

Mainstreaming recent species and ecosystem distribution data into Seychelles Key Biodiversity Areas assessments

Programme: BID
Project ID: BID-AF2020-094-NAC
Project lead organization: Plant Conservation Action group
Project implementation period: 1/4/2021 - 31/3/2023
Report approved: 1/4/2022

Narrative Midterm report

Executive Summary

We have established contact with partners and Government regarding the creation of a National Node. A number of presentations, meetings and discussions have been done with Government authorities. We registered the Seychelles National Herbarium on GBIF, and we are following up with Government regarding the National node (need time).

We have cleaned most of the species occurrence data and sampling event data.

We have published one out of 2 sampling event datasets planned.

We have described in detail the database exports and data analysis needed for the ecosystem Red Listing and the KBA evaluation, using R and Earth Engine scripts.

We have had many meetings with Government (conservation and land use planning) to discuss the validity of the proposed approach, which has also been shared and reviewed by local biodiversity experts.

We are not planning any major change to the project. The next steps will involve the organization of a workshop to share our results, and to discuss the ecosystem Red List and National species Red List, as well as the delineation and status of the KBAs. Results will then be shared more widely, and trainings will be organized to share some of the tools developed.

Progress against milestones

Has your project published at least one dataset through GBIF.org?: Yes

Dataset published:

Dataset	DOI
Quantitative and Semi-quantitative survey of the vegetation of Seychelles through stand scale plots	https://doi.org/10.15468/h67txm

Has at least one member of your project team received certification following the BID capacity enhancement workshop?: Yes

Name of the workshop participant: Bruno Senterre

Certification obtained: Advanced Badge

Report on Activities

Activity progress summary

1. To establish a GBIF Participant Node (<July 2021):

This activity has been delayed due to the political transition that happened in Seychelles precisely at

the beginning of this project (and therefore delays for new appointments in the Government), and ultimately due to a concern raised by the Government regarding data sharing and biopiracy. Basically, the Government still supports this project, the publication of datasets on GBIF and the creation of a National Node, but prefers to wait until a new ongoing legislation is finalized. In the meantime, we have been advised to register to GBIF not as a country but as an Institution.

We are confident that the National node can possibly be formalized before the end of the project, but it is unlikely to happen early. Our plan is to organize a workshop to discuss our results of the Red Listing and KBA evaluation before June 2022. We will use this opportunity to show visually what it means exactly to publish datasets on GBIF, and how this can be used as a tool to exchange data between different data management systems. We also want to organize a workshop/training to show concrete tools for extracting knowledge out of data, using prepared scripts in R.

2. Species Data cleaning (< March 2022):

Most of the occurrence data for species of high conservation value of the Inner Islands are relatively clean. We wanted to draft the complete data analysis process, from cleaning to evaluation of parameters for KBA evaluations using R scripts. And then, once the data analysis process is described, continue the data cleaning aspect and develop synergies with partners (during the second half of 2022).

3. Red Listing of Ecosystems (RLE) (< July 2022):

We have described and evaluated the Red List status for the main types of ecosystems contained in the currently recognized Key Biodiversity Areas of Seychelles. After presenting our results, in the next few months, we will continue this for the remaining types of ecosystems.

4. Assessment of global KBAs using species and ecosystems criteria (< Oct. 2022):

We have described in detail the process for KBA evaluation, and we have discussed it with the main partners in Government. Six of the most important KBAs of Mahé and Praslin have been evaluated using the described approach, following the international guidelines. The remaining KBAs will be evaluated during the next few months.

6. Publish GBIF dataset (< Jan. 2023):

One dataset has been published, for vegetation plots. We decided to exclude from that dataset data from plotless sampling event, which we will publish as a separate dataset.

We also plan to publish in 2022 the data on species occurrences, and an additional dataset for a checklist of the vascular plants of Seychelles.

The other activities of the work plan have not yet been addressed and their planning is unchanged, planned for the second half of 2022.

None of the activities of the work plan has yet been fully completed.

Completed activities

Report on Deliverables

Deliverables progress summary

Based on the project document, only one deliverable was due now, which is the signed GBIF MOU. This has not been possible due to changes in the Government and delays in procedures.

The dataset deliverable titled "KBA and vegetation surveys" has been done, and is available at <https://doi.org/10.15468/h67txm>

Other deliverables are planned for 2022. The species occurrences data cleaning, the ecosystem red listing and the KBA assessment are all in progress. Preliminary results have been produced, with detailed and fully described data analysis, and discussed with Government before extending the discussion further. The complete analysis will continue in 2022.

Progress towards deliverables

Dataset deliverables

Species occurrences dataset

Dataset type: Occurrences

Dataset scope: see project document (unchanged)

Number of records:

Data holder: see project document (unchanged)

Data host institution: SEY

% complete: 90%

Status update: Data have been cleaned. Taxonomy has been compared with GBIF backbone and decisions are ongoing for the names that we will be using.

DOI:

Expected date of publication: 2023-01-02

Vegetation surveys

Dataset type: Sampling Event

Dataset scope: see project document (unchanged)

Number of records: 225

Data holder: see project document (unchanged)

Data host institution: SEY

% complete: 100%

Status update: This is completed. But we will add another sampling event dataset, in addition to this one.

DOI: <https://doi.org/10.15468/h67txm>

Expected date of publication:

Other deliverables

Red Listing of Ecosystems

Description: Evaluate ecosystems of Inner Islands according to Red list criteria

% complete: 70%

Status update: A report has been produced and shared with Government, and local biodiversity experts. Discussions have followed and the approach has received a lot of support. But this task was not planned to be completed now and indeed it will require a few more months to be discussed and validated with all relevant stakeholders.

Sources of verification: N/A

KBA review

Description: Review of the KBAs of the Inner Islands using species and ecosystem criteria.

% complete: 70%

Status update: A report has been produced and shared with Government, and local biodiversity experts. Discussions have followed and the approach has received a lot of support. But this task was not planned to be completed now and indeed it will require a few more months to be discussed and validated with all relevant stakeholders.

Sources of verification: N/A

Communications and visibility

It is still a bit early for communication and visibility to be added to the page. In April-June, we will be discussing our results on species, ecosystems and KBAs with our partners. We will attempt to validate and share the ownership of these results with them, and we will discuss the creating of National Biodiversity Groups such as the GBIF National Node and the KBA National Coordination Group (NCG), which will likely overlap largely.

Once this is done, in the second half of 2022, we suggest to then communicate on the results.

Monitoring and evaluation

Monitoring and evaluation findings

Planning and keeping updated on the progress has been done using Asana as planned. It is easy and efficient. The original timing for activities and deliverable is consistent with the progress so far. We have already worked substantially on the Ecosystem Red Listing and KBA assessments aspects (normally mostly planned for 2022), but this is mostly because we wanted to get the process clear, based on a good basis of clean data, and then only continue working on further data cleaning, along with the involvement of more partners to discuss and debate the data and findings.

There is no major change to the work plan in terms of deadline and deliverables.

Impact of COVID-19 pandemic on project implementation

The first phase of this project required little networking for the KBA analysis itself. One of us (B.Senterre) has worked on the cleaning of data on species and ecosystems, and on the data analysis process, described through R and Earth Engine scripts. For the next phase, we will be sharing results, discussing these, and developing collaborations and trainings. It is expected that these activities will remain possible even considering the covid situation, simply by following the requires prevention measures.

The part of the project dealing with the creation of a GBIF National Node has been delayed for reasons other than covid.

GBIF leads the Biodiversity Information for Development (BID), a programme funded by the European Union. The programme provides supplementary support for activities addressing the needs of regional researchers and policymakers through mobilization and use of biodiversity data.

