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Centre for Resource  
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University of the West  
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St. Vincent and the  
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Carriacou  
Environmental  
Committee

Carriacou, Grenada

Caribbean  
Conservation  
Association



Barbados

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# ***THE SUSTAINABLE GRENADINES PROJECT***



SUSTAINABLE INTEGRATED DEVELOPMENT AND BIODIVERSITY  
CONSERVATION IN THE GRENADINE ISLANDS

## **Coral Conservation Awareness in the Grenadines**

### **Report of the People and Corals Teacher's Training Workshop**

Carriacou, Grenada  
26th- 27th September 2006



CERMES  
October 2006



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- § The Centre of Resource Management and Environmental Studies, UWI, Barbados

Citation:

Blackman, K. 2006. Report of the People and Coral Teacher's Training Workshop. Centre for Resource Management and Environmental Studies (CERMES), University of the West Indies, Cave Hill Campus, Barbados, 25 pp.

*This workshop is focusing on the teachers and principals of the schools to drive home the message of conservation.....the reefs are not only providing food but they also contribute to coral reef tourism for visitors.....we must be united to protect the reefs and it is a job that requires contribution from everyone.*

*Mrs. Bernadette Sylvester-Lendore  
Permanent Secretary  
Ministry of Carriacou and Petit Martinique Affairs*

**The People and Corals Teacher's Training Workshop**  
**Sea Waves, Carriacou**  
**26<sup>th</sup>-27<sup>th</sup> September 2006**

*Tuesday 26th September, 2006*

## **1 Introduction**

The context and background to the People and Coral project and the workshop is indicated in the project flyer (Appendix I). This was distributed to all the Grenadines primary schools to inform them about the Coral Conservation in the Grenadines project and about the upcoming People and Coral Teacher's Training Workshop. A total of 12 primary schools across the Grenadines (Bequia, Mustique, Canouan, Union Island, Carriacou, Petit Martinique) and two each from St. Vincent and Grenada participated in the workshop. At the workshop, each participant received a People and Corals workbook and a workshop folder containing the training materials created by the facilitator, Mrs. Cherrie Parris-Bourne. The workshop was held in the conference room at Sea Waves, in Hillsborough on the island of Carriacou, Grenada. The programme schedule of the workshop is shown in Appendix 2.

## **2 Opening Ceremony**

The workshop commenced with a welcome from Ms. Alexcia Cooke, Project Development and Administration Officer, Sustainable Grenadines Project. This was followed by a welcome by Ms. Rhonda Mc Lawrence, Guidance Counsellor for Schools of Carriacou and Petit Martinique. She thanked the Sustainable Grenadines Project for allowing teachers to participate in such an interesting project. She emphasised that Carriacou needs to do all it can to protect their reefs. The people of Carriacou should increase their awareness of the reefs and also preserve this tourist attraction which contributes to their economy in the Grenadines. She further stated the Ministry of Carriacou and Petit Martinique has pledged their support and will assist the Sustainable Grenadines Project however they can.

Mrs Virginia Fleary-Noel, President of the Carriacou Environmental Committee expressed that it was a wonderful opportunity for Carriacou and Petit Martinique to welcome all the participants. She welcomed the participants from St. Vincent and the Grenadines and also those Grenada. She apologised for the late start of the workshop and indicated that this was the largest workshop ever held for teachers. She stated that this workshop is expected to bring a interesting programme to the schools. She thanked everyone for attending.

The Permanent Secretary of the Ministry of Carriacou and Petit Martinique, Mrs. Bernadette Sylvester-Lendore, welcomed everyone to the workshop and emphasised the importance of coral reef livelihoods. She stated that the workshop will be focusing on teachers and principals of the schools to drive home the message of conservation. She emphasised that their activities have caused the destruction of the reefs. She mentioned that the corals stretched from St. Vincent to Grenada and that it is important that we take good care of them. She used Bucco Reef as an example where the society was caring and preserving their reefs. Furthermore, she indicated that the reefs are not only providing food but they also contribute to coral reef tourism for visitors. She emphasised that they must be united to protect the reefs and it is a job that required contribution from everyone. She then officially opened the People and Corals Teacher's Training Workshop .

Ms Katherine Blackman, workshop coordinator from CERMES thanked everyone for attending the workshop. She proceeded to introduce the facilitator Mrs. Cherrie Parris-Bourne who had conducted three previous workshops for the People and Coral workbook (one in Antigua and two in Barbados).

### 3 Workshop sessions

#### 3.1 Introduction to the People and Coral workbook

The first day of the workshop focused on introducing the participants (Appendix 3) to the People and Corals workbook. Before this, the participants engaged in number of interactive sessions which were vital to environmental education. The first activity was the human bingo game (Figure 1) which allowed the participants to become familiar with each other and to create an interactive environment. Participants were asked to leave their seats and mingle to gather names to complete the handout (Appendix 4: Handout 1). The first participant to complete the handout, Ms Corine McDonald received a small prize.



Figure 1: Participants collecting names for the activity “Human Bingo

The facilitator proceeded to discuss the goals of the workshop (Appendix: Handout 2) and this was followed by another interactive session. The facilitator attempted to determine the participants’ knowledge on the role of coral reefs. She organised the participants into groups of five and they brainstormed over a sample of postcards with sceneries from the Grenadines islands about the role of coral reefs. The list (Box 1) identified their collective responses.

Box 1: Importance of coral reefs
<ul style="list-style-type: none"><li>• Making white sandy beaches</li><li>• Prevents erosion of the beach from wave action</li><li>• Habitat for marine life</li><li>• Aesthetic beauty</li><li>• Eco-tourism</li><li>• Livelihoods (fisher folk, tourism sector)</li></ul>

After the coffee break, the facilitator explained the concept of environmental education (EE) and education for sustainable development (ESD). She explained the three elements of EE: knowledge and understanding, skills and values, beliefs and attitudes (see Handout 3). She briefly looked at the environmental education model IN-THROUGH-FOR, which means that we are teaching about the environment, IN the environment, THROUGH the environment as the environment becomes a tool in and of itself and finally FOR the environment to contribute towards its protection. She later defined ESD as enabling people to develop the knowledge, values and skills to participate in decisions about the way we do things individually and collectively. She further enlightened the participants with the principles of ESD which were interdependence, citizenship and stewardship, needs and rights of future generations, diversity, quality of life, sustainable change, and uncertainty and precaution (Appendix 4: Handout 3B).

At the end, the participants were individually asked about their plans to assist in protecting the environment at their respective schools. The list (Box 2) identified their collective responses.

The facilitator explored the effective learning models and methods. The three learning models discussed were the Competence model, Kolb's learning cycle and Glasser's pyramid (Appendix 4: Handout 4A).

**Box 2: What can you change or accomplish at your school**

- Increase awareness of the reefs and environment (e.g. field trips, teaching)
- Prevent littering and encourage recycling of paper and sandwich bags
- Institute use of recycling bins
- Implement a clean up beach campaign
- Use of biodegradable products
- Ensure regulations are followed (e.g. prohibit the selling juvenile lobsters; prevent harvesting of sea eggs during the closed season).
- Share the information learnt at the workshop with others

**1. Competence model**

The competence model shows the progression in the stages of learning, from unconscious incompetence to conscious competence. The diagram below (Figure 2) illustrates the model.

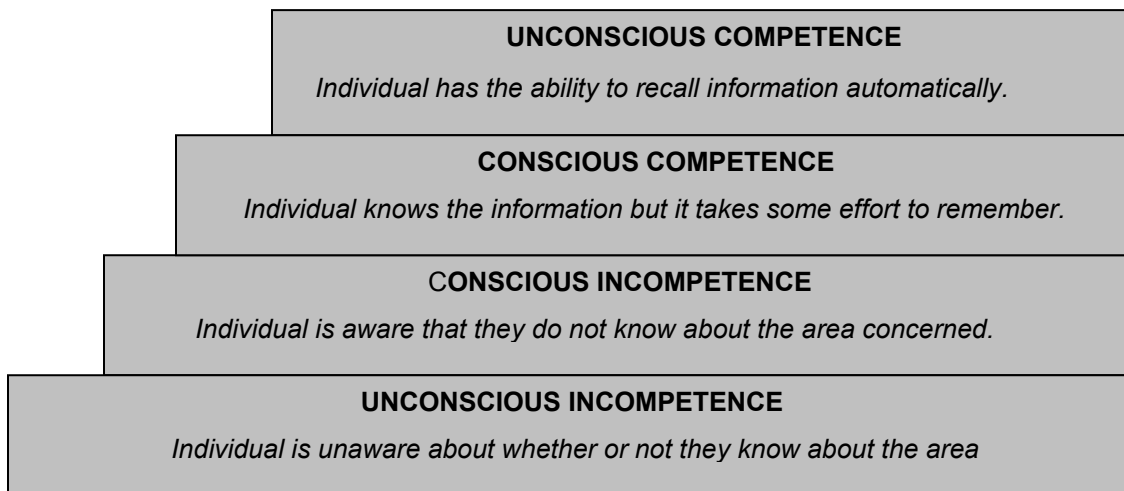


Figure 2: Diagram showing competence model

**2. Kolb 's Learning Cycle**

Mrs. Parris-Bourne explained the theory of Kolb's Learning Cycle (Figure 3), a four stage learning cycle, which explains the learning cycle that applies to all of us. The first step is the execution of an action, the review of the action, a conclusion from the observations and finally the testing of the conclusion to see if it correct. The cycle is shown in the diagram below.

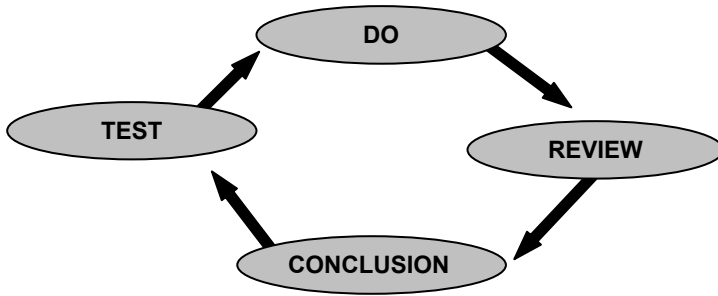


Figure 3: Diagram of Kolb's Learning Cycle

### 3. Glasser's Pyramid

The facilitator emphasised that everyone's learning style is different. She divided the participants into groups of four and allotted five minutes for them to fill in the pyramid provided to rank the learning styles from least to most effective (Appendix 4: Handout 4B). After she illustrated the pyramid for the average individual (Figure 4). She stated that to get through to the students, one must start from the bottom of the pyramid and work upwards.

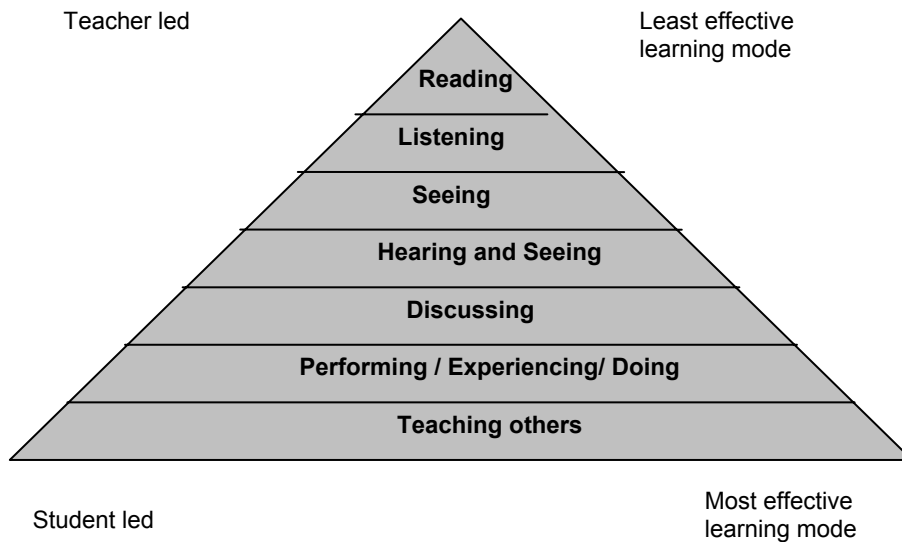


Figure 4: Glasser's Pyramid

This was followed by Handout 4C which illustrated the three types of learning styles namely- visual, auditory and kinetic (Appendix 4: Handout 4C). Subsequently the participants took part in a mini field trip called the “Art of Sound”. Participants walked to the seaside field near the workshop venue and they were asked to stand quietly and listen for ten minutes, whilst representing any sound that they heard by symbols on the piece of card in the shape of an artist’s palette. The conclusion of this mini field trip set the tone for the next session of the workshop which explored the planning and execution of field trips and introduced the concept of risk assessment (Appendix 4: Handout 5A). The workshop participants were taken through the planning of a field trip and it was concluded with the fact that once proper planning has been conducted, fieldwork is one of the most effective methods of learning for students and can be fun.



Figure 5: Participants during the field Activity, “Art of Sound”

Mrs. Parris-Bourne conducted a short lecture about the basics of corals and coral reefs e.g. what is a coral, how it grows, richness of the coral reef community etc. This was followed by an introduction to the “People and Corals: The Pack”. Handout 6 highlighted the content of the workbook. Mrs. Parris-Bourne informed the participants about the history and the structure of the pack. The pack is divided into three sections- Activity, Resource and Handout sheets. The first two sections were designed for the teachers and the final section for the students. There is also a glossary for unfamiliar terms for teachers to quickly reference.

*Wednesday 27th September 2006*

### *3.2 Field trip to Sandy Island*

Mrs. Virginia Fleary-Noel (President of the Carriacou Environmental Committee) gave a presentation on Sandy Island. She illustrated Sandy Island in the early 1990s and mentioned the demise of the island through the passing of three hurricanes: Lenny, Ivan and Emily which destroyed most of the trees of the island. One of the post-hurricane activities was the planting of trees to restore the island. She discussed the proposed Sandy Island - Oyster Bed Marine Protected Area (MPA) which was developed and gave participants a close up view of the oyster bed. Virginia indicated to them the importance of the Sandy Island – Oyster Bed mangrove ecosystem and ended the presentation by informing them about the Caribbean Regional Environmental Program (CREP) subproject in Carriacou, building capacity of CEC and CEC’s institutional self assessment.

This field trip on Sandy Island showed teachers that they could conduct an educational activity with limited resources. The activity examined the concept of coastal drift.



<p><b>Box 3: Field activity</b></p> <p><b>Aim:</b> to examine coastal drift</p> <p><b>Materials:</b> Rocks (3 types of varying weights-small, medium and heavy), string (knotted at every 2 cm) and a stick</p> <p><b>Method:</b></p> <ol style="list-style-type: none"> <li>1. Participants were paired whereby one person was designated the observer (to record the values) and the other was the doer (to conduct the activity).</li> <li>2. The pairs were organised into five larger groups. In each pair of the groups, the doer was given either an orange, blue or gold rock. Then each group was assigned to five different locations around the Sandy Island to investigate the effects of coastal drift on various sized rocks.</li> <li>3. Participants were given a stick which was placed firmly in the sand. This stick was used as the starting point. Participants were to measure the horizontal distance the rock drifts from the starting point. This was measured using the string. Participants were asked to collect 20 readings.</li> <li>4. Additionally, participants were to note the conditions of the site: e.g. wave direction, wave type and sand type.</li> </ol>
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After the field trip, participants assisted the President of CEC and the Project Manager of the Sustainable Grenadines Project in planting trees on the island.

### 3.3 Project Evaluation Plan

Katherine initiated the discussion on the Project Evaluation Plan by stating that she hoped the participants enjoyed the workshop. She indicated that the workshop was not the end of the project and thereby introduced the two subsequent phases of the People and Corals Project.

- Phase 3: Use of the workbook in the primary schools
- Phase 4: Evaluation of the use of the workbook

She provided them with a proposed plan for the use of the workbook in the primary schools and the evaluation period (Appendix 5). At the end, the teachers agreed that they will follow the evaluation plan shown in Figure 7. However, they were insistent that they workbook be used throughout the school and not only for the 9-11 year old children. At the end of the workshop, the participating schools were each given 25 copies of the People and Corals workbook. This workbook was donated by the Sustainable Grenadines Project.

Activity	Oct	Nov	Dec	Jan
Use of the workbook (~1-3 times/ week)				
Prepare evaluation survey				
Conduct evaluation				

Figure 6: Time frame for phases 3 and 4 of the People and Corals project

#### **4 Conclusion**

The assessment from the workshop participants indicated that they had increased awareness of the importance of preservation and protection of the coral reefs and the general environment. They seemed to have gained some insight not only on the coral reef environment but also environmental education and education for sustainable development. On a whole, participants agreed that they will now be better at making their students aware of the environment. According to the majority of the participants, future workshops require the involvement of the wider society (e.g. fisherfolk, coastal residents, water taxi operators, ministry officials, *inter alia*). Indeed, everyone has an integral role to play in protecting the environment. However, through reaching the children this practice of conservation will be passed through to future generations. According to Mr. Ian Rhynd, teacher from Canouan Government School, "The teacher's word is gospel". This statement emphasises the point that the teachers can reach the children and help spread the message of conservation.

The workshop concluded with a vote of thanks from the Sustainable Grenadines Project Development and Administrator Officer, Alexcia Cooke. At the end of the workshop, participants were given their certificates of participation for their involvement in the People and Corals Teacher's Training Workshop. In the end, the workshop met the general expectations of all the participants.

## 5 Facilitator's Report

*The workshop held on Carriacou Island in collaboration with the SusGren Project and the CEC was attended by 28 primary school teachers from across the Grenadines. On the whole the workshop was well organized and attended with all of the participants rating the workshop a 7 or above (on a scale of 1-10) with an average of 8.*

*The format of the workshop which was designed to be run in a low technology environment (e.g. use of OHP and transparencies) involved several sessions of group work and was started with an introductory "game" which allowed the participants to become more familiar with each other and set the tone for a very interactive and somewhat informal learning environment. The evaluation forms frequently pointed to the group sessions as favourites among the participants.*

*I believe that the teachers came with the preconceived idea of the workshop focusing solely on the coral reefs, but were pleasantly surprised to gain in addition to information about the reef environment, a much broader understanding of environmental education, and more specifically insight into education for sustainable development. Their feedback through the evaluation sheets indicated a willingness to make more conscious decisions with regard to their environment and an eagerness to pass this on to others. It was wonderful to see that they realised that they can make changes for the better and that they grasped the concept that they were an integral part of their environment and the environment a part of them.*

*The field trip session held after lunch was also commented on positively in several evaluation sheets, both the mini session that was carried out as part of the first day of the workshop "Art for Sound" as one teacher put it, as well as the practical information on the planning and execution of fieldtrips. One can only hope that the teachers were empowered to initiate and execute their own fieldtrips (with the realization that the trip does not have to take them beyond their school grounds to teach a concept) in the coming school year.*

*One of the more popular suggestions for future workshops was the involvement of people from the wider community, and one that I would wholeheartedly endorse, as the information and activities in the resource package can be utilised by every age group.*

*I would like in closing to thank everyone involved in making this second series of workshops possible – CERMES (Dr. Robin Mahon), the SusGren Project (Alexcia Cooke and Martin Barriteau) and the CEC (Virginia Fleary-Noel), and especially Ms.Katherine Blackman -- and a success.*

*Prepared 3<sup>rd</sup> October, 2006  
By Cherrie Parris-Bourne*

## 6 Appendices

### Appendix 1: The Workshop flyer



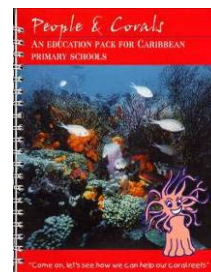
## **Coral Conservation Awareness in Grenadines Primary Schools (People and Corals Project)**



*In association with the Sustainable Grenadines Project*

### **What is the project about?**

The project aims to promote and improve coral reef conservation in the Grenadine Islands by introducing coral conservation concepts and approaches at the primary school level in all islands. In this project the *People and Corals* workbook prepared by the Caribbean Conservation Association specifically for Caribbean Primary Schools will be introduced to the Grenadines primary schools.



### **Who will be involved?**

Fourteen primary schools from the Grenadine islands (Bequia, Mustique, Canouan, Mayreau, Union, Petit Martinique and Carriacou) and two schools each from the mainland islands of St. Vincent and Grenada will participate.

### **What will happen?**

Phase 1: Preparation for workshop (January 2006)

Phase 2: Two-day training session for teachers in **Carriacou (September 26th-27th 2006)**

Phase 3: Use of book and gaining experiences and suggestions for improved use of book (2006-2007)

Phase 4: Evaluation of the project (2007)

### **What happens in the end?**

- Students in the 9-11 age group will increase their awareness of coral conservation issues and practices.
- Teachers will be exposed to ideas through training which they will teach students.
- Teachers and students will be able spread awareness to families and friends in the communities about coral reef conservation.

*Sponsored by:*

*US National Fish and Wildlife Foundation*

*UNEP, Regional Coordinating Unit, Jamaica*

*Sustainable Grenadines Project, Lighthouse Foundation*

*Field Studies Council, UK*

*For more information contact:*

*Alexcia Cooke: [susgrenpa@vincysurf.com](mailto:susgrenpa@vincysurf.com)*

*Katherine Blackman: [katamele@yahoo.com](mailto:katamele@yahoo.com)*



 LIGHTHOUSE FOUNDATION





**Coral Conservation Awareness in  
Grenadines Primary Schools  
(People and Corals Project)**



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**Two-day Teacher's Training Workshop**

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**Tuesday 26<sup>th</sup> & Wednesday 27<sup>th</sup> September, 2006**

**9:00 am to 3:00 pm**

**at**

**Sea Waves  
Hillsborough, Carriacou**

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***The purpose of the workshop is to introduce the teachers to the People and Corals education pack. In addition to this, the workshop will empower teachers to utilize the pack and integrate it into the curriculum; allow teachers to reach students and equip them with knowledge to enable individual responsibility for their environment and; to also disseminate this knowledge and power throughout the students' communities.***

## Appendix 2: Workshop Programme

### Coral conservation in the Grenadines

Coral reefs are an extremely important resource for the Grenadine Islands. Fishing and marine-based tourism are the economic mainstays of these islands. Over the years, corals reefs and related habitats have been threatened by destructive practices and uninformed development in these islands.

This project seeks to promote and improve coral reef conservation in the Grenadines islands by introducing coral reef conservation concepts and approaches at the primary school level on all the islands.

In essence, the project will establish a coral reef conservation education program in Grenadines primary schools by providing the Caribbean Conservation Association “People and Corals” workbooks to schools and training teachers to use the workbook.

### Opening Ceremony

#### Tuesday 26th September, 2006

- |                   |  |
|-------------------|--|
| <b>8:30—8:35</b>  | Welcome and Prayer<br><i>Ms. Alexcia Cooke</i><br><i>Project Development &amp; Administration Officer The Sustainable Grenadines Project</i>           |
| <b>8:35-8:45</b>  | Opening Remarks<br><i>Mrs. Bernadette Sylvester-Lendore</i><br><i>Permanent Secretary</i><br><i>Ministry of Carriacou and Petit Martinique Affairs</i> |
| <b>8:45– 8:55</b> | Opening Remarks<br><i>Mrs. Gertrude Simon-Niles</i><br><i>Education Officer</i><br><i>Ministry of Carriacou and Petit Martinique Affairs</i>           |
| <b>8:55– 9:00</b> | General Remarks<br><i>Mrs. Virginia Fleary-Noel</i><br><i>President of Carriacou Environmental Committee</i>   |

## People and Coral Teacher's Training Workshop

### Tuesday 26th September, 2006

<b>9:00-9:30</b>	Introduction
<b>9:30- 9:50</b>	Why should we conserve coral reefs
<b>9:50- 9:55</b>	What are the goals of this project
<b>10:00- 10:30</b>	BREAK
<b>10:45- 12:00</b>	What learning methods are used in People and Corals
<b>12:00- 1:00</b>	LUNCH
<b>1:00- 2:00</b>	How can outdoor activities be useful
<b>2:00 - 2:30</b>	People and Corals: The Pack
<b>2:30 - 3:00</b>	Was the workshop useful to me

### Wednesday 27th September, 2006

<b>9:00-10:00</b>	Basics of coral reefs
<b>10:00- ?</b>	Briefing and travel to field trip site
<b>?- 1:30</b>	Field trip (Sandy Island)
<b>1:30- 2:30</b>	LUNCH
<b>2:30- 3:00</b>	Briefing of the project evaluation phase
<b>3:00- 3:15</b>	Closing remarks and presentation of certificates

### Appendix 3: List of Participants

Name	Title	School	Phone	E-mail
Miguel Toussaint	Teacher	St. Patrick's Catholic	473-442-9223	
Davis John	Teacher	St. Patrick's Anglican	473-442-2990 473-442-0341 473-442-9414	
Kelvin Philip	Teacher	St. Patrick's Catholic	473-442-2799 473-442-9223	kellophi3@hotmail.com
Carol Douglas	Teacher	Sion Hill Government	784-494-5200	douglascarol51@hotmail.com
Errol Belgraves	Principal	Mustique Primary	784-488-8232 784-532-8349	ebelgraves@yahoo.com
Arlene Toppin-Bailey	Teacher	Sion Hill Government	784-458-6752 784-526-6762	
Ricardo Nicholas	Teacher	St. Patrick's Anglican	473-442-9414	
Leroy Mitchell	Teacher	Mary Hutchinson Primary	784-533-7838	
Jose-Ann Wilson	Teacher	Mary Hutchinson Primary	784-577-2467 784-485-8057	jose-annwilson375@hotmail.com
Roslyn Marshall	Teacher	Calliaqua Anglican School	784-527-8854 784-457-4588	
Nadine Thompson	Teacher	Calliaqua Anglican School	784-527-4999 784-457-4588	gotnids@hotmail.com
Orissa Malcolm	Teacher	Bequia Anglican Primary	784-529-1722 784-527-3702	orissamalcolm@22st.msn.com
C. Anthony Compton	Teacher	Paget Farm Government	784-527-3875 784-527-3045	
Ian rhynd	Teacher	Canouan Gov't	784-458-8552 784-458-8252	irhynd@yahoo.com
Dwight Logan	Teacher	Petit Martinique	473-443-9204	
Rhonda Mc Lawrence	Guidance Counsellor	Schools in Carriacou	473-443-7334	
Lionel Stiehl	Vice Principal	Mount Pleasant Government School	473-443-6195	Istiehl@yahoo.com
Francis McLawrence	Teacher	Dover Government	473-443-6295	
Virginia Fleary-Noel	President	CEC	473-443-8977	virgnoel2000@yahoo.com
Robert Martineau	Teacher	Petit Martinique	473-443-9085	ginger_377@hotmail.com
Corine Mcdonald	Principal	Dover Government I	473-443-6192	dover_gov@hotmail.com
Cynthia Caton	Teacher	Hillsborough Govt	473-443-6193	
Elizabeth Bedeau	Teacher	Harvey Vale	473-443-6194	bedeae@hotmail.com
Donetta Peters	Teacher	Harvey Vale Govt	473-443-6194	donalyn@yahoo.com
Carlene Taylor	Secretary	G.W. & Co.	473-443-8303	
Karene Taylor	Secretary	CEC	473-443-8977	
Deanna Issac	Journalist	GBN	473-443-7790	
Katherine Blackman	CERMES	CERMES	246-417-4827	katamele@yahoo.com
Cherrie Parris-Bourne	Facilitator	Barbados	876-815-8891	cherriepb@msn.com
Alexcia Cooke	SusGren, PDA	Union Island	784-485-8779	susgrenpa@vincysurf.com
Martin Barriteau	SusGren, PM	Union Island	784-485-8779	susgrenpm@vincysurf.com



## Appendix 4: Training Materials

### Handout 1

#### Human Bingo

Filters their drinking water	Has gone beachcombing	Recycles their bottle/egg cartons	Is a vegetarian	Joined a volunteer group
Raised money for a cause	Has been on a glass-bottomed boat	Can see the coastline from their school	Goes to the fish market	Has been to Folkestone before
Knows how to snorkel	Has been teaching for more than 10 years	Participates in after school activities	Plays a sport	Is originally from a fishing village

### Handout 2

#### Goals of the workshop:

- ❖ Familiarise teachers with the People & Corals education pack
- ❖ Empower them to utilise the pack and integrate it into the curriculum
- ❖ Reach students through the teachers and equip them with knowledge to enable individual responsibility for their environment
- ❖ Disseminate this knowledge and power throughout the students' communities.

## Handout 3

### Environmental Education

- ❖ What is environmental education (EE)? The 3 critical elements of EE are:
  1. Knowledge and understanding
  2. Skills
  3. Values, beliefs and attitudes
  
- ❖ Environmental education Model – In / Through / For

## Handout 3B

### Environmental education and Education for Sustainable Development

- ❖ Education for Sustainable Development (ESD) revolves around two main concepts
  1. Development
  2. Conservation
  
- ❖ ESD can be defined as?

The principles of ESD are

- Interdependence
- Citizenship and stewardship
- Needs and Rights of future generations
- Diversity
- Quality of life
- Sustainable change

- Uncertainty and precaution

## Handout 4A

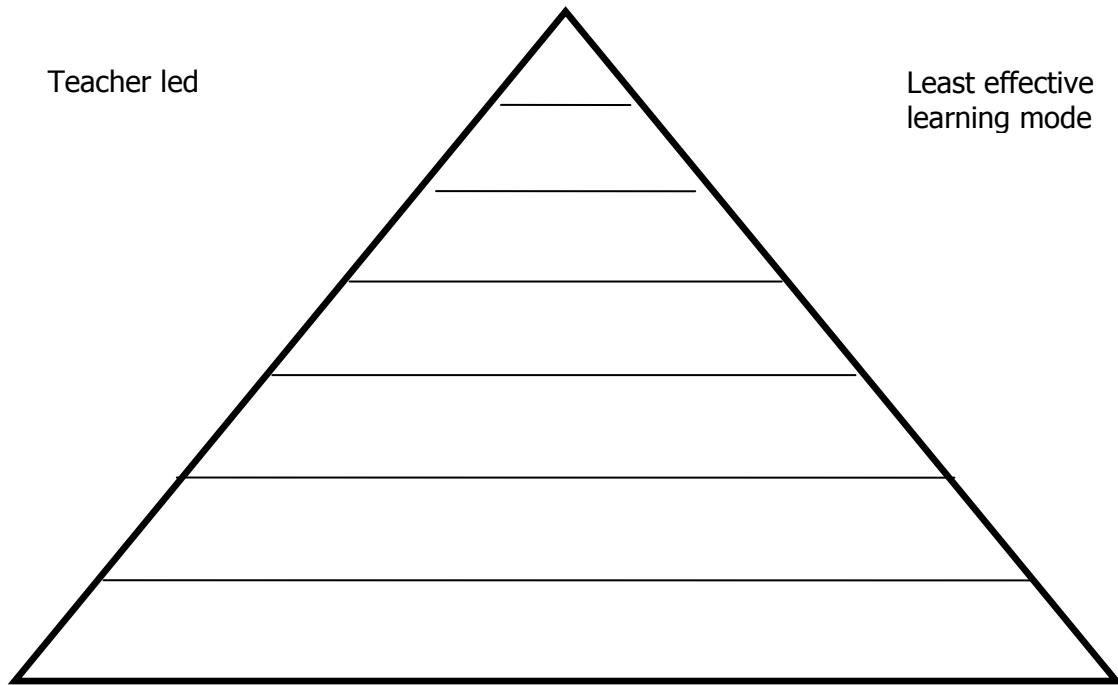
### Effective Learning Models and Methods

- ❖ There are 3 proposed learning models
  1. Competence Model
  2. Kolb's Learning cycle
  3. Glasser's Pyramid

**Glasser's Pyramid**

- ❖ Glasser's pyramid is closely related to learning styles. Please rank the following learning modes from most to least effective.

**Listening**  
**Performing /Experiencing / Doing**  
**Discussing**  
**Hearing and Seeing**  
**Teaching Others**  
**Reading**



Teacher led


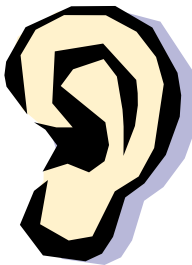

Least effective learning mode

Student led

Most effective learning mode

## Learning Styles

Can be divided into 3 types, namely visual, auditory and kinetic.

Visual	
	<ul style="list-style-type: none"><li>❖ Utilising visual display opportunities e.g. video, OHP, slides, flip charts, coloured chalks</li><li>❖ Lively or engaging textbooks</li><li>❖ Memory mapping, collage and visual note-taking tools</li><li>❖ Keywords displayed around the room</li></ul>
Auditory	
	<ul style="list-style-type: none"><li>❖ Paired and group discussions</li><li>❖ Guest speakers</li><li>❖ Mini-debates</li><li>❖ Raps, rhymes, dramatic readings</li><li>❖ Mnemonics</li><li>❖ Music for energising, relaxing, visualising and review</li></ul>
Kinetic	
	<ul style="list-style-type: none"><li>❖ Body sculpture and mime</li><li>❖ Gestures or movement to demonstrate concepts</li><li>❖ Design and build activities</li><li>❖ Field trips and visits</li></ul>

## Risk Assessment

RISK FACTOR = LIKELIHOOD x SEVERITY

### Likelihood of Occurrence

1. Highly unlikely to occur
2. May occur but very rarely
3. Does occur but only rarely
4. Occurs from time to time
5. Likely to occur often

### Severity of Outcome

1. Slight inconvenience
2. Slight injury requiring first aid
3. Medical attention required
4. Major injury leading to hospitalisation
5. Fatal or serious injury leading to disability

Therefore:                      Risk Factor > 10 is unacceptable  
   Risk factor ≥ 8 caution all to danger

## Handout 5B

### Fieldwork Guidelines

#### Planning Stage

1. Are there any Ministry of Education compliances for fieldtrips?	2. Obtain permission from landowners/agency responsible for the site. Be clear about restrictions on access and activities.
3. Ensure that Head teachers, parents as well as students understand the purpose of fieldwork. It should not be confused with an end of term trip.	4. Recognise the importance of a preparatory visit to the site to plan and execute risk assessment.
5. Choose the site with care to avoid sites which are overused (patterns may not be as natural as you would like)	6. Ensure that students are properly briefed and that if possible taught basic fieldwork techniques in advance.
7. Arrange an alternate programme in case of weather changes, unexpected denial of access or other emergencies which make the completion of the original activity unsafe or impractical.	8. Ensure that planning includes arrangements for refreshments, toilet stops and realistic timing. Your programme should be known to the Head teacher or other responsible person in case of any emergency.
9. Ensure that Head teacher, parents and students are fully familiar with existing school/site codes of conduct or with any that you may wish to discuss and agree with students ahead of time.	10. Ensure that Head teacher, parents and students understand the need for good student/adult ratio. 1/15 is adequate for many fieldwork situations (depending on site and age of children). It is <b>unrealistic</b> to take more than one class at a time

#### On Site

1. All party members should be appropriately shod and equipped. Protection from the sun with sunblock appropriate clothing e.g. hats must be insisted on. Wet weather gear may also be necessary.	2. Leaders maintain a level of supervision adequate to the nature of the party (including frequent checks of numbers)
3. Appropriate first aid equipment, water and other supplies are carried.	4. Students are strongly discouraged from collecting materials (rocks, plants, shells etc) from the site. They should be encouraged to record what they see by sketching and careful observation (smell, sound etc.)
5. Work carried out in appropriately sized groups with adequate supervision. The nature of the site, age of students, and type of activity should be carefully considered.	6. The use of questionnaires involving members of the public should be kept to a minimum or eliminated. This is especially important when the site chosen is an area where many groups practice this type of activity.
7. The areas chosen for particular activities are appropriate for study, are safe and will not be subject to damage from the students.	8. Travelling time is regarded as part of the fieldwork and fully utilised.
9. The visit is intensive, well structured, safe, but also <b>enjoyable</b> .	10. The behaviour of the party does nothing to damage the view of fieldwork held by the site owners or the public. To this end make sure that all members of the party recognise the need for good behaviour and courtesy in contacts with the public.

## Handout 5C

### Fieldwork Hazards

Hazard	Preventative Action
Vehicular Accidents	Use companies with good reputations and track records. Ensure that the carrying capacity of the vehicle is not exceeded. During the drive structured activities are needed to engage the children's attention and keep them focused.'
Lack of adequate supervision	Good student/adult ratio with at least one adult per 15 children. This ratio should be higher where risk analysis exceeds 8.
Falling	The firm establishment of boundaries. A good student/adult ratio to ensure adequate supervision.
Drowning	Wearing of life jackets (which should be put on before boarding the boat). Set firm boundaries and have good student/adult ratio.
Sunstroke/sunburn	Appropriate clothing (hats), sunblock (regardless of skin colour), rest periods in the shade and adequate supply of drinking water.
Headaches/asthma attacks	Rest periods in the shade, medication if authorised by parent.
Hazardous organisms (e.g. bees, prickly or poisonous plants)	Preparatory briefing in the hazards of the area, complete first aid kit and trained personnel.
Food poisoning	Take no foods that require refrigeration ( no mayonnaise)

**ALWAYS** leave your expected return time with a responsible party, and take a cellular phone.

**ALWAYS** be aware of your nearest medical facility, travelling time and route needed to reach it.



**Handout 5D**

Planning Fieldwork Checklist

- Preliminary reconnaissance visit
- Risk assessment
- Weather forecast (and if applicable tide tables)
- Insurance
- Permission from Ministry of Education and Principal
- Permission of parents. The form sent to the parents should detail the proposed activity, as well as ask about existing medical conditions – allergies, asthma, migraines etc., and a release to administer medication should the need arise. Clothing guidelines should also be sent to parents.
- Permission to use the site from the relevant authorities.
- Thorough briefing of all participants involved in the fieldwork exercise. This will include not only students and supervisions, but also the transportation personnel (bus driver, boat crew), and persons responsible for the site (tour guides etc).
- Transportation arrangements.
- Materials checklist.
- First aid kit.

**Handout 5E**

Risk Assessment Sheet

Hazard & Area	Who might be harmed	Existing Controls	Action to be taken	Likelihood of occurrence (L)	Severity (S)	Risk Factor (L X S)

**Remember: Risk Factor > 10 is an unacceptable risk  
> 8 caution all to danger**

**Handout 6**

**People & Corals Structure**

Topic	Activity								
1. The Coral Reef Environment	1.1 Why are coral important?	1.2 How much area do corals cover?	1.3 Who shares our home?	1.4 What is coral?	1.5 What is a polyp?	1.6 What do polyps do?	1.7 What do polyps need to live?	1.8 How do coral colonies grow?	1.9 How does a coral get about?
2. Biodiversity	2.1 What is biodiversity?	2.2 Shall we look more closely at coral reefs	2.3 Why is biodiversity important	2.4 What is a food web?	2.5 Visiting the fish market	2.6 Where are the rickets places?			
3. Fishing	3.1 What food comes from a coral reef?	3.2 How have fisheries changed?	3.3 Fishing in St. Lucia						
4. Tourism & Coastal Development	4.1 Is my island different?	4.2 Tourism word search	4.3 Should the sale of reef curios be allowed?	4.4 Sport and coral reefs... a link?	4.5 Is all development good or bad?	4.6 Are we building on shifting sands?	4.7 What should we choose?	4.8 Can we play coral bingo?	
5. Pollution	5.1 Where does the pollution come from?	5.2 Where are the creepy chemicals?	5.3 How much litter is there in our school?	5.4 How does your pollution compare to other islands?					
6. Positive Action	6.1 Positive vibes	6.2 Cleaning the beach	6.3 How do you become a Super Ranger?	6.4 Marine Protected Areas					

**Workshop Evaluation**

What did I learn today?

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Which session(s) were most useful in your opinion?

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How will your learning experience today affect your future actions?

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Did the workshop meet your expectations? Please state your reasons.

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What suggestions can you make for future workshops of this type?

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Would you be interested in being involved in future aspects of this project?

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On a scale of 1 to 10, with 1 the lowest and 10 highest, please rate the workshop and please give your reasons below.

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**Thank you for participating in the People and Corals Trainers workshop.**

## Appendix 5: Proposed Evaluation Plan

### **Coral Conservation Awareness in the Grenadines**

#### Project Evaluation Plan

- ✓ Phase 1: Project Preparation (Jan. 2006)
- ✓ Phase 2: People and Corals Teacher's Training Workshop (Sept. 2006)
- Phase 3: Use of the workbooks in participating primary schools**
- Phase 4: Evaluation of the use of the workbook**

#### Phase 3: Use of the workbook

- The workbook will be used in at least one to two classes (9-11 year olds) in the school.
- The workbook will be used for a period three months (October, November and December).
- Teachers should record the extent (coral reef environment, biodiversity etc) and frequency of the use the workbook (1-3 times).

#### Phase 4: Perceptions and experiences in using the workbook

- Surveys will be administered to the teachers and students to gain their perceptions and experiences in using the workbook and their suggestions for improved use of the workbook.
- The survey is proposed to be conducted in January 2007.