Jane Goodall Institute

Request for Proposals

DATA LANDSCAPE ASSESSMENT

JUNE 10, 2022

OVERVIEW

The Jane Goodall Institute (JGI) seeks a consultant to systematically assess how the Institute creates, receives, collects, stores, processes, analyzes, shares and disseminates, and uses data, data systems and data derived information products across all its programs and chapters. The resulting product should be a set of actionable recommendations for overhauling JGI's data structure, data standards, system integrations, technologies, and work processes, and a roadmap for addressing years' worth of inconsistently acquired and categorized data collection efforts.

Deadline to respond

Former Deadline, June 24, 2022

Extended Deadline, July 1, 2022

GENERAL INFORMATION

About JGI

Our mission is to understand and protect chimpanzees, other apes, and their habitats, and to work towards creating a critical mass of informed and compassionate citizens who will help to create a better world for people, other animals, and our shared environment.

The Jane Goodall Institute continues Jane's legacy by tackling complex questions with intention through the lens of three major interconnected systems: Animals, People, and the Environment (A.P.E.) Guided by this interconnected A.P.E. system, JGI programs rest on the foundation of one or more of our five key commitments to continue our founder's legacy – Research, Storytelling, Community & Partnerships, Data & Technology, and Policy & Advocacy. JGI's core programs are Animal Conservation, Animal Welfare, Gombe research, Roots & Shoots and the community-led conservation approach, Tacare.

JGI Science works closely with local communities, protected area managers, governments, academia, the private sector, and other NGOs to define real-world problems and ask meaningful questions, leveraging our data-reach, long-term research at Gombe and other conservation sites in Africa as global assets for interdisciplinary scientific research. This is achieved by using geospatial web mapping technologies to maintain and share research results and resources via mobile, desktop & cloud technologies, and developing data standards and protocols that enable JGI to continue its trajectory towards thought leadership in the conservation arena.

JGI aims to increase societal awareness of the inextricable links between animals, people, and the environment by sharing our scientific findings through data-driven stories. By positioning science and technology in a visible way, we can support local communities to proactively curate and communicate their own successful conservation science programs and approaches that might then influence a broader group of stakeholders. To enable our conservation efforts to reach a global audience, JGI creates research implementation spaces so that local communities, government officials, scientists, companies, educators, students, and policymakers can have a dialogue and pathways to collaborate.

From participatory mapping to habitat monitoring, JGI uses the power of geography while leveraging and adopting existing geospatial and other technologies to address information gaps and develops and maintains science and organizational data assets in the cloud using JGI Science Platform. JGI aims to scale the use of proven tools like mobile phones, apps, camera traps, satellite imagery, cloud computing, and Geographic Information Systems (GIS) to identify locations for conservation, assess the state of habitat, and track progress in restoring the land to support viable chimpanzee habitat and the sustainable development of the communities at the human/wildlife interface across these biologically significant landscapes.

Purpose of RFP

JGI is seeking competitive proposals for an audit and analysis of our data infrastructure. The primary focus will be on our data collected and used across the main programs and pillars of the institute:

- Gombe Long-term Research
- Animal Conservation
- Animal Welfare
- Tacare
- Roots & Shoots
- Conservation Science

It will include all paper and digital data, data locations, data protocols, management systems, and the status of standards and metadata uses across programs and external partners. The goal will be to build on lessons learned while dismantling old data structures and practices and implementing a new schema along with standards and technologies that can be maintained into the future.

This data overhaul is a core part of a larger initiative to develop a crosscutting Science and Knowledge Platform that enables to convert data into actionable information, knowledge and insights that results in improved decisions for people, wildlife, and the shared environment. We have begun work on a unified Science Platform through specific pilots such as Decision Support and Alert System in Tanzania and monitoring habitats across chimpanzee range in Africa, MediaValet digital content management system in Azure and over the next year will implement a centralized Science Platform using Esri ArcGIS, Microsoft Azure and associated technologies. A strong data standards foundation is key to the success of those endeavors, and we will devote appropriate resources and invest in capacity to its maintenance and evolution.

DESIRED OUTCOMES

Through a comprehensive assessment & analysis of our data and data systems and tools, we hope to improve our data standards, data collection and analysis protocols, field data collection and back-end systems, boost efficiency across all teams and departments, and enable collection and conversion of data, to actionable information, knowledge, and insights the results in improved decisions for people, wildlife, and the shared environment.

Goals

The overall goals of this effort are to:

- Increase data and content awareness and accessibility
- Increase engagement, user satisfaction and use of science data and information products
- Streamline data collection, management, analysis and use work processes
- Create a smoother integration between field data collection, desktop and cloud systems
- Offer more reliable and accessible data for internal use and with partners
- Support re-platforming
- Make us nimbler in responding to user and decision-makers needs internally, with decision-makers and communities globally

Work Phases

Based on the Work Timeline table on page 6, the JGI data landscaping objectives are as follows.

At the close of the 'Discovery' work phase, the consultant will have ensured:

- the data assets of JGI are researched and inventoried
- the data systems and partners are catalogued, and data workflows and pathways identified
- a plan and approach to acquire access to data is identified
- an initial assessment of data quality, standards, metadata etc. completed

At the close of the 'Recommendations' work phase, the consultant will have:

- conducted a secondary assessment of data and systems
- planned and developed a pathway for improved data collection, management, analysis, and use
- drafted a roadmap for actionable use of systems and partners

At the close of the 'Implementation support' work phase, the consultant will have:

- developed a management plan showing both short and long-term goals
- developed a sustainability plan for storing, managing, analyzing, and using data
- provide JGI with feedback on the execution of the management and sustainability plans, and priority user case stories

Deliverables

1. Contract signed

2. Current-state data discovery & mapping

- Data locations
- Data formats
- Data standards
- Data protocols used
- Metadata
- Systems & processes
- Content & media types
- Data input

- Data output
- Third-party partners, technology platforms and data services
- Gaps & risks

3. Analysis

- Data and information needs analysis
- Identify gaps & risks
- Incorporate user cases of different decision makers and users of data
- Identification and comparison of any existing geospatial industry and science standards

4. Recommendations and proposed roadmap

- System updates, additions or integrations
- New data standards and data collection protocols
- A new data management schema
- Specific attention to Gombe long-term data, chimpanzee population, habitat, and threats data, as well as photo, video, and rights management
- An actionable roadmap for data cleanup, migration, archival with clear processes for accomplishing this
- A forward-looking user testing and validation process
- Documentation and governance

5. Implementation support (post-delivery)

- Assist with prioritization
- Review implementation strategies
- Post-hoc review and follow-up
- All deliverables must be provided electronically for sharing and archival purposes. At minimum, a live or virtual presentation will also be required for the recommendation & roadmap

Work Timeline

Timeline	Work Phase	Deliverable
August 2022	Vendor Selection	1. Contract signed
August	Discovery	2. Current-state audit 3. Analysis
September	Recommendations	4. Recommendations & Proposed Roadmap
September-October	Implementation support	5. Review & feedback
Through EOY 2022	Post-hoc review and follow-up	6. Responses upon request

RESPONSE & SELECTION PROCESS

Response Requirements Checklist

Proposals must include	
Cover sheet	• Company name & contact information • General information about your company - size, location, age • Brief statement of company's financial health • Primary personnel on this project • Overview of your proposal
Relevant experience	• CV or Resume(s) • Summary of prior work • References (optional) • Work samples (optional)
Proposal	• Detail your proposal for completing this work • Roadmap for deliverables listed above
Questionnaire	• Responses to the 7 questions
Financial proposal	• Cost breakdown, including any license, storage, subcontractor, or implementation costs that may arise.

Responses should arrive no later than June 24, 2022 to abean@janegoodall.org and cc lpintea@janegoodall.org

Questions can be directed to:

Adam Bean

Project Manager, Conservation Science

abean@janegoodall.org

and/or

Lilian Pintea

Vice President, Conservation Science

lpintea@janegoodall.org

EVALUATION CRITERIA

Relevant experience

- Familiarity with geospatial data along with mobile, desktop and cloud geospatial technologies and infrastructures
- Familiarity with applying GIS and satellite imagery for conservation and natural resources management
- Familiarity with managing data for research, conservation and natural resource management
- Alignment with our user and decision-making needs to support wildlife research, conservation and education
- Ability to tie recommended actions to expected outcomes
- Availability and adherence to timeline
- Demonstrated experience and knowledge of the inner workings of conservation, social science, or natural resource management NGO's and their strengths/challenges in applied programs will be considered a distinct advantage

Finalist presentations

Proposals will be evaluated on the criteria above, and finalists will be invited to deliver a presentation or demonstration to the JGI recruitment panel (via Zoom).

This timeline represents our best estimate but may be subject to change.

Vendor Selection Timeline	
RFP issued	June 10, 2022
Proposals due	July 1, 2022
Notification of finalists	July 15, 2022
Vendor presentations	July 20 -22, 2022
Vendor selected	August 1, 2022

QUESTIONNAIRE

Please answer the following questions in moderate detail. Links and examples are welcome.

1. Please describe your data landscape assessment and discovery process.
2. Please summarize the tools and formats you will use for this work.
3. Please propose a roadmap for the deliverables listed above.

4. What intermediate information could we expect prior to the final report?
5. How much time do you anticipate spending per week on this project? How available will you be for questions and feedback from our team?
6. How might decision-making processes, human behavior and change management be incorporated into your report?
7. Do you need any additional information to compile a comprehensive proposal?

SCOPE OF WORK

The work product should encompass all the following data types and sources, user stories, content types and systems.

People

- Data Collectors
    - Field researchers, scientists, local communities, government agencies, other NGOs
    - Data services from private sector, academia and government
- Data Analysis
    - Research
    - Conservation decision making
    - Storytelling
    - Policy
    - Partnerships
    - Development
    - Communications
- Users
    - JGI staff and managers
    - Local communities and governments
    - Other NGOs
    - Donors
    - Private sector partners
    - Researchers & Academia
    - Social media

Data Types and Sources

- Field data captured on paper
    - Chimpanzee and other primate and animal behavior data
    - Chimpanzee and biodiversity surveys
    - Vegetation and habitat surveys, ground-truthing and vegetation plots
    - Socio-economic surveys
    - Household surveys
    - Participatory community maps
    - Village, District and Regional Land Use Plans, maps and associated documents

- Digital field data collected using field mobile apps or entered manually on mobile or desktop computers
    - Chimpanzee and other primate and animal behavior data
    - Chimpanzee and biodiversity surveys
    - Vegetation and habitat surveys, ground-truthing and vegetation plots
    - Socio-economic surveys
    - Household surveys
    - Participatory community maps
    - Village, District and Regional Land Use Plans, maps and associated documents
    - GIS data including administrative, transportation, hydrology, vegetation, land cover/land use, topographic
- Digital field data collected using field sensors such as meteorological stations, camera traps, robotic mosquito traps, videos, photos, acoustic sensors, LiDAR etc.
- Aerial remote sensing data (in both paper, slides, and digital formats) – livestock aerial surveys, georeferenced aerial photos, oblique aerial photos, UAV images and LiDAR data, videos and derived biophysical variables (e.g. digital surface model, vegetation index, etc)
- Satellite remote sensing data, including raw, pre-processed and classified optical multispectral and SAR (Synthetic Aperture Radar) data
- Data services from external partners (e.g. NASA, GLAD/UMD, Esri, Maxar and Planet)

Products

The primary focus of this project is analog and digital data landscaping. However, the solutions explored there may be integrated to adjacent products as well as

- Mapping and computing platforms
- Cloud data services
- Mobile apps
- Portals, hubs, and dashboards

Systems

Data systems involved in this project will include but are not limited to the following platforms currently used by JGI and partners to collect, store, manage, analyze, and share data:

- Esri's ArcGIS Platform (Mobile, Desktop, and Online Software, Cloud and Data Services)
- Microsoft Azure
- MediaVallet
- Google Earth Engine
- Google Earth
- Google Maps
- ODK Aggregate
- AKVO / Ecosia
- RESTOR
- Plant for the Planet
- Arbor Day Foundation

- TerraMatch / WRI
- Global Forest Watch / WRI
- Forest Watcher Mobile app / WRI
- MIRADI
- Gombe Chimpanzee Database at ASU