

Opening the collections to the world: data mobilization of the Cartagena Botanical Garden collections

Programme:BID

Project ID: BID-CA2020-048-INS

Project lead organization: Jardín Botánico de Cartagena "Guillermo Piñeres"

Project implementation period: 1/7/2021 - 30/6/2023

Report approved: 5/7/2022

Narrative Midterm report

Executive Summary

The Cartagena Botanical Garden's data mobilization team is advancing in the project achievements. Up to this point, we have published two of the five proposed datasets. We have updated the seed bank and living collection registers and published the datasets as occurrences through the national node, SIB Colombia.

According to the presented timeline, we estimated that we would finish the curation and digitization activities of the herbarium date set by December 31st, 2021 and publish the dataset in January of 2022. However, Herbarium updates and digitalization are taking longer than expected due to the data quality of the existing database. We propose to change the order of the publication, and herbarium data will be published in May 2023, and the Fauna checklist will be published in September 2022. Additionally, activities regarding herbarium specimens, capturing and organizing high-resolution images, and herbarium updates are expected to be completed by April 2023.

Progress against milestones

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

Dataset published:

	Dataset	DOI
	Banco de semillas Jardín Botánico de Cartagena "Guillermo Piñeres"	https://doi.org/10.15472/8uehrf
	Colección Viva Jardín Botánico de Cartagena "Guillermo Piñeres"	https://doi.org/10.15472/zglyv7

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

Name of the workshop participant: Maria Paula Contreras

Certification obtained: Basic Badge

Report on Activities

Activity progress summary

The activity progress are the following:

- -We have successfully achieved four activities: update of seed bank current registers, publication of seed bank data, update living collections current records and publication of the living collection data.
- -Following our timeline, we started the herbarium digitalization and organized high-resolution images of the herbarium specimen. Up to this point, we have revised more than 6,000 of 15,500 registers, more

than 11,400 photographs taken and more than 250 new mounted specimens.

- -We plan to produce and publish the Fauna checklist between July and September 2022. Meanwhile, the herbarium dataset publication will be on May 2023.
- -We will follow the proposed timetable for producing the flora checklist, the publication of the checklist and the workshops.

Completed activities

Activity: Publication of the seed bank data

Description: We published the seed bank data as occurrences in the GBIF and SIB data repositories

under a CreativeCommons CC-BY or CC0 license.

Start Date - End Date: 1/2/2022 - 14/3/2022

Verification Sources: https://www.gbif.org/dataset/ce0fda27-7bb2-4e66-bf37-d0e2ecfb593d

Activity: Update of the seed bank current registers

Description: We reviewed the seed bank collection and registered each accession to generate an

updated seed bank database.

Start Date - End Date: 1/10/2021 - 28/1/2022

Verification Sources: https://www.gbif.org/dataset/ce0fda27-7bb2-4e66-bf37-d0e2ecfb593d

Activity: Publication of the living collections data

Description: We published the living collections data as occurrences in the GBIF and SIB data

repositories under a CreativeCommons CC-BY or CC0 license.

Start Date - End Date: 24/3/2022 - 2/5/2022

Verification Sources: https://www.gbif.org/dataset/a78cafca-eaa5-4f5d-9040-10ae78dd71a7

Activity: Update of the living collections current registers

Description: We reviewed the living collections and registered each accession to generate an

updated living collections database.

Start Date - End Date: 10/1/2022 - 23/3/2022

Verification Sources: https://www.gbif.org/dataset/a78cafca-eaa5-4f5d-9040-10ae78dd71a7

Report on Deliverables

Deliverables progress summary

We have successfully reached two deliverables, JBGP Seed Bank Data and JBGP Living Collection Data. For both deliverables, we exceeded the expected number of records. For the former, we published 1,672 occurrences and for the latter, 1,403. We estimate progress of 20 % in the Flora from the tropical dry forest patches nearby Cartagena dataset, 10 % for the Fauna from the tropical dry forest patches nearby Cartagena dataset and 30 % for the JBGP Herbarium Data Dataset. We postponed the publication of the JBGP Herbarium Data Dataset due to the extent of the work with the herbarium database. We are reviewing each herbarium specimen, digitizing the information, checking if the photograph exists and checking the quality of the picture. Considering the amount of work, we decided to change the date of the deliverable and assign it a date towards the end of the project. This will give us time to record and digitize as many specimens as possible. Likewise, we decided to change the Fauna from the tropical dry forest patches nearby Cartagena

dataset publication to September 2022, the original publication date was March 2023. This will prevent us from accumulating work at the end of the project.

We will deliver the two workshops on data analysis and publishing according to the proposed timeline in October 2022 and April 2023.

Progress towards deliverables

Dataset deliverables

JBGP Seed Bank Data Dataset type: Occurrences

Dataset scope: Angiosperms from Colombia in the seed bank collection of the Cartagena Botanical

Garden

Number of records: 1.672

Data holder: Contreras M P Madriñan S

Data host institution: Jardín Botánico de Cartagena "Guillermo Piñeres"

% complete: 100%

Status update: Dataset published DOI: https://doi.org/10.15472/8uehrf Expected date of publication:

JBGP Living Collections Data

Dataset type: Occurrences

Dataset scope: Angiosperms, Gymnosperms, and ferns specimens from all the continents at the living

collection of the Cartagena Botanical Garden

Number of records: 1,403

Data holder: Contreras M P Madriñán S Delvasto M

Data host institution: Jardín Botánico de Cartagena "Guillermo Piñeres"

% complete: 100%

Status update: Dataset published DOI: https://doi.org/10.15472/zglyv7 Expected date of publication:

JBGP Herbarium Data

Dataset type: Occurrences

Dataset scope: Bryophytes, Ferns, Gymnosperms and Angiosperms specimens data and images

Number of records: 15,500

Data holder: Jardín Botánico de Cartagena "Guillermo Piñeres"

Data host institution: Jardín Botánico de Cartagena "Guillermo Piñeres"

% complete: 30%

Status update: currently reviewing specimens, updating the database and mounting specimens

DOI:

Expected date of publication: 2023-05-30

Flora from the tropical dry forest patches nearby Cartagena

Dataset type: Checklist

Dataset scope: Angiosperms from the Caribbean tropical dry forest near Cartagena

Number of records: 700

Data holder: Jardín Botánico de Cartagena "Guillermo Piñeres"

Data host institution: Jardín Botánico de Cartagena "Guillermo Piñeres"

% complete: 20%

Status update: Collecting information on the flora of the tropical dry forest

DOI:

Expected date of publication: 2023-01-15

Fauna from the tropical dry forest patches nearby Cartagena

Dataset type: Occurrences

Dataset scope: Invertebrates (Arachnids, Myriapods and Insects) and vertebrates (Birds, Mammals,

Amphibians and Reptiles) from the Caribbean tropical dry forest near Cartagena

Number of records: 400

Data holder: Jardín Botánico de Cartagena "Guillermo Piñeres"

Data host institution: Jardín Botánico de Cartagena "Guillermo Piñeres"

% complete: 10%

Status update: Reviewing literature and records of the caribbean fauna

DOI:

Expected date of publication: 2022-09-30

Other deliverables

Communications and visibility

Project results will be shared in the botanical garden institutional website and in social media

Monitoring and evaluation

Monitoring and evaluation findings

We have reached two of five outputs, the publication of the JBGP Seed Bank dataset and the JBGP Living Collection dataset. Following our timeline, we started the herbarium digitalization activities in

July 2021. However, herbarium dataset publication is taking longer than expected because of the data quality registered in the existing database. We are reviewing each herbarium specimen and digitalize the information according to Darwin Core, assigning catalog number to each picture and checking picture quality. We decided to change the deliverable date and set it a date towards the end of the project, May 2023. This will allow maximizing the number of review specimens and digitalization. Additionally, we modify the Fauna checklist publication to September 2022. Moreover, other deliverables include two workshops scheduled for October 2022 and April 2023 will take place on the set date.

The project has been managed according to the presented proposal. The project coordinator oversees planning actions and examining alternatives, organizes people to achieve set goals, and provides feedback on processes and results. The administrative assistant is in charge of budgeting and making payments, and the botanist and the student handle data processing.

The support from the GBIF Secretariat has been very effective. They have guided us in all the steps of our project. We have been in contact with Leonardo Buitrago, a BID Regional Project Support Team member. He has been a key person during project development, achievements, and publication. He has assisted and guided us in all the steps of the project. Data set publication is made through the regional node, SIB Colombia. The process takes a little over a month.

Impact of COVID-19 pandemic on project implementation

The COVID-19 pandemic did not impact the project implementation. We worked following the local authority's regulations of compulsory mask use and social distancing

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.

