



**SANDWATCH WORKSHOP
29 November – 1 December 2005
Morgan's Harbour Hotel, Jamaica**

**Workshop Report
Prepared by Gillian Cambers**



Ushio Miura (left) and Mirjam Kuzee from UNESCO-Kingston Office welcoming workshop participants

Background

The Sandwatch initiative was officially endorsed by Caribbean countries at the Fourth Regional Coordinators Meeting of the UNESCO Associated Schools Project Network Caribbean Sea Project, held in St Vincent and the Grenadines, 25–27 May 1999. Sandwatch is supported by UNESCO's:

- Associated Schools Project Network (ASPnet)
- Environment and Development in Coastal Regions and Small Islands (CSI)
- Office for the Caribbean
- National Commissions for UNESCO

Despite the fact that Jamaica had been involved in the initial regional Caribbean Sandwatch activities, no concrete Sandwatch activities had been started in Jamaica. This workshop represented an opportunity to address this situation.

Furthermore, the Secretary-General of the UNESCO National Commission for the Netherlands Antilles faced a similar situation, in that that for various reasons, Sandwatch activities had not been started in the five islands belonging to the Netherlands Antilles. Hence this workshop presented an opportunity to initiate Sandwatch activities in this territory also.

Objectives of the Workshop

The objectives were:

- Participants trained in the Sandwatch approach and ready to utilize it in their schools and classrooms.
- Activities to apply Sandwatch in other ecosystems proposed

Workshop Participants

Participants came from:

- Ministry of Education
- Schools: Port Royal All Age School, Runaway Bay All Age School, Norwich Primary School, Ardenne High School, Rusea's High School
- College of Agriculture, Science and Education
- Jamaica Conservation and Development Trust
- Jamaica National Commission for UNESCO
- Netherlands Antilles National Commission for UNESCO
- UNESCO Regional Office for the Caribbean
- University of the West Indies, Chemistry Department
- University of Puerto Rico, Sea Grant College Program

A list of participants is included in Annex 1.

Workshop Programme

The programme is included in Annex 2.

After an opening ceremony, some short background presentations were given on ASPNet, Sandwatch, Small Islands Voice and the Decade of Education for Sustainable Development. Mr. Hannam, representing the Jamaica National Commission for UNESCO, quoted from the Foreword of the publication, Introduction to Sandwatch: an educational tool for sustainable development: 'As we enter the Decade of Education for Sustainable Development with its overall objective to empower citizens to act for positive environmental, social and economic change through a participatory and action-orientated approach, it is especially timely to discuss and review ongoing educational activities that have had and are continuing to have a measure of success in the field of sustainable development. Sandwatch is one such initiative'.

Ms. Herma Meade emphasised that the Ministry of Education, Culture and Youth was supportive of the Sandwatch initiative and that there was scope for environmental activities in the primary and secondary school curriculum. The Ministry is committed to educating the populace so that all can be healthy and a healthy environment is conducive to calmness of the spirit.

Ms. Patricia Patterson mentioned some of the problems facing ASPNet in Jamaica. She made mention of an exhibition on the Slave Route Project that would be displayed in different parts of

Jamaica in 2006 and that each parish would have the opportunity to contribute to the exhibition. She looked forward to receiving feedback from this workshop on how to initiate and monitor Sandwatch in Jamaica.

The main part of the morning was devoted to sharing and discussing some background information relating to several Sandwatch procedures:

- Observation and recording
- Beach changes – erosion and accretion
- Beach composition
- Waves and longshore currents

After lunch, participants went to the beach at Port Royal and measured these beach parameters. They then returned to work in small groups to analyse, present and discuss their findings.

Sandwatch monitoring at Port Royal Beach, November 2005



Measuring beach debris



Interviewing beach users



Making an improvised wave measurement pole



Observing the vegetation behind the beach

The second day of the workshop opened with a presentation and discussion about the UNESCO Community Sandwatch Competition, September 2004 to May 2005. The competition entries were available for participants to read. Following this, other Sandwatch procedures were outlined:

- Beach users
- Beach debris
- Water quality
- Plants and animals

The participants then examined the water quality testing kits. In the afternoon, they again visited the beach at Port Royal to measure these parameters, after which they analysed their findings and presented their results.



Measuring water quality



Presenting the results

The final day started with a discussion about how Sandwatch had started in three other islands: Cook Islands, St. Lucia and St. Vincent and the Grenadines. The participants then divided into three groups to discuss different approaches for starting Sandwatch in Jamaica:

- Immediate plans for starting locally
- Developing a framework for Sandwatch in Jamaica
- Applying the Sandwatch approach to other ecosystems

After sharing the results of the groups in a plenary session, participants completed a workshop evaluation and certificates of participation were given out.

Workshop Outcome

There was overall consensus among the workshop participants that environmental studies should be integrated across the school curriculum. The participants recognized that Sandwatch was essentially a process and a way of teaching that could reinforce the environmental curriculum and it was proposed that 'Sandwatching' was perhaps a more appropriate name for the initiative. One of the key ways to encourage teachers to use Sandwatch was to demonstrate ways it could help them in their lesson planning.

Participants endorsed the following approach:

- Starting locally – immediate action in terms 2 and 3, 2006
- Infusion of Sandwatch into the Jamaican educational system
- Applying the Sandwatch approach to other ecosystems

Starting locally and immediately: Time frame January – August 2006

Representatives of the following institutions committed themselves to starting Sandwatch activities during terms 2 and 3 of the 2005-2006 academic year:

- Port Royal All Age School
- Runaway Bay All Age School
- Norwich Primary School
- Ardenne High School
- Rusea's High School
- College of Agriculture, Science and Education

These initial activities would be viewed as pilot projects. Participants planned to sensitize their School Principals about Sandwatch, and to involve other key groups such as leaders of school clubs, parents and community groups. Emphasis would be made on ways in which Sandwatch could be integrated into many different subjects. Students would be involved in undertaking Sandwatch monitoring; this would be linked to different subjects in the primary, secondary and tertiary institutions. For example at the secondary school level, Sandwatch could be linked to School Based Assessments (SBAs) in geography and social studies (not to science where SBAs require specific laboratory skills). Participants felt it important to have something concrete to show in the short term, in other words to have a series of Sandwatch pilot projects in the six different institutions.

Representatives from the six institutions also planned to identify and collaborate with other schools in their areas that might be interested and to share information and invite them to participate in Sandwatch activities.

Each of the six institutions would write a proposal to get support from local environmental, community-based and private sector organizations, for items such as monitoring kits, transportation, beach cleaning materials, posters, and other promotional items.

It was felt that there was a need for an umbrella organization that would support these actions; such an organization would include representatives from UNESCO, the Ministry of Education, Youth and Culture, and other organizations.

Infusing Sandwatch into the education system in Jamaica: Time frame 2006-2007

At the basic and primary levels, Sandwatch would be introduced to teachers at the regular monthly meetings in collaboration with the Early Childhood Unit. The Sandwatch procedures would be discussed and demonstrated to teachers. The pilot projects would be very important here for providing concrete examples of Sandwatch in action. Collaboration with school clubs, parents, environmental and community-based organizations, and UNESCO would be important components. Sandwatch could be introduced as a classroom and an extra-curricular activity.

At the secondary level, a similar process would be undertaken, with the addition of Sandwatch activities into School Based Assessments. A website would be set up to keep teachers, at all levels, informed. The need to obtain funding for equipment needs and to provide incentives for teachers and students was recognised.

At the tertiary level, Sandwatch could supplement and enrich existing environmental programmes. In addition, students could write proposals to address environmental needs and submit them to the administrator of their institution for further action. One of the goals would be to entrench community involvement in the planning of school activities.

Applying the Sandwatch approach to other ecosystems

Rivers

The RiverCare programme, started by Live and Learn Environmental Education Inc. in Fiji and other Pacific islands, was discussed.

A pilot River Watch project has just started in Jamaica in the Black River. Water quality testing kits (for pH, salinity, total dissolved solids, acid bases) have been provided to CXC chemistry students at Maggotty High School by the Chemistry Department of the University of the West Indies. Staff from the Chemistry Department will provide training for staff and students in water sample collection and analysis in December 2005. It is planned to integrate the results from this pilot project into a remote sensing water quality monitoring project. Localised funding is yet to be identified for students' travel to the site.

Participants felt that there was considerable potential for adapting the Sandwatch approach to river systems and entire catchments. River Watch is an interesting approach, which could be enhanced by including community awareness concepts and attitudinal changes.

Mountains

At the Blue and John Crowe Mountains National Park, there has been an increase in landslides with the recent hurricanes and heavy rainfall. An environmental educational programme has been developed to start in January 2006: Schools Halting Environmental Disaster by Protecting Our Watersheds and Environmental Resources' (SHED POWER). This programme is supported by the Forestry Department, Jamaica Development and Conservation Trust, and the University of the West Indies. While there are no communities living in the national park itself, there are several primary and all-age schools and communities in the buffer zone around the park. At present the Jamaica Conservation and Development Trust monitors the rivers, slopes and birds, however, it is planned to involve schools and communities in these activities.

Wetlands

Participants felt there was also potential to apply the Sandwatch approach to wetlands. Unfortunately there was insufficient time to discuss this application.

Annex 1 Workshop Participants (Preliminary)

Ms. Marva Browne, Netherlands Antilles National Commission for UNESCO
Ms. Gillian Cambers, University of Puerto Rico Sea Grant College Program
Ms. Marolyn Lucy Gentles, Jamaica Conservation and Development Trust
Mr. Everton Hannam, Jamaica National Commission for UNESCO
Ms. Jennifer Harvey, Rusea's High School
Ms. Mirjam Kuzee, UNESCO Office for the Caribbean
Ms. Lorane Lawes, UNESCO Office for the Caribbean
Ms. Nicola Lee-Platt, College of Agriculture, Science and Education
Ms. Herma Meade, Core Curriculum Unit, Ministry of Education, Youth and Culture
Mr. Winsome Ming, Norwich Primary School
Ms. Ushio Miura, UNESCO Office for the Caribbean
Mr. Winfield Murray, Region 4, Ministry of Education, Youth and Culture
Ms. Sonia Nevins, Ministry of Education, Youth and Culture
Ms. Patricia Patterson, ASPNet, Jamaica National Commission for UNESCO
Port Royal All Age School
Ms. Elaine Roulston, Region 1, Ministry of Education, Youth and Culture
Ms. Natalie Robinson, Runaway Bay All Age School
Ms. Jennivie Tracey, Ministry of Education, Youth and Culture
Ms. Jodi Williams, Ardenne High School
Ms. Sonia Williams, Region 1 Ministry of Education, Youth and Culture
Ms. Rosemaire Wilson, Chemistry Department, University of the West Indies

Annex 2 Workshop Programme

Sandwatch Workshop 29 November to 1 December 2005 Morgan's Harbour Hotel, Port Royal, Jamaica

Expected Outcomes

- (1) Participants trained in the Sandwatch approach and ready to utilize it in their schools and classrooms.
- (2) Activities to apply Sandwatch in other ecosystems proposed.

Programme

Tuesday 29 November 2005: Opening; Setting the Framework of Education for Sustainable Development; Discussion and Practice of Sandwatch Procedures (1)

9am	Workshop Opening Welcome and Introductory Remarks: Mr Everton Hannam, Secretary General, Jamaican National Commission for UNESCO Ms Ushio Miura and Ms Mirjam Kuzee, UNESCO Office for the Caribbean Ms Phyllis Reynolds, Assistant Chief Education Officer, Ministry of Education
9:30am	Outline of the workshop programme Ms Gillian Cambers What is Sandwatch? Background Ms Gillian Cambers Small Islands Voice Initiative, Ms Gillian Cambers Associated Schools Project Net, Ms Patricia Patterson Decade of Education for Sustainable Development, Ms Ushio Miura
10:30	Break
10:45	Sandwatch Procedures – Session 1 - Concepts Observation and recording Beach changes – erosion and accretion Beach composition Waves and currents
12.30	Lunch
14.00	Sandwatch Procedures - Session 1 – Beach Practice
16.00	Small group sessions – Analysis of results -- Presentation of findings

Wednesday 30 November 2005: Sandwatch and Community Action; Discussion and Practice of Sandwatch Procedures (2)

9.0	Community involvement in Sandwatch: Results of the UNESCO Community Sandwatch Competition September 2004 – May 2005 Ms Gillian Cambers Discussion
10.15	Break

- 10.30 Sandwatch procedures – Session 2 – Concepts
Beach users
Beach debris
Water quality
Plants and animals
- 12.30 Lunch
- 14.00 Sandwatch Procedures – Session 2 – Beach Practice
- 16.00 Small group sessions – Analysis of results
-- Presentation of findings

Thursday 1 December 2005: Next Steps for Sandwatch in Jamaica; Application of Sandwatch to other Ecosystems

- 9.0 Approaches to Sandwatch: Beyond Caribbean Beaches
Ms Gillian Cambers
- 9.30 Starting Sandwatch in Jamaica – Small Group Sessions
- 10.15 Break
- 10.30 Starting Sandwatch in Jamaica – Presentations of Small Group Discussions
- 11.30 Summary and Wrap-up
Workshop evaluation
Closing and presentation of certificates
- 12.30 Lunch and departure