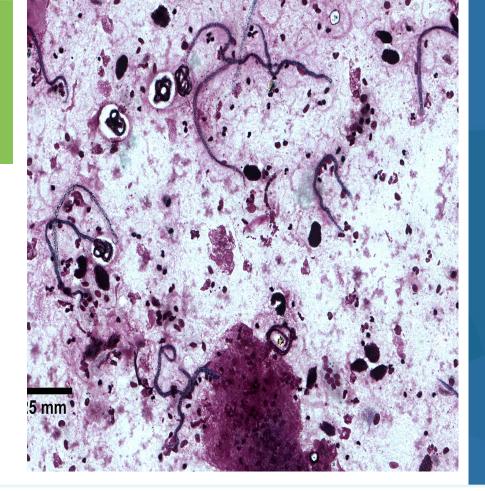


Support for national and regional initiatives

Domingos incluir FOTOs com os estudantes de outras Institutições, incluindo do Mestrado.

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Regional Vision

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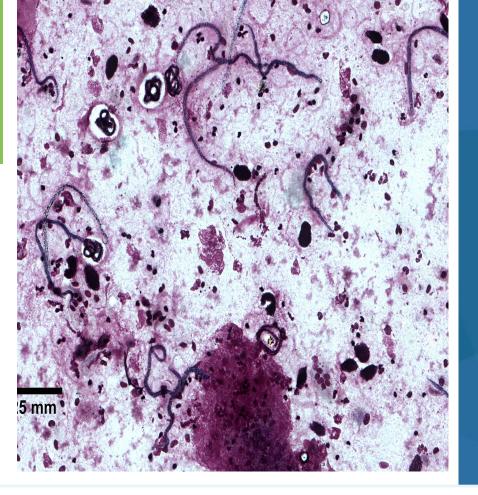








Team and Roles









Node services

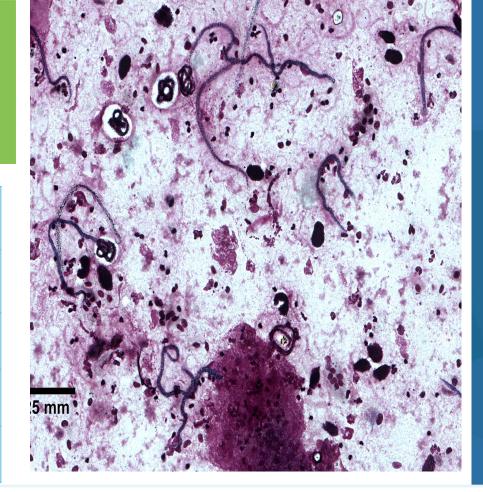
Helping others to publish their data (helpdesk support)

Providing training in digitization, publication, data quality, data use

Support for/participation in projects

Data cleaning at the node level

Node portal/website





Needs, priorities and actions



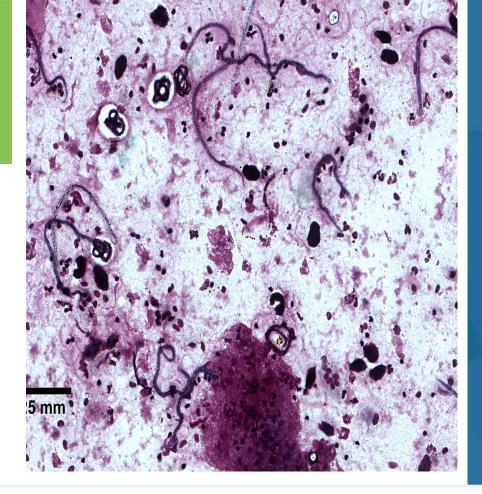








Support for national and regional initiatives





Regional Vision







Endangered Wildlife Trust

Global Biodiversity Information Facility

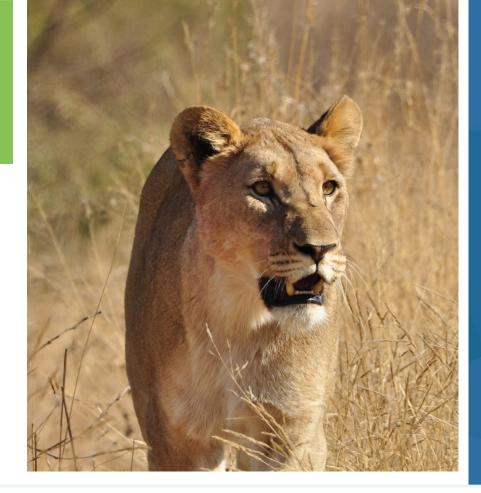
Lizanne Roxburgh

Team and Roles

Harriet Davies-Mostert - Head of Delegation

Lizanne Roxburgh - Node manager

5 other science staff - working on various projects that involve data management, mobilisation and analysis





Data mobilization plans and progress

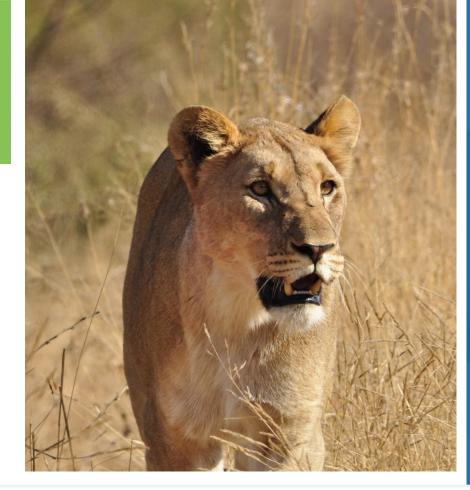
- Mobilized and published: Tracking data from a free-roaming female cheetah released into the Pilanesberg National Park, South Africa (North West Parks)
- **Publishing plans**: Riverine Rabbit occurrence dataset (multi-institutional)
- Engaging with ESKOM (South Africa's power utility) about publishing some of their biodiversity datasets





Node services

Helping others to publish their data (helpdesk support)	Х
Providing training in digitization, publication, data quality, data use	Х
Support for/participation in projects	Х
Data cleaning at the node level	Х
Node portal/website	





Needs, priorities and actions

NEEDS

- Virtual training/ recorded sessions for those that do not/ cannot attend Global Nodes meetings
- Ongoing funding opportunities (e.g. CESP, BID)

PRIORITIES

- Publishing data on threatened or conservationdependent species
- Regional training
- Getting to grips with sampling event data and its potential policy uses (e.g. IPBES, Red Lists etc)

ACTIONS

- Publishing existing datasets on threatened species
- Expanding and improving our e-learning platform
- Developing a sampling event project

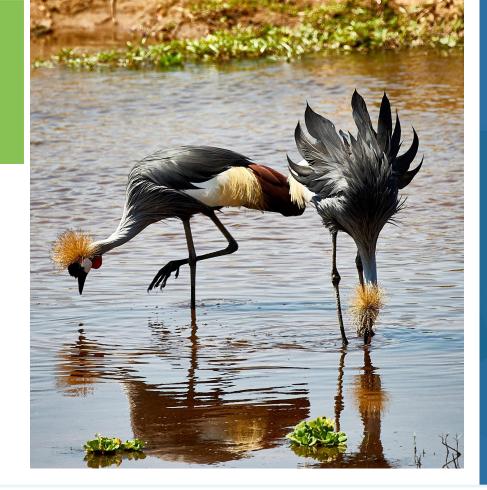


Data use

User communities: NBAs, Red Lists, Conservation Managers, EIA practitioners, Researchers

GBIF datasets:

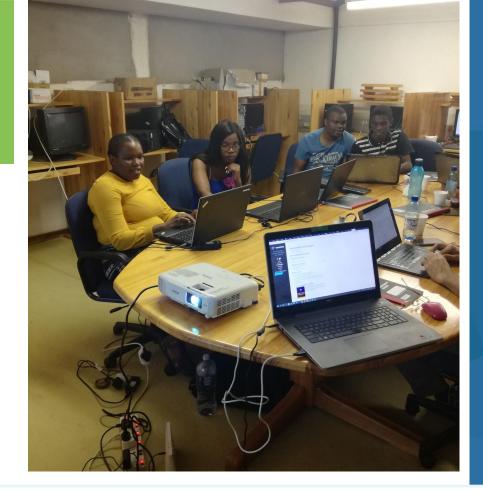
- African Cranes 4557 downloads, 10 citations
- Cheetah tracking 3920 downloads, 10 citations





Support for national and regional initiatives

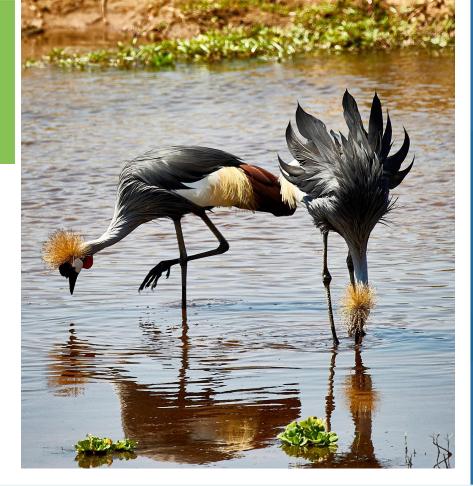
- **GBIF-CESP** biodiversity data management training - Malawi, South Africa, Swaziland, Namibia
- ABC2 project online data management course with >40 participants from Ghana, Malawi, Rwanda, South Africa
- Foundational Biodiversity Information Programme - training course at graduate level on data management in South Africa





Regional Vision

Beyond big unstructured data - GBIF Africa has the skills, resources and vision to design, collect and mobilize structured biodiversity data for sustainable development, conservation and human wellbeing.







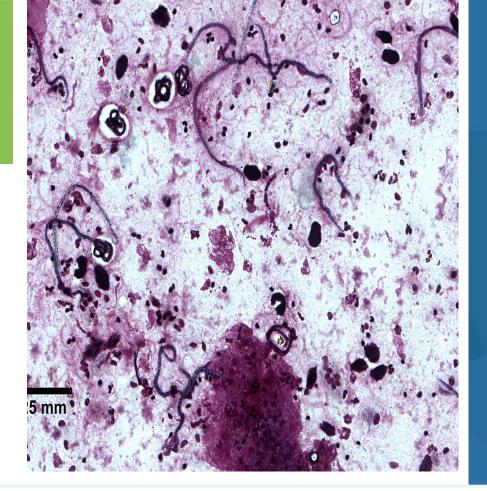
Ghana Biodiversity Information Facility (GhaBIF)

Global Biodiversity Information Facility

Alex Asase, University of Ghana

Team and Roles

- Head of Delegation: Prof. Alfred A.
 Oteng-Yeboah
- Node Manager: Prof. Alex Asase
- Node Assistant: Mr. Anthony Adu-Gyamfi





Data mobilization plans and progress

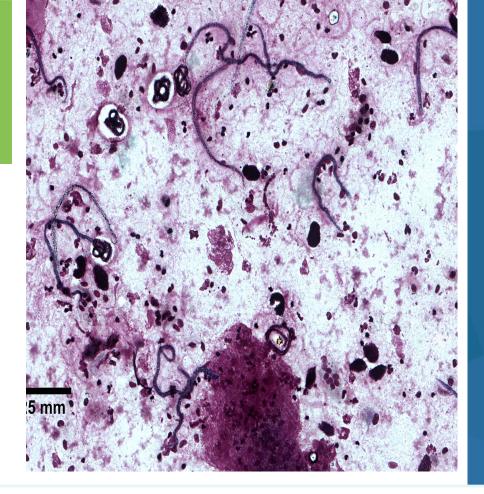
- occurrence data on plants, insects, vertebrates, fishes etc. published via GBIF.org since 2018.
- Basic data quality improvements regarding taxonomy, time and geography achieved before data were published.
- Plans are far advanced to publish abundance / sample-based data on plants.





Node services

Helping others to publish their data (helpdesk support)	Х
Providing training in digitization, publication, data quality, data use	Х
Support for/participation in projects	Х
Data cleaning at the node level	Х
Portal/website	Х





Needs, priorities and actions

NEEDS	PRIORITIES	ACTIONS
Biodiversity data to support conservation and sustainable development.	Mobilize relevant data	 Identify and define priorities for data mobilization. Engage and partner with relevant data holder and user communities. Support mobilization of relevant biodiversity data.
Biodiversity information at science-policy interface.	Promote use of biodiversity information in science and policy	 Prioritise data needs at policy-science interface. Promote integration of biodiversity data into national policy decisions. Support development of user-friendly biodiversity information products.
Capacity to efficiently and effectively mobilize, manage, and use biodiversity data.	Enhance capacity in biodiversity informatics	 Identify critical training and capacity needs and gaps. Promote training and capacity enhancement activities. Maximize opportunities offered by GBIF in training and capacity enhancement.



Data use

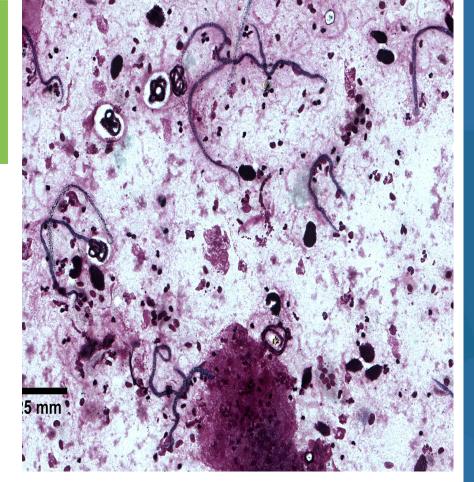
- 24 resources / use cases on modelling, climate change, database, invasives etc available on GBIF.
- UNEP-WCMC CONNECT project using data to develop BIPs for Ghana.
- National scientists and students using data for various research (e.g. Asase et al. (2020) App Plant Sci 8 (1) e:11318).





Support for national, regional and global initiatives

- Supporting activities of the National CHM of the CBD in Ghana & UNEP-WCMC CONNECT BIPs for Ghana.
- Leading a capacity enhancement project on data mobilizing and use in support of sustainable development in West Africa.
- Contributor to "Advancing the catalogue of World's Natural History Collections" (<u>https://docs.gbif.org/collections-idea-paper/en/</u>)





Regional Vision

Vision for GBIF Africa- To become an excellent biodiversity information network dedicated to biodiversity data mobilization, management and use for sustainable development in Africa.







GBIF/GUINEE

Saïdou Doumbouya



Team and Roles

Saidou Doumbouya: Node Maanger

Saidou Doumbouya interim: Head of delegation

Outereach and communication: Mamadou Weroto Diaby

Assistants pour la collecte des données:

Fatoumata Camara

Ibrahimah B. Soumoro

L'équipe n'est pas au complet, il manque un IT





Data mobilization plans and progress

Les données mobilisées sont essentiellement des données d'occurrences.

Elles sont fournies par nos partenaires

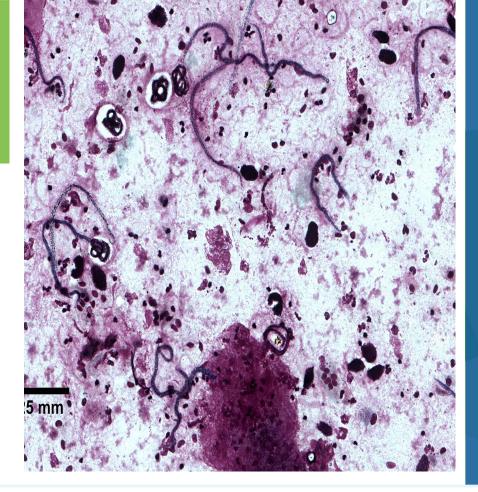
Traitées et publiées par le Node Manager et par le GBIF/FRANCE.





Node services

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Providing training in digitization, publication, data quality, data use	х
Support for/participation in projects	х
Data cleaning at the node level	х
Node portal/website	





Needs, priorities and actions

NEEDS

1. Mobilisation de fonds 2. oportinuté de formation en publication/utilisation de données 3. Acquérir les Techniques de sensibilisation sur la biodiversité

PRIORITIES

1. Oportinuté de formation en publication/utilisation de données 2. Mobilisation de fonds 3 Acquérir les Techniques de sensibilisation sur la biodiversité

ACTIONS

1. Formation des membres de l'équipe en publication, activité entréprise par le Node Manager 2. Organisation des rencontre avec les fournisseurs de données 3. Récherche d'un IT



Needs, priorities and actions

NEEDS 4. Former un IT

PRIORITIES

1. Oportinuté de formation en publication/utilisation de données 2. Mobilisation de fonds 3. Acquérir les Techniques de sensibilisation sur la biodiversité

ACTIONS 3. Invite /encourage les nouveaux fournisseurs à adhérer le réseau national des fournisseurs



Data use

Nous n'avons pas le feedback des demandeurs d'informations, des visiteurs de notre site IPT

A titre d'exemple, l'institut National de statistique vient de faire une enquête sur les plantes menaces de Guinée, mais nous n'avons encore eu pas leur le feedback

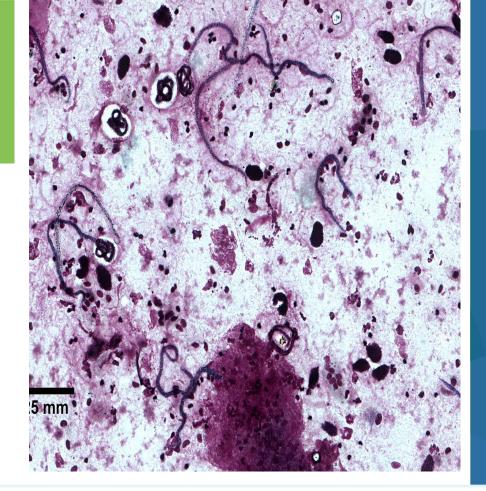




Support for national and regional initiatives

Le Node à travers l'IPT a été sollicité lors de l'actualisation de la monographie nationale, qui date de 1997.

L'expertise du Node national reconnue par l'une des Sociétés minières a demandé de publier ses données récoltées au cours des études d'impact environnemental





Regional Vision

Etre un acteur principal dans le partage, l'archivage et la publication des données nationales sur la biodiversité et fournir des informatons pertinentes au décideurs pour la mise en œuvre de la CBD.

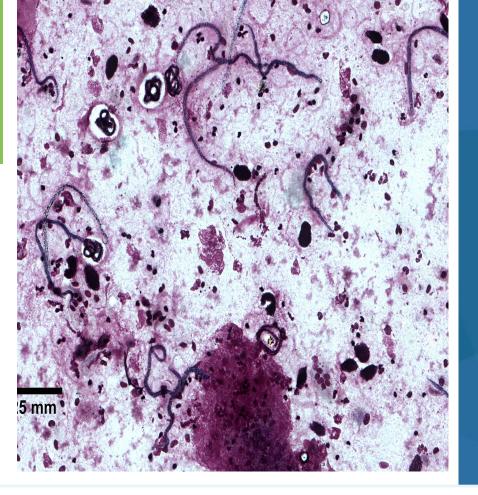








Team and Roles





Data mobilization plans and progress





Node services

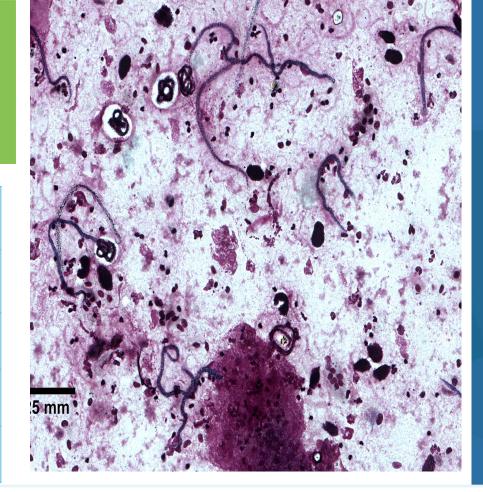
Helping others to publish their data (helpdesk support)

Providing training in digitization, publication, data quality, data use

Support for/participation in projects

Data cleaning at the node level

Node portal/website





Needs, priorities and actions



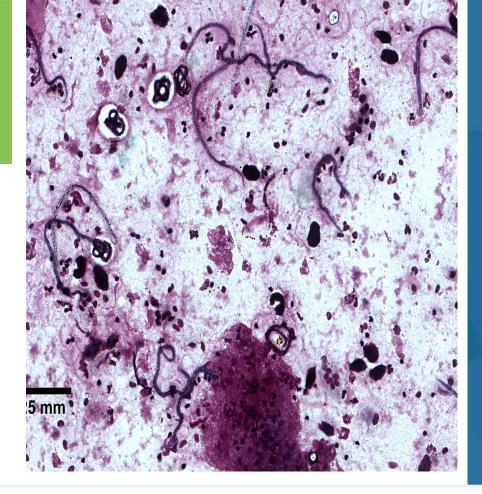








Support for national and regional initiatives





Regional Vision







GBIF KENYA

Lawrence Monda



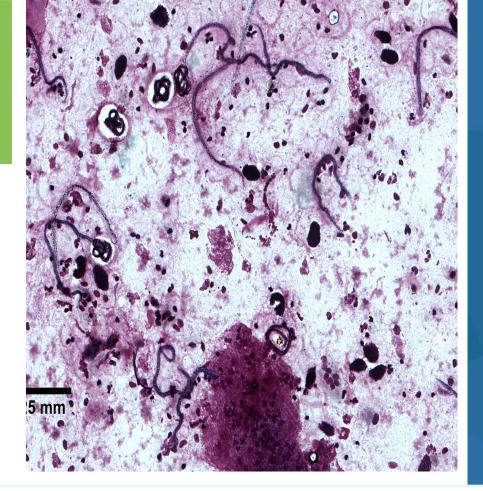
Team and Roles

Dr Geoffrey Mwachala Head of Delegation

Lawrence Monda Node Manager & Technical Liaison

Gilbert Busolo Technical Support

Esther Mwangi Data Mobilization and support Brenda Nyaboke Data Mobilization and support





Data mobilization plans and progress

Continue working with funded projects within the institution

Publicize and Publish datasets from various institutional projects in the country and the region

Capacity building on data quality

Occurrence data 38

Checklist 6

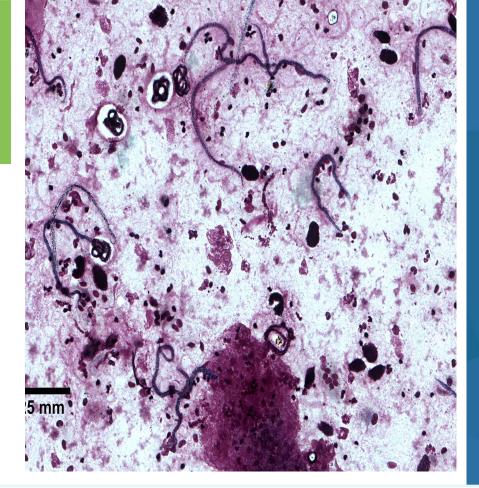
Sampling Event 6





Node services

Helping others to publish their data (helpdesk support)	X
Providing training in digitization, publication, data quality, data use	x
Support for/participation in projects	-
Data cleaning at the node level	X
Node portal/website	-





Needs, priorities and actions

NEEDS

- Improve Geographical coverage of data Published
- Increased Cooperation between Afrcan Data holders/owners
- Enhanced Policy support for digitization /Data Sharing

PRIORITIES

- Enhance human capacity in digitization
- Enhance capacity of the data holding institutions
- Continuous sensitization of top policy makers

ACTIONS

- Seek Partnership in capacity building
- Appoint more team members & Enhance capacity in data management
- Lobby for GBIF Support to reach /sensitize policy makers









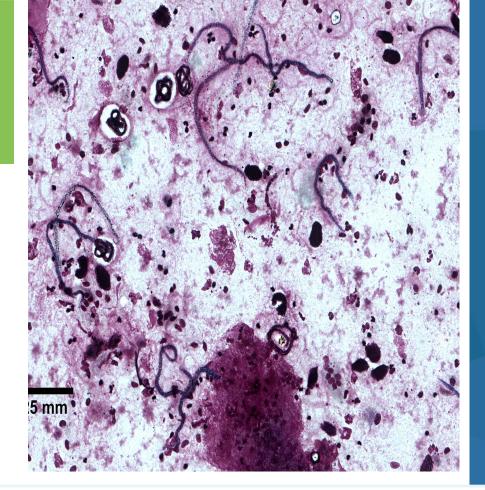
Support for national and regional initiatives

Support development of a Kenya biodiversity Atlas

Support the Clearing House Mechanism at NEMA

Support for the regional IGAD Biodiversity Management Program

Support regional institutions by providing IPT resource for publishing





Regional Vision

A platform that provides services to the policy makers and scientific community in the area of biodiversity research and conservation







Liberia Node

Benedictus Freeman

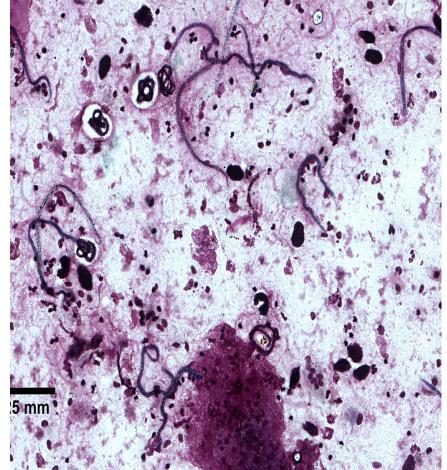


Team and Roles

John T. Woods Node Manager Email: johntwood38@gmail.com

Benedictus Freeman

Data Manager/Acts as Node Manager Email:b<u>enedictusfreeman@gmail.com</u>





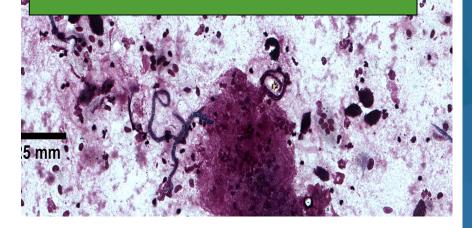
Team and Roles

Jesse Kaiyeepu Acting IT Person Email: jbkaiyeepu@yahoo.com

C. Mike Doryen Head of Delegation Email: <u>mikedoryen@gmail.com</u>



Our team is not efficient enough, we look forward to more capacity enhancement of team members and further recruitment





- Liberia became a member of GBIF about a year ago as a result of the BID project
- Under this BID project, were able to initiate the process of data mobilization for the first time in Liberia





- Between 2017 and 2019, we mobilized and published ~5000 data records
- These datasets comprised primarily of occurrences and checklists data





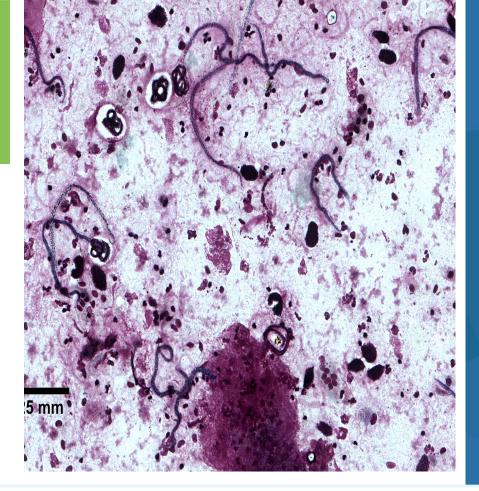
- We have been able to assemble about 8 data holding institutions
- We have gathered several datasets that are yet to be processed and published due to limited capacity





Node services

Helping others to publish their data (helpdesk support)	х
Providing training in digitization, publication, data quality, data use	х
Support for/participation in projects	
Data cleaning at the node level	х
Node portal/website	





Needs, priorities and actions

NEEDS

- Well trained team members
- Enhanced capacity
- •

•

•

•

- Funding to support advancement
- Technical support
- Strategic Plan

PRIORITIES

Funding

•

•

- Adequate staff
- Technical support
- Strategic plan

ACTIONS

•

- Stakeholders' engagement
- More outreach and communication
- Fund raising





- Data mobilized so far have accumulated 20 citations
- Users include conservation planners, species distribution and ecological niche modelers, biodiversity assessors, etc.





Data use



Read more about literature, how it's discovered and linked to GBIF-mediated data.

Developing Standards for Improved Data Quality and for Selecting Fit for Use Biodiversity Literature Data ©

Chapman, A. Belbin, L. Zermoglio, P. Wieczorek, J. Morris, P. Nicholls, M. ... - (2020) Biodiversity Information Science and Standards The quality of biodiversity data publicly accessible via aggregators such as GBIF (Global Biodiversity Information Facility), the ALA (Atlas of Living Australia), iDigBio (Integrated Digitized Biocollections), and OBIS (Ocean Biogeographic Information System) is often questioned, especially by the r...

Darwin Core • GBIF • data quality • data quality tests • fitness for use • framework

Journal article Open access Peer-reviewed

Data referenced in study DOI 10.15468/dl.5pmzev DOI 10.15468/dl.bwcpqx

Host-parasite interaction augments climate change effect in an avian brood parasite, the lesser cuckoo Cuculus poliocephalus ©

Yun, S. Lee, J. Yoo, J. (2020) Global Ecology and Conservation

Avian brood parasites such as Cuculus cuckoos are recognized to be affected more severely by the adverse effect of climate change owing to close host-parasite relationships. However, the spatial effect of climate change has rarely been assessed in the avian brood parasite-host system. To test this e...

Avian brood parasite • Biotic interaction • Climate change • Lesser cuckoo • Overlap area • Spatial mismatch

Completeness of digital accessible knowledge of the birds of western Africa: Priorities for Literature survey GD

Freeman, B. Peterson, A. (2019) The Condor

Open-source primary biodiversity data, or digital accessible knowledge (DAK), are widely used in biodiversity informatics to understand the status of global biodiversity, model species' ecological niches and geographic distributions, and inform biodiversity conservation decisions. However, these dat...

biodiversity data accessibility and use • biodiversity informatics • citizen science • conservation priority • inventory completeness • spatial and temporal sampling gaps

Journal article Peer-reviewed

Data referenced in study DOI 10.15468/dl.ekcwir

Gaps in butterfly inventory data: A global analysis 🖘

Literature

Girardello, M. Chapman, A. Dennis, R. Kaila, L. Borges, P. Santangeli, A. (2019) Biological Conservation

Species distribution data are crucial for assessing the conservation status of species (red listing, IUCN) and implementing international conservation targets, such as those set by the International Convention on Biological Diversity. Although there have been a number of efforts aimed at aggregating...

Aichi targets • Biodiversity inventories • GBIF • Knowledge-gaps • Lepidoptera • Wallacean shortfall

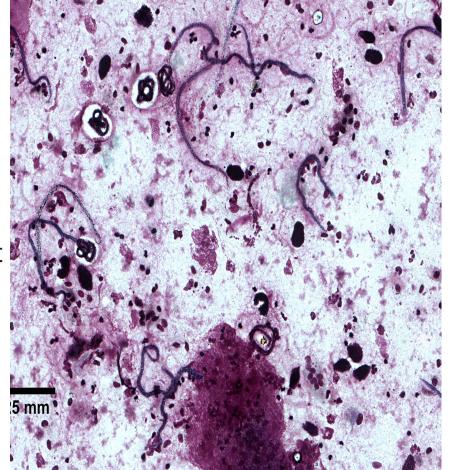
Journal article Peer-reviewed

Data referenced in study DOI 10.15468/dl.j4funx



Support for national and regional initiatives

- Yes, we are in the process of establishing a national institution that will have the sole mandate to mobilize, archive, and publish biodiversity data in the country in collaboration with all relevant stakeholders
- Working with other nodes in the region to develop CESP projects





Regional Vision







MadBIF

Herizo RANDRIAMBANONA



Team and Roles

Heriniaina RAMANANKIERANA (Head of delegation) Herizo RANDRIAMBANONA (Node Manager) Jean Marc RAKOTOMANJAKA (I.T. Person) Jaona RANAIVO (Data manager) Rokiman LETSARA

Irinah RATSIZAFY

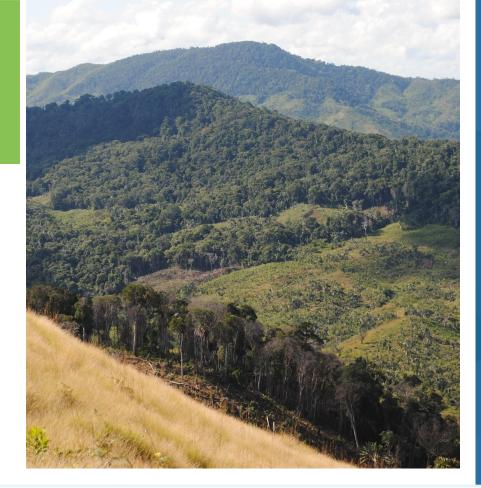
16 participants (data providers) with **11** have already published





50 251 occurrences published from 2018 up to now

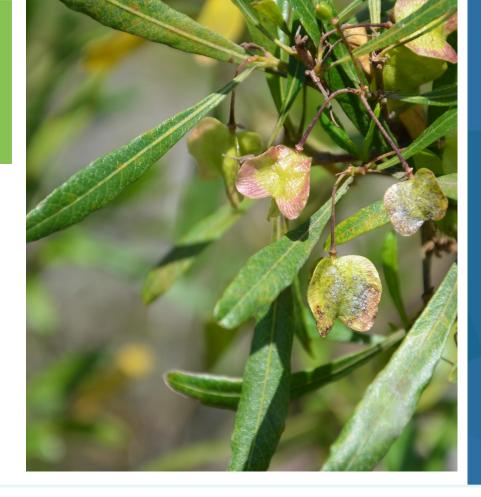
We try to raise funding to continuing the digitization program prioritizing threatened species, pollinators, invasive species





Node services

Helping others to publish their data (helpdesk support)	Х
Providing training in digitization, publication, data quality, data use	Х
Support for/participation in projects	Х
Data cleaning at the node level	Х
Node portal/website	





Needs, priorities and actions

NEEDS

- 1 Funding
- 2 Training (data mobilization, data use)
- 3 Outreach

PRIORITIES

- 1 Funding
- · 2 · 3

ACTIONS

- 1 Fund raising
- 2 Data mobilization
- 3 Training



Data use

Researchers, students, biodiversity conservation planners (e.g. GSPM : Groupement des Spécialistes de Plantes de Madagascar for conservation status evaluation)





Support for national and regional initiatives

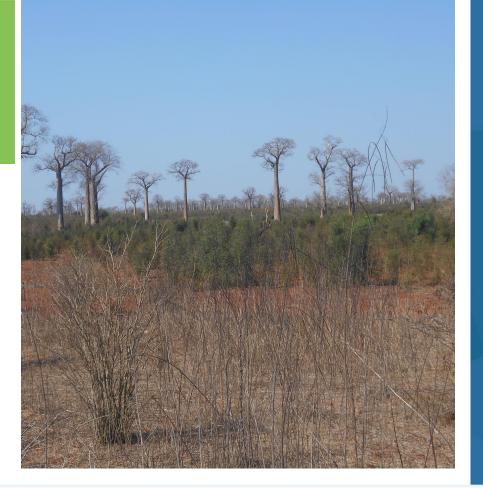
Yes we were supporting the national and regional BID grantees in the projects





Regional Vision

The ACM is quoted as a model in the regional approach of GBIF, Thanks to the team leaders of GBIF Africa we should keep this image

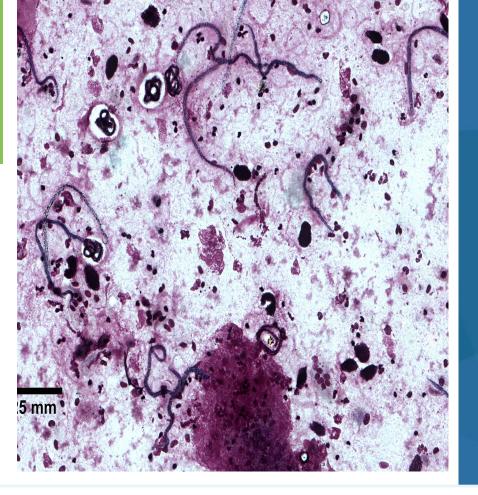








Team and Roles









Node services

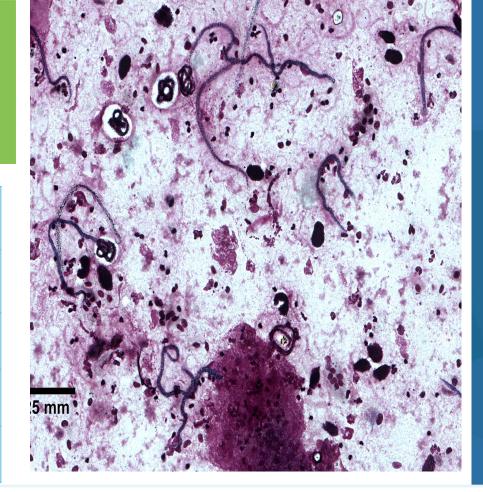
Helping others to publish their data (helpdesk support)

Providing training in digitization, publication, data quality, data use

Support for/participation in projects

Data cleaning at the node level

Node portal/website





Needs, priorities and actions



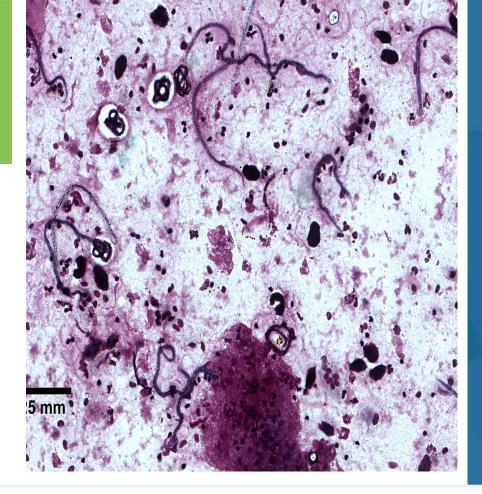








Support for national and regional initiatives





Regional Vision

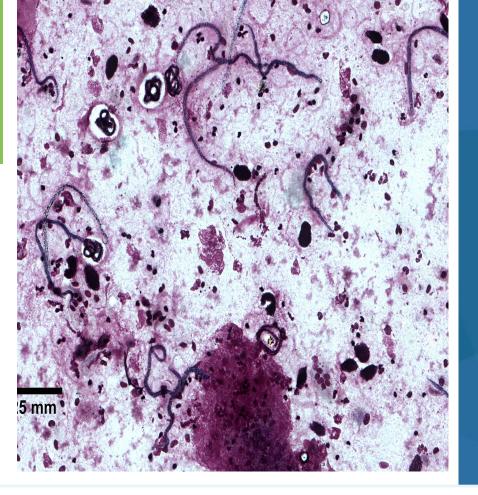








Team and Roles









Node services

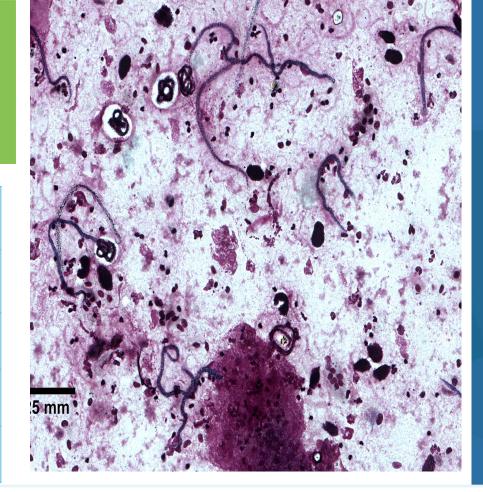
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Support for/participation in projects

Data cleaning at the node level

Node portal/website





Needs, priorities and actions



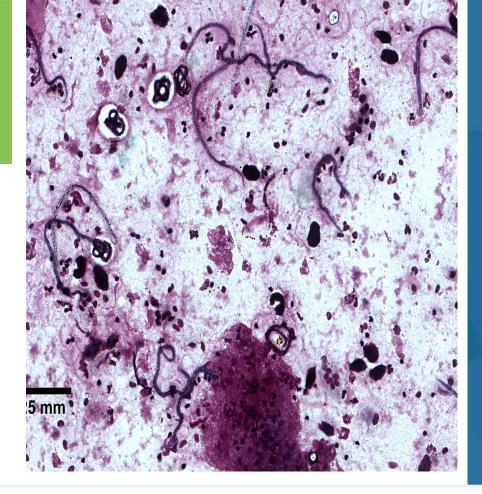








Support for national and regional initiatives





Regional Vision

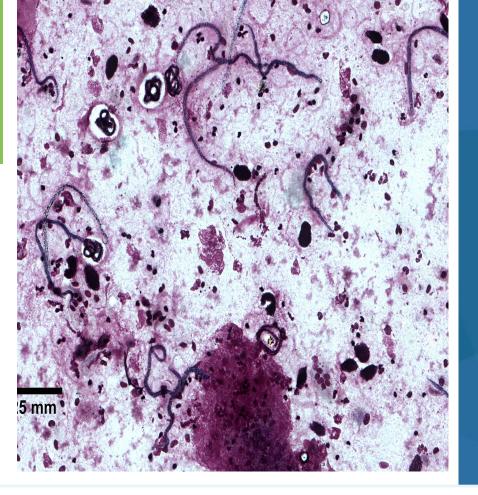








Team and Roles





Data mobilization plans and progress





Node services

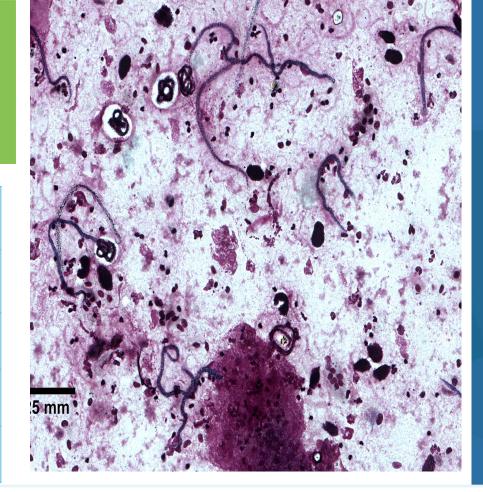
Helping others to publish their data (helpdesk support)

Providing training in digitization, publication, data quality, data use

Support for/participation in projects

Data cleaning at the node level

Node portal/website





Needs, priorities and actions



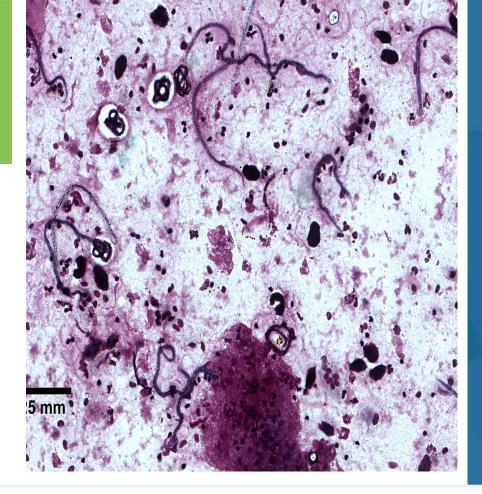








Support for national and regional initiatives





Regional Vision







Adda Maman

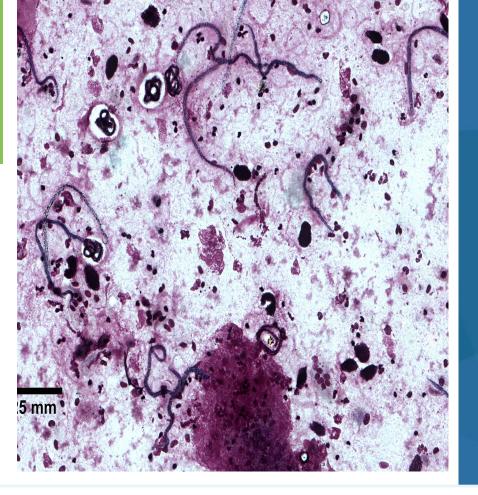


Data mobilization plans and progress





Team and Roles





Node services

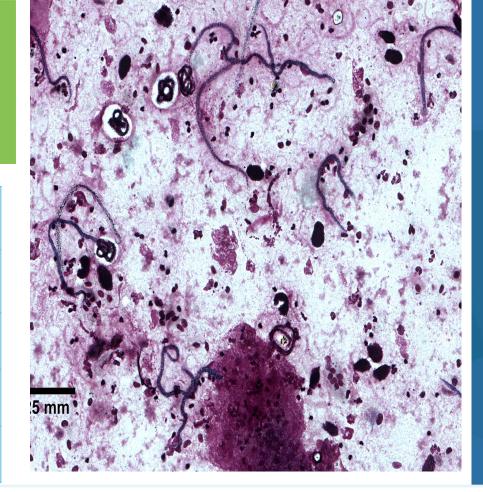
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Providing training in digitization, publication, data quality, data use

Support for/participation in projects

Data cleaning at the node level

Node portal/website





Needs, priorities and actions



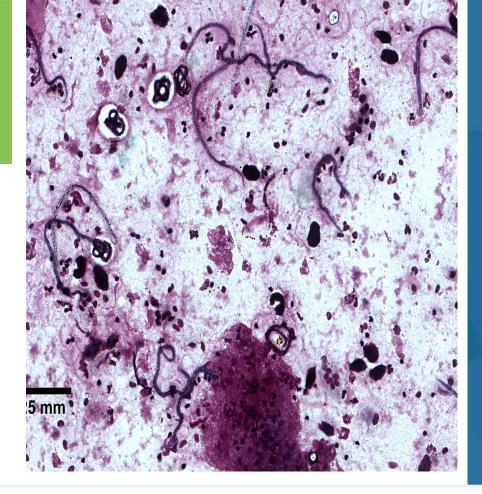








Support for national and regional initiatives





Regional Vision







Nigeria Biodiversity Information Facility (NgBIF)



Omokafe A. UGBOGU

Team and Roles

-Team composition

Prof. Adeshola O. ADEPOJU - Head of Deelegation; edfrin@frin.gov.ng

Prof. Omokafe A. UGBOGU – Node manager, principal investigator; <u>omokafeugbogu@yahoo.com</u>

Kehinde A. ADENIJI - Resource creator; obalomo2016@gmail.com

Akininyi S. ODEWO - Resource creator; akinodewo@gmail.com

Temitope L. SOYEWO - Resource creator; tolulopeokan@gmail.com

Temitope O. Oyebola - Resource creator; temitopesoyewo@gmail.com

Emmanuel C. CHUKWUMA - Resource creator, data publisher ; chukwuma.ec@frin.gov.ng

Joshua Dazi - Resource creator, data publisher , Open Data Ambassador joshuadazib@gmail.com

Seyifunmi O. AINA - Resource creator; seyifunmiaina@gmail.com

- Yes, the team is very efficient and has been extremely hardworking since the establishment of the node.



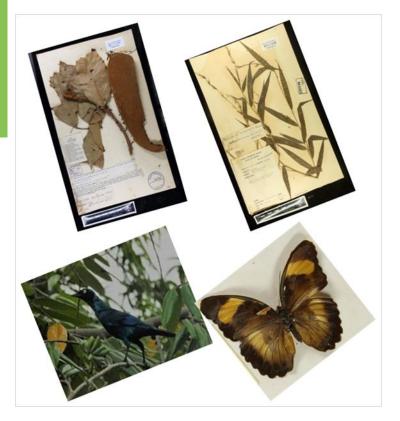


Data mobilization plans and progress

In the last two years, we have successfully mobilized and published about 50,000 biodiversity records comprising occurrence and checklist datasets. Efforts toward data quality has been intensified with further improvements also considered from time to time.

Specifically, the node has trained biodiversity data holders from several institutions across Nigeria and some of these have started implementing the objectives of the training.

Currently, the node is strategizing on how to support local scientists working on marine life.





Node services

Helping others to publish their data (helpdesk support)	X
Providing training in digitization, publication, data quality, data use	Х
Support for/participation in projects	X
Data cleaning at the node level	X
Node portal/website	X





Needs, priorities and actions

NEEDS

- 1. National Strategic plans
- 2. Capacity enhancement and mentoring
- 3. Updated biodiversity data management tools

PRIORITIES

1 integration and adoption of GBIF activities into the existing National Biodiversity strategies

2. A fully functional training material to serve as self-instruction document for data holders

3. Rapid synchronization of data with data management systems to ensure easy access to data by data users.

ACTIONS

1. Training of Data mobiliza and analysis on different biodiversty types

2. Community participation in data mobilization and periodic organization of workshops

3 Constant check for relevant software applications to enhance existing management systems

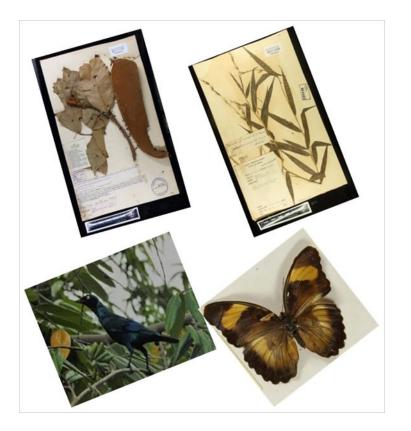


Data use

A number of local and foreign researchers have utilised our data including the published records.

Students have utilized our mobilized data for their degree projects.

As at the time of this report, there are already 80 citations from our published datasets (<u>https://www.gbif.org/dataset/search?publishing_org=3dc910</u> <u>5b-6792-4d2f-8872-c60dded8ae20</u>)

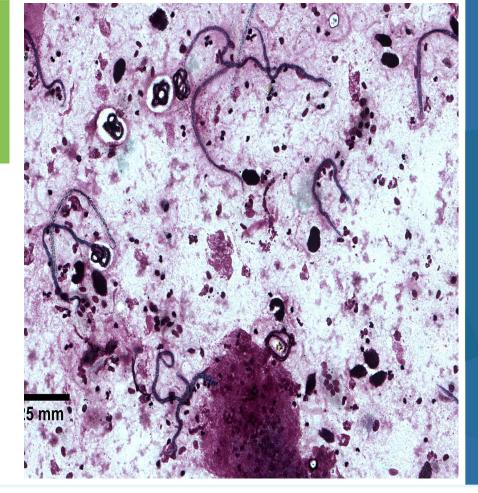




Support for national and regional initiatives

The node periodically supports national initiatives as a way of encouraging data holders to make their data available to the end-users.

- Biodiversity Open Data Ambassador
- The Nigeria Node participated in the Regional activities, collaboration and initiatives





Regional Vision

- That an African Coordinating Mechanism (ACM) is required, which is the ultimate Vision for a Formal Regional Structure for biodiversity information management on the continent.
- •Through the ACM, the African Nodes will strive to become the data-science interface for this mega-diverse continent, in support of the implementation of the Africa's Science and Technology Consolidated Plan of Action





SANBI-GBIF

Fatima Parker-Allie

Global Biodiversity Information Facility

Team and Roles

- Head of Delegation: Yonah Seleti
- Node Manager: Fatima Parker-Allie
- **Division:** Foundational Biodiversity Science Division
- Do you think that your team is efficient enough? Do you envision an improvement?
- No significant staff constraint very inefficient; Data publishing by SANBI **not** FTE Node staff;
- Not clear on improvements



Data mobilization plans and progress

Funded approach

Foundational biodiversity Information Programme (FBIP); 70 000 records;

large-per project is R500,000 to R1.5 million per annum for a 3 yr period (R1,5m – R4,5m in total per project). **Small** - 50K-200K /project

Non Funded - Through partnerships and data sharing agreements-Institutional agreements finalised and Partnership meeting with SANPARKS conducted (Feb 2020).

Data types - occurrence, checklists, sample event

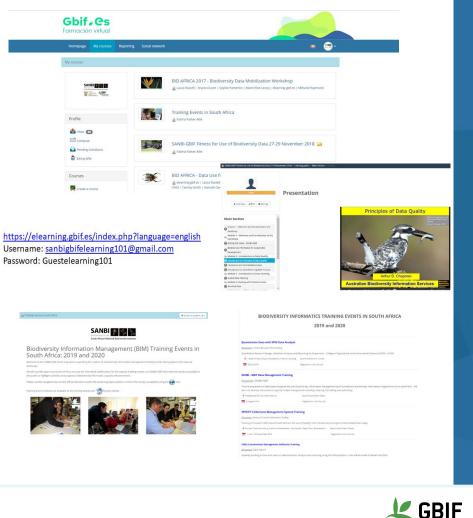
New strategic Areas - Mass digitization concept : Innovative technological approaches like mass digitization supporting biodiversity data mobilization, use and job creation in African Institutions





Node services

Helping others to publish their data (helpdesk support) SANBI	Y
Providing training in digitization, publication, data quality, data use SANBI-GBIF	Y
Support for/participation in projects SANBI-GBIF	Y
Data cleaning at the node level SANBI	Y
Node portal/website (Institutional, not independent, inefficient)	Y/N

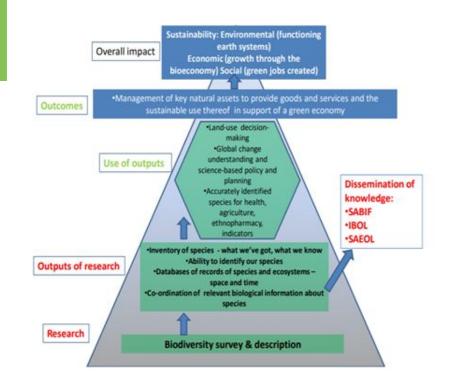


Needs, priorities and actions

Needs	Priorities	Actions
Capacity development in BDI/establishment of a Centre	Research Chair appointed	Engagement with DSI to submit ToR and relevant documentation for a priority Chair in BDI (UWC)
	Establish hub/programme of work at the University of Sol Plaatje	Partnership letter; MoU under development; Post doc appointed; work programme developed; biodiversity data science curriculum developed, further curriculum discussions with HoD
	Student Cohort implemented and increased annually	2 Masters and 1 Postdoc funded
	BDI & data related activities through student projects	Data mobilised and published
	Training Events in data management and use	Service provider to be advertised (3 in 18 months)
Establish Staff Capacity for the Node	Training and Engagement Officer	Internal Discussions



- Data mobilised through the FBIP programme large projects includes policy linkages
- FBIP Outputs: Seakeys, Biogaps (filling data gaps to support development decisions in the karoo)
- ABC also looking at data use and policy alignments





Support for national and regional initiatives

- Regional
- Lead the development of the GBIF-Africa regional engagement strategy and business case
- Development of *information product* on the ACM
- Concept development for Mass Digitization supporting data mobilisation, use and job creation in Africa
- Biodiversity Information for Development (BID) Steering Committee
- National
- Centre for BDI Initiative: 2 Masters Students and 1 Post doc student in BDI appointed; research & data publication; curriculum development in Biodiversity Data Science
- eLearning Platform Establishment of the SANBI-GBIF eLearning Platform, using GBIF-Spain system - Fitness for Use curriculum avail,
- Training event in data management & BIMF-FBIP Forum held (Aug '19)





BIF-AFRICA REGIONAL ENGAGEMENT STRATEGY



FUNDING PROPOSAL: TOWARDS THE ESTABLISHMENT OF THE AFRICA COORDINATING MECHANISM 2019-2024

Fatima Parker-Allie, Kristal Maze and GBIF-Africa Nodes







Support for Global initiatives

- Elected to the IPBES Knowledge and Data Task Force and attendance of the 1st Joint Task Forces meeting in Bonn, November 2019
 - IPBES Data Management Policy
 - Curriculum and webinars
- GBIF Task Team for dev curriculum for Node Managers (2019 Nodes Meeting)
- GBIF: Reviewer CESP 2020; Biodiversity Data Needs Post-2020 CBD Framework; Jury Member - GBIF YRA 2020





Strategic Planning for Nodes -Experiences from South Africa and the SANBI-GBIF Node



Regional Vision

- 1. Establishment of the ACM & implementation of the Regional Engagement Strategy and Action Plan.
- 2. Centre for Biodiversity Informatics, able to support regional participants teaching and learning.
- 3. An African community and global network that is able to harness the value of the data revolution for sustainable development





GBIF - South Sudan

Lwanga Tiba Charles – Node Manager South Sudan



Team and Roles

Mr. Paul Lado Demetry - Head of Delegation

Contact: ladolodemen@yahoo.com

Mr. Lwanga Tiba Charles- Node Manager/ Data Manager

Contact: tiba_lwanga@yahoo.com

Mr. George Wesley Brown – Assistant Data Manager

Contact: zekigeorge84@gmail.com

Mr. Dut Jacob Daw - Data Mobilizer Assistant

Contact: dutdawdhueng@gmail.com

Mr. Gift Sharifaladin – Scientifice outreach and communication

Contact :



Data mobilization plans and progress

Data Mobilization at National institutional level is in Progress

Types of Data published:

1,580 occurrences data from **61** datasets was published in GBIF website so far

61 occurrences data was published in GBIF website on 16th June 2018 after joining the GBIF community (<u>https://www.gbif.org/dataset/dbca12a3-a1d0-42bf-85</u>35-c30aa349faa7)



Data mobilization plans and progress

Major Project digitize collection

IGAD Biodiversity Management Program (Data sharing Project) :
1,176 Herbarium data were digitized from the National Museum of Kenya .



Node services

Helping others to publish their data (helpdesk support)	х
Providing training in digitization, publication, data quality, data use	
Support for/participation in projects	Х
Data cleaning at the node level	Х
Node portal/website	



Needs, priorities and actions

NEEDS

1 Capacity Enhancement Training

2 Node Mentoring

3 Data sharing agreement.

PRIORITIES

1 Capacity Enhancement Training

2 Node Mentoring

3 Data sharing agreement.

ACTIONS 1 Node Mentoring

2 Capacity Enhancement Training

3 Data sharing agreement





At the moment we are still in the process of data mobilization, we had published fewer data.



Support for national and regional initiatives

The National initiatives that the node is supporting currently is data mobilization at institution level.



Regional Vision

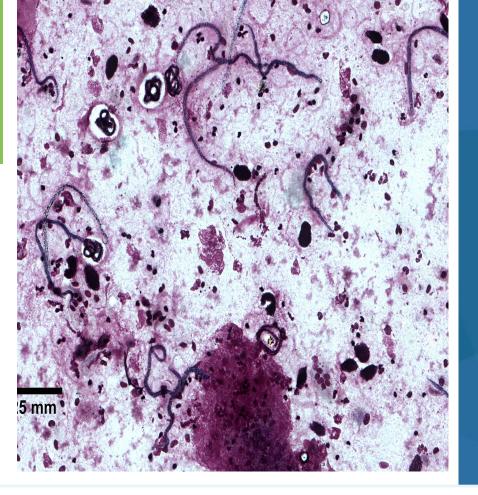
As GBIF Africa, my regional vision is to see coordination and collaboration among the Node Managers at the regional level.







Team and Roles





Data mobilization plans and progress





Node services

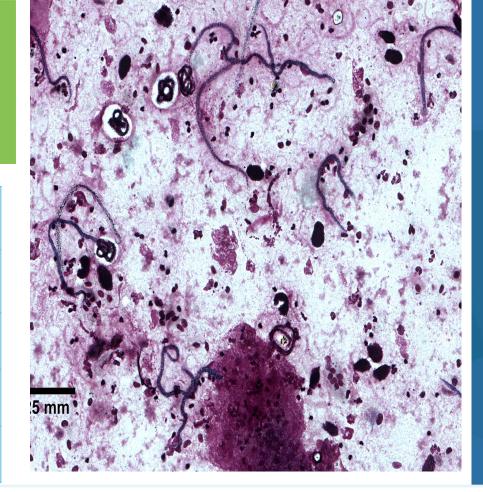
Helping others to publish their data (helpdesk support)

Providing training in digitization, publication, data quality, data use

Support for/participation in projects

Data cleaning at the node level

Node portal/website





Needs, priorities and actions



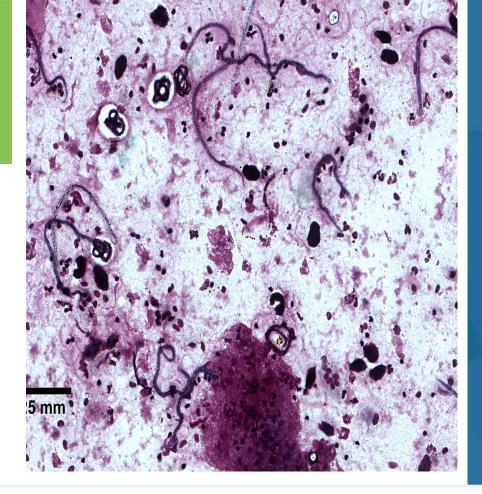








Support for national and regional initiatives





Regional Vision







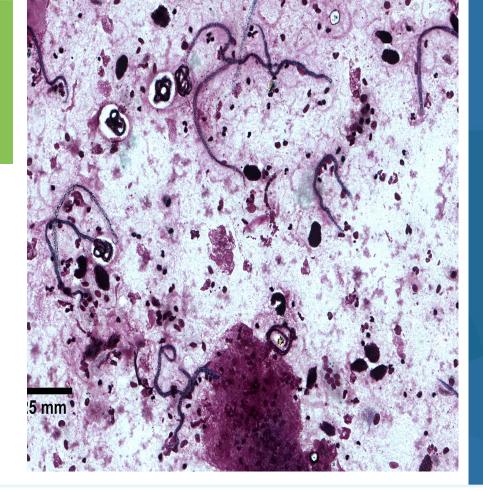
GBIF TOGO in progress



Pierre Radji, Node manager

Team and Roles

Node manager = scientific outreach and communication
Koudjo Akpene and Christian Ahadji = 1st data manager 2nd as developers (now in study on *megadata* in France)
HoD= resigned since 2018; additional delegate is retired
Meeting with the Minister (letter, waiting for the reply to complete the team.





Data mobilization plans and progress

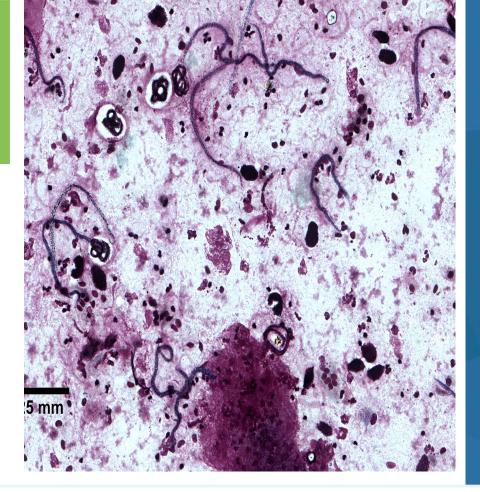
 From 2018 up to now: occurrences data: botanical collections, part of entomological collection, checklists of ornamental plants
 Challenges on data mobilzation: DNA sequences, abundance data available on many literatures, and geological data





Node services

Helping others to publish their data (helpdesk support)	Y
Providing training in digitization, publication, data quality, data use	Y
Support for/participation in projects	Y
Data cleaning at the node level	Y
Node portal/website	Y





Needs, priorities and actions

NEEDS

- 1 Team completion
 2 Data analyses: research, protected area
- •3 More commitment from the MEDDPN in mobilizing the data available in the various departments of the Ministry.
- •4 Financial support for the Node's activities

PRIORITIES

••1 To have a complete team (more extended) to better devote itself to **GBIF** activities 2 Organize GBIF Africa regional meeting (with local additional funds) 3 Extend data mobilization activities by identify other stakeholders (to DNA sequences)

ACTIONS

 1 Initiate ongoing discussions with the Chair of the UL (previously instructed on the subject) about the staff of the GBIF team 2 Maintain talks with the MESR as cofunder of the GBIF Africa regional meeting •3 Projects to restart data mobilization



Data use

Needs to perform on Data analyses very insufficient to convince decision-makers to take actions (in terms of health or protection of threatened plants).

Currently focusing on data papers (4)

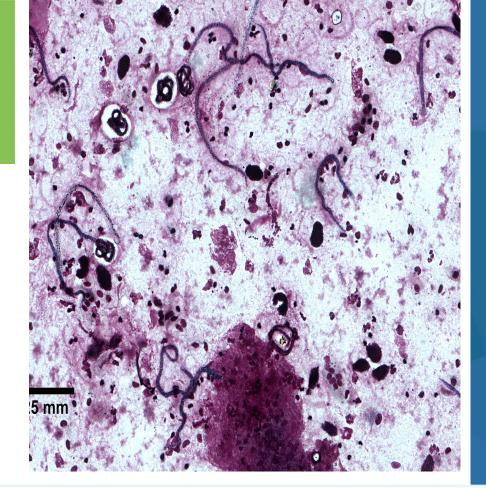




Support for national and regional initiatives

National initiatives: collaboration with CHM, other agencies of the MEDDPN, talks for complete team with MESR, UL

For regional initiatives: support from MESR to welcome and host GBIF Africa meeting in 2020 (postponed on 2021 due to Covid-19)





Regional Vision

- Implementation of ACM to let/keep involved AU countries decision-makers

- Advocacy for the accreditation of the GBIF's activities at the academic level (recognition by CAMES).







Uganda Biodiversity Information Facility (UgaBIF)

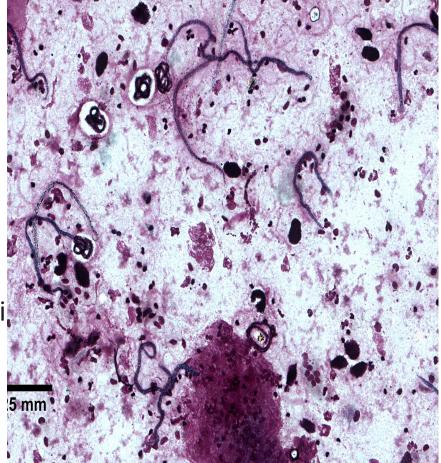
Innocent Akampurira, Node Manager-UgaBIF



Global Biodiversity Information Facility

Team and Roles

- 1. Dr. Peter Ndemere- Head of Delegation; info@uncst.go.ug
- Mr. Innocent Akampurira, Node Manager; iakampurira@gmail.com/i.akampuri a@uncst.go.ug
- 3. 3. Mr. Collins Mwesigwa- IT,; c.mwesigwa@uncst.go.ug





Data mobilization plans and progress

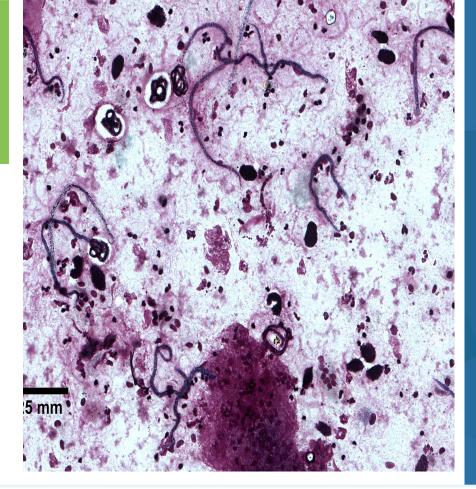
- Since 2018, UNCST has been making efforts to support data digitisation in Uganda by providing help desk services to data provider organisations and endorsing the data publishers requests.
- Some efforts were dedicated to review of the datasets jointly.





Node services

Helping others to publish their data (helpdesk support)	Х
Providing training in digitization, publication, data quality, data use	Х
Support for/participation in projects	Х
Data cleaning at the node level	
Node portal/website	





Needs, priorities and actions

NEEDS

- Publishing
- More awareness
- Resource mobilisation

PRIORITIES

- 1 Data cleaning
- 2 Link with research database

ACTIONS

- 1 Web portal
- 2 Online Reserach Mgt System development



Data use

GBIF data has been used by a number organisations in developing proposals to various potential funders.

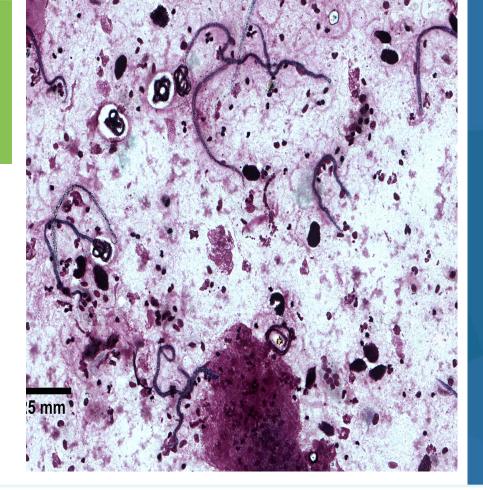
Projects have received funding because of GBIF-Uganda mobilised datasets e.g NaFRRI and NEMA





Support for national and regional initiatives

UNCST has provided technical backstopping to regional projects and national conservation projects.





Regional Vision

A decision support system for all stakeholders.







GBIF Zimbabwe

Global Biodiversity Information Facility

Luke Jimu

Team and Roles

Node Manager: Prof. Luke Jimu (jimaldino@yahoo.com)

Data Manager: Mr. George Ncube (geoncube@gmail.com)

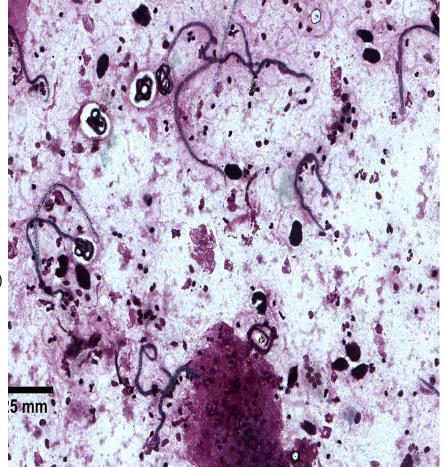
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Communications: Dr. Admore Mureva (admury@gmail.com)

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Head of Delegation: Dr. Lizzie Mujuru (Izzmjr2009@gmail.com)





Data mobilization plans and progress

From the beginning of 2018 to date, publishers in Zimbabwe have mobilised 19,742 occurrences.

We had a workshop on data quality improvement in January 2020. The workshop was one of the CESP project activities.

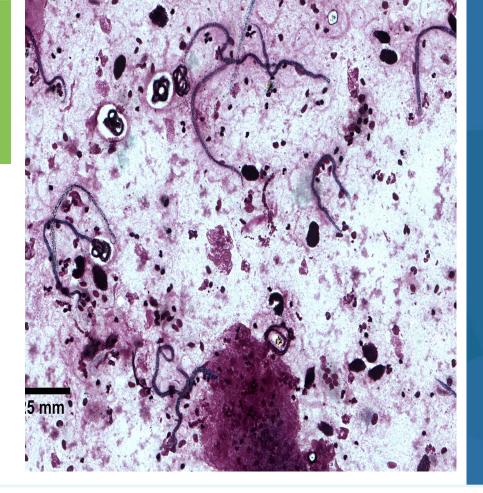
Two additional data holding institutions, that participated in the above workshop registered as publishers in 2020.





Node services

Helping others to publish their data (helpdesk support)	Х
Providing training in digitization, publication, data quality, data use	Х
Support for/participation in projects	
Data cleaning at the node level	
Node portal/website	Х





Needs, priorities and actions

NEEDS

- 1. Budget for node activities
- 2. Capacity building in data quality improvement and use (e.g. R, Maxent, Wallace)
- 3. Collaborations

- PRIORITIES
- 1. High
- 2. High

з. High

ACTIONS

- 1. Lobby the mother ministry to fund the node. Apply for grants.
 - Application for data mobilisation grants
- 2. Conduct capacity building workshops in collaboration with other nodes and institutions
- 3. Sign MOUs with other nodes and institutions



Data use

GBIF mediated data is mainly used by researchers, undergraduate and post-graduate students

For example, data mobilised by Zimbabwean institutions has been cited by about 40 users.

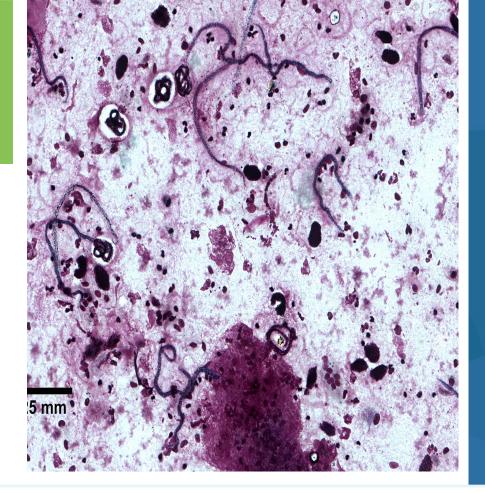
There is need to sensitise government to increase use of GBIF mediated data in decision making e.g. policy formulation





Support for national and regional initiatives

Development of Zimbabwe's Sixth National Biodiversity Report





Regional Vision

to be a hub of biodiversity data for key decision making



