

# **Sandwatch International Database Refresher Workshop Dominican Republic**

**Crowne Plaza Hotel,  
Santo Domingo, Dominican Republic**

**19-20 November, 2015**

## **REPORT**

**Prepared by the Sandwatch Foundation**



## **Background**

Sandwatch is a volunteer network of children, youth and adults working together to monitor and analyse changes in their beach environment. Through Sandwatch, they use a standardized approach, share their findings with the wider community and take action to address issues, enhance their beach environment and build resilience to climate change.

With its practical hands-on approach, Sandwatch is an example of Education for Sustainable Development – an approach to teaching and learning that seeks to empower and encourage people of all ages to assume responsibility for creating and enjoying a sustainable future.

Sandwatch is science in action, applied in the real world in an interdisciplinary manner with applications ranging from geography to art, and from poetry to mathematics. It helps students to apply their school-based learning to everyday life situations.

The Sandwatch programme started in 2001 and groups from more than 30 countries around the world are actively involved in Sandwatch. In 2013 the Sandwatch International Database was launched in Mauritius. The database provides Sandwatch groups with a safe site to store their maps and photos, enter their data, and view tables and graphs showing how the beach changes over time. The database represents an important historical archive of beach changes at specific locations that can be shared globally and in time will make a contribution towards global climate change assessments.

Over the course of 2013 and 2014, three short (one-day) training courses on the Sandwatch International Database were held in (i) Bequia, St. Vincent and the Grenadines; (ii) Cape Verde Islands; and (iii) the Dominican Republic. In most cases these short training courses were “add-ons” to larger events, e.g. the “Climate Change Education Inside and Outside the Classroom” training courses held in 2013-2014. These short courses served to promote interest in the database but were too short to provide participants with all the necessary skills to actually use the database.

So to maximise use of the database it was decided to focus on a longer training course for one country. Early in 2015 several countries were contacted as to their interest in the database and the length and availability of their data records. Based on the responses received, the Dominican Republic was selected as being ready to move to the next step – that of showcasing a country with its data correctly entered such that the analysis and teaching tools already built into the database can be fully utilised. This could then be used to incentivise other countries to do likewise.

Two training courses were held in the Dominican Republic in 2015, a five-day training course in May and a shorter two-day refresher course in November 2015. Then in 2016,

if funding is available, a longer workshop will be held to review experiences and showcase results.

At the first workshop in May the participants came with different skill sets and varying IT and database knowledge. This had been expected and was one of the reasons why the workshop was planned to cover a 5-day period.

Time was therefore available to allow individual participants to “learn by doing”. All participants had been advised in advance to bring their Sandwatch data to the workshop.

By entering their own data in the different sections of the database, which are organised according to the chapters in the manual, they were able to become familiar with the database. Each section of the database, or chapter of the manual, follows a similar format and participants quickly found that once they had learnt how to enter data on waves for example, then the longshore current section followed a similar pattern.

Having the technical support people from the educational districts and the supporting institutions present was extremely helpful especially for those participants who found the database challenging, and also for helping with some of the problems that arose through using different internet browsers.

Participants appreciated the usefulness of the database to demonstrate an accurate and comprehensive picture of the health of their beach over the course of several months and years.

By the end of the workshop all the participants were able to successfully access and view the database, as well as to enter and populate the specific sections with the data they had collected over the last several months and years.

This was apparent during the final day of the workshop when participants each gave a presentation using the data they had entered into the database. Several of the participants have been members of Sandwatch for many years and were very pleased to see how all their data can now be fully and safely recorded in a systematic way.

This report presents the refresher workshop held in November 2015.

## **Objectives**

The overall purpose of the refresher workshop was to evaluate experience with the database during Sandwatch activities carried out by participating schools in the second half of 2015. In the Dominican Republic, schools in the southern provinces have been actively involved in Sandwatch since 2001 and the network is coordinated by the Dominican Republic National Commission for UNESCO, with the collaboration of the

Ministry of Education, Ministry of Environment and Natural Resources and the National Aquarium.

The objectives of the Sandwatch Database Refresher Workshop were to:

1. Review database use by participating schools during Sandwatch activities between May and November 2105.
2. Determine if there were any difficulties faced entering data in the database and, if so, review these aspects of data entry.
3. Discuss the integration of the data entry into ongoing Sandwatch activities.
4. Have database entry and use integrated into future planned Sandwatch activities.
5. Review the support of one or more government agencies or NGOs who could work with the local Sandwatch groups to help guarantee the continuity of interest in Sandwatch activities and the establishment of the database as a living tool for teaching and archiving data following from discussions at the May workshop.

### **Logistical Arrangements**

The Sandwatch Database Refresher Workshop was held on November 19-20, 2015 at the Crowne Plaza Hotel in Santo Domingo, Dominican Republic. The workshop was sponsored and supported by UNESCO Headquarters in Paris, the Dominican Republic National Commission for UNESCO and the Sandwatch Foundation.

The workshop was facilitated by Dr. David Gray, designer of the Sandwatch International Database and Ms. Khalissa Ikhlef, Programme Specialist, Local and Indigenous Knowledge Systems, UNESCO, Paris.

Simultaneous translation was available throughout the workshop. The Sandwatch International Database is available in Spanish and English, so throughout the demonstrations and presentations screens were shown with the different language versions.

Overall the logistical arrangements were good. The internet connection was solid except for a couple of short interruptions. Data speed was better than at the May workshop and adequate for workshop needs. Simultaneous translation services were excellent.

### **Participants**

The participants list is presented as Annex 1.

Three of the teachers from the May workshop have left the schools they were with and are no longer involved with Sandwatch activities. Two of the replacement teachers

attended the workshop but have not yet had basic Sandwatch training. This highlights the need for continued training and monitoring to ensure on-going Sandwatch involvement by participating schools.

Other participants included technical support people from the Educational Districts and other supporting institutions such as the Ministry of the Environment and Natural Resources and the National Aquarium, the Secretary General of the National Commission and the Dominican Republic Sandwatch Coordinator.

## **Workshop Agenda**

The workshop agenda is shown in Annex 2.

This agenda was adjusted in response to feedback from participants on their experience with database use since the May 2015 workshop.

On the first day Dave Gray gave a brief review of the database structure especially for the new attendees. He also pointed out a couple of modifications that were made to the database in response to items that arose at the May workshop. After this there was a general discussion of this fall's activities including logistical problems that affected the actual data collection.

In the afternoon various teachers reviewed the data that they and their students had entered. The group discussed entries and offered advice on adjustments that should be made.

On the second day this review continued. This was followed by a review of a couple of database entry activities that were causing problems. In the afternoon the group reviewed the Long Bay example beach data to compare with the datasets that had been presented. Finally there was a discussion of future Sandwatch activity and database use.

## **Results**

The day before the workshop there was a meeting with Dr. Dave Gray, Ms. Khalissa Ikhlef, Mrs. Maria Mercedes Brito-Feliz and Mr. Franklin Jesús Tejeda to review the Sandwatch activities and database use for the second half of 2015. Database use had been less than expected. However it appears that this was mainly due to Sandwatch activity that did not take place because of various logistical problems including access to transportation and equipment and water conditions at the beach. This helped provide background to workshop discussions and to adjustments in the agenda.

On day 1 of the workshop these problems with the carrying out of assigned Sandwatch activities were again brought up and discussed with the group. The Sandwatch

Coordinator will have to work with the participating schools and local school boards to overcome these logistical problems.

It became apparent after this discussion and the presentations of the monitored beaches that data for activities that had been completed this fall had been entered. Problems were in the carrying out of the beach activities not in entry into the database.

However during the data presentations it also became apparent that there were problems with the way groups were organizing their data in the database. The entries for most types of data are organized by data collection location and then by the date on which the data is collected. Eventually this will mean that there is a table of data of the type being collected for each data collection location with one row (or sometimes column) for each collection date.

The main issues seen were that data collection locations were not adequately defined and data collection locations were duplicated so that there was a new data collection location record for each collection date.

On day 2 Dave Gray reviewed the data for the Long Bay example beach showing how the data collection locations are properly defined and how data tables are built with each observation day. Significant time was spent discussing data organization in the database and how this matches the way activities are defined in the Sandwatch Manual.

There are likely two factors contributing to these problems. First the database is aligned very well with the data collection activities defined in the Sandwatch Manual. If activities do not follow closely the descriptions in the Manual there could be a misalignment. Use of the database will require that activities more closely follow the manual's instructions and these should be reviewed. Second there needs to be a good understanding of "the scientific method" where data is carefully organized. For some non-science teachers this may take some getting used to. This therefore needs to be monitored and supported.

Two database entry activities were giving some users problems and these were reviewed. The database only accepts picture files that are less than 1MB in size. Modern cameras and smart phones capture pictures with a high resolution and often the saved file is larger than this limit. The group reviewed a couple of tools that can be used to reduce picture resolution and thus file size before uploading to the database. We also reviewed how to edit data that had already been entered into the database.

The workshop ended with a discussion of how we will move forward. One of the outside groups that attended the last workshop may support some new schools to get involved with Sandwatch. The National Commission has added a person to help the Sandwatch Coordinator support the ASPNet schools that are involved with Sandwatch. This should help to resolve some of the logistical issues that were faced this fall.

## **Follow-up Activities**

Dr Gray will continue to monitor remotely how often each of the participants accesses and uses the Sandwatch Database. Participants are encouraged to contact the workshop facilitators for any guidance or help.

Participants again made commitments for future Sandwatch activities and entry of collected data into the database. These commitments will be monitored by Mr. Franklin Jesús Tejada of the Dominican Republic National Commission for UNESCO. In addition, he will look into organizing refresher training in the Sandwatch beach activities.

Dr. Gray agreed to set up a Spanish language demonstration beach in the database that the Dominican Republic schools can use as an example. Mr. Franklin Tejada has agreed to help with the translation of content.

The Sandwatch website will be updated to include full details and photos taken during the workshop. These can be accessed via the Dominican Republic's national homepage on the website (see link below) and via Facebook.

[http://www.sandwatch.ca/index.php?option=com\\_content&view=article&id=26:the-dominican-republic&catid=1:the-caribbean&Itemid=2](http://www.sandwatch.ca/index.php?option=com_content&view=article&id=26:the-dominican-republic&catid=1:the-caribbean&Itemid=2)

## **Evaluation**

The workshop evaluation form is shown as Annex 3 (attached separately). The responses are contained in Annex 4. Overall the participants were very satisfied with the workshop, 85% felt secure with entering the data, while 31% would still like additional help and training.

## **Conclusion**

Overall the objectives of the workshop were met and the participants indicate a comfort level with the database and its use in their Sandwatch activities.

Special thanks must go to Ms. Maria Mercedes Brito-Féliz, Secretary General of the Dominican Republic National Commission for UNESCO, and her team, especially Mr. Franklin Jesús Tejada, who managed to host an extremely enjoyable and successful workshop.

The follow-up plan for January – May 2016 is attached separately as Annex 5.

## Annex 1 Participants List

SCHOOL	TEACHER	BEACH	TECH. SUPPORT	EMAIL TEACHER
1. Centro Educativo Las Américas	Carlos NAVARRO	Playa Salinas	Agustina Duvergé	<a href="mailto:carlos.navarro.rodriquez@gmail.com">carlos.navarro.rodriquez@gmail.com</a>
2. Centro Educativo Los Palmares	Alex CORPORAN	Playita Nigua	Bienvenido Santana	<a href="mailto:thekelebra@hotmail.com">thekelebra@hotmail.com</a>
3. Liceo Sor Ana Nolan	Alberto SEMPER	Playa Bayahibe	Gabriela De Los Santos	<a href="mailto:albertosemper@gmail.com">albertosemper@gmail.com</a>
4. Colegio Círculo de Estudio Pestalozzi	Ander PINEDA	Playa La Caleta – SPM <sup>1</sup>	Gabriela De Los Santos	<a href="mailto:anderpineda59@gmail.com">anderpineda59@gmail.com</a>
5. Colegio Santa Teresita	Bélgica PAREDES	Playa Palenque *	Ángela Hernández	<a href="mailto:paredes_belgica@hotmail.com">paredes_belgica@hotmail.com</a>
6. Instituto Politécnico Santa Ana	Darling RAMÍREZ	Playa La Caleta - SD <sup>2</sup>	Bienvenido Santana	<a href="mailto:ramirezdar95@gmail.com">ramirezdar95@gmail.com</a>
7. Centro Educacional Bautista	Jauer ORTIZ GONZÁLEZ	Playa El Muerto	Bienvenido Santana	<a href="mailto:matematicacristiana_01@hotmail.com">matematicacristiana_01@hotmail.com</a>
8. Liceo Manuel Antonio Patín Maceo	Abraham LARA	Playa Palenque *	Ángela Hernández	<a href="mailto:yenemin11@hotmail.com">yenemin11@hotmail.com</a>
9. Liceo Matutino Socorro Sánchez	Jorge TRINIDAD SENA	Playa Guayacanes *	Agustina Duvergé	<a href="mailto:aljorape29@gmail.com">aljorape29@gmail.com</a>
10. Liceo Profesor Juan Bosch	Luisa GERMAN	Playa Najayo	Nerte Encarnación	<a href="mailto:luisagermanfranco@gmail.com">luisagermanfranco@gmail.com</a>
11. Liceo Matutino Gerardo Jansen	Martha DE AZA ENCARNACIÓN	Playa Macao	Gabriela De Los Santos	<a href="mailto:aris27@yahoo.com">aris27@yahoo.com</a>
12. Liceo Matutino Ernestina Tejeda	Micry Anny BERIGÜETE	Playa Palmar de Ocoa	José González	<a href="mailto:micryprinces@hotmail.com">micryprinces@hotmail.com</a>
13. Colegio San José Obrero	Miguel CORADIN	Playa Juan Dolio	Juan Ciprián	<a href="mailto:sanjojobrero594@hotmail.es">sanjojobrero594@hotmail.es</a>
14. Politécnico María de la Altagracia	Summary ACOSTA	Playa Guayacanes *	Agustina Duvergé	<a href="mailto:summary_acosta@hotmail.com">summary_acosta@hotmail.com</a>
15. Liceo Vespertino Ernestina Tejeda	Wanda Raquel PEGUERO	Playa Punta Salinas	José González	<a href="mailto:wanda_peguero@hotmail.com">wanda_peguero@hotmail.com</a>
16. Instituto Politécnico Profesor Juan Bosch	Ydeni NÚÑEZ MÉNDEZ	Playa Boca Chica	Agustina Duvergé	<a href="mailto:institutopolitecnicoprof.juanbosch@hotmail.com">institutopolitecnicoprof.juanbosch@hotmail.com</a>

<sup>1</sup> SPM - San Pedro de Macorís Province;

<sup>2</sup> SD - Santo Domingo Province

\*Teamwork for 12 months

## **Annex 2: Agenda Sandwatch Database Refresher Workshop**

**19-20 November 2015**

### **Thursday 19 November**

- 9.00 - 9.45**      Welcome and Introductions – Participants should be ready to give a very short summary of their Sandwatch group activity and database use since the training workshop in May.
- 9.45 - 10.30**    Review of Sandwatch International Database – Review the functionality of database highlighting recent changes; look at activity for Dominican Republic since the May training workshop.
- 10.30 - 10.45**    Break
- 10.45 - 12.30**   Discussion of database use since the May training workshop – How are groups integrating the database into their Sandwatch activities? Are groups having any difficulties entering their data into the database? If so, what areas need to be reviewed?
- 12.30 – 1.30**     Lunch
- 1.30 – 3.15**     Review of entries for each beach – Each group leader will present the data for their beach and how it is collected, entered and used.
- 3.15 – 3.30**     Break
- 3.30 – 4.30**     Continuation of beach reviews
- 4.30**             Informal evaluation of the day's activities.

### **Friday 20 November**

- 9.00 - 9.30**      Recap of day 1
- 9.30 - 10.30**    Review problem items using the database identified on day 1
- 10.30 - 10.45**    Break
- 10.45 - 12.30**   Work in small groups resolving any database issues
- 12.30 – 1.30**     Lunch
- 1.30 – 2.30**     Continuation of work in small groups
- 2.30 – 3.15**     Update and preliminary review of the support and interest of government agencies, NGOs and other relevant partners, especially in terms of i) use of the data produced by the Sandwatch groups, ii) expansion of Sandwatch activities in other parts of the country, and ii) sustainability strategy of the project in the Dominican Republic.
- 3.15 – 3.30**     Break
- 3.30 – 4.00**     Next steps
- 4.00 – 4.30**     Evaluation & Closing

## Annex 3 Sandwatch Database Refresher Workshop Evaluation Form

1. Workshop Content

- |                                    |                                  |
|------------------------------------|----------------------------------|
| <input type="checkbox"/> Excellent | <input type="checkbox"/> Average |
| <input type="checkbox"/> Very Good | <input type="checkbox"/> Poor    |
| <input type="checkbox"/> Good      |                                  |

2. Instructors

- |                                    |                                  |
|------------------------------------|----------------------------------|
| <input type="checkbox"/> Excellent | <input type="checkbox"/> Average |
| <input type="checkbox"/> Very Good | <input type="checkbox"/> Poor    |
| <input type="checkbox"/> Good      |                                  |

3. Workshop Facilities

- |                                    |                                  |
|------------------------------------|----------------------------------|
| <input type="checkbox"/> Excellent | <input type="checkbox"/> Average |
| <input type="checkbox"/> Very Good | <input type="checkbox"/> Poor    |
| <input type="checkbox"/> Good      |                                  |

4. Any comments on the content, instructors or facilities?

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5. How confident are you to help your group enter your Sandwatch data in the database and use the database tools on a regular basis?

Very confident

Not Confident

5

4

3

2

1

6. Do you need any further help or training?

Yes

No

If Yes, please describe:

7. Any other comments about the workshop and the training:

## **Annex 4 Sandwatch Database Refresher Workshop Evaluation Form Responses**

Thanks to the Dominican Republic National Commission for UNESCO for translating the evaluation forms and compiling the results. See the attached pdf file: “Annex 4 Sandwatch Refresher Workshop Evaluation Results.pdf”.