



2007 Youth Summit on
the Oceans: Virgin Islands
Future Leaders Turning
the Tide



“What Kind of
Oceans
DO YOU WANT?”



Dear *Future Leaders*

Welcome to the first Youth Summit on the Oceans. We are calling this process, “*Virgin Islands Future Leaders: Turning the Tide*,” because we hope you will *turn the tide* in your communities when you return home four days from now. We all share a commitment to the ocean because it is a life support system for the planet and without a healthy, functioning ocean, we have an unhealthy planet. It is the ocean that gives us clean air, provides food, and regulates the weather. We need to understand the role of the ocean in our lives and recognize that it is a finite resource for us. That is what this Summit is all about, and I thank you for adding your voice to this important conversation.

This is the first-ever Summit of its kind in the Virgin Islands, which makes you a vital part of something special. Please use this time to think deeply, discuss openly and work together for a better future for the ocean and for the Virgin Islands. This is your summit. You are the driving force behind what transpires. You have the opportunity to explore environmental impacts both locally and worldwide and to decide what changes you think are needed to make our ocean healthier. For now, you are *Future Leaders* but someday you will be more than that. You will be *the leaders*. We promise you that the men and women who are the leaders now will hear your voice loud and clear.

So what can you expect from this summit?

- A deep dive into the ocean and the environment that are the heart and soul of life in the Virgin Islands.
- An opportunity to learn about the threats and challenges facing our ocean and why, if we don't do something soon, the ocean, the coral, the fish and the Islands themselves may look very different from what we see today.
- A chance to meet and talk with key local and federal officials, community leaders and experts in oceanography and the environment.
- A lot of fun, good food, and new friendships with other *Future Leaders* who, like you, care about the world in which we live.

In return, we expect that you will:

- Listen and learn, share your thoughts and concerns!
- Explain to us, the adults, the community and government leaders, where we are failing and what you think we should be doing to protect the ocean, the coastlines and the environment.
- Express what **you and all of your friends** can do to help the ocean and the environment.
- Help us understand exactly how you will hold us accountable for making sure that your children will be able to enjoy the ocean, the coastlines and the environment that you enjoy.
- Tell us what we should all do until the next summit when we will learn whether we've all made a difference!
- Tell others what you have learned about the ocean.

You *can* make a difference. You *can* turn the tide. And your ideas, and opinions *do matter*! Once again welcome to this unique and exciting opportunity to shape our world. Please, enjoy your surroundings, your fellow participants and help make this a wonderful event.

Vikki Spruill
President and CEO, Ocean Conservancy

The Contents of this Workbook!

A Glossary	3
The Purpose of the Workbook	4
The Official Opening	5
Theme Session 1. The Virgin Islands Context	14
<i>Special Session: The Delegate to Congress</i>	20
Theme Session 2. Issues through Data Collection and Analysis	21
Theme Session 3. Site Visits	28
<i>Special Session. The 11th Hour</i>	35
<i>Synthesis Section - Putting it Together</i>	39
Theme Session 4. Communicating Our Message	43
Theme Session 5. The Players in Marine Management	48
<i>Synthesis Section - Getting Our Message Together</i>	55
Theme Session 6. Beyond the Youth Summit	59
Presenters Biographies	60

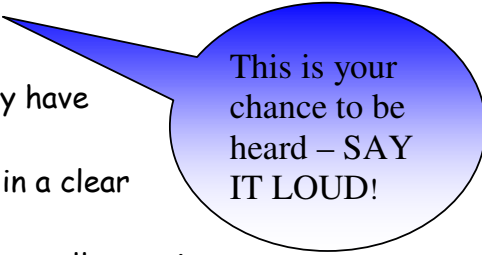
Glossary

- **Ecosystem:** A complex set of relationships among the living resources, habitats and residents of an area
- **Goal:** A broad statement of what you are ultimately trying to achieve
- **Governance:** Governance involves interaction between the formal institutions and those in civil society. It refers to parts of society using power, authority and influence and enact policies and decisions concerning public life and social well being (*this definition also works for resource governance*)
- **Indicator:** A unit of information measured over time that allows you to document changes in specific attributes. It helps you understand where you are, where you are going and how far you are from the goal
- **Integrity:** Integrity of an system refers to our sense of it as a whole. If a system is able to maintain its organization in the face of changing environmental conditions then it is said to have integrity. If a system is unable to maintain its organization than it has lost its integrity.
- **Services:** the fundamental life-support services provided by natural ecosystems, without which human civilization would cease to thrive.
OR - the conditions and processes through which natural ecosystems, and the species that make them up, sustain and fulfil human life.
- **Threat:** Those factors that impact biodiversity, food security and livelihoods, both in the short and long term

Welcome to your workbook for the *2007 Youth Summit on the Oceans: Virgin Islands Future Leaders Turning the Tide*. As you know the purpose of the Youth Summit is to focus on marine conservation issues, share ideas, discuss methods and approaches to issues as well as form working relationships with your peers. Please use this workbook to capture your thoughts and opinions throughout this Summit. We hope this is a useful resource for you as you work towards '*Turning the Tide*'.

The Purpose of this Workbook:

- ✓ To provide a framework for capturing your thoughts and opinions
- ✓ To make you think
- ✓ To provide you with materials to take away and use in discussions that you may have with other participants
- ✓ To help guide you through each session in a clear concise way
- ✓ This is a work in progress, a tool to help us all move in the right direction together




This is your chance to be heard – SAY IT LOUD!

Use this Workbook to:

- ✚ Write down what you believe or feel, this is your opportunity to be heard
- ✚ Free your mind - don't get locked in to a specific way of thinking, express yourself in whatever way suits you
- ✚ Help build a more complete picture of the issues; you will get out of it what you put in!
- ✚ Note down the answers when you come up with them, these will come from you and the entire group so be creative!

Resources available to you during this Summit

- ✓ EACH OTHER!
- ✓ Facilitators, resource persons and presenters
- ✓ The Agenda and this Workbook
- ✓ Session documents
- ✓ YOUR BELIEFS, IDEAS and THOUGHTS!



We are all in this together so lets make a Difference

*2007 Youth Summit on the Oceans:
The Official Opening*



“We have inherited our coral reefs from the generation that came before us, and we must care for them so we may yet pass them on to our children, in the condition that they deserve. Will our legacy be one of responsibility and healthy coral reefs, or of ecological and economic squander? It is for us to choose.”

~Nick Drayton, Ocean Conservancy St Croix

Ocean Conservancy is proud to be the managing partner of the 2007 Youth Summit and is grateful for the participation and support of a wide cross-section of organizations throughout the Virgin Islands. A brief background of these organizations is provided here for you.

Ocean Conservancy

THANK YOU!

Ocean Conservancy promotes healthy and diverse ocean ecosystems and opposes practices that threaten ocean life and human life. For more than thirty years, Ocean Conservancy has worked toward long-lasting solutions to threats facing our oceans. Through research, education, and science-based advocacy, Ocean Conservancy informs, inspires, and empowers people to speak and act on behalf of the oceans. Ocean Conservancy has four major priority focus areas:

1. Restoring Sustainable American Fisheries
2. Protecting Wildlife From Human Impacts
3. Conserving Special Ocean Places
4. Reforming Government for Better Ocean Stewardship

More information, including where Ocean Conservancy work and how to get involved, is available on the website www.oceanconservancy.org



The BVI National Park Trust

The Government of the British Virgin Islands established the BVI National Parks Trust in July of 1961 to preserve the natural beauty and historic features of the territory. The Trust is responsible for the territory’s terrestrial and marine National Parks and protected areas within the Ministry of Natural Resources and Labour. The Trust currently manages 20 National Parks, including cultural sites. The Trust has management authority over approximately 70 named dive sites with 180 mooring buoys in sixteen geographic locations throughout the BVI as part of its Marine Conservation Programme.



The Trust has grown from a purely voluntary organization to one that is now a professionally staffed operation with a complement of 27 employees.

More information, including projects that NPT are currently involved in, is available on the website www.bvinternationalparkstrust.org

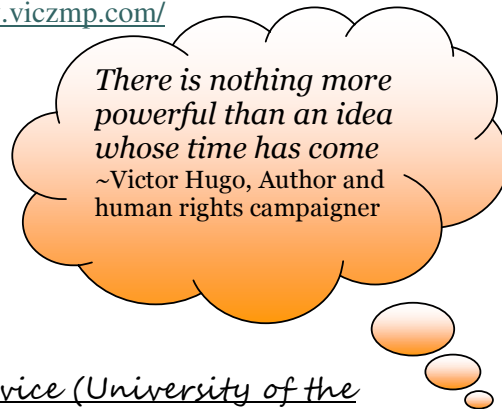
The Coastal Zone Management Division Of DPNR

In 1978, the Virgin Islands Legislature enacted the Virgin Islands Coastal Zone Management Act as a means of regulating development and managing coastal resources in the Territory. The Virgin Islands Coastal Zone Management Program (VICZMP) was established to carry out the mandates and objectives of this Act.



One of VICZMP's goals is to protect, preserve and, where feasible, enhance and restore the overall quality of the environment in the coastal zone. VICZMP works, coordinates and partners with various local and national government agencies to develop and implement a variety of projects and programs, including review, processing and enforcement of minor and major development permits in the first tier of the coastal zone.

More information, including ongoing projects and rules and regulations governing the territory, is available on the website <http://www.viczmp.com/>



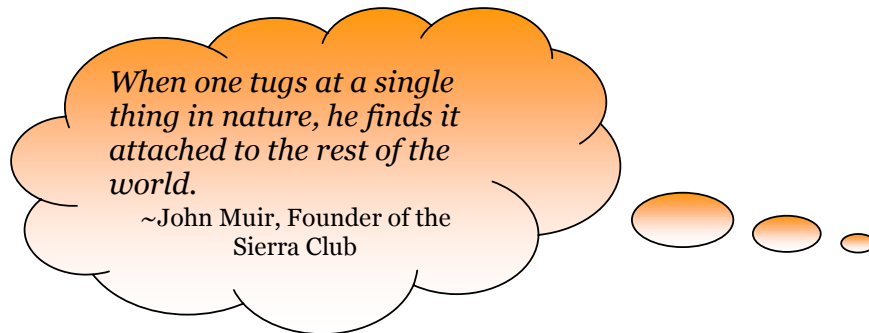
Virgin Islands Marine Advisory Service (University of the Virgin Islands)

The Virgin Islands Marine Advisory Service (VIMAS) is located within the Center for Marine and Environmental Studies at the University of the Virgin Islands. VIMAS was established on the St. Thomas campus of UVI in 1984 and on St. Croix in 1990. The main objectives are:

- Increase interest in and awareness of marine career opportunities for the Virgin Islands' youth.
- Assist coastal planning and decision-making to foster a balance between development and our living and non-living resources.
- Increase the general public's awareness and understanding of marine resources and marine affairs.

VIMAS agents achieve these objectives through educational programs, workshops, presentations, dissemination of informational materials, and through cooperative involvement with various committees, organizations, and institutions.

More information, including marine careers and community projects, is available on the website <http://rps.uvi.edu/VIMAS/index.htm>



The Experimental Program to Stimulate Competitive Research

The Virgin Islands Experimental Program to Stimulate Competitive Research (VI-EPSCoR) promotes the development of the Territory's science and technology resources:

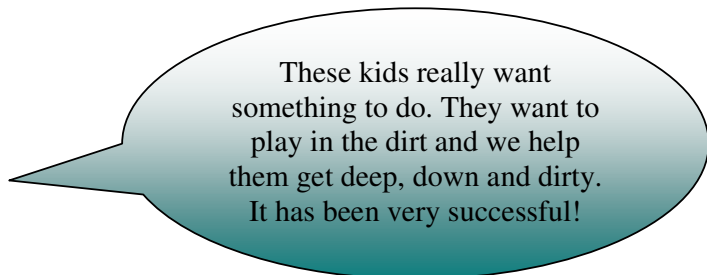


- By conducting research on areas of scientific inquiry linked to the Territory's economic development;
- By improving research infrastructure to strengthen competitiveness;
- By increasing participation of students in science and technology in order to build a skilled workforce;
- By building partnerships between government, non-governmental organizations, and the private sector to create a foundation of research and development for economic growth.

More information, including education and research opportunities, is available on the website <http://epscor.uvi.edu/>

The Junior Gardening and Ecology Academy

Mario A. Francis of St. Thomas founded the Junior Gardening & Ecology Academy in 1991 to educate local youth about the importance of preserving the natural resources of the Virgin Islands. The Academy, which is held for eight weeks during the summer, focuses on site visits to different islands and hands-on learning projects. The aim is to help young people focus their energy during summer vacation. Upon winning the **Environmental Protection Agency 2006 Environmental Quality Award** Mr. Francis said:

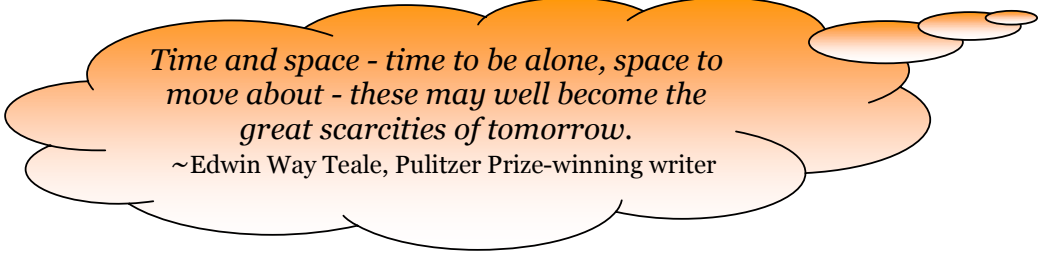


The Office of the U.S. Virgin Islands' Delegate to Congress

A **Delegate to Congress** is a non-voting member of the United States House of Representatives who is elected from a U.S. territory or from the District of Columbia. While unable to vote in the full House, a non-voting Delegate may vote in a House committee of which the Delegate is a member.

The USVI Delegate to Congress is The Honorable Donna M. Christensen. As a Member serving her sixth term, she is the first female physician in the history of the U.S. Congress, the first woman to represent an offshore Territory, and the first woman Delegate from the United States Virgin Islands. In the 110th Congress, Delegate Christensen serves on the following House Committees, Subcommittees and Caucuses: She serves on the Committee on Natural Resources, which oversees territorial and public land issues, and on the Homeland Security Committee which oversees preparing the nation to prevent and withstand attack.

More information, including Delegate Christensen's responsibilities and areas of focus, is available on the website <http://www.house.gov/christian-christensen/>



*Time and space - time to be alone, space to
move about - these may well become the
great scarcities of tomorrow.*

~Edwin Way Teale, Pulitzer Prize-winning writer

The Rotaract Club of Tortola

The Rotaract Club is a Rotary Club-sponsored organization of young men and women between the ages of eighteen (18) and thirty (30). We the members of the Rotaract Club of Tortola are working under the guidance of the Rotary Club of Tortola. Rotaract's purpose is to provide an opportunity for young men and women to enhance the knowledge and skills that will assist in their personal development to address the physical and social needs of their communities.

The Rotaract Club of Tortola, under its Environmental Ambassador efforts has worked closely with the Conservation and Fisheries Department and National Parks Trust in their various efforts and are long standing participants in the Coastal Cleanup efforts organised for the International effort in October. Recently many members have become PADI certified and the efforts have expanded to include the underwater cleanup. Efforts also include participation in environmental workshops and meetings, fieldtrips to areas of environmental concern/interest and participating in the VI's first ever Parade for the planet. We have adopted KATS "Kids and the Sea" Sea Skills Program and is in the process of trying to gain experience to revive ARK "Association of Reef Keepers".

More information, including club stories and membership advice, is available at the website <http://www.clubrunner.ca/CPrg/Home/homeA.asp?cid=1530>

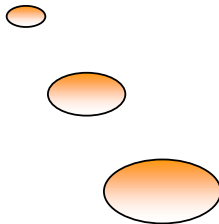
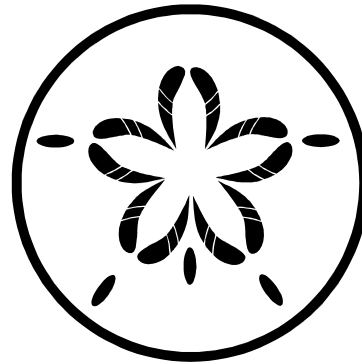
The Interact Club of Road Town

Interact is a Rotary-sponsored service club for young people ages 13-19. The program gives young people an opportunity to participate in fun, meaningful service projects while developing leadership skills and meeting new friends. They help the young individual interactors just as much as they help the community. It's their goal to serve the community as well as bettering themselves as they learn the leadership skills necessary for the outside world

Each year, Interact clubs complete at least two community service projects, one of which furthers international understanding and goodwill. Through projects, Interactors develop a network of friendships with local and overseas clubs. And, in the process, Interactors develop leadership skills and learn the value of hard work.

More information, including ongoing community projects and how to join, is available at the website <http://www.freewebs.com/rtinteract/>

Two other important vital Summit contributors that have been instrumental in the build up process to this event are Lana Vento Foundation and the BVI High School's Environment Club.



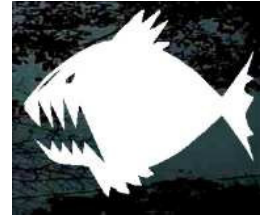
In the end we will conserve only what we love. We will love only what we understand. We will understand only what we are taught

~ Baba Dioum, Senegalese environmentalist

Notes Section for you to use!

The Thinking Part

1. What did this session mean to me, what did it make me feel?



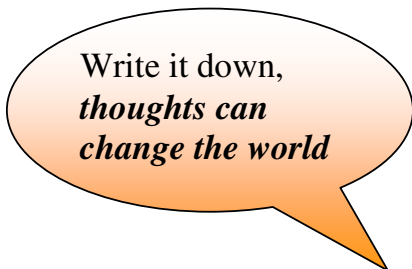
2. Did it change the way I look at the oceans and environment around me? If so how?

*Because we don't think
about future
generations, they will
never forget us.
~Henrik Tikkanen, Author*

3. Is there anything I can do to help?

4. What should *the government* be doing now? What can they do?

5. *Who else* should be doing something about this?



Other thoughts, ideas and suggestions

More Notes Space for you to use!



*Session Theme 1. The Virgin Islands Context: The State
of our Local Marine Ecosystems
Friday October 26th (AM)*

Objectives:

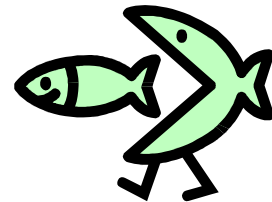
1. To highlight specific factors that stress our marine systems, and the implications of these stress factors on marine ecosystem health
2. To examine the relevance of coastal and marine integrity to the Virgin Islands communities, and the implications of ecosystem degradation



Theme Introduction:

Marine and coastal ecosystems are among the most productive ecosystems in the world. The areas where fresh water and salt water mix, nearshore coastal areas, open ocean marine areas; all these habitats combine to form the marine ecosystems we depend so heavily on. These ecosystems produce more services relating to human well-being than most other systems, even those covering larger total areas of the planet.

The delicately balanced marine environment relies on the interaction of hard and soft corals, sponges, anemones, snails, rays, crabs, lobsters, turtles, dolphins and other sea life as well as many associated habitats including mangroves and seagrasses.



A coral reef cannot be properly described. It must be seen to be thoroughly appreciated

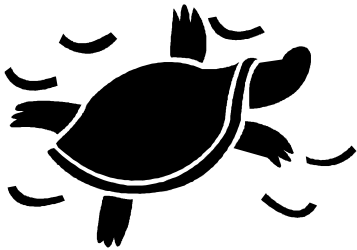
~Sidney Hickson,
Naturalist, 1889

Coral reefs are composed of thin plates or layers of calcium carbonate secreted over thousands of years by billions of tiny soft-bodied animals called coral polyps. Millions of polyps grow on top of the limestone remains of former colonies to create the massive

reefs. These animals form the only natural formation visible from outer space. Corals are divided into two kinds and both are stationary on the ocean bottom. Hard corals such as brain, star, staghorn, elkhorn and pillar corals have rigid exoskeletons, or corallites, that protect their soft delicate bodies. Gorgonians, or soft corals, such as sea fans, sea whips, and sea rods, sway with the currents and lack an exoskeleton.

Mangroves are salt-tolerant trees with submerged roots that are a nursery and breeding ground for birds and most of the marine life that migrates to the reef, including many types of fish. Mangroves trap and produce nutrients for food and habitat, stabilize the shoreline, and filter pollutants from the land. They also protect low-lying lands by buffering them against storm winds, waves and floods. Four different types of mangroves are found in the Caribbean.

Seagrasses are flowering marine plants that are an important part of the food web. They provide foods and habitat for turtles, manatees, many fish, filter-feeding organisms and foraging sea life such as sea urchins and sea cucumbers. Seagrass beds are a nursery for shrimp, lobster, young fish and many other sea creatures, providing refuge and hiding places from predators. They help maintain water clarity by trapping fine sediments with their roots and underground stems stabilizing the bottom. Salt ponds and algal plains also play important roles in the system and are both abundant throughout the Virgin Islands.



Coral reefs and their associated habitats occupy less than one quarter of one percent of the earth's marine environment, yet they are home to more than a quarter of all known fish species. Coral reefs deserve protection for their intrinsic natural value. In addition, the economic, tourism, fishing and recreational resources of tropical areas around the world depend upon healthy coral reef ecosystems. Barrier coral reefs protect shorelines from erosion and storm damage. The food, tourism revenue, coastal protection and new medications that reefs provide are worth about \$375 billion each year.

Presentations for this session:

- 1. Stresses and Impacts on Our Marine Systems**
- 2. How Does the State of the Marine Environment into Everyday Life? Interactions Between Local Marine Systems and Local Communities**

Threats:

Threats can be either natural or man-made. To protect coral reefs we must also strive to protect the nearby seagrass beds, salt ponds, mangroves and algal plains. While the reefs may in some ways be the most

colourful feature of coastal and marine areas in the Virgin Islands, their associated habitats are critical parts of a vibrant, functioning ecosystem.



We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect
~Aldo Leopold, Ecologist

Notes Section for you to use!

The Thinking Part



1. What did this session mean to me, what did it make me feel?

2. Did it change the way I look at the oceans and environment around me?
If so how?

The activist is not the man who says the river is dirty. The activist is the man who cleans up the river.
~Ross Perot. Businessman

3. Is there anything I can do to help?

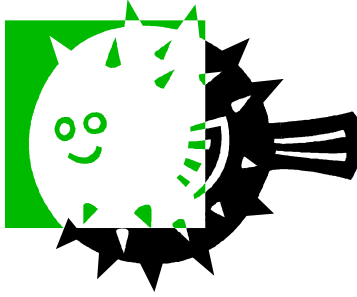
4. What should the government be doing now? What can they do?

5. Who else should be doing something about this?



Other thoughts, ideas and suggestions

More Notes Space for you to use!



*A Special Session: A Session with
The Delegate to Congress
Friday October 26th (AM)*

The Honorable Donna M. Christensen continues to distinguish herself as a leader in the United States Congress. As a Member serving her sixth term, she is the first female physician in the history of the U.S. Congress, the first woman to represent an offshore Territory, and the first woman Delegate from the United States Virgin Islands.

In the 110th Congress, Delegate Christensen serves on the following House Committees, Subcommittees and Caucuses: She serves on the Committee on Natural Resources, which oversees territorial and public land issues, and on the Homeland Security Committee which oversees preparing the nation to prevent and withstand attack.

Delegate Christensen chairs the Natural Resources Subcommittee on Insular Affairs which oversees the affairs of the offshore territories to include Puerto Rico, the U.S. Virgin Islands, Guam, the Northern Marianas Islands, and the free associated states of the Republic of the Marshall Islands, the Federated States of Micronesia and the Republic of Palau. The Subcommittee has been reinstated after 12 years with the Democratic takeover of the House. She also serves on the Homeland Security Subcommittees on Emergency Communications, Preparedness and Response and Emerging Threats, Cybersecurity and Science and Technology.

Delegate Christensen is a Member of the Congressional Black Caucus and chairs the Congressional Black Caucus' Health Braintrust, which oversees and advocates minority health issues nationally and internationally. She is a Member of the Congressional Caucus for Women's Issues; Member of the Steering Committee of the Congressional Travel and Tourism Caucus; Member of the Congressional Rural Caucus; Member of the Friends of the Caribbean Caucus; Member of the Coastal Caucus; Member of the Congressional Fire Caucus and additionally, a Member of the Congressional National Guard and Reserve Caucus.

She was born in 1945 to the late Judge Almeric Christian and Virginia Sterling Christian. She earned a Bachelor of Science in 1966 at St. Mary's College in Notre Dame, Indiana. She earned an M.D. (Doctor of Medicine) in 1970 from George Washington University School of Medicine in Washington, D.C. She interned at Pacific Medical Center in San Francisco, California from 1970 to 1971 and did her residency in family medicine at Howard University Medical Center from 1973 to 1974. She became a board certified physician in 1977.

Christensen began her medical career in the Virgin Islands in 1975 as an emergency room physician. She served as staff physician at the Maternal & Child Health program, Medical Director of the Nesbitt Clinic in Frederiksted, Director of the Frederiksted Health Center, Director of Maternal and Child Health and Family Planning, served as the Medical Director of the St. Croix Hospital and rounded out her medical career as the Territorial Assistant Commissioner of Health and as the Acting Commissioner of Health. She maintained a private practice in family medicine from 1975 until her election to Congress in 1996.

As a registered member of the Democratic Party of the Virgin Islands, she has served as Democratic National Committeewoman, member of the Democratic Territorial Committee, Delegate to Democratic Conventions from 1984 to present, Member, Platform Committee of the Democratic National Committee from 1988 to present. She was elected to the Virgin Islands Board of Education from 1984 to 1986 and was appointed as a member to the Virgin Islands Status Commission from 1988 to 1992.

*Session Theme 2. Understanding the Issues Through
Data Collection and Analysis
Friday October 26th (PM)*

Objectives:

1. To provide an opportunity to experience some types of coastal and marine data collection and analysis
2. To highlight the application of data collection and analysis to management approaches

Theme Introduction:

Data collection – why do we do it and what do we get out of it? Data help you design, target, and implement fact-finding activities based on specific questions. The rapid advances in digital technologies and networks over the past two decades have radically altered and improved the ways that data can be produced, managed, and used, not only in science but also in all spheres of human endeavour. New sensors, satellites and experimental instruments produce increasing amounts and types of raw data. Every aspect of the natural world, from the subatomic to the cosmic, all human activities, and indeed information on every life form can now be observed and stored in electronic databases.



Data collection is not all about counting things. There are many different types of data including biological, ecological, chemical, cultural, social and economic, and all these types can be useful so what are some of the specifics and how do we collect these data? There is a range of methods including scientific experiments, questionnaires, photograph analysis, the use of satellites, interviews with experts and literature searches but the end requirements are the same, they must all answer your initial questions.

Here is a breakdown of the big picture method used during research:

Defining the Question: This step involves narrowing possible topics and then choosing the question to be the focus of your research. Your question should be specific and can be broken down into smaller, more manageable parts. You may need to gather more information before you decide on your final question. Ask yourself:

- Specifically, what do I want to know?
- What is the purpose of asking this question?
- What will the answer tell me?
- Can this question be answered through research? (Can I describe how I might answer it?)
- Is it feasible? (Can I do it with the time and equipment available to me?)

Forming a Hypothesis/Hypotheses: This step helps you answer the question:

- What do I know about my topic?
- What additional information would help me?
- How can I use different sources of information (experts, books, articles, computer databases) to gather the information I need?
- Where will I conduct this research?
- Where are the organisms or events I want to study?
- What resources are available to me-time, equipment, people, money, facilities, etc.?



Planning the Research/Developing Data Collection Methods: This step involves making a very specific plan about how you will conduct your research and collect your data. In the end, your procedure should be clear enough so that someone else could follow it exactly. To plan your research and develop your procedure, ask yourself:

- How will I answer my research question/test my hypotheses? What data do I need to collect? How will I collect these data?
- What equipment or supplies do I need?
- Do I have a reference point (control) with which to compare my data?
- To answer my question, do I need to design many different experiments to test a series of things?
- How many (samples, sites, tests, etc.) do I need?
- What record-keeping techniques (e.g. data sheet, journal) will I use? Are my data collection techniques organized and thorough?
- Are there sequential steps to my research? If so, what are they? How will I plan my time?

Collecting Data: Be sure that you write down all of the information (data) that could affect the answer to your research question. When you collect the data, ask yourself:



- Am I recording all relevant data?
- Can I read and understand my notes?
- Am I keeping track of what I did at each step?
- Am I being objective in my data collection?

Organizing & Analyzing the Data: This step gives you the chance to pull together the data you've collected and look at it more closely. Compare and contrast the information you've gathered to see the results of your research. Ask yourself:

- How will I organize and summarize the data I've collected?
- What do my data show?
- How should I present my data graphically so that others can see the results clearly? (e.g. bar graphs, tables, pie charts, line graphs, etc.)
- Are the results significant? Are there tests I might use to tell me if the results are significant?

Interpreting the Data & Drawing Conclusions: In this step, stand back from your data and look at it more critically. Decide what conclusions you can draw. Ask yourself:



- What alternative hypotheses might explain these results?
- Am I considering all relevant data, including extremes or "oddball data" in my analysis?
- How might my sampling or data collection methods have affected these results?
- What answer do my results provide to my original question?
- How do my results compare to what I expected to happen (my hypothesis)?
- What can I conclude from my results?
- How do my conclusions affect the community or "big picture" (implications)?

Communicating the Results: Now it's time to share your work. Ask yourself:

- Who is my audience?
- What is the best way to communicate to my audience? (e.g. written report, oral or poster presentation, video, etc.)
- What visual aids will help my audience clearly understand this research?
- Have I addressed all of the following components of my research in my communication?:
 - Introduction to question, purpose of this research and why it is interesting or matters
 - Description of methods used to collect data
 - Results
 - Conclusions
- What questions are raised by my research? How do others respond to my work?



"It is our task in our time and in our generation, to hand down undiminished to those who come after us, as was handed down to us by those who went before, the natural wealth and beauty which is ours."

~John F. Kennedy, 35th President of the United States

Presentations and options for this session (you will have to choose one):

1. **Socio-economic exercise – the people side of the story**
2. **Ecological exercise – the biological side of the story**
3. **Physio-chemical exercise - the physical side of the story**

Notes Section for you to use!

The Thinking Part



1. What did this session *mean to me*, what did it make me feel?

2. Did it *change the way I look* at the oceans and environment around me? If so how?

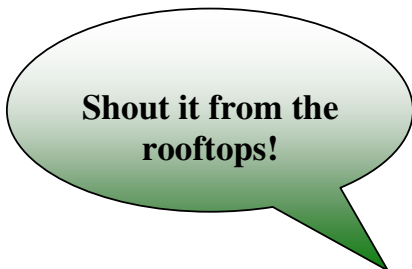
The purpose of conservation: The greatest good to the greatest number of people for the longest time.

~ Gifford Pinchot, first Director of the U.S. Forest Service

3. Is there *anything I can do* to help?

4. What should *the government* be doing now? What can they do?

5. *Who else* should be doing something about this?



Other thoughts, ideas and suggestions

More Notes Space for you to use!



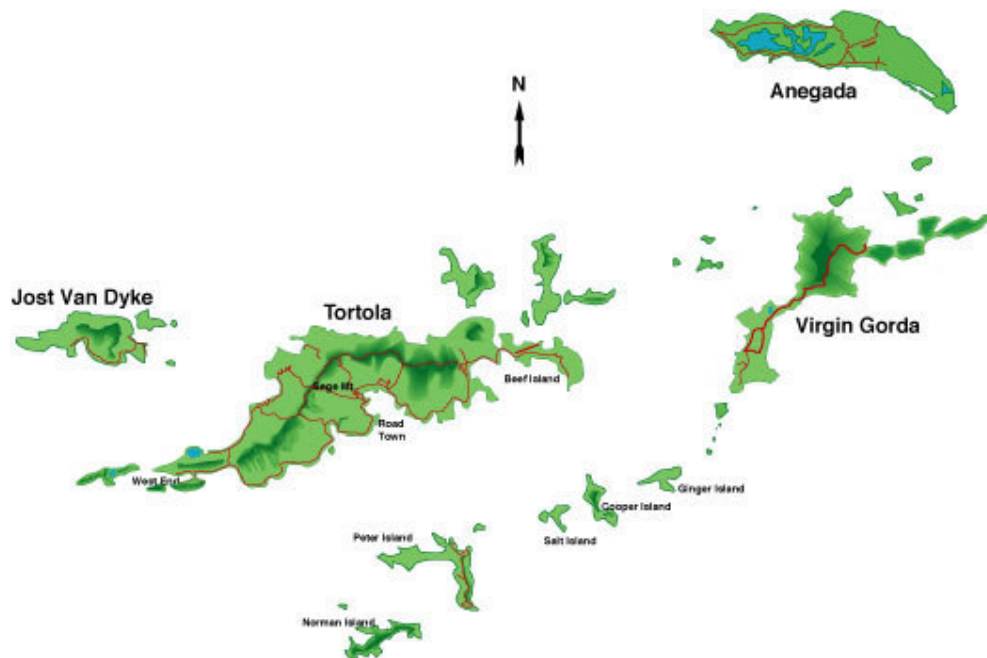
Session Theme 3. Site Visits – Current Management Efforts
Saturday October 27th (AM)

Site 1. The British Virgin Islands Introduction:

Objectives:

1. To examine efforts in the British Virgin Islands to manage coastal and marine resources
2. To discuss the successes and challenges to effective management

The British Virgin Islands comprise a terrestrial land mass of 161 km² which are surrounded by a territorial sea of 81,000 km². The BVI include the four main islands of Tortola, Virgin Gorda, Jost Van Dyke and Anegada, as well as 37 small islands, islets and cays. Most of the islands, with the exception of Anegada, were uplifted from submerged volcanoes resulting in dramatic relief and steep sloping hills. The total local population is approximately 28,000.



The British Virgin Islands.
Source: http://www.cderra.org/members_vg.php

Extensive coral reef systems exist around most of the islands, with fringe reefs close to shore and smaller, sometimes isolated patch reefs scattered across the shallow shelves. The Horseshoe Reef is the largest reef system in the BVI, encircling Anegada and extending beyond the southeast tip of the island covering 30 square miles. There are 49 miles of beaches in the BVI spread over the entire island chain.

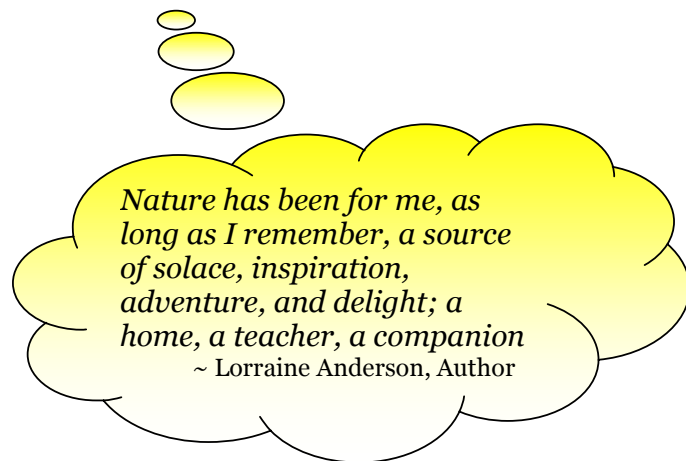
The first system plan for parks and protected areas in the BVI was prepared in 1981. A second report was prepared in 1986, which led to a revision of the policy framework for protected areas management, resulting in the National Parks Act 2006. The National Parks Trust and their partners have completed a new BVI protected area systems plan for 2007-2017. The BVI also have committed to several international agreements that play a global role in the protection of natural resources including:

- ✓ The Convention concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention) http://whc.unesco.org/world_he.htm
- ✓ The Convention on Biological Diversity (CBD) <http://www.cbd.int/default.shtml>
- ✓ The Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention) <http://www.ramsar.org/>
- ✓ The Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Regions (Cartagena Convention), Protocol Concerning Specially Protected Areas of Wildlife (SPAW Protocol) <http://www.cep.unep.org/pubs/legislation/spaw.html>

The people of the British Virgin Islands are aware that the environment is vital to their way of life and that effective environmental laws are necessary in order to ensure and maintain cultural, economic and environmental harmony. This is why the overarching vision for the BVI protected areas system as taken from the BVI Protected Areas System Plan 2007-2017 is: ***“To manage important natural and historical resources in ways that will contribute to an improvement of the quality of life of BVI residents”***.

Statements like these are important but can we measure the success of management initiatives and projects to make sure that our goals are being met? Effective management requires a continuous stream of information and lots of work in order to determine what is working and what is not. These efforts can:

- ✿ Lead to better management in a changing environment
- ✿ Assist in effective resource allocation
- ✿ Promote accountability and transparency
- ✿ Help involve the community, build trust and promote protected area values



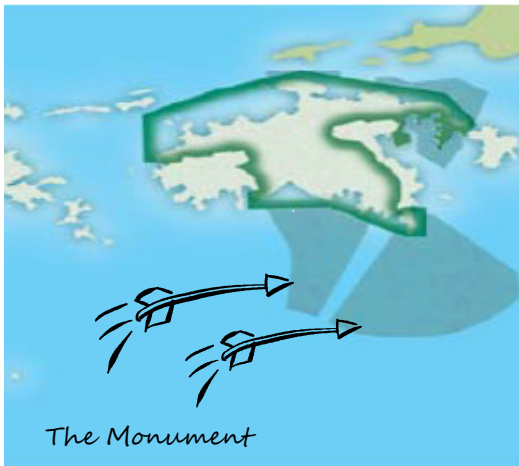
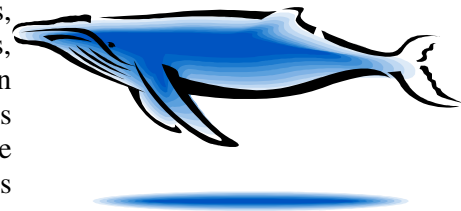
Site 2. The Virgin Islands Coral Reef Monument (St John, USVI)

Objectives:

1. To examine efforts by federal agencies to manage coral reef resources in the USVI
2. To discuss successes and challenges to effective management at the Federal Level

Virgin Islands Coral Reef Monument includes federal submerged lands within the 3-mile belt off of the island of St. John. These waters support an extensive and complex system of coral reefs, and associated habitats such as shoreline mangroves and seagrass beds that contribute to their health and survival. The Virgin Islands Coral Reef Monument was established in January 2001 when a presidential proclamation designated 12,708 acres of federally owned submerged lands to be protected.

The monument was established with several biological objectives including the protection of threatened and endangered species, which forage, breed, nest, rest, or calve in the waters. Humpback whales, pilot whales, four species of dolphins, brown pelicans, roseate terns, least terns, and the hawksbill, leatherback, and green sea turtles all use portions of the monument. Countless species of reef fish, invertebrates, and plants utilize these waters during their lifecycle, and over 25 species of sea birds feed in the waters.

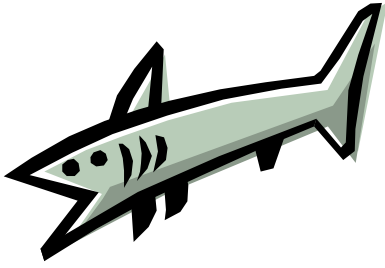


The submerged monument at Hurricane Hole contains the most extensive and well-developed mangrove habitat on St. John. Numerous coral reef-associated species, including the spiny lobster, queen conch, and Nassau grouper, transform from larvae to bottom-dwelling juveniles in the shallow nearshore habitats of Hurricane Hole. As they mature, they move offshore and take up residence in the deeper coral patch reefs, algal plains of the submerged monument lands to the south and north of St. John. Deep algal plains

with scattered areas of hard bottom dominate the monument south of St. John. The hard bottom is colonized with corals, sponges, gorgonians, and other invertebrates, providing shelter for lobster, groupers, and snappers as well as spawning sites for some reef fish species. These algal plains and hard bottom areas link the shallow water reef, sea grass, and mangrove communities with the deep water shelf and shelf edge communities of fish and invertebrates.

Notes Section for you to use!

The Thinking Part



1. What did this session mean to me, what did it make me feel?

2. Did it change the way I look at the oceans and environment around me? If so how?

Only when I saw the Earth from space, in all its ineffable beauty and fragility, did I realize that humankind's most urgent task is to cherish and preserve it for future generations

~ Sigmund Jahn, German cosmonaut

3. Is there anything I can do to help?

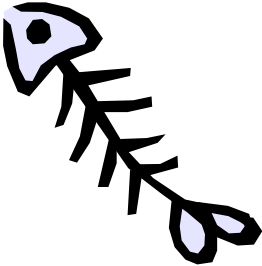
4. What should *the government* be doing now? What can they do?

5. *Who else* should be doing something about this?



Other thoughts, ideas and suggestions

More Notes Space for you to use!



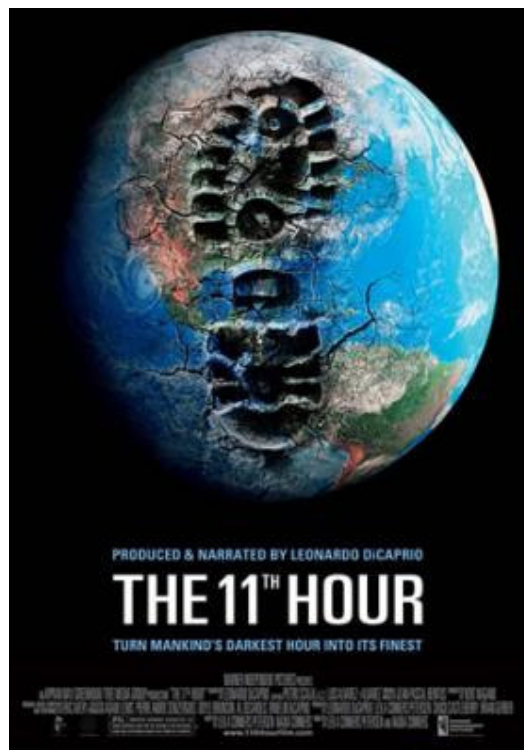
Special Session – Movie Night!

The 11th Hour

Saturday October 27th (PM)

Movie Introduction:

The 11th Hour is the last moment when change is possible. The film explores how we've arrived at this moment -- how we live, how we impact the earth's ecosystems, and what we can do to change our course. Featuring ongoing dialogues of experts from all over the world, including former Soviet Prime Minister Mikhail Gorbachev, renowned scientist Stephen Hawking, former head of the CIA R. James Woolsey and sustainable design experts William McDonough and Bruce Mau in addition to over 50 leading scientists, thinkers and leaders who discuss the most important issues that face our planet and people.



CLARION
AWARDS 2007



IVCA Clarion Award Winner
Feature Film: The 11th Hour

The Thinking Part



1. What did this movie *mean to me*, what did it make me feel?

2. Did it *change the way I look* at the oceans and environment around me?
If so how?

What we do today, right now, will have an accumulated effect on all of our tomorrows.

~Alexandra Stoddard, Author,
Interior Designer and Philosopher

3. Is there *anything I can do* to help?

4. What should *the government* be doing now? What can they do?

5. *Who else* should be doing something about this?



Other thoughts, ideas and suggestions

More Notes Space for you to use!



Synthesis Section – Putting it Together

Sunday October 28th (AM and PM)

This will be on-going throughout the rest of the Youth Summit in order to prepare for the Coral World Presentations on Monday evening as well as our final Action Plan!

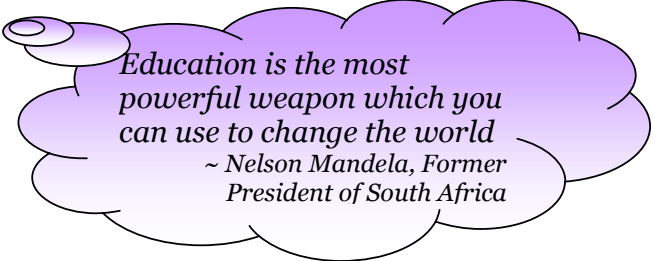
Objectives:

1. To bring together information gathered at date into a structured format
2. To identify concerns, recommendations, threats and issues

Theme Introduction:

Now that you've heard from the experts, talked among yourselves, experienced the wonders of the ocean and coral life around you, it's time to put your collective heads together and develop an Action Plan that will build on what you've learned and how you feel.

What do you want to tell everyone who has been at this Summit, and those who should have been here, but could not, what do you want them to know about the experience you've had?

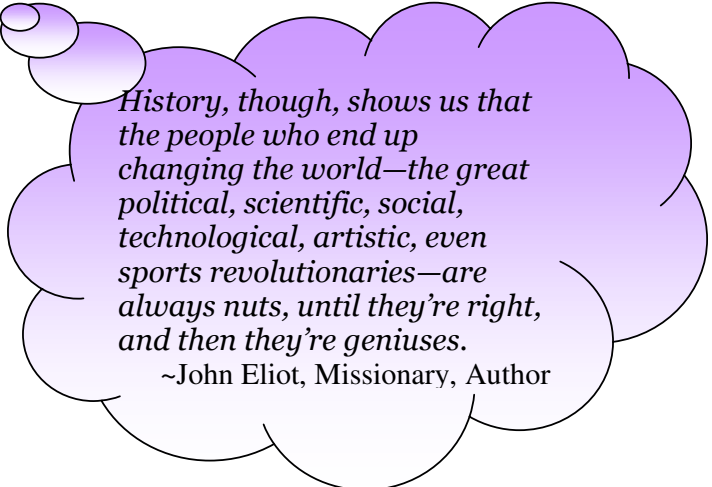


Education is the most powerful weapon which you can use to change the world

~ Nelson Mandela, Former President of South Africa

The Process:

1. You'll be getting together in small groups, to make it easier to think and talk.
2. Each small group will be responsible for developing **five or more action steps** that community and government leaders should consider and **three to five (or more)** action steps you and your friends and family and local community can do now and in the future.
3. Choose one person to write up what you all decide are the action steps.
4. Choose two people from your group to speak for your group and present your recommendations, feelings and ideas.



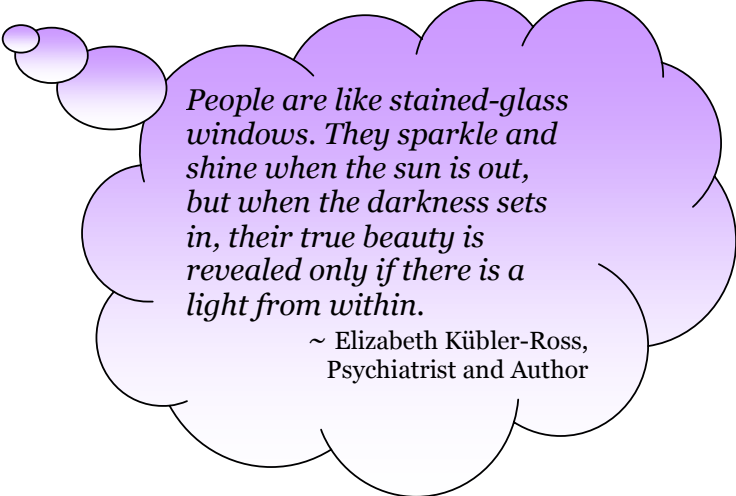
History, though, shows us that the people who end up changing the world—the great political, scientific, social, technological, artistic, even sports revolutionaries—are always nuts, until they're right, and then they're geniuses.

~John Eliot, Missionary, Author

All of the recommendations, ideas and feelings from each group will then be collected and compiled into a document for distribution to government leaders, community leaders, educators and other stakeholders. It will include the names of each future leader....all of you...and you will all receive a copy for your own use.

Notes Section for you to use!

More Notes Space for you to use!



People are like stained-glass windows. They sparkle and shine when the sun is out, but when the darkness sets in, their true beauty is revealed only if there is a light from within.

~ Elizabeth Kübler-Ross,
Psychiatrist and Author

Even More Notes Space for you to use!



Session Theme 4. Communicating Our Message
Sunday October 28th (AM)

Objectives:

1. To introduce the various methods and techniques for messaging
2. To describe the local media environment: what works, what doesn't and how to network with local media houses

Theme Introduction:

We are almost through the first decade of the 21st century, and nearly a tenth of the world's land surface is in some form of protected area - national parks, nature reserves, landscape protected areas and wilderness. There is an extensive and growing network of marine protected areas around the world too. This is a remarkable achievement for the world's governments and conservation organizations and a demonstration of the importance of biodiversity protection, maintenance of environmental services, protection of cultural values and aesthetic and moral considerations.

BUT is it just the governments that need to be involved? If we want to involve everybody and really change things have we got the message right? Are local people engaged in the story? Are we telling the right story, the right way and at the right time?



There are many different types of media that are accessible to us but if we don't think about what we want to say and how to say it then all the newspapers and TV stations are useless. Who are we trying to reach with our message?

Notes Section for you to use!

The Thinking Part



1. What did this session mean to me, what did it make me feel?

2. Did it change the way I look at the oceans and environment around me? If so how?

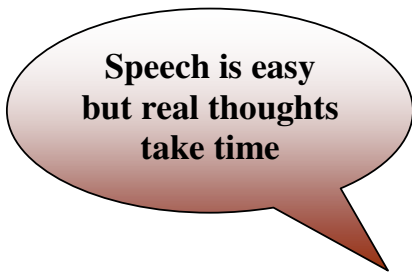
*May your trails be crooked,
winding, lonesome,
dangerous, leading to the
most amazing view. May
your mountains rise into and
above the clouds.*

~ Edward Abbey, Author

3. Is there anything I can do to help?

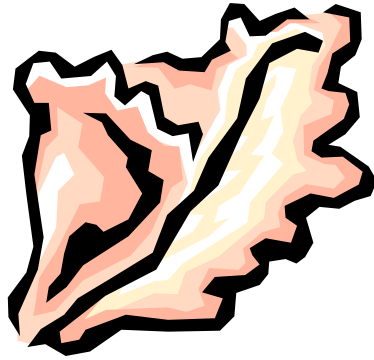
4. What should *the government* be doing now? What can they do?

5. *Who else* should be doing something about this?



Other thoughts, ideas and suggestions

More Notes Space for you to use!



Session Theme 5. The Players in Marine Management
Sunday October 28th (PM) and Monday October 29th (AM)

Part 1. Resource Users

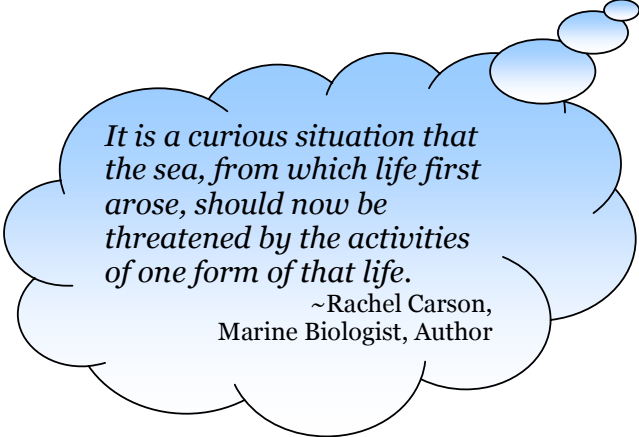
Objectives:

1. To examine the roles played by resource users in determining the success of marine management efforts

Theme Introduction:

Conservation experiences all over the world have proven that social, cultural, economic and political factors, more than biological or physical ones, shape the success of marine management efforts. Coastal and marine ecosystems provide food, building materials, firewood, recreational opportunities, protection and buffering from coastal hazards, economic development opportunities and important life support functions to a large range of individuals, communities and businesses. It is, therefore easy to see the critical role that the people that use these resources can play in managing them.

BUT is it that easy? Even though a role exists it is often difficult to find individuals willing to play that role or mechanisms that allow them to do so. The engagement and participation of all groups of society, especially those whose livelihoods are tied to the environment, is an important goal for resource managers.



It is a curious situation that the sea, from which life first arose, should now be threatened by the activities of one form of that life.

~Rachel Carson,
Marine Biologist, Author

Part 2. The Role of the Community in Marine Management

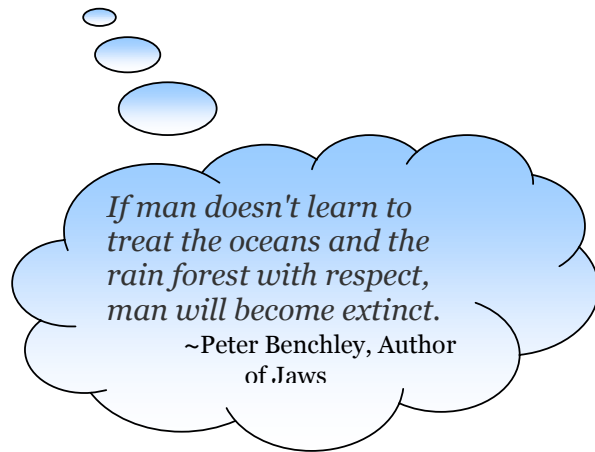
Objectives:

1. To examine the role of culture, volunteerism and advocacy as facilitators of, or impediments to, situation changes in marine conservation

At least fifty percent of the world's population currently live within sixty kilometres of the coast – at present, more than 3 billion people. By the year 2008, the world population will exceed 6.7 billion people, with 3.4 billion of us living in coastal areas. People, every person on the planet for that matter has a role to play in the management of all natural resources, especially the oceans. With large numbers of

community members involved in local, regional, national or international efforts through donations of time and money are we having the impact we want to be having?

So is there a way to get involved? There are many big nonprofit organizations that use the membership fees and donations from people of all walks of life to work towards better management of natural resources. The Ocean Conservancy is one such example of these organizations. In some countries the community themselves are responsible for the management of their own resources. Community management and co-management (a situation in which two or more social actors negotiate, define and guarantee amongst themselves a fair sharing of the management functions, entitlements and responsibilities for a given territory, area or set of natural resources) are important avenues for the involvement of people in conservation.



Part 3. Governance and Management

Objectives:

1. To provide insight into the role of government in marine and coastal resource management

Theme Introduction:

Resource governance is the way in which users and their intentions are managed through a set of rights, rules, laws and strategies. This includes enforcement methods, such as policing and punishments, as well as incentives to direct people and control use. Formal organizations and law traditionally define resource governance although accepted practice and uses often play a large role. Resource governance takes place at four different levels: local, provincial/state, national and international. The government obviously plays a large role at all of these levels.

In the USVI, the Territorial Government has jurisdiction over the marine resources in territorial waters, which extend from the shoreline out to three nautical miles. The Commissioner of the Department of Planning and Natural Resources enacts fisheries management regulations and local fisheries advisory committees make recommendations to the Commissioner on how to conserve these resources. The U.S National Park Service manages waters under its jurisdiction. In federal waters (from three to 200 nautical miles offshore) regional councils manage marine resources through fisheries management plans.



In the BVI, the Ministry of Natural Resources and Labour have jurisdiction over fishing regulations through the Conservation and Fisheries Department. The National Parks Trust is responsible for the designation and management of marine protected areas throughout the Islands. The BVI Protected Area Systems Plan guides the management of the marine resources.

Part 4. The Private Sector and its Role in Marine and Coastal Resource Management

Objectives:

1. To examine opportunities for the private sector as a partner in coastal and marine conservation



Traditionally we think about fishermen as the main resource users but with tourism being the lifeblood of many Caribbean nations many other groups must fall into this user category. For example, tourism contributes more than 30 percent of the gross domestic product in at least 10 countries or territories in the Caribbean region. One Caribbean worker in six is directly employed in the tourism industry. In 2000, according to

the World Resources Institute, international tourism receipts in the Caribbean region totaled US\$25.5 billion. Including supporting and related services, tourism contributes a total of about US\$105 billion annually to the Caribbean economy.

Economic valuation is a powerful tool for raising awareness about the economic value of natural resources and about the implications of different development or management decisions. Credible valuation studies based on reasonable and fully disclosed assumptions can directly influence planning and development in areas adjacent to coral reefs. Economic arguments are also potent persuaders for a wider audience, convincing communities, politicians, and the general public of the important, lasting benefits of effective management and protection of coral reefs.

Part 5. Youth and their Role in Marine Management

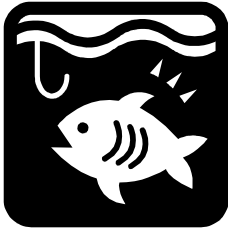
Objectives:

1. To identify specific ways in which youths can be more effective situation changers in their sphere of influence

This is your chance to be creative. How can the youths of the world be more involved? Are there new and exciting ways for youths to make a difference? How are you already involved and do you think these are the right ways? Is it working as well as you would like?

Notes Section for you to use!

The Thinking Part



1. What did this session mean to me, what did it make me feel?

2. Did it change the way I look at the oceans and environment around me?
If so how?

We do not inherit the earth from our ancestors, we borrow it from our children.
~Kenyan Proverb

3. Is there anything I can do to help?

4. What should *the government* be doing now? What can they do?

5. *Who else* should be doing something about this?



Other thoughts, ideas and suggestions

More Notes Space for you to use!



Synthesis Section: Getting Our Message Together
Monday October 29th (PM)

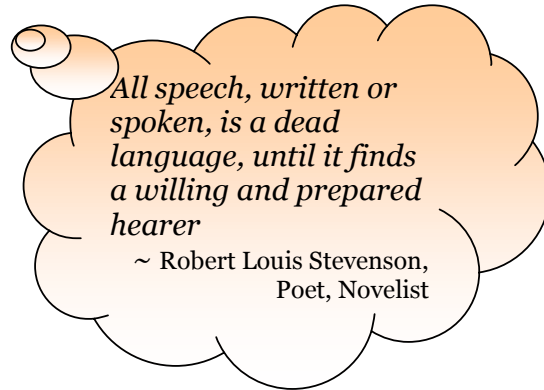
Objectives:

1. To complete the Final Presentation to the *Current Leaders*

Theme Introduction:

OVER TO YOU!!!!

Many people are looking forward to your presentations tonight. Here is an excerpt from a letter that was sent to USVI senators, the Delegate to Congress's office, the Governor's Office and the offices of many dignitaries in the BVI inviting them to listen to your voice.



...the Summit will culminate in a **Dinner and Presentation Event at Coral World Ocean Park, Smith's Bay, St Thomas on Monday the 29th of October from 6:30 to 9:30pm.** I wish to extend an invitation for you to attend this event and take a moment to expand our collective vision for the evening. The *Future Leaders* will present to the public, a report on their deliberations formulated over the course of the Summit. While, for obvious reasons, we cannot predict the outcome of these deliberations, it is expected that the report will express *Future Leader* perspectives on the following broad categories:

- The thoughts of *Future Leaders* regarding the current state of our marine and coastal resources
- General and specific recommendations for improved stewardship of these resources based on their creative thinking and processing of the information shared during their deliberations
- General and specific commitments to their own new initiatives, and to partner with the *Present Leaders*, with regard to coastal and marine stewardship
- Recommendations of mechanisms for facilitating ongoing dialogue and collaboration between *Present* and *Future Leaders* in order to accomplish real and sustainable goals and objectives.

The Coral World Dinner and Presentation Event will also provide opportunities for key *Present Leaders* from both the British and the U.S. Virgin Islands, to make short remarks in response to the initiatives presented by the *Future Leaders*. Media houses from both the BVI and USVI will cover the event; highlighting the critical role *Future Leaders* can play in helping to define our future today.

SO IT REALLY IS OVER TO YOU NOW - YOUR VOICES ARE READY TO BE HEARD!!

Notes Section for you to use!

More Notes Space for you to use!

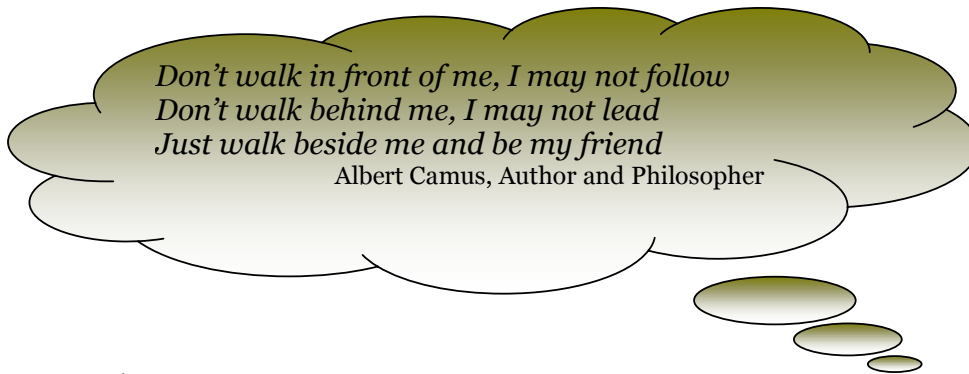
Even More Notes Space for you to use!!



*Session Theme 6. Beyond The Youth Summit –
Staying Connected
Tuesday October 30th (AM)*

Objectives:

1. To discuss and develop a plan for ongoing engagement



Mentoring Program

It will be very easy for you to leave this Youth Summit, go back to your busy lives and push aside your commitment to the marine environment. To better help you fulfil your commitment, a post-Summit Mentoring Program will be available to you. This will be a database of Current Leaders who will either:

- 1) engage you to work on an existing project that they are tasked with, or
- 2) act in the capacity of advisee to help guide you when you need resources for your own project, need advice on university majors or classes, or who may help direct your job search.

This database is currently being created and will be made available very soon!

*This might be the end of the Youth Summit on the Oceans, but
it's the beginning of a new day in the Virgin Islands ...for all of
us!*

Notes Section for you to use!

Presenters - Biography Section for you!

Introduction Session to the Youth Summit

Nicolas Drayton, Caribbean Ecosystems Program Director, Ocean Conservancy

Nick Drayton is the Ocean Conservancy's Caribbean Ecosystems Program Director in the U.S. Virgin Islands Field Office. He holds a masters' degree in Coastal Biology from the University of North Carolina at Wilmington, and over the years, Nick has worked with marine parks and protected areas across the Eastern Caribbean. He has represented institutions and agencies such as the University of the West Indies, the Caribbean Conservation Association, the BVI National Parks Trust and The Nature Conservancy.

Nick has been involved in a wide range of marine conservation-related roles, including training, advocacy, planning, management and administration of Caribbean MPA's. While he was Director of the BVI National Parks Trust, he served on the BVI's National Tourism Development Strategy Implementation Committee. More recently, Nick has been a key player in the establishment of the East End Marine Park, on St. Croix, the first territorial marine park in the U.S.V.I. He currently serves as the Chair of the East End Marine Park Advisory Committee. In 2005, Nick was recognized for his "...commitment to protecting and enhancing environmental quality." by the U.S. Environmental Protection Agency with their Environmental Quality Award, -the highest recognition presented to the public by the agency. Most recently, in October of 2006, Nick received an award from the U.S. Coral Reef Task Force, "... for outstanding efforts in the USVI, BVI, and beyond to strengthen coral reef management..."

Professor Jeremy Jackson

Jeremy Jackson is William and Mary B. Ritter Professor of Oceanography and Director of the Geosciences Division at the Scripps Institution of Oceanography, University of California, San Diego. He is also a Senior Scientist and Director of the Center for Tropical Paleoecology and Archeology at the Smithsonian Tropical Research Institute in the Republic of Panama. From 1971 to 1985 he was Assistant, Associate, and Full Professor of Ecology at the Johns Hopkins University. Dr. Jackson is the author of some 100 scientific publications and author or editor of five books. His research has focused on three main areas, including coral reef ecology, speciation and macroevolution of marine invertebrates, and the ecological and evolutionary consequences for the tropical American marine biota of the gradual formation of the Isthmus of Panama over the past 25 million years. He co-founded the Panama Paleontology Project in 1986, an international group of some 30 scientists, to help support the isthmian research. Dr. Jackson is a Fellow of the American Academy of Arts and Sciences and the American Association for the Advancement of Science, and received the Secretary's Gold Medal for Exceptional Service at the Smithsonian Institution in 1997. He has served on committees of the National Research Council and the Advisory Board of the National Center for Ecological Analysis and Synthesis, and has presented 12 plenary lectures over the last ten years.

Pastor Dexter Skepple

Pastor Dexter Skepple was born and raised on the island of St. Croix in the United States Virgin Islands. Upon completion of High School Pastor Skepple moved to Killeen, Texas where he received a Bachelor's Degree in Aviation from Central Texas College. He also graduated from Christian House of Prayer's School of the Prophets in Copperas Cove, TX, under the leadership of Bishop Nathaniel Holcomb. While in Texas Pastor Skepple met and married his wife "Terry." After their marriage they relocated to the Virgin Islands where they have resided for the last 12 years.

Pastor Skepple has worked in the field of Aviation for the last 15 years, and is currently an Airline Captain for Cape Air Airlines. By faith, Pastor Skepple transitioned from the Cockpit to the Pulpit in 1998. On October 8, 1998 he and his wife started Speak the Word Ministries International where they now Pastor full-time. Without advertising, only doing what God had instructed, they started the ministry with 8 people in 1998. To this day they don't know how those eight people found out about the ministry all they know is that God had to send them. The ministry now has two services and well over 800 people on Sunday morning. Speak The Word Ministries is where souls are being saved, healed and delivered; there is a special anointing for "Increase, Favor, and Promotion." Pastor Skepple takes no credit for what God has done – for he knows "God has done it all." Pastor Skepple has a very simplistic approach to ministry therefore, he teaches with simplicity, power and boldness. His assignment is to build people of purpose, power and praise and to teach them that there are "No Fears, No Limits and No Borders in and through Christ Jesus."

Session Biographies

Karlyn Langjahr, NOAA Coral Reef Fellow, CZM

Karlyn Langjahr is the NOAA Coral Reef Management Fellow at the Department of Planning and Natural Resources- Division of Coastal Zone Management at the St. Croix office. She coordinates VINE, Virgin Islands Network of Environmental Educators, for the USVI territory as well as the 2008 International Year of the Reef initiative. Karlyn's scientific background began with aquatic ecology until she branched out into community-based conservation and environmental work in developing countries. Her main interests now revolve around empowering local community groups and understanding the socioeconomic effects of marine and coastal management on USVI communities. She earned her Masters of Marine Affairs degree from the University of Washington, Seattle and speaks fluent Spanish and French. In the near future she will be stationed at the St. Croix East End Marine Park at Great Pond leading the EEMP's outreach and education projects. Karlyn enjoys the rewards of working in education and outreach and loves living on St. Croix!

Kim Ishida, Program Assistant, Ocean Conservancy

As Program Assistant for Ocean Conservancy, Kim Ishida has worked with partners and youth from US and British Virgin Islands to develop the 2007 Youth Summit on the Oceans. Prior to her work with Ocean Conservancy, Kim worked out of The Nature Conservancy's Virgin Islands field office on St. Croix where she coordinated education and outreach activities, assisted in an alternative livelihoods program for local fishermen and participated in scientific fieldwork. As a Master of Marine Affairs student at the University of Washington, Seattle, Kim worked with the government of the Turks and Caicos Islands to create a National Sustainable Tourism Action Plan.

Kent Bernier, Jr., Environmental Specialist, DEP-DPNR

Captain Kent Bernier, Jr. from the Department of Planning and Natural Resources Division of Environmental Protection is an Environmental Specialist in the Water Pollution Control Program. Mr. Bernier oversees the Division's Ambient Monitoring Program, Clean Marina Program and Terminal Facility License Program. As a Licensed Captain and Certified Diver, Mr. Bernier's knowledge and experience are a great resource to the department. His work includes field inspection of terminal facilities, permitting and compliance assessments and data collection. Data collected by Mr. Bernier helps the Virgin Islands determine and analyze its water quality. Captain Bernier is also a First Responder for Environmental Incidences for the Virgin Islands.

Melony Glasgow, Laboratory Technician, Conservation and Fisheries Department

Ms. Glasgow is currently employed at the Conservation & Fisheries Department as the Laboratory Technician. She has held this post since September 2002. Her responsibilities

include developing and maintaining the water quality programme in particular coastal sites. Melony is a graduate of St. John's University in New York. She holds a Bachelor of Science degree in Toxicology. She also holds two Associate Degrees from the H Lavity Stoutt Community College, the more recent being in Disaster Management.

Pearline George, Laboratory Technician, Conservation and Fisheries Department

My name is Pearline George. I am the Laboratory Assistant at the Conservation and Fisheries Department, Government of the British Virgin Islands. I have been working at this Department for five years and enjoy every moment of it.

Shona Paterson

Shona Paterson holds a BSc (HONS) in Marine Biology and an MSc (HONS) in Tropical Coastal Management. Shona has worked throughout the Northern Caribbean for the last six years and remains committed to tropical marine conservation and sustainable resource management. With an emphasis on marine and coastal habitat mapping, fisheries assessment and marine protected area evaluation through stakeholder engagement she has developed many skills in community engagement and the wider conservation approach. She has just completed a two year position with The Nature Conservancy's Eastern Caribbean Program as its Conservation Specialist

Nancy Woodfield Pascoe, Planning Coordinator, National Parks Trust

Nancy Woodfield Pascoe is the Planning Coordinator at the BVI National Parks Trust responsible for planning, monitoring and developmental work for programme and project implementation, in conjunction with the Director. Her duties also include management of the Geographic Information System (GIS) and all digital mapping activities pertaining to the BVI Government National GIS.

She holds a MSc. (Hons.) in The Geography of Third World Development and a BSc (Hons) in Geography from the Royal Holloway & Bedford College, London University, England

Rafe Boulon, Chief of Resource Management, National Parks Service

Rafe was born in the Virgin Islands and is currently the Chief of Resource Management for the Virgin Islands National Park and the Virgin Islands Coral Reef National Monument. He received his undergraduate degree in 1976 from the College of the Virgin Islands in Marine and Environmental Science where he took many field courses that involved staying at VIERS in the early 1970s. He then received a Masters degree in 1980 from the University of Puerto Rico in Biological Oceanography where he studied coral diversity and storm impacts in deep shelf-edge reefs. Rafe worked for the V.I. Government, Department of Planning and Natural Resources, Division of Fish and Wildlife as Chief of Environmental Education and Endangered Species for 18 years. He has been in his present position with the National Park Service for over seven years. This position involves the management and preservation of all natural and cultural resources found in both park units. Rafe has been involved in the establishment of marine protected areas in both territorial and federal waters and has served on the Caribbean Fishery Management Council since 1982 as a member of the Scientific and Statistical Committee as well as a voting member representing the Virgin Islands on numerous occasions. Rafe still lives on St. John with his family near Trunk Bay on the north shore where he grows fruit trees, raises bees and builds custom motorcycles.

Kathryn Novak, Regional Outreach Manager, Ocean Conservancy

As Regional Outreach Manager for Ocean Conservancy, Kathryn Novak works to identify new constituents, members, and volunteers and inspires them to become engaged ocean conservation activists. With ten years of experience in marketing and non-profit development, Kathryn leads the outreach efforts of Ocean Conservancy's regional office in St. Petersburg, Florida, which encompasses marine conservation work in the South Atlantic and the Gulf of

Mexico. In addition, Kathryn directs the International Coastal Cleanup for the state of Florida, managing a team of 50 zone captains that coordinate nearly 350 cleanup sites and over 28,000 volunteers statewide.

Susan Winer, President, Stratenomics

Ms. Winer founded Stratenomics, Inc. in 1983 in Chicago Illinois. Stratenomics works with both for-profit companies and established non-profit organizations to help focus capabilities and resources on meeting market and operational objectives. . In her role as President of the company, she has served as the interim CEO or COO for client companies in transition a diversified real estate services and asset management company and a start-up digital imaging software company with a recently patented technology. In 2003, Ms. Winer established STRATENOMICS V.I. LLC on St. Croix, United States Virgin Islands to respond to the growing need to support the economic, organizational and strategic development of both for profit and non-profit organizations in the Virgin Islands and throughout the Caribbean basin.

Prior to establishing her own companies, Ms. Winer was Vice President of the Chicago Board of Trade, the first woman to serve in a senior management capacity at the Exchange. Earlier in her career she was with McGraw Hill Publications serving as Midwest bureau chief, writing for 44 Trade and Technical Publications and as regional editor for three of the publications. She was also a business and financial reporter for the Chicago Daily News. Ms. Winer has held numerous positions on state, federal and non-profit boards, and served in a leadership role in a variety of community and economic development activities. She has been a frequent speaker for numerous economic development groups, professional organizations and educational institutions around the country. She received a BA from Wayne State University and completed graduate courses at the University of Michigan as well as courses offered by the Center for Mediation in Law in Northern California.

Olasee Davis, Extension Specialist, University of the Virgin Islands

Olasee Davis is an Extension Specialist with the Cooperative Extension Service of University of the Virgin Islands. He is responsible for developing and implementing educational programs in the areas of natural resources, with emphasis on rangeland management and environmental education; promotes awareness of natural and environmental resources, including marine environment, terrestrial flora as related to grazing land development to the general public and school population; encourages and develops multi-agency coordination with multiplier groups dealing with renewable natural resources, such as developing publications jointly with other natural resources agencies, or in assisting teachers to enrich curricula; sponsors and/or participates in biological surveys; responsible for carrying out the environmental education programs, culture ecology programs, natural and historical programs, cultural programs, marine environment programs and water quality educational program, etc, under the Cooperative Extension Service program on St. Croix campus, University of the Virgin Islands. He has also developed environmental educational video program for television and radio shows and lectured thousands of people in the Virgin Islands included churches, schools, university community, non-profit organizations etc, Eastern Caribbean, and Central America on various environmental, agricultural, cultural, and historical issues.

His ultimate goal is environmental education, forest ecology, soil conservation, ethnobotany, crop management, range management, and to utilize my skills and scientific training in the environmental, agricultural or other technical areas. He holds a Master's of Science: Emphasis on forestry ecology and range management. And is a Ph.D. candidate in environmental science

Elton Georges, CMG, OBE, Deputy Governor, BVI

Mr. Elton Georges has, except for a short stint in banking (1979-81), spent his working life of 39 years in the education and public services in his native British Virgin Islands. Beginning in 1965 as a secondary school teacher, he became Permanent Secretary in the Chief Minister's Office in 1971 and Deputy Governor in 1983. He has also served as Clerk to the Executive Council and as Acting Governor of the Territory on very many occasions. Along the way he has been chairman of several public boards and committees, including being twice Chairman of the Development Bank of the Virgin Islands and is a member of the Board of Governors of the H Lavity Stoutt Community College since its establishment. He was for 20 years chairman of the Disaster Emergency Management Organisation of the Territory.

Mr. Georges holds a Bachelor of Arts (Mathematics) degree from Mt. Allison University in Canada and post graduate diplomas in Education (U.W.I.) and Public Administration (Carleton University, Ottawa). Mr. Georges is a member and past president of the Rotary Club of Tortola. He is married to Rita Frett Georges for 31 years, and they are the parents of Noni and Kamau Georges

Senator Terrence "Positive" Nelson

Senator Terrence "Positive" Nelson is a member of the ICM political party, serving his first term in office. Senator Nelson was born on September 27, 1967 to Adolphus & Henrietta Nelson on St. Kitts, West Indies. Senator Nelson is the third of four (4) children. He graduated from Central High School on St. Croix in the class of 1985, and immediately pursued and attained a B.S. Degree in Accounting from St. Augustine's College in 1989 (Cum Laude). Nelson worked for the North Carolina Department of Cultural Resources then returned home to St. Croix in 1995 where he taught as a secondary school teacher up until he was sworn into office as a senator in 2005.

His personal slogan, "Positive Is How I Live", is exhibited in his attitude and behavior. His daily reminder to everyone is to, "Choose the positive in any situation you encounter; Remember God is real, God is love; do keep peace over your heart; and remember... A Positive Mix in 2006". Senator Nelson is a grassroots St. Croix representative who is focused on enhancing the quality of life and the efficiency of public services through responsible and proactive government. He is also concerned with the management of our financial, natural, and cultural resources. Senator Nelson is a husband, father and caring community activist. He is a teacher, labor leader, Director of Positive Work, Inc. and Tae Kwon Do instructor. He is a member of Wiseman Lodge #311; Lions Club international; and Phi Beta Sigma, Fraternity, Inc. Senator Nelson has been married to Kimberly Roper Nelson for 12 years and has four children: Terrence Jr, Tafari, Tywreh, and Keturah Nelson.

Senator Nelson states, "I am a member of the Independent Citizens Movement because I want to carry on the work started by Governor Cyril King and Prince Minister Robert Bradshaw. The Virgin Islands is a Caribbean nation and should actively participate in Caricom. I am a Nationalist who believes in local pride. I am committed to defend and protect, "Freedom, Progress, and Justice" for all Virgin Islanders."

Lianna Jarecki, Ph.D., Principal Lecturer, H. Lavity Stoutt Community College

Dr. Lianna Jarecki is a principal lecturer at the H. Lavity Stoutt Community College on Tortola, BVI. She maintains an active research program directed at understanding the ecology of Caribbean salt ponds, a subject on which she has presented and published widely. She also directs an international marine research program each summer at the Guana Island Wildlife Sanctuary. Dr. Jarecki received her undergraduate education at Cornell University in New York. She earned her Masters in Zoology at the University of Florida and her Doctorate in Biodiversity Management from the Durrell Institute of Conservation and Ecology, University of Kent in the United Kingdom. She has since become a leading expert on the conservation of Caribbean wetlands.

Viridin C Brown, Vice-Chairman, Caribbean Fisheries Management Council

Viridin Brown is a former senator in the Virgin Islands legislature. He was elected for seven terms and served on many committees and leadership positions, eventually being elected by his colleagues to serve as President of the Nineteenth Legislature. From 1975 to 1979 he served as the Commissioner of the then Department of Conservation and Cultural Affairs in the Cabinet of the Late Governor Cyril E. King. During the administration of the former Governor Roy Scheider, Brown was appointed Assistant Commissioner of the Department of Planning and Natural Resources. He has served periodically on the Caribbean Fisheries Management Council over the last thirty years of its enactment by Congress and has been elected Chairman and Vice-Chairman by the members. He is currently the Vice-Chairman of the Council. Brown served as a member of the U.S. State Department Negotiating Team that successfully concluded a negotiated agreement between the United States and the United Kingdom affecting commercial fishing and boundary issues between the USVI and the BVI. He has worked as a teacher and administrator in the Virgin Islands Department of Education.

Viridin Brown is, and has been, a member of numerous local, national and regional organizations. He was a member of the Board of Trustees of the National Parks and Conservation Association for six years and a member of the Board of Directors of the Caribbean Conservation Association. He is currently a member of the Board of Directors of the Gulf and Fisheries Institute and Workable Inc. of the Virgin Islands.

Dana Wusinich-Mendez, Coastal and Coral Reef Management Specialist

Dana Wusinich-Mendez has been working with NOAA's Office of Ocean and Coastal Resource Management as a coastal and coral reef management specialist for 5 years. During this time she has worked to provide support to the Coastal Zone Management and Coral Reef Management Programs of U.S. islands in both the Caribbean and Pacific regions and is the lead NOAA representative for these programs in the USVI and Puerto Rico. Dana also works to support efforts to establish and manage marine protected areas (MPA) in the islands and has provided assistance to develop management plans to and implement MPA initiatives. Prior to her experience with NOAA, in 1997-2000 Dana worked in Mexico for a local conservation non-governmental organization to establish an MPA with a local fishing community on the Mesoamerican Reef system. In 1995-1997 Dana also worked as a teacher in a marine environmental education program on Cape Cod, Massachusetts. Dana has a degree in biology from the University of Richmond, Virginia and a Masters' in Coastal Environmental Management from Duke University.

Warner Chabot, Vice President for Campaign Strategies, Ocean Conservancy

Mr. Chabot directs Ocean Conservancy's efforts to expand and coordinate Ocean Conservancy's existing regional operations and campaigns in California, Maine, the South Atlantic and Florida. He is also responsible for identifying and addressing marine protection needs elsewhere within the United States and its territories and neighbors. Under his prior leadership as Director of the Pacific Regional Office in San Francisco, Ocean Conservancy's regional reputation grew as a highly respected and effective leader for ocean conservation. Mr. Chabot has built an outstanding team of conservation professionals in San Francisco and led coalitions to enact landmark policies and laws to protect special ocean places through networks of marine reserves, to reform ocean governance and fisheries management in California, to restore ocean waters, and to recover vulnerable ocean wildlife.