BID Caribbean Workshop on Biodiversity Data Mobilisation

Final Report on the on-site event in St. Augustine (TT), June 2017

The **BID workshop on biodiversity data mobilization** is part of the capacity enhancement approach of the [Biodiversity Information for Development (BID) programme](#) led by GBIF. The workshop has online and onsite components, both with a strong practical approach. This report refers to the **second edition of the workshop** offered to the recipients of selected proposals from the Caribbean, which included an on-site event held at the University of West Indies, St. Augustine, Trinidad and Tobago, 19-22 June 2017.

Each edition of the workshop aims to contribute to enhancing the capacity of the BID-funded project teams to plan and implement biodiversity data publishing efforts effectively and according to GBIF standards. The workshop has a strong focus on the technical aspects of data mobilization — in particular, everything related to the data lifecycle: digitization, management and online publishing.

At the conclusion of each edition, the work of participants who have successfully completed all assignments is evaluated, and those participants that achieved successful scores receive an official certification in the form of a Mozilla Open Badge.

Based on recommendations from the evaluation of the previous edition of this workshop held in Rwanda, 2016, the following changes were implemented:

- Mentors led the small groups, which allowed the trainers to rotate between the groups. This improved the trainers' ability to assess each of the participants' performance and was an extremely positive change.

- Mentors provided comments on each of the participants' performance to aid the trainers in their assessments.

- The workshop used a new elearning portal (provided through in-kind support by GBIF Spain). The new portal was easier to use. Participants utilized the new portal more effectively than in previous edition of the workshop, and were able to use the social aspects of the portal to get to know each other prior to the onsite event.

- We did not have a need to provide separate language groups for this edition; however, the materials were still provided in French and were additionally translated into Spanish. Two participants, in particular, appreciated the ability to converse in both French (to the trainers) and Spanish (to the mentors).

The participants' overall evaluation of the event was extremely positive. This report summarizes the feedback received and suggests areas for improvement for future events.

1. Contents

The workshop brochure can be found on the event page (https://goo.gl/coec1C). The complete structure of the workshop, including details about the activities and materials used can be found in the course collaborative platform (http://elearning.gbif.es -- password required).

2. Participation

Ten students participated in the on-site event. Nine of them represented BID-funded projects and one additional was a regional participant. The countries involved were: Barbados, Belize, Cuba, Guyana, Haiti, Jamaica, Suriname, and Trinidad and Tobago. The participants were nominated prior to the event by their project leads and were expected to possess the following capabilities:

- Basic skills in computer and internet use, and, in particular, in the use of spreadsheets, databases, and tools for geographical data representation (e.g. Google maps, GIS software).
- Basic knowledge about geography and biodiversity informatics: geography and mapping concepts, basic taxonomy and nomenclature rules, basic knowledge about GBIF and other relevant initiatives working in biodiversity informatics.
- Willingness to disseminate the knowledge learned in the workshop with partners and collaborators in your project by adapting the biodiversity data mobilization training materials to specific contexts and languages maintaining their instructional value.

The course was led by trainers from the GBIF community: Sharon Grant (Chicago Field Museum), Sophie Pamerlon (GBIF France), and Marie-Elise Lecoq (GBIF France). Grant and Pamerlon were part of the team that developed and taught the original edition of the course and provided valuable consistency in the delivery of this edition. Lecoq was chosen for her technical expertise and involvement with the Atlas of Living Australia portal project, which is to be implemented for the Caribbean regional project.

The event was also supported by three BID mentors: Anabela Plos (GBIF Argentina; GBIF Latin American and Caribbean Regional Deputy), Paula Zermoglio (VertNet), and Manuel Vargas (Instituto Nacional de Biodiversidad). These mentors were chosen for their leadership and involvement in the biodiversity informatics community in Latin America.

A GBIF Programme Officer for Participant and Engagement, Laura Anne Russell, coordinated the training and a local host, from the University of the West Indies, Mike Rutherford, coordinated all the logistics.

During the course, the participants were divided in three working groups of three people, each under the supervision of one of the mentors. The trainers rotated groups whenever they were not presenting. The full list of registered participants can be found on the event page (https://goo.gl/coec1C).

3. Evaluation

Attendees evaluated the event by filling out an anonymous online form to which a link was provided during the last session. It included two sections: the first based on quick assessments of key topics and of the course sessions, and the second based on free-text questions. **8 out of 10 participants** completed and submitted the form.

3.1. Key topics

The table at right includes the course features that the participants were asked to rate from 1 (very dissatisfied) to 5 (very satisfied).

Topic	AVG score
Course contents	4.63
Course structure and schedule	4.13
Course materials	4.50
Trainers	4.63
Interaction with my peers	4.63
Preparatory activities	4.50
Practical organization	4.38
Support for languages	4.80
Use of digital and online resources	4.38
Applicability in my work place	4.13

All scores were very high (all over 4 and many over 4,5 out of 5). Attendees valued the interaction with the trainers and peers, the quality of the contents, and the support for languages most highly. The first is probably thanks to the small size of the work groups, which allowed extended discussion time with the trainers and mentors. The contents were developed based on the participants and the projects they represented, which allowed the development of a very targeted programme. And while the course was conducted in English, the participants appreciated the availability of translated materials.

The course structure and schedule, along with applicability in the workplace scored the lowest, although still in the upper range of the scoring. The lower scores for the course structure and schedule may be related to the intensive schedule. Some participants commented that a fifth day of training would be helpful as they wanted more time to absorb the content and more time to practice; some of the practice time on the fourth day was lost to a regional plenary presentation. The lower score for the applicability in the work place may have to do with two students in particular struggling to adapt data examples used in the course to their own type of data.

> Participants gave the workshop features an **overall score of 4.47 out of 5**.
>
> The Kigali edition of this data mobilization workshop received a 4.49 out of 5.

3.2. Workshop sessions

The next table summarizes the average scores that participants assigned to the different sessions using the same five-point scale mentioned in section 3.1. Each session scored above 4 and many over 4,5, with the exception of one (Advanced Data Publishing). The Basics of Data Transformation (led by Marie-Elise Lecoq) received the highest score at 4.63. The techniques taught in this session were new and valuable to the participants and they were excited to learn how to standardize their data using the techniques.

The session about Advanced Data Publishing scored the lowest with a score of 3.63. This is likely because it is the most technical of all the sessions, and few people in the audience could follow all its contents fully. It requires a high level of understanding of the cycle of publishing biodiversity data, which for many in the room was a new topic. This was also the lowest rated topic in the Kigali edition.

Session	Average score
01: Introduction	**4.50**
02: Workshop foundations	4.38
03: Digitization planning	4.38
04: Digitization planning practice	4.25
05: Biodiversity data types	**4.50**
06: Principles of data digitization	4.38
07: Digitization tools	4.25
08: Basics of data transformation	**4.63**
09: Data management tools	**4.50**
10: Open Refine	4.13
11: Basics of data publishing	4.13
12: Simple data publishing	4.25
13: Advanced data publishing	3.63
14: Practical session	4.21

Participants gave the course sessions an **overall score of 4.28 out of 5**.

The Kigali edition of the course sessions received a 4.52 out of 5.

3.3. Free-text responses

In the second section of the evaluation form, the students had the opportunity to provide more detailed feedback in free-text responses. The questions and a summary of the responses follow below:

a) *In which area did you **increase your knowledge** the most?*
   - Data management, transformation and cleaning (4 people)
   - Planning a biodiversity data mobilisation project (2 people)
   - Use of the IPT (3 people)
   - Biodiversity data digitization (1 person)
   - How to publish data in GBIF (1 person)

b) *Which of the topics studied will be the **most useful in your daily work**?*
   - Biodiversity data cleaning and transformation (6 people)
   - Biodiversity data publishing (2 people)
   - Biodiversity data digitization (2 people)
   - Use of the IPT (1 person)
   - All topics (1 person)

c) *Is there anything that you would have **added** to this course?*
   - More time/another day to absorb concepts (1 person)
   - Additional use cases/data type examples (2 people)
   - IPT installation and management (1 person)

d) *Any other **comments or suggestions**?*
  - o More time/another day (3 people)
  - o Workshop broadened network of biodiversity colleagues (1 person)
  - o Offer a workshop on project proposal development (1 person)
  - o Some accents (of the trainers) were difficult (1 person)
  - o More follow-up information on OBIS (1 person)

4. Evaluation and recommendations by the GBIF Secretariat

We have an important opportunity with the BID programme to improve the course curriculum based on the feedback we receive every time we repeat the course. We are continuing with our plan to implement this capacity enhancement workshop as a core piece of the GBIF curriculum.

Based on the feedback received during the course and through the evaluation form, the Secretariat offers the following recommendations for improving the future training events:

A. Emphasize the practical work using small groups

The organization of the course around small work groups focused on practical work continues to be a key to the success of this course. GBIF should maintain this approach to future BID training events.

B. Expand role of mentors

Giving the mentors a greater role improved the group work and allowed participants to build a relationship with the mentors that will last beyond the projects' conclusions. With this edition of the workshop and forward, we recommend assigning mentors to the individual projects. We will utilize our pool of volunteer mentors and assign them to projects based on the project themes, language requirements and mentor skill sets.

C. Explore options to increase practice time during the training events

Four hours is given to hands-on practice on the final (fourth day), but only one student managed to complete the second use case during that time. The remaining participants completed it later as part of their follow-up activities along with their final and third use case. In the evaluation comments, several of the participants highlighted the need to have a longer event, especially to allow more practice time. However, the course is very intensive and adding a fifth day would not be recommended. It would be better to find a way to increase the time given on the last day for hands-on practice to six hours.

The Secretariat and the team of volunteer mentors will continue to provide support to project representatives in their data mobilization work during the third part of the workshop and though the online platforms established to support the BID community for the rest of the project implementation time.

C. Include more information on Darwin Core

In the previous edition of this course, participants seemed to be more familiar with the Biodiversity Informatics standard, Darwin Core. For this group of participants in the Caribbean, the Darwin Core was unfamiliar. When this was recognized, we adapted an abbreviated presentation and worked it into agenda during second day. This presentation will be expanded and included as a part of the permanent agenda. To make time for this, a presentation in the Digitization section will be absorbed into the other Digitization presentation.

D. Improve support materials

As mentioned in the previous section, these participants were less familiar with concepts and terms that have become common in Biodiversity Informatics. The recommendation is to provide a glossary of terms and links to more information as part of the elearning portal (https://elearning.gbif.es) that supplements the course.