

# GOS-UNDP-GEF Outer Islands Project funds new ICS database | 05 December 2019



One of the capacity-building workshops held earlier this year (Photo credit: Joanna Prosper)

Seychelles has moved one step closer towards developing and implementing its first National Biodiversity Database.

Through the design of a new single biodiversity system, the BioHolistic Database, it aims to integrate all types of biodiversity data in the country.

Developed by two consultants, Dr Bruno Senterre and Geospatial Developer Michael Wagner, the design of the BioHolistic Database has been facilitated under the GOS-UNDP-GEF Expansion and Strengthening of the Protected Areas Subsystem of the outer islands of Seychelles and its integration into the broader land and seascape project and guided by the Island Conservation Society Seychelles (ICS).

This database development project was also partly supported by a CEPF-funded (Critical Ecosystem Partnership Fund) project led by the Seychelles Plant Conservation Action group (PCA).

Since the system can be adopted by other conservation organisations, two capacity-building workshops were held earlier this year, with conservationists from ICS, the Marine Conservation Society Seychelles (MCSS), PCA, Seychelles National Parks Authority (SNPA), Seychelles National Herbarium and the Ministry of Environment, Energy and Climate Change (MEECC) attending.

Two young people who are receiving training and assisting the consultants to support the database, Israel Alcindor and Eli Louise, were also present. Participants learnt about the various tasks undertaken to develop the final database and were also provided with the opportunity to test data entry onto the new system. In addition, they discussed and proposed other ideas as to how the system could be utilised and improved.

The training also covered critical areas such as: increasing awareness of common mistakes regarding data management, addressing the gap in information from data, methods of field data collection tools and data entry, and how data is reviewed, explored and exported.

Under the GOS-UNDP-GEF Outer Islands Project (OIP), ICS has recruited a database manager, Aurélie Duhec, to develop and maintain the BioHolistic Database. Ms Duhec possesses extensive experience in the field, having worked for several years as a conservation officer across the outer islands, including time spent on Alphonse and Farquhar.

While she awaits certain components of the biodiversity database to be finalised, Ms Duhec is currently devising a strategy to cleanse existing data, as well as to improve the consistency and quality of collated data, in order to ensure that an effective digital transfer to the BioHolistic Database system can take place once ready.

Commenting on her new role, Ms Duhec said: “I am proud to be a part of this ambitious project and cannot wait to administrate the Bio Holistic Database. Once operational, the database will allow for excellent data management, easy data manipulation and the avoidance of duplication. This is a conservationist’s dream. I have a strong understanding of the strengths and weaknesses of our current data management methods. The process of re-organising ICS’ data by putting pieces of information together in a logical way to obtain an exploitable dataset, to me, is like piecing together a puzzle.”

The collection of data is a continuous and important task for many environmental organisations in Seychelles. The various monitoring activities undertaken by rangers, volunteers and scientists are critical to understanding patterns and changes in our environment.

Databasing biodiversity can, however, provide issues. Biodiversity is complex, made of many interconnected factors, and is therefore generally dissected into small specialised sets (e.g. on corals, turtles, beaches, climatic data or on rubbish collection on a given geographic area). Organisations have typically ended up with an abundant amount of data stored in single files within different folders and often struggle to manage this important information in a meaningful way.

The BioHolistic Database provides a standardised data entry platform that: 1) has the ability to integrate data from any institution, 2) is accessible to multiple users online, 3) can incorporate shared properties and 4) can synchronise with open source QGIS (Quantum Geographic Information System) mapping software.

The system developed by Dr Senterre and Mr Wagner provides a powerful solution to biodiversity data management in Seychelles, representing a significant step forward in its technicality, as well as in establishing Seychelles’ first National Biodiversity Database. Improved data management provides the opportunity for better insights into what is

happening to Seychelles' ecosystems. This would allow for more informed and timely management decisions at the local, national and international level.

ICS' head of science and projects, Pierre-André Adam, said: "We have been very good at collecting data rigorously over the years; but not always so good at analysing data in order to make a meaningful difference in a timely fashion. And one major delay is often down to the agonising number of hours spent just organising the data in a form which is ready to be analysed. That is the beauty of having a 'state-of-the-art' centralised database such as this and a dedicated person to manage it. Data is in an 'almost ready to be analysed state'. It can be processed faster and more efficiently, leading to proactive recommendations and management actions."

### **About ICS**

The Island Conservation Society (ICS) is a non-governmental, not-for-profit organisation based in the Seychelles. ICS promotes the conservation and restoration of island ecosystems, sustainable development of islands, and awareness of their vulnerability and vital importance to the planet's biodiversity. Its conservation teams are currently based on the following islands: Aride, Alphonse, Desroches, Farquhar and Silhouette.

### **About the GOS-UNDP-GEF Outer Islands Project**

The GOS-UNDP-GEF Outer Islands project, 'Expansion and strengthening of the protected area subsystem of the Outer Islands of Seychelles and its integration into the broader land and seascape', aims to promote the conservation and sustainable use of terrestrial and marine biodiversity in the Seychelles' Outer Islands by expanding the protected areas system and strengthening protected area management, supported by broad-scale ecosystem planning and sustainable land management activities to conserve ecosystem functions.

For more information on the project, visit:

<http://www.pcusey.sc/index.php/pcu-projects/ongoing/141-oi-project>

<http://www.islandconservationseychelles.com/gos-undp-gef-outer-islands-project.html>

### **Contributed by ICS**