Mobilizing Cuban plant information from the IUCN/SSC Cuban Plant Specialist Group

Programme: BID
Project ID: BID-CA2020-001-NAC
Project lead organization: IUCN/SSC Cuban Plant Specialist Group
Project implementation period: 1/7/2021 - 30/6/2023
Report approved: 24/7/2023

Final Narrative Report

Executive Summary

During first half of the project, we digitalized and prepared for mobilization via GBIF according DwC standard 58898 records, almost 20000 records more than anticipate mobilizing for the end of the project. It was also performed the planned assessment of biodiversity information needs for more effective conservation management, planning and policymaking. As positive impact of our effort, the subject is considering in the developing National Strategy od Plant Conservation. During the project we also accomplished training about 24 students and stakeholders on data mobilization. In addition to the increasing challenges facing any project in Cuban nation, we only encountered difficulties with the publication of the conservation relevant information from conservation assessments of Cuban plants (conservation rationale for example) that we included as long text strings in field in taxonRemark.

Progress against milestones

Has your project completed all planned activities?: Yes

Has your project produced all deliverables: Yes

Report on Activities

Summary of the implementation of the project activities

All three workshops planned under the project were delayed due unexpectedly long and strict Covid-19 travel banns and meetings prohibitions. In the meantime, we provided one-on-one biodiversity mobilization training to critical project members, also we designed a questionnaire to assess biodiversity information needs and conducted the survey. This delay did not affect the project results. With those trained persons we worked in data capture and management for data mobilization to move to our goals.

The project mobilized more than 50 thousand of occurrences of native Cuban plants, many of them threatened, as well as invasive plants in Cuba. We also produce updated lists on Threatened Cuban Plants and Invasive Plants in Cuba, with complementary information, as well as reports on threatened plants not protected by National System of Protected Areas and most noxious invasive plants. All of them are useful for management, conservation and restoration planning, policymaking and decision-making, as well as awareness and education.

Completed activities

Activity: Train the data mobilization coordinators

Description: Gain mandatory certification. Two staff members were trained in biodiversity data mobilization and gain both their advantage badges at BID Caribbean Data Mobilization Course
Start Date - End Date: 19/7/2021 - 17/10/2021
Verification Sources: https://gbif.fluxx.io/s3/model_doc/7602/8614410
https://gbif.fluxx.io/s3/model_doc/7602/8614408

Activity: Design a questionnaire to assess biodiversity information needs

Description: A questionnaire to assess biodiversity information need of conservation stakeholders were produced and made available online. Survey were conducted and responses were analyzed and summarized
Start Date - End Date: 8/9/2021 - 30/4/2022
Verification Sources: https://www.questionpro.com/t/ATxF1Zot9K https://gerbet.mx-router iv.com/web_version/85m4xq/kuw_rcuc

Activity: Workshop: Challenges and solutions for biodiversity data use

Description: Based on results of the questionnaire previously designed and applied to detect biodiversity information needs, in this workshop we discussed about plant data needed for conservation planning, research, and policymaking. We will also identify actions and partnerships that could address data needs
Start Date - End Date: 15/4/2022 - 17/4/2022
Verification Sources: https://gbif.fluxx.io/s3/model_doc/7602/8614757

Activity: Workshop: Mobilizing biodiversity data - guidelines and tools

Description: Workshop to building new capacities to mobilize biodiversity data. This workshop revised DwC standard, as well as data capture, management and publish through GBIF IPT. This workshop was aimed to CubanPSG members, new partners and students
Start Date - End Date: 12/4/2022 - 15/4/2022
Verification Sources: https://gbif.fluxx.io/s3/model_doc/7602/8631703

Activity: Workshop: Using CubanPSG biodiversity data for conservation planning, policymaking and decision-making

Description: This workshop aimed to improve access to data of IUCN SSC Cuban Plant Specialist Group for conservation planning, policymaking and decision-making. This workshop explored data sets of the IUCN SSC Cuban Plant Specialist Group and outline its potential to support conservation planning, policymaking and decision-making. We also record all comments and recommendations for improving usability of our searching platform and its results
Start Date - End Date: 17/4/2022 - 18/4/2022
Verification Sources: https://gbif.fluxx.io/s3/model_doc/7602/8631444

Activity: Data Publishing - Checklist of Invasive plants

Description: We published the checklist of invasive plants of Cuba
Start Date - End Date: 13/9/2021 - 31/5/2022

Verification Sources: https://doi.org/10.15468/q56c5c
https://www.gbif.org/dataset/58a65302-3eae-44f9-be41-8c5001f48094

Activity: Data Publishing - Species Conservation Assessments

Description: We produced and publish and annotated checklist of redlisted Cuban native plants.
Start Date - End Date: 13/9/2021 - 21/6/2023
Verification Sources: https://www.gbif.org/dataset/d51a552b-0d2c-4788-a5c9-824b552abbf1#citation
https://doi.org/10.15468/9qtwmv

Activity: Data Publishing - Distribution of invasive species of Cuba

Description: We captured, georeferenced and publish an occurrence dataset containing the presence records for invasive plants of Cuba
Start Date - End Date: 25/10/2021 - 22/6/2023
Verification Sources: https://www.gbif.org/dataset/63cdad4e-75f8-4295-93a0-38627da5b409#citation
https://doi.org/10.15468/yvbkp3

Activity: Data Publishing - Distribution of Cuban native plants

Description: We produced and published a occurrence dataset with present sites of occurrence or distributional data of the Cuban native plants used in conservation assessments
Start Date - End Date: 25/10/2021 - 26/6/2023
Verification Sources: https://www.gbif.org/dataset/284ff299-cd6e-47a4-9730-f5a2f941e404#citation
https://doi.org/10.15468/mj8z59

Report on Deliverables

Deliverables - Summary

All project deliverables were produced: 4 datasets already publish and accessible from GBIF portal, and 4 other deliverables.

Deliverables produced by the project

Dataset deliverables

Checklist of Invasive Plants in Cuba - 2022

Dataset type: Checklist
Dataset scope: This dataset contains the updated checklist of invasive alien plants in Cuba, based on data gathered between 2017 and 2022, plus other relevant information like invasion pathway, degree of establishment and local vernacular names
Number of records: 617
Data holder: IUCN/SSC Cuban Plant Specialist Group
Data host institution: GBIF Secretariat
% complete: 100%
Status update: Published and registered in GBIF
DOI: https://doi.org/10.15468/q56c5c
Expected date of publication:

Cuban Redlisted Plant Species – 2023

Dataset type: Checklist

Dataset scope: This resource presents an updated checklist of Cuban native plants assessed, with relevant conservation information like IUCN category, conservation assessment rationale and protected areas where occur. Also local vernacular names and status as Cuban endemic are provided as apply.
Number of records: 4,722
Data holder: IUCN/SSC Cuban Plant Specialist Group
Data host institution: GBIF Secretariat
% complete: 100%
Status update: Published and registered in GBIF
DOI: https://doi.org/10.15468/9qtwmv
Expected date of publication:

Distribution of Cuban Plants

Dataset type: Occurrences
Dataset scope: This resource present sites of occurrence or distributional data of the Cuban native plants used in conservation assessments
Number of records: 49,741
Data holder: IUCN/SSC Cuban Plant Specialist Group
Data host institution: GBIF Secretariat
% complete: 100%
Status update: Published and registered in GBIF
DOI: https://doi.org/10.15468/mj8z59
Expected date of publication:

Distribution of Alien Invasive Plants in Cuba

Dataset type: Occurrences
Dataset scope: In this resource, the distribution of invasive plants in Cuba is addressed, based on these species occurrence recorded in the Cuban archipelago.
Number of records: 3,818
Data holder: IUCN/SSC Cuban Plant Specialist Group
Data host institution: GBIF Secretariat
% complete: 100%
Status update: Published and registered in GBIF
DOI: https://doi.org/10.15468/yvbkp3
Expected date of publication:

Other deliverables

Report on challenges and solutions for biodiversity data use in Cuba

Description: The report includes the challenges faced by Cuban biodiversity data users to access the data, key information needed for aim local and national goals and actions to address these challenges.
% complete: 100%
Status update: Improved and prepared as a manuscript for publication in a scientific journal. In the last phase of review by the authors prior to submission to the journal
Sources of verification: https://gbif.fluxx.io/s3/model_doc/7602/8629398

Report on the top 50 alien invasive species of concern in Cuba

Description: Compendium of available information on the top 50 invasive plants in Cuba
% complete: 100%
Status update: Analysis and report are completed (see uploaded attached).
Sources of verification: https://gbif.fluxx.io/s3/model_doc/7602/10019434

Report on threatened species not protected by Protected Areas

Description: This report provides an updated checklist of threatened Cuban species not protected by the National System of Protected Areas (SNAP). It provides useful information for their ex situ conservation in Cuban Botanic Gardens, their legal protection under the Species of Special Importance Law, and the establishment of new protected areas
% complete: 100%
Status update: Analysis and report are completed (see uploaded attached)
Sources of verification: https://gbif.fluxx.io/s3/model_doc/7602/10019438

Gaps in knowledge and conservation in Cuban plants

Description: We identify knowledge and conservation gaps in plant diversity of Cuba.
% complete: 95%
Status update: Analysis and preliminary results are complete and a preliminary publication draft is available in Cuban PSG website. Paper should be complete and journal submit, now data sets publishing are finished. That is the reason for reported it as 95% complete.
Sources of verification: https://cubanplantsiucn.planta.ngo/wp-content/uploads/2023/06/gapsCubaPlantInformationAndConservation_preliminar-draft_ES.pdf

Events

Workshop: Challenges and solutions for biodiversity data use

Dates: 2022-04-15 - 2022-04-17
Organizing institution: IUCN/SSC Cuban Plant Specialist Group
Country: Cuba
Number of participants: 35
Comments: During these three days we discussed about plant data needed for conservation planning, research, and policymaking, based on preliminary results of the survey performed using an questionnaire specially designed for this purpose, as well as on participants information needs. We will also identify actions and partnerships (e.g. with Institute of Tropical Geography) that could address data needs.
Website or sources of verification: https://gbif.fluxx.io/s3/model_doc/7602/8614757

Events

Workshop: Using CubanPSG biodiversity data for conservation planning, policymaking and decision-making

Dates: 2022-04-17 - 2022-04-18
Organizing institution: IUCN/SSC Cuban Plant Specialist Group
Country: Cuba
Number of participants: 28
Comments: With 28 participants from 10 distinct institutions we presented IUCN SSC Cuban Plant Specialist Group datasets contents and their potential use for conservation planning, policymaking and decision-making. We also record all comments and recommendations for improving usability of our searching platform and its results.
Website or sources of verification: https://gbif.fluxx.io/s3/model_doc/7602/8631444

Events

Workshop Mobilizing biodiversity data guidelines and tools

Dates: 2022-04-12 - 2022-04-15
Organizing institution: IUCN/SSC Cuban Plant Specialist Group
Country: Cuba
Number of participants: 18
Comments: During this workshop we introduced DwC standard, as well as data capture, management and publish through GBIF IPT
Website or sources of verification: https://gbif.fluxx.io/s3/model_doc/7602/8631703

Communications and visibility

We presented the project and results at the First Cuban Botanical Congress, and the Annual Meeting of the Cuban Plant Specialist Group (2022). Due some workshops (delayed for COVID 19 restrictions) have been run during the First Cuban Botanical Congress much more first-hand data users took part of debate and make consensus about need for data mobilization and use of standards like DarwinCore for the different Cuban institutional teams. We are almost ready to submit for publication a paper named "How to effectively share information on biodiversity in Cuba? A case study on plants" about results on needs and challenges for biodiversity data use in Cuba. We are alredy share all the relevant information with the stakeholders during last extended Cuban PSG Meeting (March 2023) when were discused problems and solutions in the framework of the National Strategy of Plant Conservation under developing. Results are alredy shared as datasets through GBIF, also are make progress in a solution to share it through Cuban PSG website using a search page developed to access to checklists and relevant information about invasive and threatened plants in Cuba.

Monitoring and evaluation

Final Evaluation

Project has been achieved successful results, complete all planned activities, produce all planned deliverables, and mobilizing much more records than we anticipate. Guidance and assistance of Leonardo Buitrago as BID Regional Project Support Team have been helpful indeed, especially with overcoming obstacles that we encountered in capturing some pieces of information that we consider important in our data and during dataset publish through IPT.

Best Practices and Lessons learned

Detailed documentation is really crucial and needed. Also a complex dataset with some field with lot of text make publish process really messy. Are both leason learned by us.

Post Project activities

Next activities will be finish last review of the paper on information needs, finish the written of "gaps" paper for publication, also republish some datasets to meet BID recomendation for Checklist of Invasive Plants in Cuba - 2022 and our own expectation for Cuban Redlisted Plant Species – 2023. We expect keep working closely to Cuban stakeholders in order to all gathered and mobilized information be usefull. And we also expect to present result about strategy to address information needs in 31st International Congress for Conservation Biology (ICCB 2023).

Sustainability

Sustainability Plans

We are expectant in front to perspective of the inclution of biodiversity information sharing explicitly of National Strategy of Plant Conservation. This could be a great framework for collaborative activities on information sharing and mobilization.

Impact of COVID-19 pandemic on project implementation

Our COVID contingency plans were based on the early-pandemic regional travel bans, but as the pandemic progressed, the Cuban government implemented stricter restrictions that limited the movement even between neighboring municipalities. We must delay some activities but has not negative impact on final results.

GBIF