



## ASCENSION ISLAND GOVERNMENT

### JOB DESCRIPTION

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| <b>JOB TITLE:</b>   | <b>DNA Biomonitoring Project Officer</b>   |
| <b>LOCATION:</b>    | Ascension Island   |
| <b>TEAM:</b>        | Conservation and Fisheries   |
| <b>REPORTS TO:</b>  | Marine Conservation Team Leader  |
| <b>JOB PURPOSE:</b> | The project officer will work closely with partners at the University of Edinburgh and the Natural History Museum, London to develop and conduct molecular genetic testing to support ongoing conservation efforts on Ascension Island. Ongoing application of these novel genetic tools will enable marine and terrestrial invertebrate species to be quickly and accurately identified through DNA metabarcoding of environmental samples. |

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#### MAIN DUTIES:

1. Conduct desktop study to prioritise species for DNA sequencing.
2. Collate tissue samples from verified species identified through previous research projects.
3. Liaise with the Natural History Museum, London and send samples for DNA barcoding.
4. Liaise with University of Edinburgh to assist in developing and validating eDNA primers and protocols for eDNA metabarcoding.
5. Assist in finalising protocols for DNA extraction, metabarcoding and bioinformatics that will be conducted for ongoing biomonitoring projects on Ascension.
6. Conduct metabarcoding on mixed environmental samples from terrestrial invertebrate traps, inshore marine light trapping, marine settlement panels and gut contents from marine indicator species.
7. Conduct analyses on sequencing data using bioinformatic tools and pipelines.
8. Deliver molecular training across the AIGCFD team.
9. Organise school visits to the Ascension molecular lab to teach students about the applications of DNA techniques.
10. Assist in developing outreach materials, reports and recommendations for genetic biomonitoring in the UKOTs.
11. Publish sequences through global databases such as the International Barcode of Life BIOSCAN platform and NCBI.
12. Share management of the eDNA Laboratory in Georgetown; ensuring that it is clean, well-stocked and services the projects efficiently.

## RESPONSIBILITIES:

1. To undertake the main duties of the post (detailed above) to the highest possible standard.
2. Work closely with on-Island team members, and other stakeholders to complete the main duties of the post and work towards a sustainable programme for marine research and conservation on Ascension Island. This may include assisting in other projects where required.
3. To report regularly to the Marine Conservation Team Leader, to ensure that all parties are meeting their targets and goals.
4. Comply with Health and Safety at Work procedures.
5. To abide by the AIGCFD data management policy with regards to responsible archiving and documentation of scientific datasets.
6. To interact with all members of the public, including the island community, school children and visitors, in a courteous manner and to promote conservation efforts on Ascension where appropriate.

## PERSON SPECIFICATION:

### Essential:

1. MSc in Biology, Environmental Science or equivalent vocational experience
2. A sound knowledge of molecular techniques including conducting DNA extraction and PCR
3. Numerate and computer literate, with a sound knowledge of Microsoft Office applications (Access, Excel, Word) and ideally bioinformatics
4. Good interpersonal skills with a proven ability to work effectively in a small team.
5. Experience of living and working on conservation issues in small and remote communities and/or on small islands and having an appreciation of how they run
6. The successful candidate will be self-motivated, happy working both independently and in a team setting, and willing to sometimes work extended hours (often at weekends) and on projects outside of core duties if required.
7. A full, valid driving licence.

### Desirable:

1. Experience in conducting eDNA metabarcoding workflow.
2. Experience in bioinformatics and analysis for biological monitoring applications.
3. Prior experience in coordinating projects involving multiple partner organisations.

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This Job Description indicates the main duties and responsibilities of the post. It is not intended as an exhaustive list.

The Ascension Island Government (AIG) reserves the right to amend this Job Description from time to time according to operational needs. Any changes will be discussed with you and confirmed in writing. Please note that you share with AIG the responsibility for making suggestions to alter the scope of your duties and improve the effectiveness of your post.

Updated: June 2022