

**Submitted by the Government of Ecuador  
to the 59<sup>th</sup> Annual Meeting of the International Whaling Commission  
May 2007**

**ECUADOR WHALE WATCHING AT ITS PUREST**

Ecuador is, for its size, the most diverse country in the World. Our mega-diverse country includes a great variety of marine species, among these whales and dolphins. Whale watching in Ecuador has become a most interesting marine eco-tour option for the coastal region of our country. Whale watching is a new alternative of income for our native communities along the coast. We calculate an influx of around 40.000 tourists.

The attached brochure is an official Ministry of Tourism document, which shows the interest of the Government of Ecuador in the conservation and non lethal use of cetaceans. Also, we are helping to strengthen the goal of conserving the Humpback whale and other cetaceans and to enhance the present and future well being of Ecuadorians through sustainable tourism.

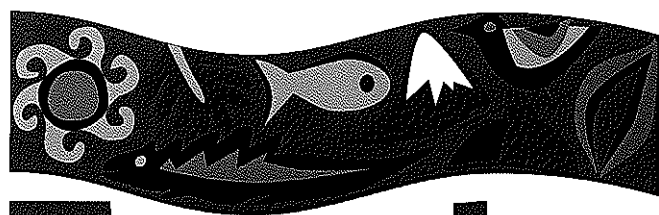
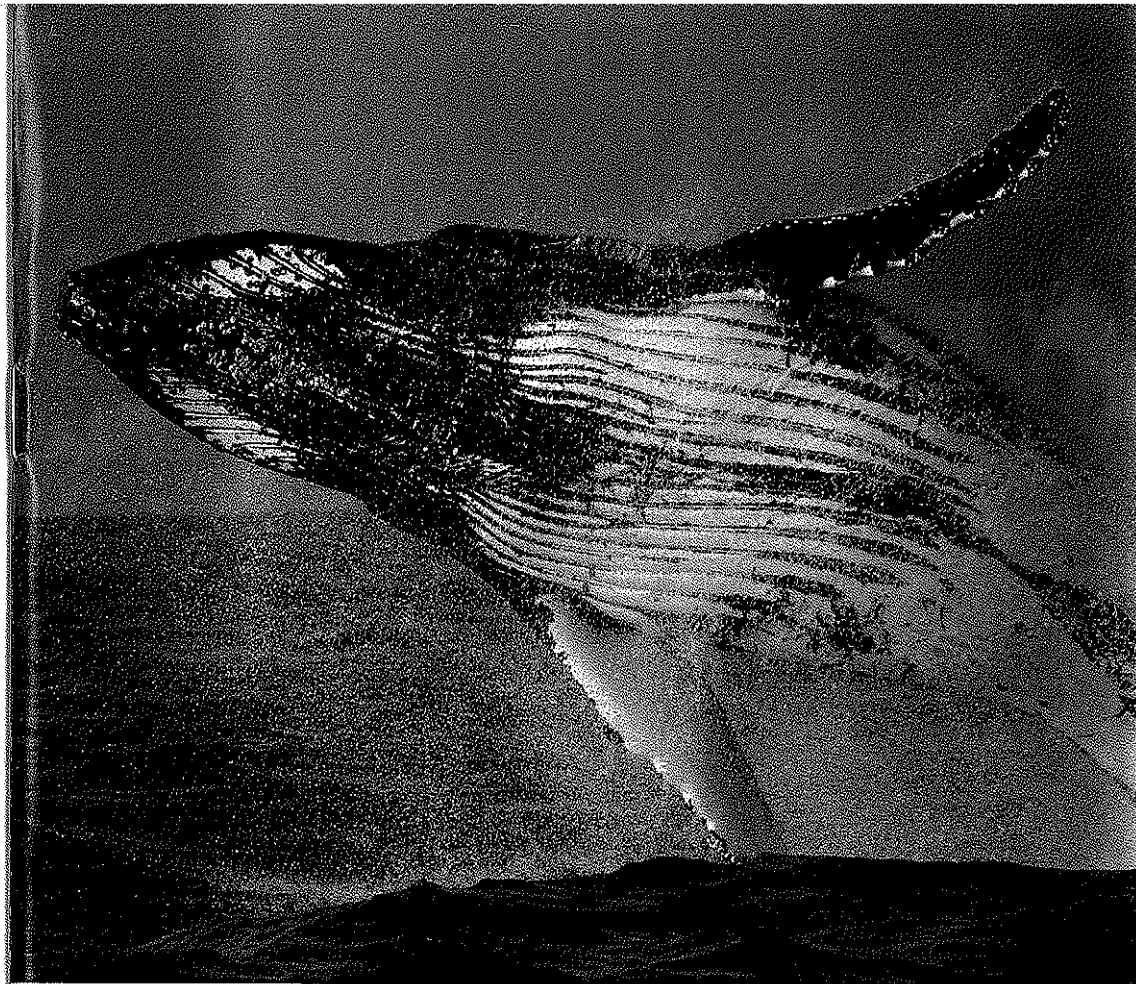
After 10,000 years of human occupancy, the Ecuadorian coast has been the place of immigrant cultural processes. The Isla de la Plata, located in Machalilla National Park and one of the main breeding areas for humpback whales, was a ceremonial and commercial exchange center that many different cultures from the Ecuadorian coast visited.

For many years we have been looking for archaeological objects that could give us an idea of how long the Humpback whales have been visiting Ecuador. We have found several representations with engravings on orca and cachalot teeth. However, there is no evidence that ancient Ecuadorian navigators hunted whales, so the origin of the teeth of orcas and other cetaceans could be from animals that probably stranded on the beaches.

Since 1999, scientific research and whale watching have mutually strengthened each other, counting on the support and the knowledge of the native people, wherein researchers work together with ancestral knowledge, for the benefit of all in Ecuadorian society.

Whale watching is one of the most promising economical activities for our coast that is changing the life of thousands of Ecuadorians. Therefore, Ecuador kindly invites the members of the IWC to recognize the importance of non-lethal use of cetaceans to developing countries and to cooperate with us in making the IWC an important supporter for the development of this industry in a sustainable manner.

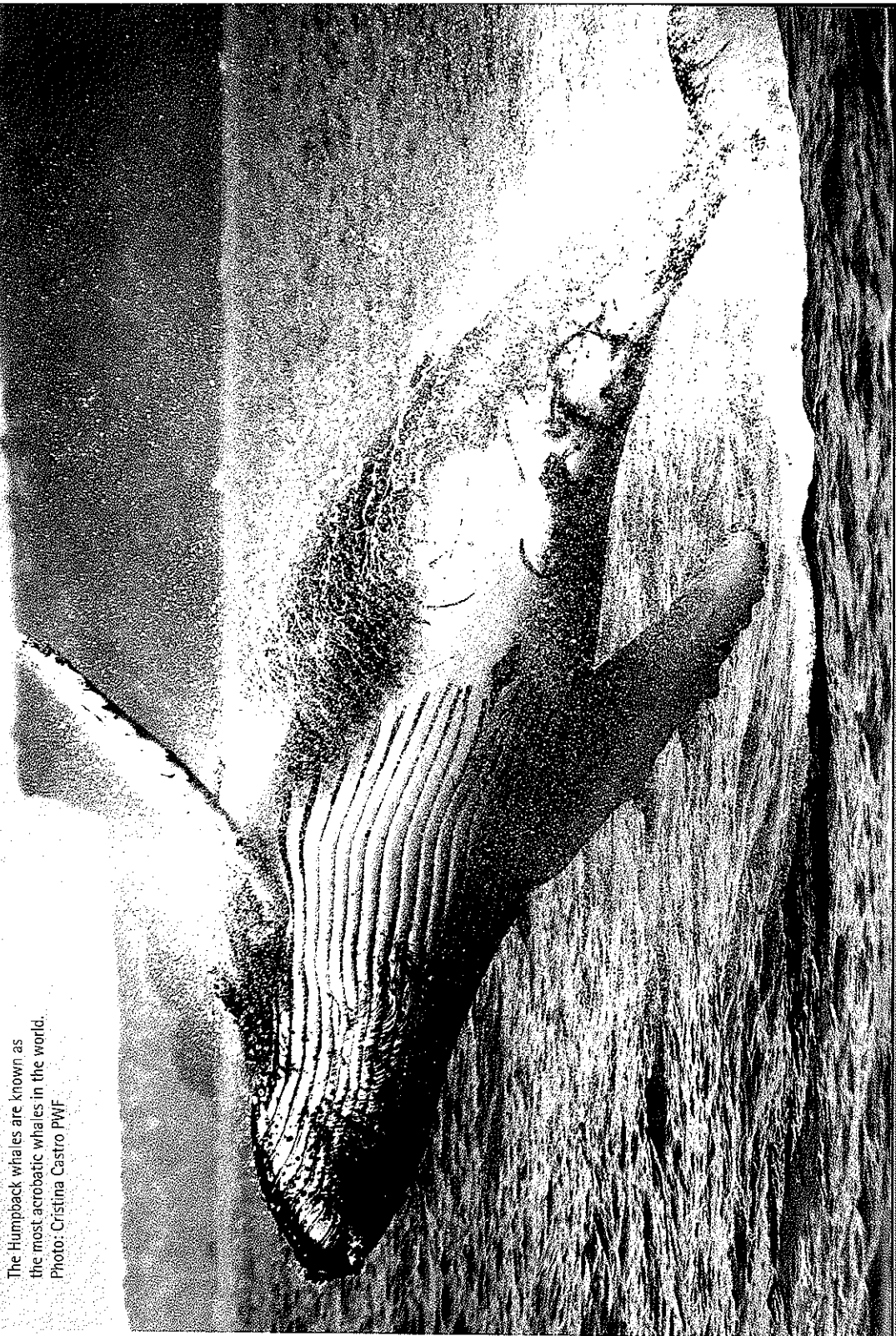




# Ecuador

*Whale watching at its purest*

The Humpback whales are known as  
the most acrobatic whales in the world.  
Photo: Cristina Castro PWIF







## *Whale watching at its purest*

The Ecuadorian Tourism Promotion Fund (FMPT) is a new public-private alliance that includes all of the relevant sectors of the country's tourism industry. In 2002, the project was created by the Ministry of Tourism, and recently, this initiative has been bearing fruit, breaking new ground for Ecuador as an international, sustainable tourism destination.

Ecuador is, for its size, the most diverse country in the world. Our mega-diverse country includes a great variety of marine species. This is due to the fact that the coast of our country is bathed with two ocean currents; the cool Humboldt Current that originates from the Antarctic region and the warm "Niño" current that originates off the coast of Panama. Both supply a vast quantity of nutrients for the marine food chain.

Whale watching in Ecuador has become a most interesting marine eco-tour for the coastal region of this country.

This brochure is dedicated to the organizations and private businesses that have pioneered whale watching here in Ecuador including the Pacific Whale Foundation (PWF), many dedicated biologists and scientists, and Cristina Castro, Research Director for Ecuador of the PWF. All are helping to strengthen the goal of conserving the Humpback whale population and to enhance the present and future well being of Ecuadorians through sustainable tourism.

If you share our vision of responsible travel and recreation, we welcome you to Ecuador.



Ministerio  
de Turismo





## PACIFIC WHALE FOUNDATION

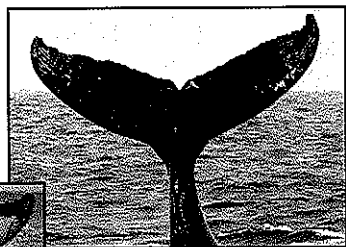
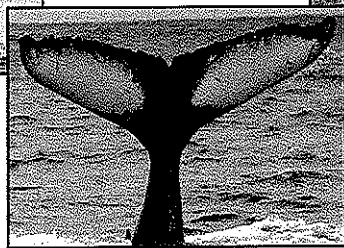
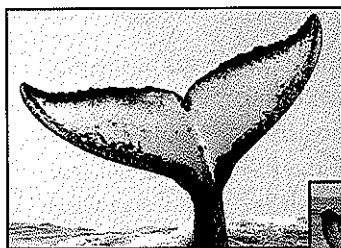
The Pacific Whale Foundation is a non-profit organization that works for the conservation of whales, dolphins, coral reefs and other environments in Hawaii, Australia, Ecuador, and other places facing the Pacific Ocean.

*"Ecuador is the most amazing tourist destination with whales in the world".*

We are proud to collaborate in the marine research and conservation education here in Ecuador".

Sincerely,

Gregory Kaufman  
President and Founder  
Pacific Whale Foundation



If you would like to learn more about our work, visit us at:  
[www.vivecuador.com](http://www.vivecuador.com) / [www.pacificwhale.org](http://www.pacificwhale.org)  
[www.purecuador.com](http://www.purecuador.com)

## *Ecuadorian whales*

The Humpback whale that migrates more than 7,000 kilometers (4,500 miles) every year from the cold waters of Antarctica to the warmer waters off the coast of Ecuador travel this distance to give birth to their calves and to ensure their survival.

Through the years they have become special "Ecuadorianos" and they have been included in our national records. Clarita, Tres Rayos, Clementina, Leonardo, Machalilla, Colombiana, Pedrito, Sercapex and Faro are a few of the 850 whales from Ecuadorian coastal waters that have been identified and named.

How do we know each individual? The particular scars and marks that each whale has on its fluke (tail) is like a fingerprint for a person. Here in Ecuador, we have been photographing whales' flukes during the past 15 years, and that has helped us follow their movements and better understand some of their way of life.

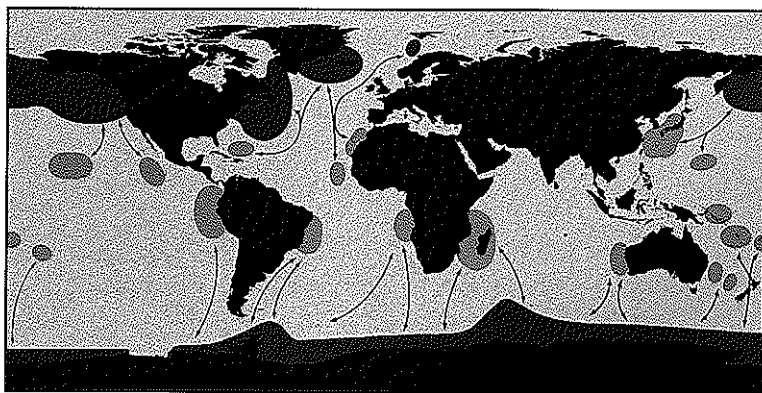
Humpback whales, as migratory animals, are found in every ocean in the world. They feed in polar waters and

reproduce in tropical and subtropical waters. The "Ecuadorian" whales travel every year from Antarctica, through the Pacific, to Ecuador and Colombia. It has been established that some of them travel as far north as Costa Rica, making it the longest whale migration ever recorded.

They travel in large pods and stay close to the coast. Young males are the first to begin the migration and the first to arrive off the coast of Ecuador. Pregnant females are the last to arrive. Their average swimming speed is about four knots, but when migrating it can be up to 6 knots.

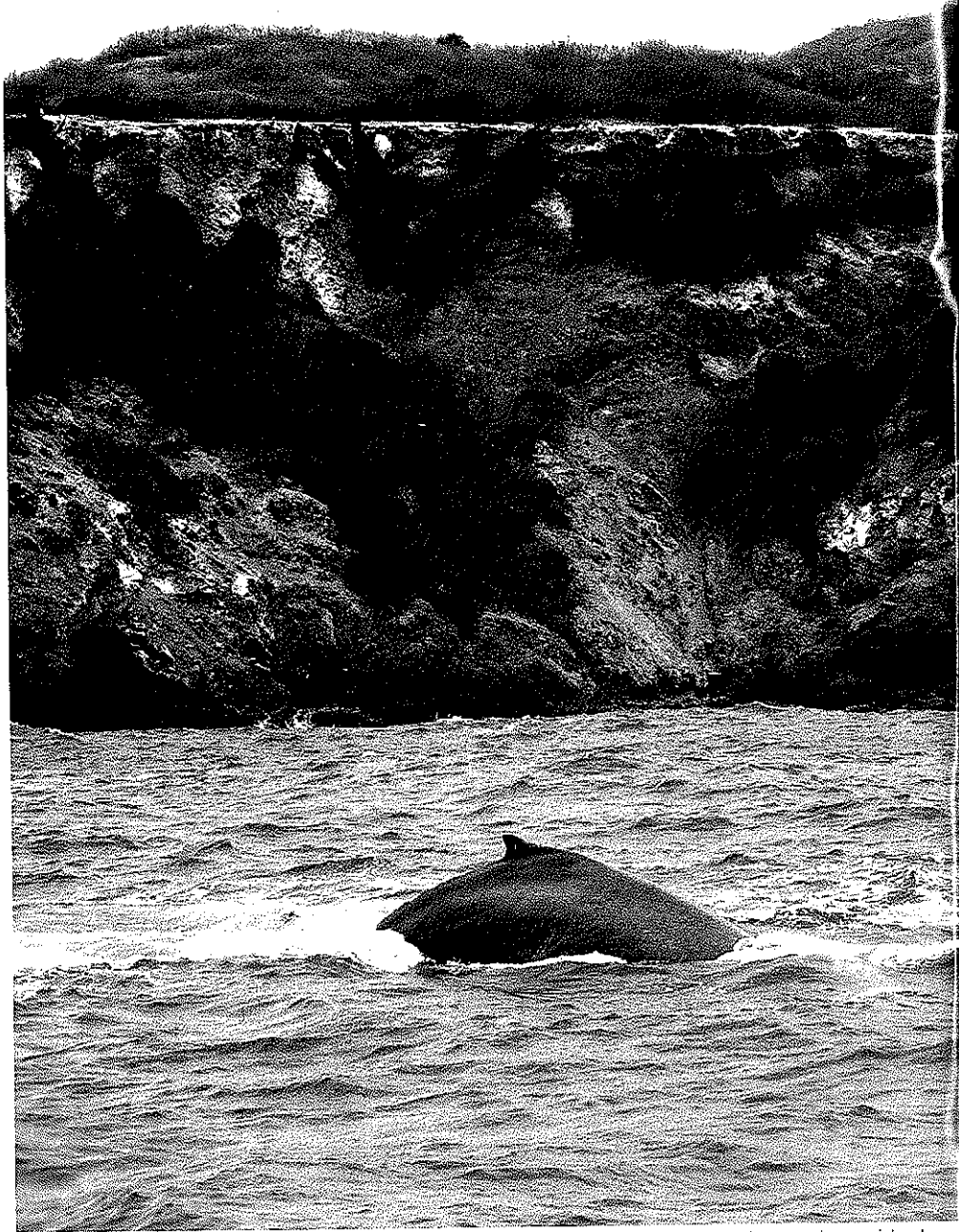
Certain marine regions along the Ecuadorian coast such as the Machalilla National Park, Puerto Lopez, Puerto Cayo, Bahía de Caraquez, Manta, Jama and Pedernales in the Manabí province, Salinas in the Guayas province, and Sua in the Esmeraldas province, are the sites that the Humpback whales have chosen for mating that takes place from June to September.

### Migratory habits of the Humpback whales



■ Feeding areas.

■ Breeding areas.



During their migration, the whales travel close to the coast. They prefer reproduction areas that are close to islands.

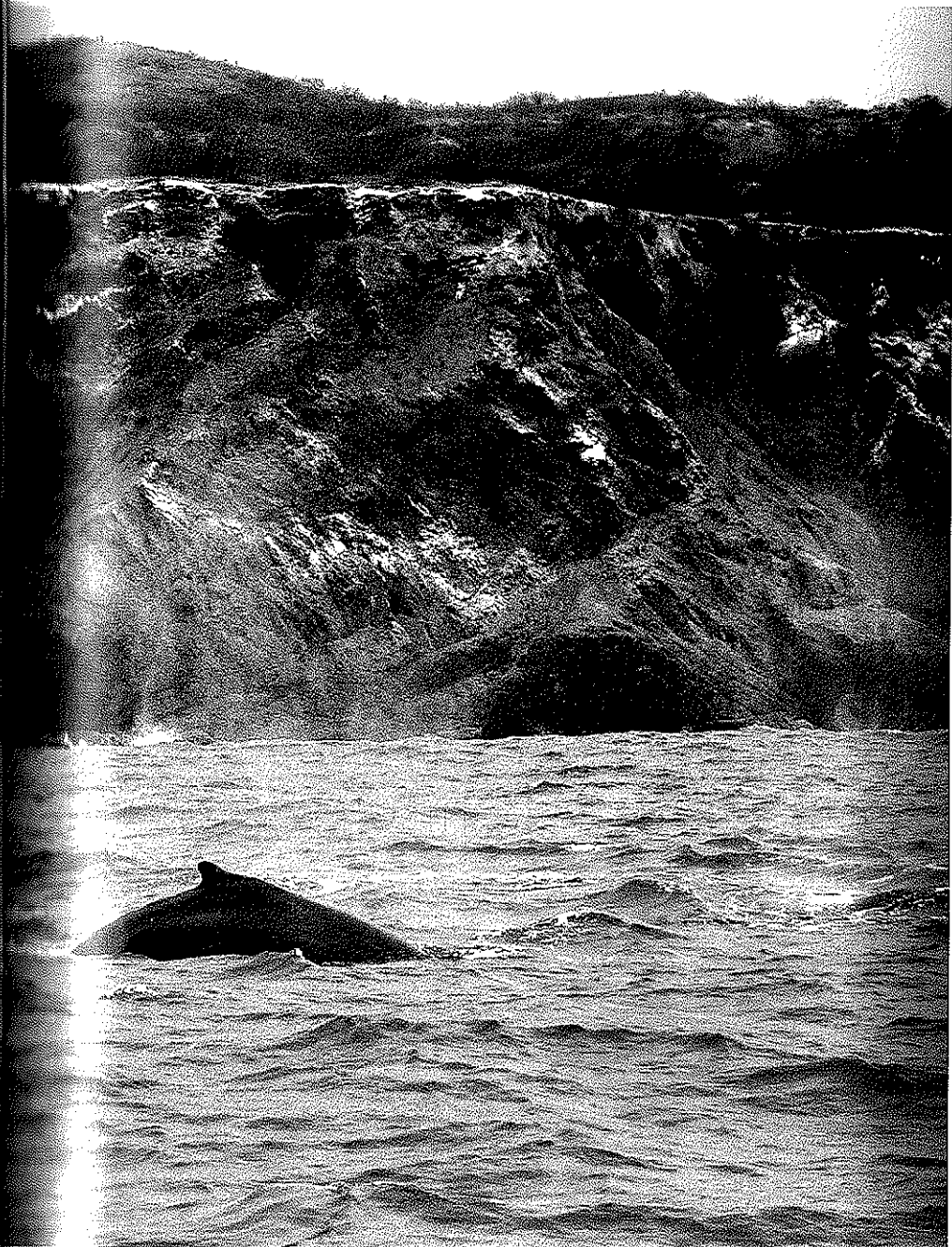


Photo: Cristina Castro PWF

## Their evolution

Life began in the ocean about 3,500 million years ago. But the ancestral origin of whales and dolphins all are known as cetaceans goes back 125 million years with the *Mesonychidae*, which are considered among the most primitive terrestrial ungulates. Genetic studies have shown that the proteins of whales are closer to those of the artiodactyl ungulates such as llamas, bovines, deer, camels, porcines and hippopotamuses than to any other mammals, even though the *Mesonychidae* were similar to the dog or wolf because it had hair, front and back extremities, a long tail and was carnivorous.

Evolution suggests that when food became scarce on land, and to elude predators, the ancestors of the whales were forced to move to water and swamps to feed on molluscs and fish. This gradually, over many millenniums, led them to adapt to living in water.

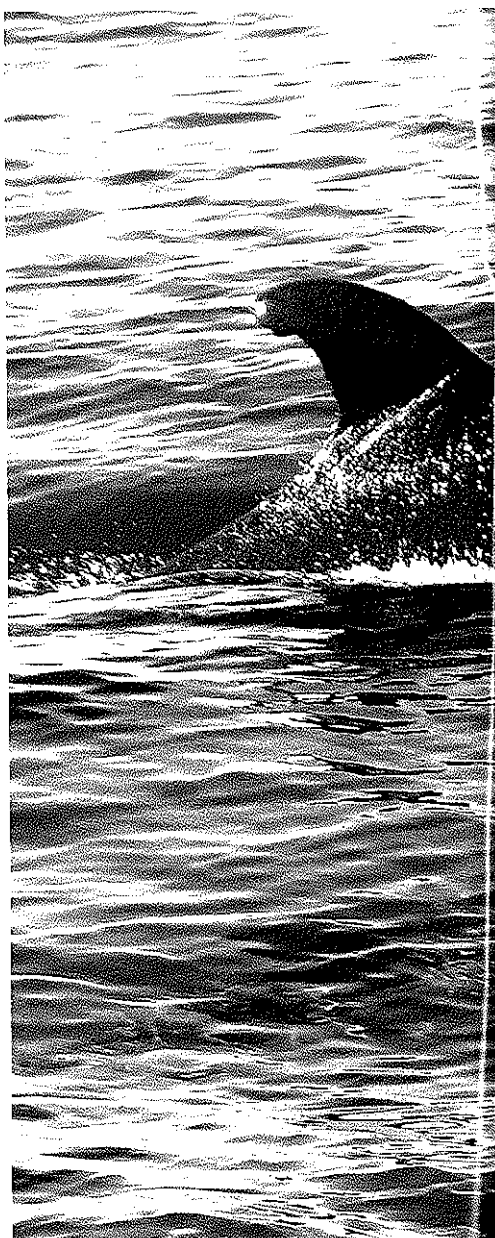
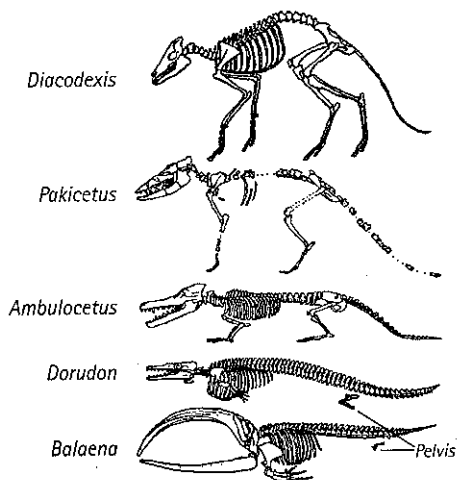


Photo: Josh Wittmer, Biologist and naturalist guide.





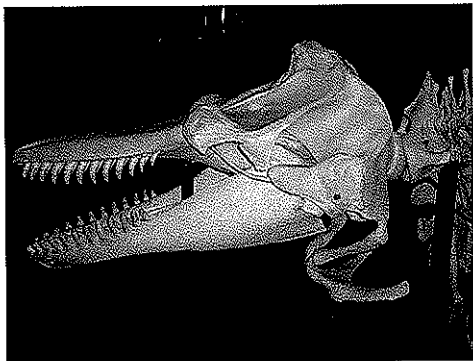
Whales and dolphins are mammals that have adapted to marine life. They breathe using lungs, so they have to surface for air. This photograph shows a "false Orca" false killer whale, which is considered a predator of young Humpback whales. It is one of many dolphin species in Ecuador.

## *History of the whales in Ecuador*

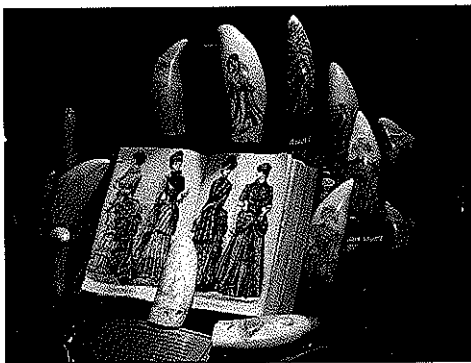
After 10,000 years of human occupancy, the Ecuadorian coast has been the place of important cultural processes. The Isla de la Plata, located in the Machalilla National Park, was a ceremonial and commercial exchange center that many different cultures from the Ecuadorian coast visited. Clay handicrafts reproduced what people saw in nature and helped them to understand the world around them. For many years, we have been looking for archaeological objects that could give us an idea of how long the Humpback whales have been visiting Ecuador. We have found several representations with engravings on orca and cachalot teeth. There is no evidence that ancient navigators hunted

whales, so the origin of the teeth of orcas and other cetaceans could be from animals that probably ran aground on the beaches. Clay figures resembling animals like sea lions and dolphins have also been found, coming from the Machalilla culture (1500 B.C. – 1200 B.C.).

An interesting myth that has been told for centuries on the coast of Manabi is the story of the "Biriél", which is a kind of ghost ship that was known for interfering with small boats during the Spanish colonial years. According to some archaeologists, one theory of this legend is that it was a pirate ship. Another theory is that the Biriél is simply an enormous marine animal, most likely a whale.



Orca cranium. – Photo: Cristina Castro PWF



Illustrations on whale teeth. – Photo: Cristina Castro PWF



Dolphin shapes carved on an instrument used to embroider, used by the Manteño Culture (500 A.C. – 1500 A.C.)



## *About the Humpback whales*



Whale calf with its mother. – Photo: Cristina Castro PWWF

Whales are marine mammals that breath air through their lungs. They are warm-blooded, and early in their evolutionary process, had hair. The females have mammary glands and feed their calves with milk.

There is a heavy layer of fat under their skin that can reach 50 cm. (20 inches) in thickness that protects them from icy cold water. These whales can eat up to one ton of food a day. Their diet includes small fish and krill, which is a shrimp-like crustacean. Oil from whales was once used to lubricate clocks and machinery, to cure leather, to make candles, soap, and resins. In addition to their thick layer of fat, the baleen, endocrine glands, liver, meat and bones were used to produce pharmaceutical

products, hormones, vitamins and food for domestic animals. They also provided ambergris which was used for making perfumes. The entire animal was put to use.

The technology of whale hunting was developed over the years and very efficient weapons were devised to kill whales such as the explosive harpoon. The estimated number of Humpback whales in the world before man began serious commercial hunting, was at least 200,000. Today, the estimated numbers are from 10,000 to 20,000.

Fortunately, commercial hunting is over. Harpoons have been replaced with cameras, and whale hunters with enthusiastic tourists that sometimes travel thousands of miles to watch the whales.

In size, Humpback whales are the fifth largest of the genus. They do not have teeth. Rather, they are baleen cetaceans (*Mysticeti*). Baleen is a horny substance that grows as fringed plates from the upper jaws of certain whale species, acting as a strainer for food.

Their scientific name, *Megaptera novaeangliae*, means large wings, referring to its long pectoral fins that can grow up to 5 meters (16 feet) long in adult whales.

Their color is grayish black. The ventral area tends to be white on the

whales that migrate to Antarctic waters. Seen from below, the white color blends optically with ice, acting as camouflage.

Newborn Humpback whales weigh an average of 1.5 tons, are 4 to 5 meters long (10 to 16 feet), and are fed exclusively with milk during their first 5 months. A calf can be identified for its overall gray color.

Nature provides the baby whale with the right nutrition for a whale, milk is much thicker than that of terrestrial mammals with less water (40-45% of the total volume) and more fat

### The Humpback whales are also known as...

Rorcual jorobado or Ballena jorobada (Latin America)

Yubarta (Colombia)

Baleia jubarte (Brasil)

Zatokuzira (Japan)

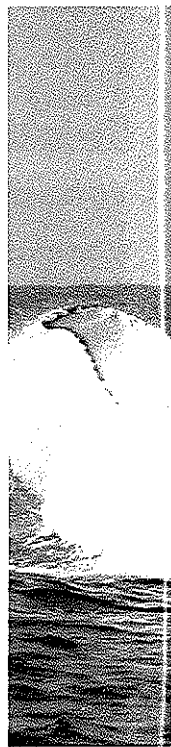
Gorback (Russia)

Baleine à bosse (France)

Knolhval (Norway)

Buckelwal (Germany)

Kaipokak (Inuit)



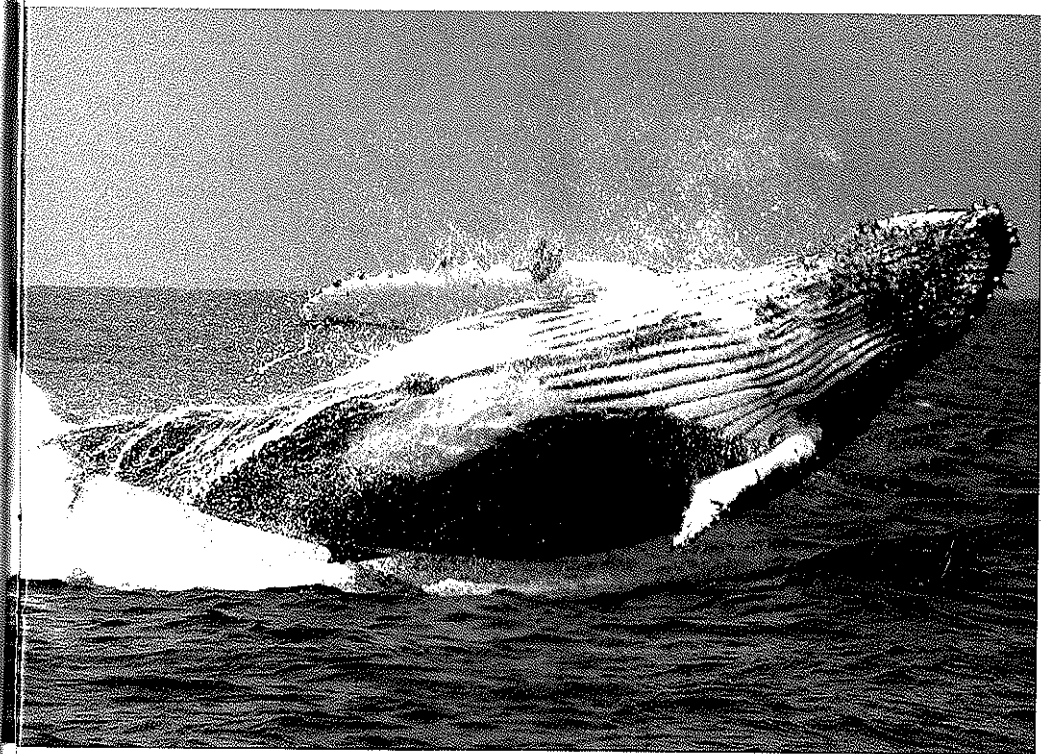
(40-50%), while the milk of other mammals has about 80% water and 17% fat. The mother whale can produce 100 to 130 gallons of nutritive milk daily. This helps the young whale double its size and weight in less than a year.

Whale calves are frequently seen along the coast of Puerto Cayo. The water there is not very deep. This helps keep them safe from the majority of predators. These areas are known as whale nurseries.

To tell the difference between males and females can be a bit difficult.

Adult males average 13 meters (43 feet) in length; females are slightly larger and can measure up to 14 or 15 meters (45 feet). When adult, Humpback whales can weight up to 30 tons (60,000 pounds). Generally, the males have scars on their dorsal fin and fewer marks on their body. The scarring results from fighting between males over a female.

The oldest Humpback whale registered was 48 years old, but biologists believe that they can live longer. The largest Humpback whale known was 18 meters (60 feet) long.



Humpback whales breach to observe surroundings, sometimes to communicate and mainly to display for mating courtship. - Photos: Cristina Castro PWF

## *Courtship and mating*

Birth and safety of their calves are only some of the reasons Humpback whales return every year to the Ecuadorian coast. Mating is a primary priority because the females ovulate only once during the season, limiting their fertilization period.

Females use their pheromones to attract the males. A romantic love story occurs in the Ecuadorian ocean with males showing their strength by breaching (leaping out of the water) repeatedly to impress the females. Special muscles help them breach with such intense strength that almost their entire body leaves the water. They can even make loops while breaching, making them look like dancers. Another resource that males use to attract females is to dive and sing melodic songs. The whale's songs are a series of notes that make musical phrases with the phrases joining to make themes. Combined in different ways they become songs. This sounding is the primary way whales communicate and their sounds can carry as far as several hundred miles!

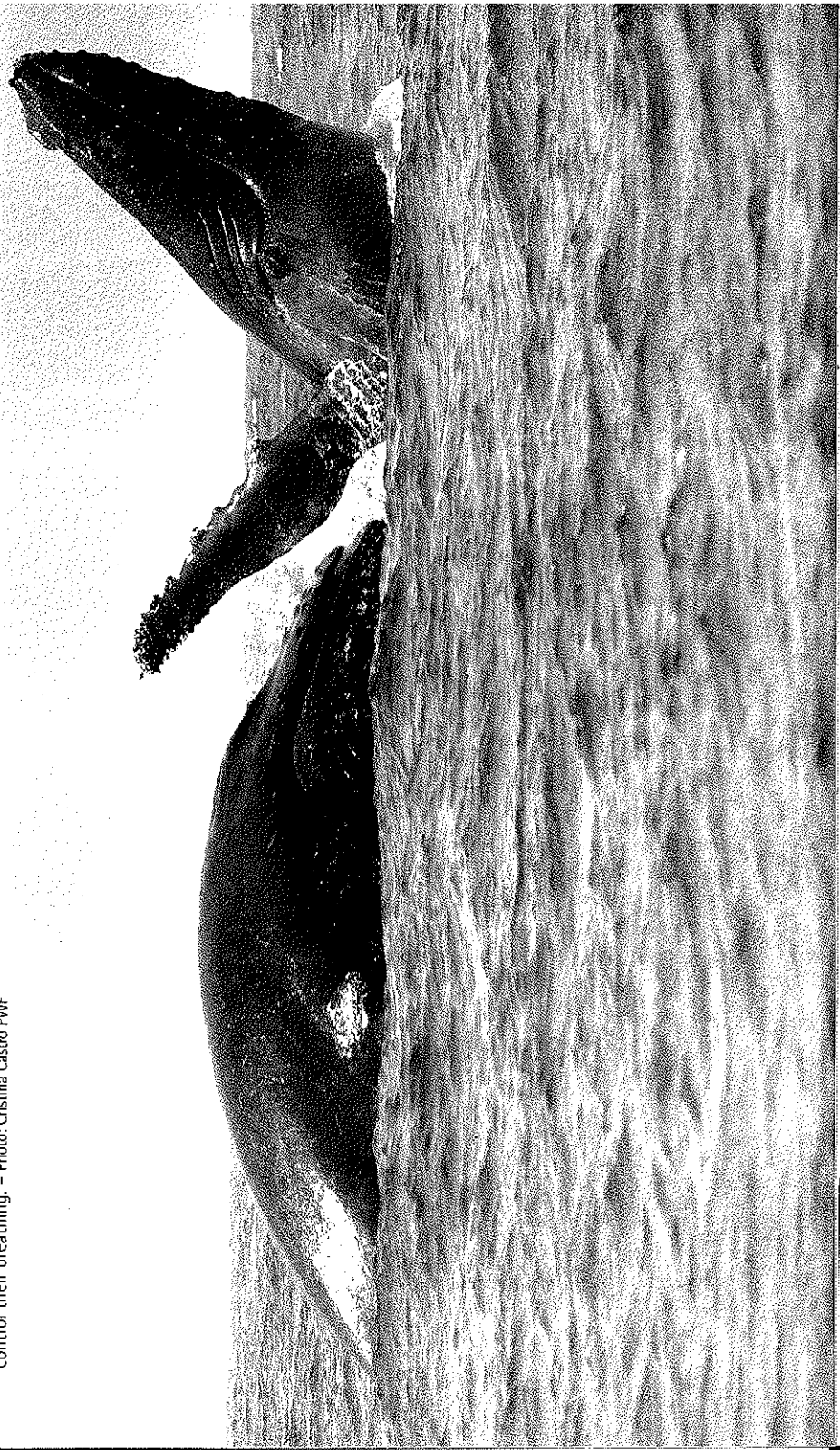
But, as frequently happens, when love is in the air (or in the water), drama and intense action are also involved. After the female has tentatively chosen her companion for mating, there will still be other males interested in the female and challenger groups are sometimes formed. A challenger group will follow the female and her chosen male.

A frigate bird will blow up its red chest to express power to a female. Male whales will extend their pectoral fins as much as 5 meters (16 feet) and inflate their throats, trying to look more powerful than their competitors to make the weaker whales in the challenger group go away. Some individuals in the challenger group will start a series of breaches followed by frequent head strikes as a show of strength. After demonstrating, the whales move closer to the chosen male, threatening to crash into him. The chosen male moves in with the others and they form a compact group to display for the female. One can only imagine what they are doing beneath the surface of the water by watching their dorsal fins. Although the fins are all that can be seen from above, divers have observed the whales crash their bodies into each other during the fighting that takes place by those males wanting the female. They also use crustaceans that are attached to their throat and fins as weapons to make cuts on their opponents' bodies. They also use their bodies to try to prevent another whale from rising to the surface for breath.

The winner of the fight will impregnate the female.

The scars produced from the fights helps researchers to recognize individuals.

The breathing system of whales and dolphins is conscious, but in humans it is unconscious. Whales and dolphins have to decide when to breathe. Even while they rest, part of their brain stays awake to control their breathing. – Photo: Cristina Castro PWF



# Whale Anatomy

## Head

It is rounded and constitutes 30% of the whole body. It has tubercles (meat appendix) along the upper and lower jaws. Each tubercle has one single hair that is 1 or 3 cm. long, which are believed reinforce sensorial capabilities.



Photo: Paul Forestell

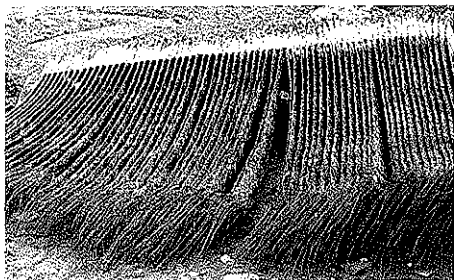


Photo: Cristina Castro PWF

## Baleen

The whales have from 270 to 400 fringed plates that are 85 to 104 cm. long that are attached to the upper jaw. Baleen is used to strain food from the water. The plates are made of keratin, the same material that composes human hair and nails.

## Dorsal fin

It is short and projects toward the front. When diving, the whales arc their bodies which makes the dorsal fin look like a hump, ergo the name Humpback, given to them by whale hunters and sailors.

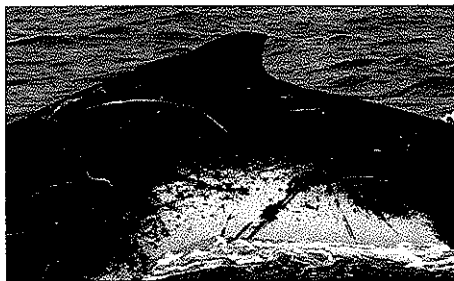


Photo: Cristina Castro PWF

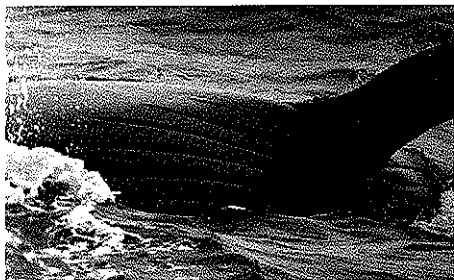


Photo: Cristina Castro PWF

## Ventral plates

They have from 14 to 22 ventral plates, which expand and increase the mouth's capacity (up to 4 times) during feeding.



## Pectoral fins

Located on both sides of the chest, the pectoral fins are long and thin, and are as long as 23% to 30% of the total body length. The fins are used to rotate and to navigate.



Photo: Cristina Castro PWF



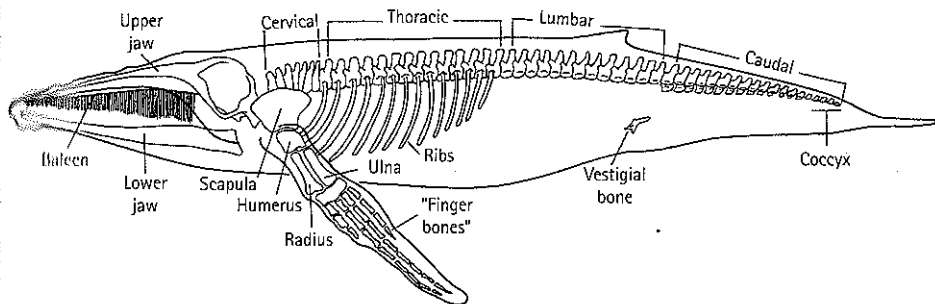
Photo: Cristina Castro PWF

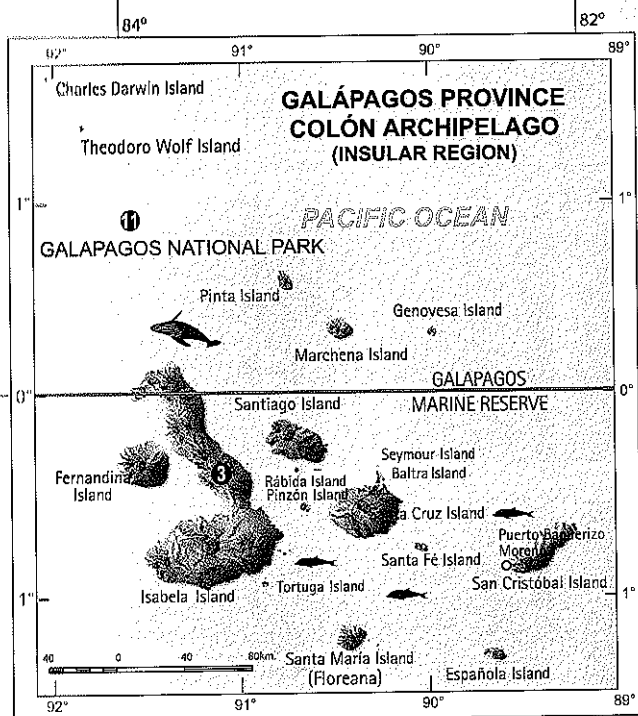
## Fluke

Whales swim by moving the fluke (tail) up and down (fish move their tails left to right). As noted, the fluke is the "fingerprint" of each whale. Distinctive pigmentation on their ventral surface also helps to identify them.

## Skeleton

The weight of their skeleton is only 15% of their total body weight. The bones are sponge-like and contain a light oil.





## National Protected Areas System

### NATIONAL PARKS

- 1 Cajas
- 2 Cotopaxi
- 3 Galápagos
- 4 Llanganates
- 5 Machaillia
- 6 Podocarpus
- 7 Sangay
- 8 Sumaco
- 9 Yasuni

### BIOLOGIC AL RESERVES

- 10 Limoncocha
- 11 Marina Galápagos

### ECOLOGIC AL RESERVES

- 12 Antisana
- 13 El Ángel
- 14 Cayambe - Coca
- 15 Cayapas - Mataje
- 16 Cotacachi - Cayapas
- 17 Los Illinizas
- 18 Macho - Chindul
- 19 Manglares - Churute
- 20 Cofán Bermejo
- 21 Aronillas

### GEBOTANIC AL RESERVE

- 22 Pululahua

### FAUNA RESERVES

- 23 Cuyabeno
- 24 Chimborazo
- 25 Manglares El Salado

### WILDLIFE RESERVES

- 26 Pasochoa
- 27 Isla Santa Clara
- 28 La Chiquita
- 29 Ecosistema de Manglar del Estuario del Río Muisne
- 30 Islas Corazón y Frigatas

### NATIONAL

### RECREATION AREAS

- 31 EL Boliche
- 32 Parque El Cóndor
- 33 Parque Lago

Source: Ministerio del Ambiente 2004

PACIFIC OCEAN

600 miles  
(1,000 kilometers)

De la Plata Island

Salango Island

Olón

Montanita

Ayacucho

Punta Santa Elena

Salinas

Punta Carnero

Playas

Punta Arenas

Puná Island

Santa Clara Island

Jambelí

MAG

### FUENTES DE INFORMACIÓN

RAM Mapa del Ecuador Esc. 1:1'000.000, 1999  
M. P. Ecuador, 2002  
Ministerio de Turismo, 2002 y Fotografías  
Ministerio del Ambiente, IGM

El presente mapa fue elaborado por el INSTITUTO GEOGRÁFICO MILITAR  
EN BASE AL MAPA FÍSICO DEL ECUADOR ESCALA 1:1'000.000  
APROBADO POR EL MINISTERIO DE RELACIONES EXTERIORES Y  
INTERIORES DE LA CEL EN EL AÑO DE 1999



### LEY DE LA CARTOGRAFÍA NACIONAL

Art. 4 - El Instituto Geográfico Militar realizará toda actividad cartográfica referente  
a la elaboración de mapas y levantamientos de carácter oficial del territorio nacional

En cumplimiento de los acuerdos del 26 de Octubre de 1998, el Perú dio en propiedad privada al  
Ecuador un área de un kilómetro cuadrado en el sector conocido por el Ecuador como TWINZA.  
Cuyas coordenadas son:

(UTM Zona 17)

### GEOGRÁFICAS

Datum Horizontal WGS84

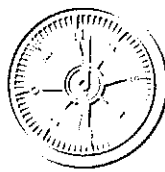
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- 3 (9615990 N - 805540 E);
- 4 (9615990 N - 804540 E);

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- 03°27'53.523" S - 78°15'00.500" W
- 03°28'26.054" S - 78°15'00.806" W
- 03°28'26.148" S - 78°15'33.190" W



78°

76°



# Ecuador

Colombia

Equator 0°

Perú

2°

4°

## CONVENTIONAL SIGNS



Capital city



Province capitals



Main cities



Historic cities



International border

Panamerican highway

Paved road

Secondary road

Main rivers

Provincial border

## SYMBOLS



Whale watching



Dolphin watching

6,310

meters

0



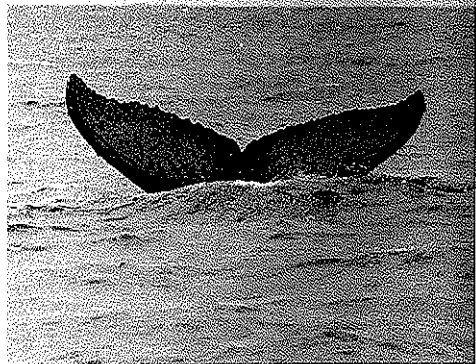
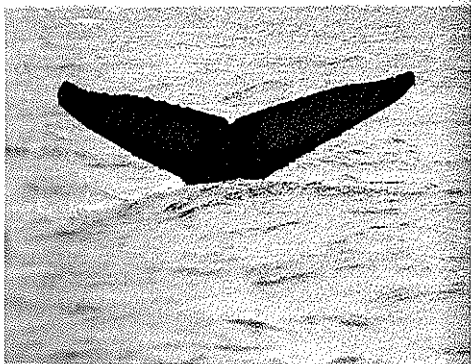
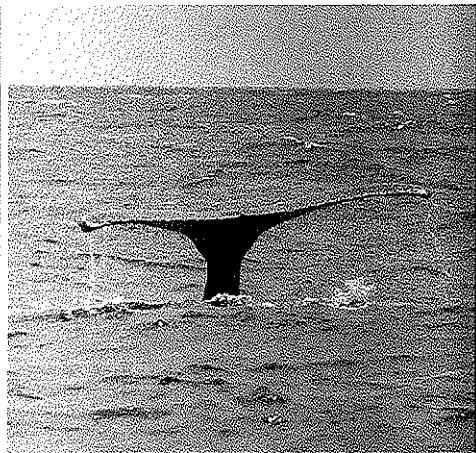
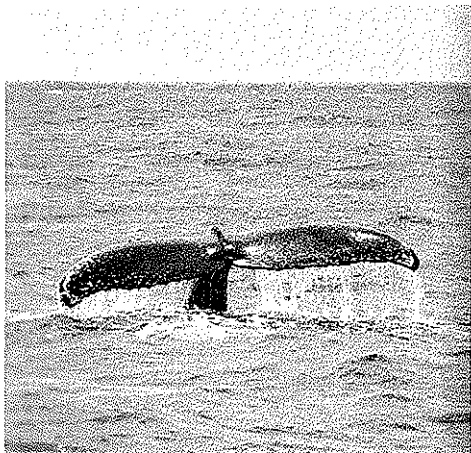
78°

76°

## *Photographing whale's flukes*

Now that whale hunting is finished and the animals are no longer in danger, whale watching has become a tourist attraction that benefits the people of the coastal villages. Ecuador

has trained and educated guides and ship captains to inform tourists and others of the laws designed to ensure the conservation of the sanctuaries that the whales inhabit.



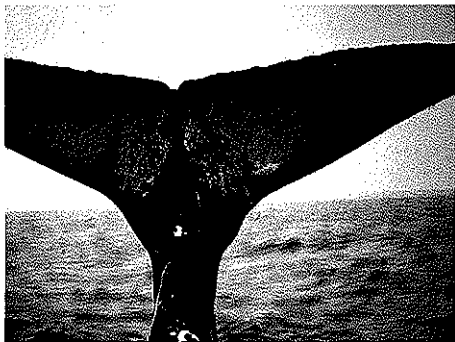
Humpback whales have scars and marks on their flukes. It is like fingerprints in humans in that they are so distinctive that individuals can be identified. In Ecuador 1,500 different animals have been photographed.

Photos: Cristina Castro FWF

## **"Tres Rayos"**

The first photograph taken of this whale is from 1994, and was taken in the Machalilla National Park area. Researchers of the Ecuadorian Foundation for the Study of Marine Mammals discovered the whale and, since then, it came back for the following 8 years. The 3 lines that can easily be distinguished on its fluke are the reason for its name (Tres Rayos). In 1999 we learned without a doubt that it was a female, because for 4 hours she kept raising her fluke out of the water exposing its genitals. Experts tell us that this behavior means that the whale is a female and does not want to reproduce. Local people call this whale "la loca" (the crazy

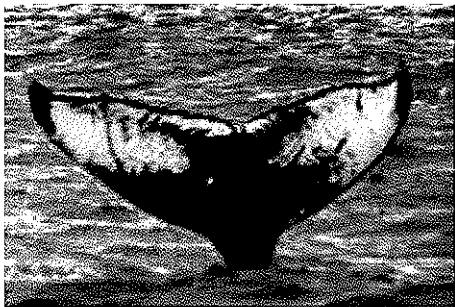
one). We saw her for the last time in 2002 but hope to see her again.



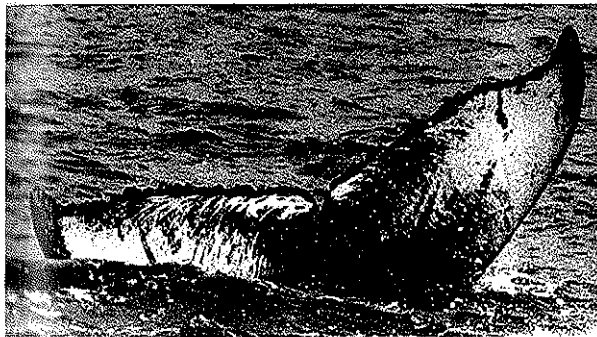
## **"Josefina"**

This whale was seen for the first time in 2002, and again in 2004 and 2005. What makes it interesting is that it stays in Ecuador for very long periods. In 2004 it traveled along the coast of Machalilla National Park for 27 days and also visited the coast near Salinas. We look forward to seeing Josefina again next year.

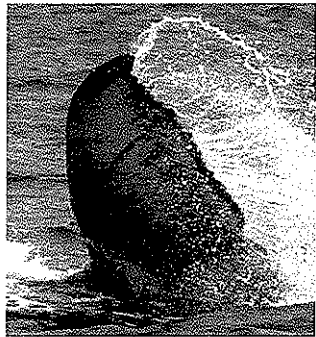
Year 2002



Year 2004

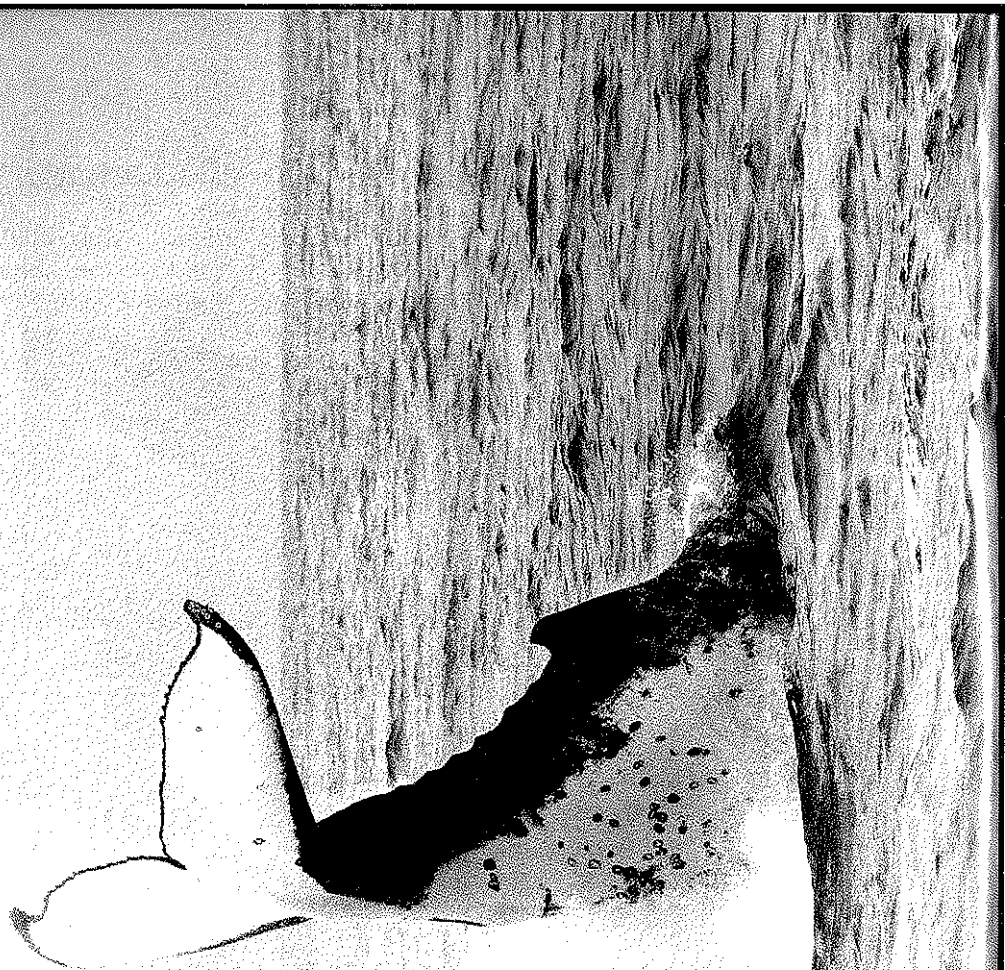


Year 2005



Ecuador has a great marine diversity. The main difference between dolphins and whales is that dolphins have teeth and whales have baleen. The Orca or killer whale is a giant dolphin.

Photo: Cristina Castro PWF



# Whale hunting

Source: Elsa Cabrera -  
Cetacean Conservation Centre-Chile

Knowledge of the history of whale hunting has helped us see the folly of killing whales and move to establish regulations that protect and preserve these wonderful animals.

Legendary histories about whale hunting are full of heroism and action. Early hunters used small boats and attacked the whales with harpoons that sometimes gave the whale a chance to save itself. When the whale won the battle, it did not kill its adversaries to obtain products. Many whales survived, reflecting the limited efficiency of ancient hunting techniques and weapons.

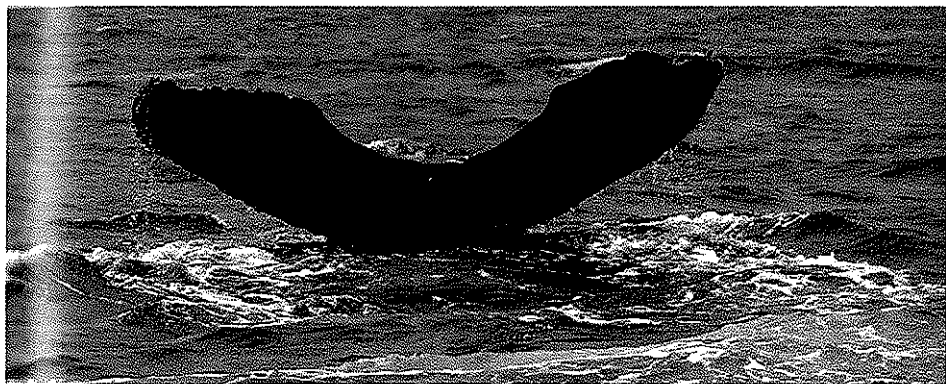
But over time, and with the development of new technologies, commercialized whale hunting became a profitable industry. No other wild animal has been persecuted with such insistency, putting almost every whale species at risk of extinction.

With the transition of primitive whale hunting into commercial killing, a sustainable activity was turned into a cold industry, sustained with the death of these

animals. During the more recent commercial hunting era, the nations fought for the right to kill whales species. With this, the killing didn't stop and the number of individuals of these gentle giants was reduced to precarious levels. Near extinction of many species, became a reality.

Hundred of thousands of whales where brutally killed, demonstrating man's cruelty and lack of understanding, compassion or reason. When a species was hunted to near extinction, the usual procedure was to start hunting a new species. The whale conservation movement that fought for a moratorium of commercial whale hunting in 1972 was ineffective until 1986, and only then, when the whale populations around the world were about to disappear.

Now, more than 20 years after the moratorium was declared, whale populations have not recovered from the killing they were exposed to. Unfortunately, commercial whale hunting could be legally authorized again due to pressure from Japan, Norway and Iceland.



This whale is known as "Manteño Chair" by local people, because its fluke's shape reminds the thrones used by the Manteño Culture (500 A.C. - 1500 A.C.). Its particular shape is the result of an Orca attack.

Photo: Cristina Castro PWF



## *Ecuadorian regulations for whale watching*



Photo: Cristina Castro PWF



Photo: Paul Forestell.



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**Art. 7.- OBSERVATION RULES:** To protect the physical safety of the passengers and crew, and for minimal disturbance of whales and dolphins, the captain and crew will follow these regulations:

- a) Approaching is to be from the side or rear of the animals, and the ship's speed must not be more than 5 knots when it is 400 meters (1,300 feet) away from a pod of whales or 200 meters (650 feet) from a pod of dolphins.
- b) The ship must be kept to a minimum distance of 100 meters (330 feet) away of the whales or 50 meters (165 feet) from dolphins, and always from behind the pod.
- c) The speed of the ship must match the speed of the cetaceans, and the captain has to choose the best direction according to water and wind conditions in order to keep the ship under safe control.
- d) Should a whale or a pod of whales get close to a ship, the captain must put the engine into neutral gear and stop. He will have to wait to see what the cetaceans do, for it may be possible that the whales could touch the ship with their pectoral fins or fluke. Only after the whales have moved away from the ship can it be put into movement again. When dolphins get close it is best to not stop but maintain the same speed and direction as the dolphins.
- e) The captain must avoid making sudden changes of speed or direction, maintaining a speed that gives him complete control of the ship depending on ocean conditions. The engine must always be on.

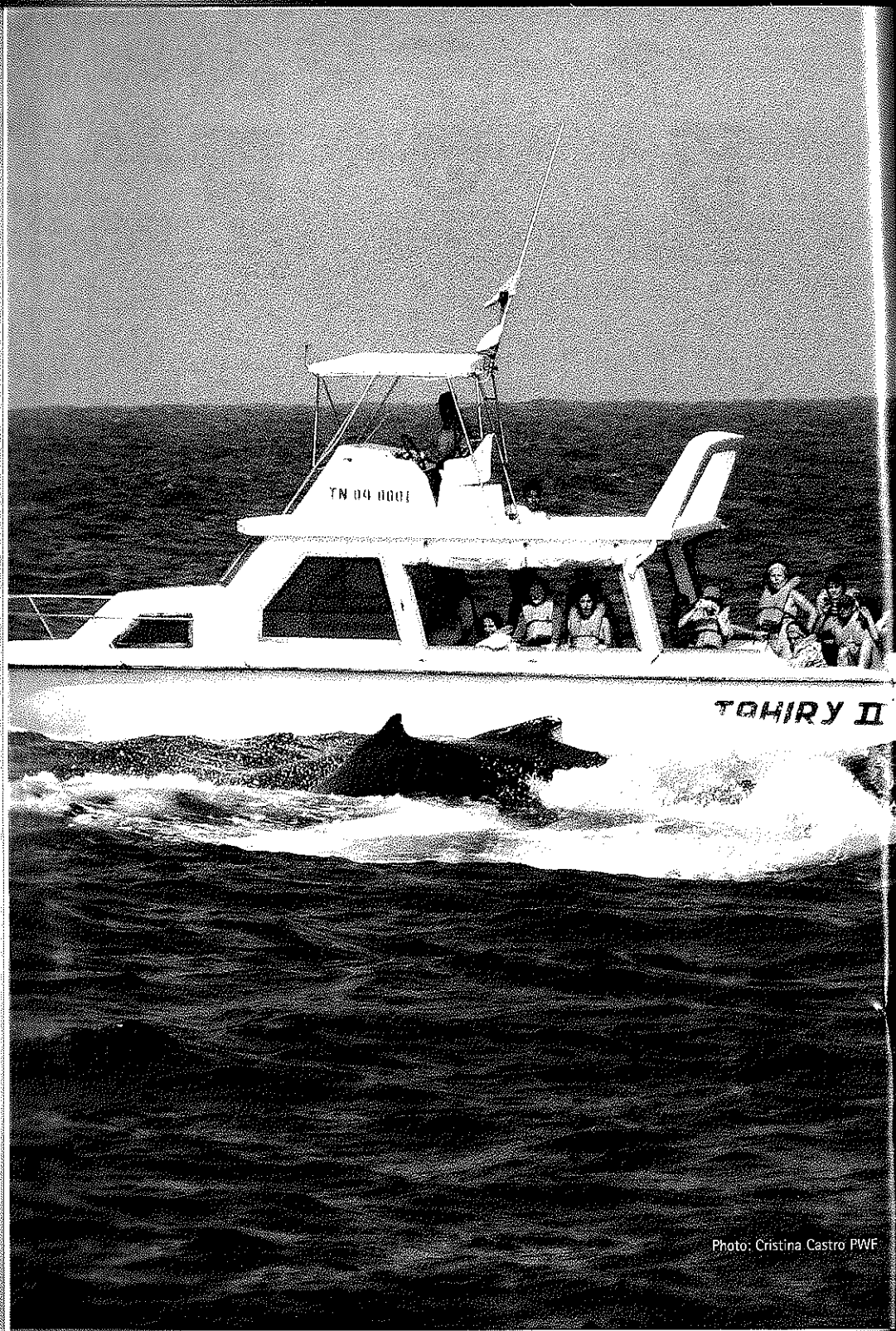


Photo: Cristina Castro PWF





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- f) When leaving an observation area, the increase of speed is to be progressive and no higher than the speed was when approaching until the ship is 400 meters (1,300 feet) away from the animals. The ship must move in the opposite direction of the cetaceans.
- g) The maximum observation time is 25 minutes.
- h) Each observation group will be authorized to use a maximum of three ships. If there are more ships, the last will have to keep away from the area and wait until one of the ships in the observation area retires. Captains will have to coordinate the procedure to be followed by radio. Another option is to look for another group of cetaceans.
- i) The ship should never interrupt the swimming line of the animals, travel around them, be inside a group, or between a mother and calf.
- j) It is absolutely forbidden for persons to swim or dive together with whales or dolphins. The only exception is when it is done for research purposes. To do so must be previously approved by the Seaport Captain. Safety precautions must be taken in case of accident.
- k) It is forbidden to feed the animals or to throw garbage into the sea.

Humpback whales are migratory animals. They live in cold waters and reproduce in warmer waters. In reproduction areas they prefer warm and more shallow waters to help keep their calves safe from predators. This photograph shows Humpback whales feeding in Antarctic oceanic waters.

Photo: Stephanie Fernández, Biologist and naturalist guide.



## *Other aquatic mammals in Ecuador*

In addition to Humpback whales, there are more than 25 different aquatic mammal species in Ecuador, some of which live in the Amazon region, along the Coast, and around the Galapagos Islands.

Pink dolphins, otters, manatees, sperm whales, spotted dolphins, false Orcas (killer whales), pilot whales, bottlenose dolphins, beaked whales and sea lions are some of the aquatic mammals found along the coast of Ecuador.



Spinner dolphins. - Photo: Cristina Castro PWF

Ecuador has a great diversity of marine mammals ranging from the bottlenose dolphin that can be about 2 meters (7 feet) long to the gigantic sperm whale from Galapagos.

The Esmeraldas, Manabí, Guayas and El Oro provinces are frequently visited by common and spotted dolphins, looking for food, they can make pods of several hundred animals.

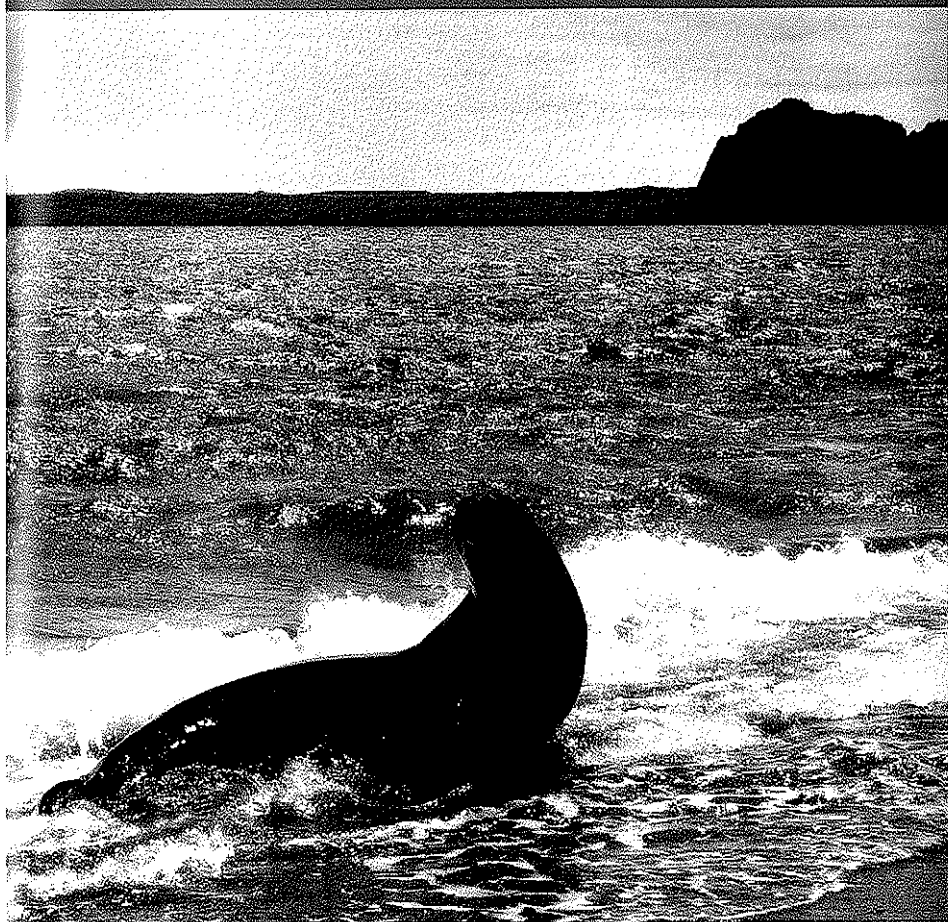
To see bottlenose dolphins, visit the coast of Playas and Posorja in the

Guayas province, all the water channels found in this region have permanent populations of dolphins that make beautiful acrobatic breaches.

With some luck, you may see the giant dolphins killer whales especially in the months of June to September. This is also the period when Humpback whales give birth to their calves. The killer whales are the natural predators of baby Humpback whales.



Spinner dolphins, mother and calf. - Photo: PWF Staff.



Galápagos Sea Lion. - Photo: FMPT/Satré

The ecosystems in the Galapagos Islands are home for a wide variety of whales and dolphins that you may see from the tourist ships. But another attraction is visiting the sea lions that are endemic to the island.

There are many sea lion colonies to be seen. You can enjoy visiting one of the

most threatened species on earth. By the way, the difference between sea lions and seals is that the first have external ears. When you swim in the ocean, these animals are sometimes curious and will swim alongside you.

## The pink dolphin or river dolphin

They can be found in dense forest at the Yasuni National Park, the Cuyabeno Wildlife Reserve and the Limoncocha lakes. Their pink color gets stronger as they age; older animals have a deeper pink color. These dolphins are present on the local Quichwa indigenous myths in

which this animal ("bufeo" is the local name for the pink dolphin) is a creature that is an animal during the day and turns into a handsome young man at night. They are believed to visit the indigenous communities during festivals and people say they are very joyful and gallant. The myth also says that these dolphins make love to women and their children are known as "sons of the bufeo".

## The manatee

This large mammal is known in Ecuador as "vaca marina" (sea cow). They can weigh up to 450 kilograms (more than 900 pounds) and can be 3 meters (10 feet) in

length. They live in rivers, estuaries, and small lakes. The manatee is very shy and spends most of the day eating. It is difficult to find, much less get close to this animal, but if you do, you will never forget it.

## The river otter

There are otters and also the giant otter that spend a good part of their life in water. They have thick, beautiful fur. They are excellent swimmers and are

good fishers. They can be seen, at the Yasuni National Park, and the indigenous communities of Zancudococha, Puerto Bolívar, Playas de Cuyabeno and Zabalo in the Cuyabeno Reserve.

Giant Otter from the Amazon Region. - Photo: Geovanna Lasso







## PACIFIC WHALE FOUNDATION

I have devoted my time and effort to the research of Humpback whales for years. It is hard to understand that in past centuries these enormous and beautiful animals were seen as marine monsters, included in magic and amazing stories. Through the years they have been both respected and hated, persecuted and then forgotten, animals that share the world with us.

I am still amazed when I see them breach and I scream with emotion as if it was the first time I have seen them (sometimes even louder than tourists) and my eyes tear from emotion when I can hear them singing.

To feel a whale close to you may be the most exciting experience of your life! Come and visit Ecuador, my country, at its purest.

*Cristina*





#### TEXT

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Part of the text is based on the following articles:

Castro C. 2003. La Jorobada, la acción y el drama. *Terra Incógnita*. 23: 33-37.  
Castro C. Printed material. La Ballena Jorobada y otros mamíferos marinos en Costas Ecuatorianas.

#### PHOTOGRAPHS

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