



**OCEAN LIFE SYMPOSIUM II : OCEAN LIFE ON THE BRINK The Eastern Caribbean Coalition for Environmental** Awareness **The Pew Environment Group The Kido Foundation The Grenada Fund for Conservation Grenada Grand Beach Resort GRAND ANSE, GRENADA** 19th – 21st MAY 2010

# DOMINICA'S OCEAN LIFE CONSERVATION POLICY





 Terry Raymond, Dominica Non State Actors

• Dr. Fitzroy Armour, Green Ventures Ltd

### Marine Conservation Dominica

- Cabrits National Park
- Northern Forest reserve
- National park
- Whales & Dolphins protected
- Soufriere Scotts Head marine reserve



#### Oyohayo bay ©Dr Fitzroy Armour

# Educational tours Fort Shirley Cabrits National park

#### Whaledive.org

© Dr Fitzroy Armour

Dominica

### **Fun & Educational tours**





# Yacht moorings

### **Children's programs**

Saíling/navigation, whale dolphin, turtle, reef research safaris

*"Black pearl" Pirates of the Caribbean Parts 2 & 3* 

#### © Dr Fitzroy Armour

- Research safari Sailing power low noise/emissions
- Restoration of "Elf Aquitaine"
- Floating classrooms participate in
  - Whale & Dolphin research
  - Protection of Turtles, Iguanas
  - Reefs & beach clean ups

©Dr Fitzroy Armour

### Watching industry in nexts of Domine Data collection 2005 to 2008

Researching possibility of whate

# Sperm whale off Portsmouth

**©Dr Fitzroy Armour** 

### 

#### Turtle protection

#### © Dr Fitzroy Armour

# Renewable energy



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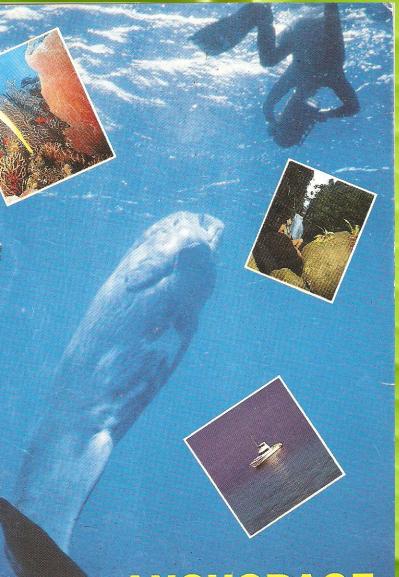


# Whale watching off Anchorage >30 years ago

Photo Dr Fitzroy Armour

#### Whales@hotmail.com

Note correct positioning of whale watcher downwind and parallel



1991 Filming jewels of the Caribbean sea

#### ANCHORAGE DIVE CENTERS DOMINICA

# Green Ventures Working with top side to prevent toxic runoff

- Sharon Jones
- DOAM
- Herbal business association
- Women's bureau
- Scouts association
- Pioneering Whale watching & Dive industry
- Citrus certification
   program
- CARDI
- Marine & Agri. Researcher
- Natural botanicals





### **Educational & Fun tours**

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## Terry Raymond has become

- Coordinator –Youth Environment Service Corps
- Executive Director-Dominica Youth Environment Organisation Inc.
- Chairman-Caribbean Non State Actors Advisory Panels
- Youth Development Officer Ministry of Culture, Youth Affairs and Sport

## Planting seeds example



- 1989 Dive Student of F Armour
- Terry Raymond Joined the Dominica Conservation Association (Mona George Dill)
- Taught Reef clean-ups & Conservation
- Today Terry is living proof of seeds

### Whaledive.org Dominica

Champagne

PADI

© Dr Fitzroy Armour

# Living classroom

© Terry Orlando Raymond (DOMINICA) A DESCRIPTION OF THE OWNER OF THE

© Terry Orlando Raymond (DOMINICA)

## **Primary School curriculum**

- School text book
- Documentaries
- Home work/Projects
- Practical application
- Cause and effect
- Assignments
- •Floating classrooms

## New Caribbean Junior Reader 5

#### Watching Whales Off Dominica

Whales are huge creatures which once upon a time terrified sailors. Now we know that they are gentle giants, the world's biggest and most fascinating creatures. Once they were almost hunted to extinction. Now we are learning to appreciate them and to protect them. They come to the waters around Dominica to calve and that is where some people are lucky to have the chance to see them.

This deep and sheltered coast is enjoyed by many Cetaceans or whales including the Singing Humpback and the Sie, both Baleen whales, which migrate from the North Atlantic to mate and calve between May and October. There are also many toothed whales sighted throughout the year mating, nursing, calving, playing and diving to the great deeps to feed on squid and other deep-water creatures.

The resident toothed whales include the Sperm whale, the largest toothed animal to exist, Pygmy Sperm Whale, the Orca, the False Killer Whale, the Pygmy Killer Whale, the Pilot Killer Whale, the Pilot Whale, the Spotted Dolphin, the Bottlenose Dolphin and others.

Due to the gentle sea and extremely deep waters, Dominica has ideal and comfortable whale-watching conditions. Whales are gentle and curious toward humans. I have seen a Sperm Whale cow nursing three calves while the other pod members dive to feed. One cow/nursemaid tends to as many as three calves while the other members of the pod go off on their dives for as long as one hour and as deep as 6,000 feet.

On this particular day the small group consisted of keen first time whale watchers. We cast off from the jetty for an "afternoon till sunset" tour on the protected west coast of Dominica. We were not far from shore when our first whale was sighted.

Unmistakable against the still ocean, the whale's waterspout rose quickly, only to turn into a miniature rainbow. Again the spout rose at a distinct forty-five degree angle to the surface. The angle and repeated spouting meant that it must be a Sperm Whale. On approaching, we realised that there were also two small spouts – a cow and two calves. The calves were anxiously nuzzling her until she responded by tilting on her side to begin nursing them.

Nursing now over, the calves prepared to join the adults. Swimming slowly the cow bobbed her head twice before finally arching her back. The increased weight of her tail leaving the water started her deep dive. Unable to dive to such depths, the calves are often left at the surface to

play. Each calf, being at least twenty feet in length, enjoys the comfort of fearing nothing in the entire ocean except the Orca and of course the heartless whaler, who would harpoon them in an effort to lure the other whales to the slaughter.

Attracted to the drifting dive boat, both calves spent thirty minutes swimming around and upside down under the boat, competing to get closer to us. Unlike the Dolphins that beam their sonar from their melon foreheads, the Sperm Whales do so from the chest so they need to swim sideways or upside down when investigating the boat or snorkellers. Extreme care is necessary and any contact must be started by the whales. On hearing the returning of the pod the calves quickly shifted attention,

swimming to greet the first arrival. One by one they broke the surface until ten individual spouts were counted forming a raft.

Aware of their curious behaviour, we gently eased into the water with

only a mask and snorkel, holding on to the lines floating at the stern of my 41 foot dive boat. Floating at the surface, we were overwhelmed by the sonar clicks of the approaching pod of whales. The curious whales

wanted a much closer look at us in the water. These tours are not only educational and fun, but also give visitors the

opportunity to contribute to fund raising to help conservation.

Snorkelling with a Sperm whale.

# **Reaching children in schools**

#### Acknowledgements

#### Text

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# Reaching children in schools /

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Minister of Education endorsing the floating Classroom Programme

#### **Teachers training Session**

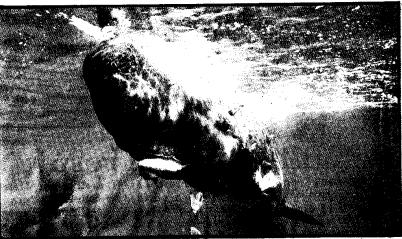


# **TUDENTS BY SENIOR WHAI**

# Avoiding Tourism boycott 1994

#### **Tourism Boycotts VS Promotion?**





 Sperm whale calf off the west coast - Photo: Fitzroy Armour; Anchorage Dive Centres

#### Humans more important than whales - P.M.

Prime Minister Engenia Charles has called on the Boston based International Wildlife loalition to find out all the facts before jumpnclusions, and called on them to be terested in the human beings in citwho are being pushed to the side on nation insuè because "certain countries want to control is and leave us out of it".

the said nobody was concerned about the Saminiae who were working.

and the other Windward islands, said her government is not against having a special area for whales in Antarctica. She said her government requires all the scientific information before taking any decision, particularly since the chairman of the committee which deals with the scientific information resigned because he stated the Whaling Com-· mission was not using information that had book dependent der state will be the

TOURISM THREATENED The Boston-based International Wildlife Coalition has vowed to begin an

international campaign to boycott the tourism industries of St. Vincent, St. Lucia, Grenada and Dominica - nations backing Japan's opposition to a ban on commercial whaling.

Coalition President, Dan Morast told the Caribbean Environmental Reporters Network that the unanimous vote was taken at an emergency board meeting because of what he described as the "blatant collaboration between Japan and St. Lucia, St. Vincent, Grenada and Dominica".

According to him, this latest collaboration occurred at a meeting of the International Whaling Commission held in Australia. February 21 to 25. That meeting was called to discuss the French proposal for a no-whaling sanctuary in Antarctica which Japan opposes. The vote on the sanctuary is expected at the Interna-

EL BERREN AL POINT SCHOOL SIGN

ther has resulted, Morast said his organization can Japan manipulate votes. Morast said they expect to spend 81,000 EC dollars (30,000 US dollars) in the boycott campaign. The plan calls for tourism marketing consider-

in the section

cial whaling. Though nei- ibbean countries were granted fisheries development projects and each no longer sit by and watch given the 43,000 pound sterling IWC membership dues to vote against commercial whaling.

Dominica and Grenada first three months of the recently announced Japanese fisheries projects. Tokyo promised fisheries projects to Prime Minister ations, tourism propage ( the statis Charles on a visit ilan 'met

Cetacean Society International

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Internet Address: RobbinsB@aol.com

25 August 1994

Fitzroy Armour Anchorage Dive Center WC meeting 1994 lobby to pass whale sanctuary Rothing Bandow Ph.D. Dear Mr. Armour -I had the pleasure of meeting and talking Briefly with you at the International Whaling Commission meeting in Puerto Vallarta, Mexico, at the end of May.

OFFICERS

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STATIOTECA.

#### Hyperbaric chamber

## Major breakthrough for tourism sector



Minister of Tourism looking on at Hyperbaric Chamber

The Tourism Sector in Dominica has received a major boost with the installation of a Hyperbaric Chamber at the Princess Margaret Hospital.

Funded by the European Union under the Eco-Tourism Development Programme at a cost of \$750,000, the well equipped and functional Hyperbaric Chamber will be used for treating emergencies associated with scuba diving.

Speaking at the Handing Over of the Chamber on Monday, Chief Medical Officer (acting), Dr. David Johnson stated that the Facility "is a significant boost to the Tourism and Health Sectors which will translate in increased revenue to the island from the Scuba Diving Tourism Industry and will improve the quality of care offered at the Princess Margaret Hospital."

The Ministry of Health and Social Security official listed the other functions the Hyperbaric Chamber will perform:

The Chamber will be used as a marketing tool to scuba diving travellers;

With a functional chamber there will be no need for air evacuation to neighbouring islands for treating their medical emergencies related to diving.

The Chamber will be used in treating other nondiving medical conditions, such as burns, diabetic wounds, selected surgical wounds and other medical conditions that require increased oxygen saturation.

BY PRESS SECRETARY SEAN DOUGLAS



bother to try to see the whales. This

way, visitors

through high

conceptrate on the

sounds which come into his small hour

toughty hydrophones and speakers. Even

are a mile or more away, well out of sighting range, the

sounds coming into

loud. This method

roquire calm water

or long-distance.

travel. He simply

has to slip othebore.

the heat can be

of expenencing utuales does not

when the whales



With supert hical guidance is in persible to get stass to sperm whales. Plants single and Fitzrow Armonie! Anchorsge Dive Cattles.

and hong his hydrophone under the boat. All he asks his whale watchers is for a little petrol money and he also wells some excellent tapes. Paul's little and excersions should be renamed 'while listening' tours.

On Dominica, Fitzroy Armour is a cruck muturalist at fending the resident sperm whales along the lost shore, west of Roseam. He, too, uses

dolphins (95 percent), short-finned pilot whales (40 percent), false killer Vhale watching industry rare Fraser's dolptints, occas, dwarf n the early days for a three-to four-hour excarsion. And Photos by Fitzroy

icrest with outstanding birdhir including numerous parrots and other natural wonders - a short distance from the main town.

the spectrum and the second seco

Both Fittrey and Paul are on the leading edge of whole watching in the Carilibean, Whale watching is also Seconting a lig-time operation in the Deminican Republic, where 15:200 people a year watch whales at Samana Bay and in the Bahamas where 1,300 people a year we and sometimes waim with spotted dolphins. In the British Virgin Islands and on Dominica, whale watching happens on a smaller scale with two or three operators and fewer than a thousand whale watchers a year. but it's growing fast. As of 1994, 13 of 24 Caribbean countries and territories otiet some formai whale or dolphin

watching, in 1997, 18500 peoplemostly outside visitors - spent an estimated £3.7 million in total resetures on whale-watching tours.

(注于)) 建立人的

While watching - in the Caribbean as elsewhere - started out as a pleusant pastime. The first whale watchers who paid \$3 US to see gray whiles off of southern California in the 1950s would be very surprised to see how widespread and 'political' it has become today. It is still a pleasant activity, of course, but it is also much more Today, with Japan, Norway and iceland wanting to resume whating, whale watching is providing solidcontonuc, cultural, recreational, scientific and educational arguments against

BEING... One with nature Where man has ... no influence, No power to predict ...to alter

...To control

#### Whaledive.org

Dominica

PADI

Dominica

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Fax(767)445 5<mark>599</mark>

### Water clarity 1989

Dominica

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   protected
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#### Quarry Questions:

- What does the country benefit?
- Does this operation have to be carried out this way?
- Do they meet international standards?
- Is there a less dusty or less toxic alternative?
- Is location ideal/alternate?
- How do quarries affect other industries & marine environment?

From Solomon to point round
open quarries prevent coastal
fishing and diving
Latest opened in Feb 2009
In Marine reserve

# Quarry placed jetty in middle of traditional coastal fishing ground



# Quarry dust between two fishing villages



Fishing and Farming village US AID study showed reefs completely covered in silt



#### Hills and mountains being torn down



Quarry & Asphalt plant upwind of fishing village on bank of Dominica's largest river.

Our Kalinago and African ancestors have fought many wars to protect the environment

### For our Children