

GBIF Asia Nodes Meeting 2024

Beijing, China

28-29 August, 2024



[GBIF CAS] 2024 update

Zheping Xu

Node Manager of GBIF CAS

Nodes Regional Representative Asia



Node team and roles



1.Dr. Keping Ma, Head of delegation, Biodiversity Committee & Institute of Botany, Chinese Academy of Sciences

2.Dr. Liqiang Ji, Additional delegate, Institute of Zoology, Chinese Academy of Sciences

3.Dr. **Zheping Xu**, Node manager, National Science Library, Chinese Academy of Sciences

4.Dr. Maofang Luo, Node staff, Biodiversity Committee & Institute of Botany, Chinese Academy of Sciences

Roles: Support GBIF CAS and Asia Regional business



1. Engaging research communities for data mobilization and use



Co-author data paper and publish via IPT:

- (1) Occurrence dataset of birds in university campuses of Nanjing, Juangsu Province China(10.3897/BDJ.12.e126064)
- (2) Occurrence dataset of birds in Sihong Hongze Lake Wetlands National Nature Reserve in China(10.3897/BDJ.11.e113108)
- **A workshop with 10 academic journals on data sharing policy, data repository and metadata description**



2. Support national biodiversity commitments and the science-policy interface

- **Catalogue of Life China 2024 Annual Checklist:** There are 155,364 species & infraspecific taxa in 2024 Annual Checklist of Catalogue of Life China, including 141,484 species and 13,880 infraspecific taxa. It is widely used in China among the communities of research, policy and public sector.
- With Biodiversity Committee, Chinese Academy of Sciences together, host “The 2024 Asian Regional Membership Committee Meeting of IUCN in Hainan, China”
- Selected and involved as an expert for the Task Force on Data and Knowledge Management of IPBES



3. Promote open biodiversity data approaches within the business and finance sectors

2022 ESG Report Examples for Biodiversity (Data) in China

ESG: short for Environmental, Social and Governance

Data from 227 reports in the fields of **computer/information industry** from listed

Zhejiang Dahua: smart monitoring system for gibbon (*Hylobates*) in protected area.

TPV Technology: help The Explorers (UNESCO's project) to protect *Ara*

China Mobile: 5G technique to protect *Ciconia boyciana* in Shandong

VeriSilicon: Adopting giant pandas adoption and rescue of stray animals

G-bits: funding 200,000 RMB to protect *Eurynorhynchus pygmeus* and promotion by embedding into game

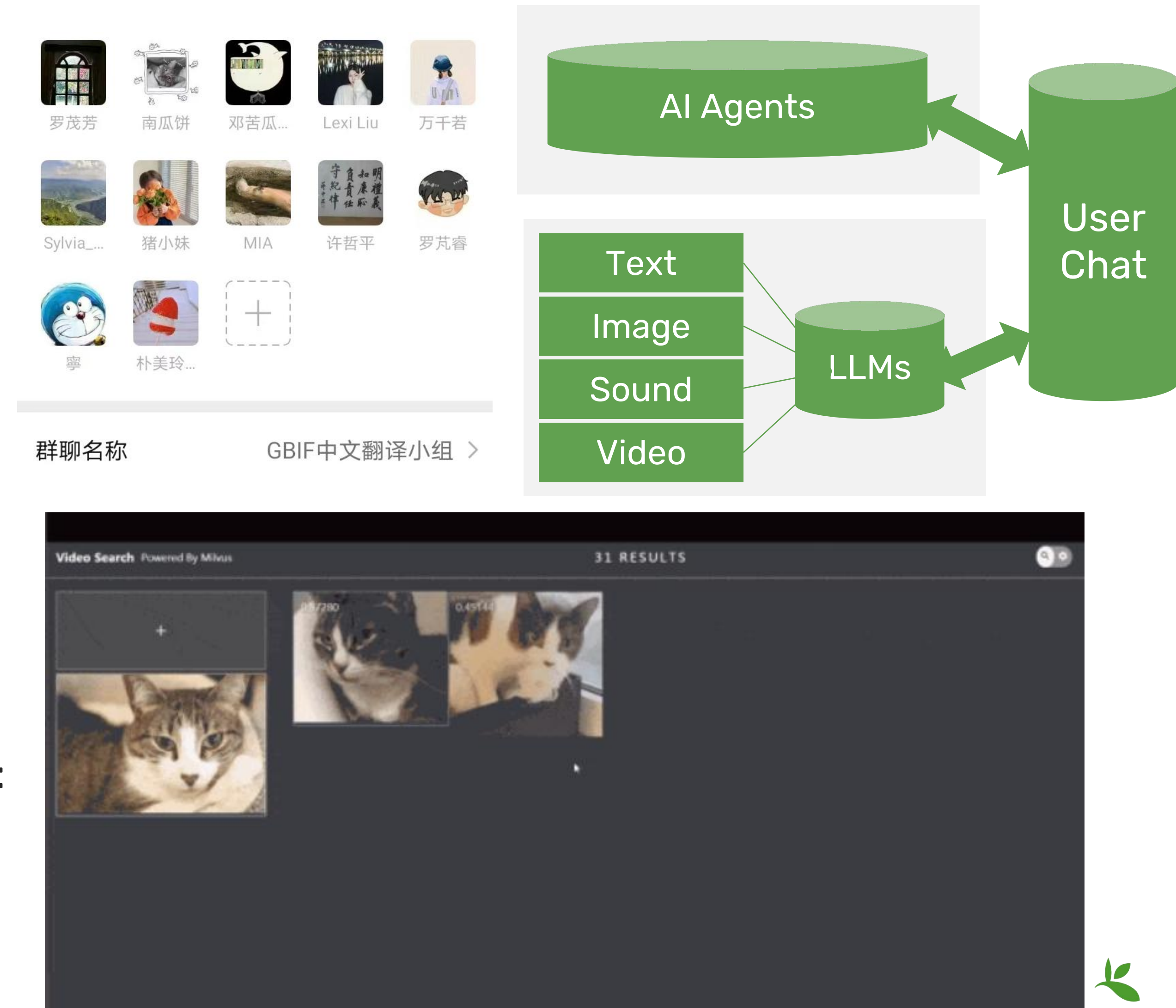
HIK VISION: cooperation with WWF to monitor birds in protected area an tropical rain forest

- Make discovery from big companies' ESG Annual reports, and discuss their biodiversity supporting activitie in the future.
- They usually support in 3 ways: public welfare funding, open education and public technique.



4. Support node development through knowledge sharing and mobility of skills

- Training on data publishing and data data paper in several physical workshop and webinar
- A group of volunteer translators
- Co-apply CESP project with ICIMOD
- AI technique Development(**In-processing**):
(1)Online AI Agent, comining your knowledge with LLMs; (2)Multimodal RAG(Retrieval Augmented Generation) for species, including text, image, sound, video and DNA Sequence;(3)AI governance: sensitive and security



5. Develop capacity within regional communities of practice

- Author a report entitled “2023 Asian Biodiversity Data Use Guide: Linking to the UN 17 Sustainable Development Goals and Open Science”
- Prepare an article about what and how GBIF data is used in Asia
- Investigation the possibility of regional **newsletter**(August):(1)Sri Lanka Launches Ambitious “30×30” **Initiative** For Conservation And Sustainable Development;(2)New KoEF **project** to enhance biodiversity protection and research capacity in Bhutan; (3)A United Stand for Philippine Biodiversity **Strategy** and Action Plan (PBSAP)

2023 ASIAN BIODIVERSITY DATA USE GUIDE

Linking to the UN 17 Sustainable Development Goals and Open Science



GBIF ASIA
GBIF CAS (Chinese Academy of Sciences) Node
March 2024

15.2 ASSESSING HIGH CONSERVATION VALUE AREAS FOR RARE, ENDEMIC AND THREATENED (RET) SPECIES: A STUDY IN HIGH ALTITUDE CHANGTHANG LANDSCAPE OF INDIA

India

Challenge

The Forest Stewardship Council introduced the concept of High Conservation Values (HCVs) as a criteria in the forest certification process in order to promote sustainable forest management. Comprising six major components or values, HCVs, particularly components one and two, address the habitat for viable populations of “rare, endemic and threatened (RET) species” using the IUCN Red List category and other national / regional / local lists. However, a consistent robust methodology for identification of these areas, does not exist.

Contribution

The proposed methodology addresses the urgent need for a holistic and robust set of techniques to implement the HCV toolkit. This is crucial for identifying and mapping HCVAs for RET species at the landscape level and can be easily adapted to and adopted at the national, regional, state or local level in India. These methods offer an efficient and reliable approach for the application of the HCV concept, elsewhere in the world.

Citation

Mehetab Sahana, Gopala Areendran, Akhil Sivadas, et al. Assessing high conservation value areas for rare, endemic and threatened (RET) species: A study in high altitude Changthang landscape of India, Journal for Nature Conservation, 2023,73, 126406, ISSN 1617-1381.

15 LIFE ON LAND



Data Uses

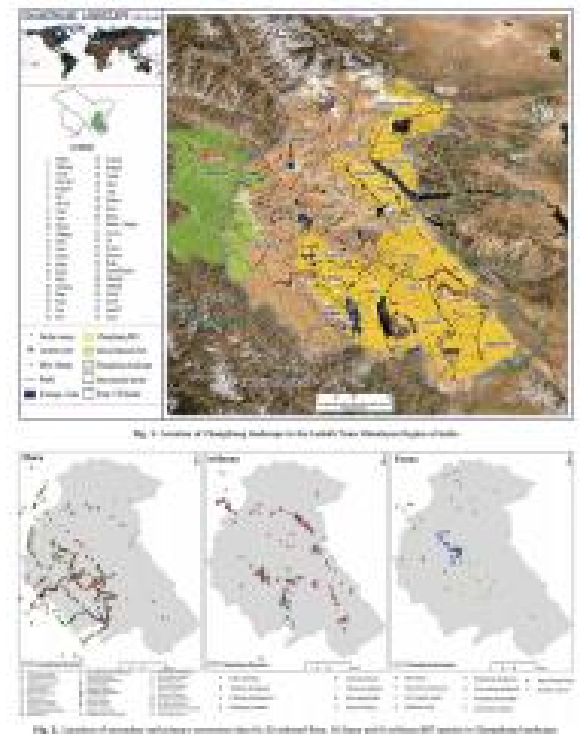
GBIF, eBird

Open Sciences

Open scientific publications, Open research data

Affiliations

1. Indira Gandhi Conservation Monitoring Centre (IGCMC), India
2. University of Manchester, United Kingdom
3. Indira Gandhi Conservation Monitoring Centre (IGCMC), India
4. National Conservation program, India
5. National Tiger Conservation Authority (NTCA), India



6. Strengthen support services for collection communities



542 records in China

中国数字植物标本馆
Chinese Virtual Herbarium

首页 数据资源 物种名录 新闻公告 规章制度 技术支持 实体馆 关于我们

中国植物标本馆索引 >

中国科学院植物研究所标本馆

标本馆信息
馆藏标本

基本信息	
标本馆名称	中国科学院植物研究所标本馆
标本馆代码	PE
地址	北京市香山南辛村20号
网站地址	http://pe.ibcas.ac.cn/
联系人	杨志荣 010-62836435 zry@ibcas.ac.cn
建馆时间	1928
标本数量	3010000

371 herbaria nad 2,253
staffs in China

- Deployment of local hosted portals
- Discuss the mechnism of synchronous update between GBIF GRSciColl and Chinese data source like CVH etc



7. Contribute to data model enhancements

- Contact some researchers on eDNA data and camera-trap data, make a design plan for future publishing



Thank you

Zheping Xu, xuzp@mail.las.ac.cn



GBIF Asia: Discussions on status and priorities

Priority Area 1: Science and Research

1. Engage research communities for data mobilization and use

* scientific leaders; local researchers; FAIR and CARE principles; targeting research communities; invasive alien species; Data Use Club; graduate schools, universities; Award; data-intensive biodiversity research

Priority Area 2: Policy and Partnerships

2. Support national biodiversity commitments and the science-policy interface

* CBD; National Biodiversity Strategies and Action Plans (NBSAPs); Kunming-Montreal GBF;SDGs; IPBES

3. Promote open biodiversity data approaches within the business and finance sectors

* private sector; Environmental and Social Impact Assessments (ESIA); Data4Nature initiative

Priority Area 3: Community and Capacity

4. Support node development through knowledge sharing and mobility of skills

* Assist in communication and Collaboration; CESP programme; data publication and use; hosted portals and Living Atlases ;

5. Develop capacity within regional communities of practice

* partnerships with nodes regional support teams ; BID programme; regional nodes meetings and engagement

Priority Area 4: Infrastructure and data products

6. Strengthen support services for collection communities

* GRSciColl; hosted portals

7. Contribute to data model enhancements

* New data model: regular webinars; training materials

