JOB TITLE:	Biodiversity Data Technical Officer
DIVISION/DEPARTMENT:	Science

#### 1. OVERALL PURPOSE OF JOB

To support the management of BirdLife's spatial and tabular datasets on species and important sites for their conservation and undertake data manipulation and analysis to support decision making.

#### 2. STAFF RELATIONSHIPS

## **REPORTING TO (LINE MANAGER):**

Senior Biodiversity Data Manager

## REPORTING TO JOB HOLDER (LINE MANAGED STAFF):

None.

#### PRINCIPAL STAFF RELATIONSHIPS/RESPONSIBILITIES WITHIN SECRETARIAT

Working closely with other Science staff, in particular the Conservation Data Manager, GIS Development Officer, GIS Officer, the Global Science Coordinator (IBAs/KBAs), Global Science Technical Officer (IBAs/KBAs), other members of the Science Team, and other Divisions including Regional Divisions as appropriate, in particular the Regional IBA Coordinators.

# PRINCIPAL STAFF RELATIONSHIPS/RESPONSIBILITIES WITHIN BIRDLIFE NETWORK

Staff within BirdLife Partner organisations.

Also, scientific, policy, and data management people in other conservation organisations, other end users requesting our data, and software developers.

#### **3. KEY WORKING RELATIONSHIPS**

Contact	Level (1-3)	Contact	Leve I (1-3)	Contact	Level (1-3)
BirdLife Network Organisation Staff	2	General Public	2	Institutional policy makers /Politicians/ Corporations	0
BirdLife Advisory Groups, Committees, Reg. Councils	0	Press & Media	0	Institutional Funders	0
BirdLife Global Council	0	Regulators/Legislato rs/ Auditors	0	Individual donors/ members	0
Suppliers/Service Providers	1	Scientific Community	2	Royalty/VIPs/ High worth Individuals	0

#### Level of Contact

1.= General Informing. "Appearance, first impressions". May have some independent outside exposure and contact, primarily informative.

2.= Presenting/Representing/Reporting "Relationship management". Frequent exposure representing BirdLife. Maintaining individual contacts. Frequently managing information flow.

3.= Justifying/Negotiating - "Influencing decision makers". Frequent exposure as lead contact, representing Birdlife to highly influential people. Responsible for complex and sensitive/high risk communications.

### BIRDLIFE INTERNATIONAL - JOB SPECIFICATION/DESCRIPTION

#### 4. MAIN DUTIES/WORK PROGRAMME RESPONSIBILITIES

#### By main work area:

- Contribute to the management of BirdLife's biodiversity databases on Important Bird and Biodiversity Areas (IBAs) and Key Biodiversity Areas (KBAs) in the World Database of KBAs (WDKBA) and the World Bird and Biodiversity Database (WBDB), and data on species in the Species Information Service (SIS).
- 2. Maintain and update dashboards on the BirdLife Data Zone and KBA website, and assist in the specification, design, and implementation of other information dashboards, data outputs and reports as required. Create new or redeveloped dashboards as the data infrastructure develops.
- 3. Use advanced data analysis techniques and manipulation of information to support data import, management and analysis, and help with interpreting data and synthesising information to support decision making.
- 4. Undertake export and transformation of IBA/KBA tabular and spatial data to support identification of IBAs and KBAs, identify and address deficiencies in datasets, and inform scientific analyses etc.
- 5. Assist BirdLife Partners, the BirdLife Secretariat and KBA Secretariat with processing new IBA and KBA datasets and preparing and integrating these into the WDKBA and WBDB as appropriate.
- 6. Deliver training to stakeholders to ensure that best use is made of information systems, reports and dashboards as required.
- 7. Support the provision of spatial and tabular data requested by BirdLife Partners, other organizations, the scientific community and the general public.
- 8. Contribute to BirdLife's science work (particularly on IBAs/KBAs) more generally as appropriate and assist with other BirdLife Science, Policy and Conservation activities as needed.

## BIRDLIFE INTERNATIONAL - JOB SPECIFICATION/DESCRIPTION

<b>RESPONSIBILITY AREA</b>	LEVEL OF AUTHORITY
Financial/Budgetary	
	None
Contracts – Funders	None
Contracts –	None
Staff/Consultants	
Contracts – Service	None
providers	
Legal Responsibility	
	None
Other	
	Responsible for ensuring work is completed to high scientific standards

#### 5. LIMITS OF AUTHORITY/RESPONSIBILITY FOR RESOURCES RESPONSIBILITY AREA | LEVEL OF AUTHORITY

#### 6. EDUCATION/SKILLS AND OTHER SPECIAL REQUIREMENTS

REQUIREMENTS	KNOWLEDGE/SKILLS/ATTRIBUTES	
Minimum General Education	Educated to degree level (preferably in environmental sciences, computing or information technology).	
Job Specific Education/ Qualification	BSc (or higher) in environmental science, computer science, GIS, geography, or equivalent relevant work experience in an information management related discipline	
Job Specific Knowledge	<ul> <li>Proven ability to critically assess and synthesise information.</li> <li>Practical experience of querying and maintaining large spatial and tabular datasets.</li> <li>Detailed knowledge of working with relational databases such as PostgreSQL and MySQL, including the ability to script frequently performed tasks in Python, SQL and/or other languages.</li> <li>Practical knowledge of R for analysis and production of data products.</li> <li>Practical experience of ETL pipelines and data cleansing practices.</li> <li>Knowledge of Power BI or equivalent software for data visualization.</li> <li>Familiarity with Google Earth Engine</li> </ul>	
Experience	<ul> <li>Demonstrable experience of advanced data manipulation, including creation and use of code in relevant languages</li> <li>Experience of compiling data from multiple sources, data cleaning and checking.</li> <li>Practical experience of querying and managing large databases.</li> </ul>	
Management & organisational skills	Ability to organise own time according to a brief and work with a high level of initiative and under pressure, in order to meet targets within agreed timeframes.	
Communications skills	Good communication skills, willing to work as part of a team and to report on and develop tasks and roles. Diplomatic skills and sensitivity to the range of different cultural styles within the BirdLife Partnership.	
Creativity & Initiative	Ability and willingness to contribute ideas to improve the effectiveness and efficiency of delivering project outputs.	

# BIRDLIFE INTERNATIONAL - JOB SPECIFICATION/DESCRIPTION

Computer Literacy Languages Travel requirements	Microsoft Office, SQL, R, Python, Power BI. QGIS, ArcGIS or other spatial software an advantage, but not essential. Fluency in English required. Other languages an advantage but not essential. Willingness and ability to travel when required	
OTHER DESIRED/HELPFUL KNOWLEDGE/SKILLS/ATTRIBUTES	<ul> <li>Experience of Azure Synapse for performing data transformations</li> <li>Experience in the use of API procedure calls, ideally to the REST standard</li> <li>Experience of database maintenance and optimization, especially in Postgres</li> <li>Experience with geospatial database extensions and web mapping technologies (e.g. PostGIS, Geoserver and OpenLayers).</li> <li>Practical experience with Google Earth Engine application and functionality.</li> </ul>	

Prepared by:	Date:
Gill Bunting, Olivia Crowe, Stu Butchart	25 <sup>th</sup> March 2024