



Conserving Cetaceans On A Global Scale



©WWF

2003



WWF's Cetacean Conservation Strategy

All around the world, WWF strives to safeguard whales, dolphins and porpoises—collectively known as cetaceans. Our strategy aims to promote the recovery of species and populations at risk, and significantly reduce the threats they face. Through field research, training and capacity building, conservation education, and by securing stronger national and international action and agreements, WWF is making progress toward these high-priority cetacean conservation objectives:

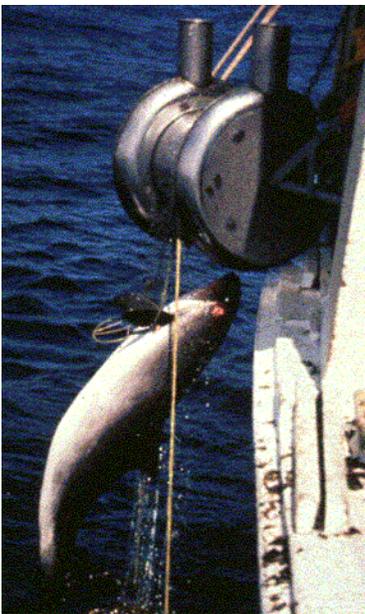
- decreasing bycatch, or entanglement in fishing gear
- reducing ship collisions
- protecting cetaceans from chemical contaminants
- addressing climate change and its impact on cetaceans
- supporting whale watching
- bringing whaling under the strict control of the International Whaling Commission (IWC)

What follows is a summary of current WWF cetacean conservation activities across the globe.

Decreasing bycatch/entanglement in fishing gear

Worldwide

In July 2002, WWF launched a global cetacean bycatch campaign with the formation of an international cetacean bycatch task force made up of 27 of the world's leading experts who have joined with WWF to provide technical assistance and scientific guidance in tackling the problem. With input from the task force, we set the following priorities:



- Accelerate research and development on cetacean-safe fishing gear and methods;
- Increase training and technology transfer—especially to developing countries; and
- Strengthen policy, urging national governments and international policy fora to tackle the bycatch problem.

Since then, we have contributed funding to the IWC Scientific Committee to support research on bycatch mitigation in developing countries. We held a panel session at the FAO Committee on Fisheries meeting to urge the FAO to establish international guidelines and standards for reducing cetacean bycatch in fisheries around the world. We helped draft proposed legislation in the U.S. that, if passed, will support international cetacean bycatch mitigation efforts and authorize funds for research on cetacean-safe fishing gear, as well as training in developing countries. And we provided testimony to the U.S. Commission on Ocean Policy, an advisory body to the U.S. Congress, that persuaded the commissioners to flag reducing global cetacean bycatch as a national priority for marine conservation in their upcoming report to Congress due out in Fall 2003.

Africa

WWF is helping to reinforce local NGO efforts in monitoring and mitigating cetacean-fisheries interactions in **Senegal, Togo and Ghana**, where high levels of cetacean bycatch in coastal net-fisheries are likely to be unsustainable in the long term. Opportunistic utilization of cetacean bycatch for food—due to sharply declining fin-fish takes (from over-fishing), poverty and protein needs—is evolving into totally unmanaged directed dolphin fishing and causing even higher mortality. The endemic **Atlantic humpback dolphin** is thought to have only recently disappeared from vast stretches of West African coastal habitat, presumably as a result of bycatch. WWF is providing interim support to local NGOs that are trying to stop bycatch from progressing into direct hunts by teaching people about the marine environment, exploring bycatch mitigation approaches, decreasing demand for cetacean products and training port-based fisheries observers to improve data quality.

Asia and Oceania

Gear entanglement is believed to be the most serious threat facing cetaceans in the waters of **the Philippines**, where 22 species have been recorded. While substantial information has been generated on the extent of cetacean bycatch by municipal (small-scale) fishers in the Philippines—in part through WWF's work over the past several years—very little is known about the situation in large-scale operations. Therefore, WWF is initiating a cetacean bycatch assessment in commercial fisheries and has gained permission from one of the key national fleets to place WWF observers on board its vessels, an encouraging outgrowth of a marine mammal training program that WWF provided for this company's owners and operators last year. We will also engage the fishing industry in developing and documenting best practices for reducing bycatch. WWF is also filling in information gaps on the effect of local commercial fleets on cetaceans in the Philippines, including analyses of their areas of operation, as well as types of gear they use and how these may impact cetaceans. We are conducting training for bycatch monitoring in Cebu and Negros Occidental provinces bordering the Tañon Strait, and in the municipality of Taytay in Malampaya Sound.



©WWF

A recent analysis by WWF has identified three critical sites for cetacean bycatch in **the Philippines**: the Malampaya Sound in Palawan; the Babuyan Islands north of Luzon; and Gingoog-Butuan Bays in Mindanao. WWF has been researching the distribution, abundance and seasonality of the **Irrawaddy dolphin** in Malampaya Sound off the island of Palawan since 1999. Because its limited range overlaps with a high-use fishing area, this dangerously depleted population of perhaps fewer than 70 animals is highly vulnerable to extirpation from drowning in fishing gear. Based on monitoring studies in the past two years, a total of eleven mortalities have been recorded, and six have been attributed to bycatch from artisanal gill nets. Findings from biological and ecological studies of these dolphins, plus socioeconomic and cultural analysis of local communities, will be incorporated into a natural resources management plan for the area. We are also working with local fishermen on a strategy to minimize bycatch of these dolphins and promote their recovery. Detailed monitoring of bycatch and initial activities to mitigate it will continue for Malampaya Sound and will start in the Babuyan Islands and Gingoog-Butuan Bay, with participation by local academic institutions to promote interest in marine mammal research and enhance local capacity.

Maui's dolphins (formerly known as North Island Hector's dolphins but now recognized as a separate subspecies rather than just a distinct population of Hector's dolphins) are endemic to **New Zealand**. They are the world's rarest marine dolphin with a population as low as 100, largely due to entanglement in fishing gear, particularly gillnets. The population can only withstand one human-induced death every seven years if it is to survive. WWF is actively supporting the New Zealand government's attempts to protect the dolphins—including a ban on commercial and recreational set netting—in the face of strong resistance from fishers, and urging the government to keep trawlers out of their range as well. We continue to support management-oriented research, along with education in schools and public outreach to raise awareness. This includes hosting a

community-based "sightings and strandings" network to provide more information on the location of dolphin pods and interactions with fishing activities. For this purpose, WWF maintains a special website at <http://www.hectorsdolphin.org.nz> as well as a free phone line (0800HECTORS) for reporting sightings.

Europe

Harbor porpoise bycatch levels in the Baltic Sea are estimated at 2.1% of the population size, which is already severely depleted and may number as few as 600 individuals. In 2002, WWF helped develop a recovery plan for **Baltic Sea** harbor porpoise—the Jastarnia Plan—which calls for measures like switching fishing gear from bottom-set and drift nets to long lines and traps, research on new fishing gear to reduce accidental capture of harbor porpoises, the prudent use of acoustic deterrents (pingers), a reduction in fishing in driftnet and bottom-set gillnet fisheries, and the establishment of protected areas. The Jastarnia Plan was approved by the scientific committee of ASCOBANS (Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas). We are pushing Member States to adopt and implement the plan. We have also been investigating the feasibility of time-area closures in certain fisheries in the Baltic region as a bycatch mitigation measure. WWF is analyzing harbor porpoise bycatch data in a geographic information system (GIS) to see whether there are certain fisheries, areas and seasons in which bycatch occurs more frequently. ■

Bycatch of **harbor porpoises** is also unsustainable in the **North Sea**. The scientific committees of ASCOBANS and the IWC agree that total anthropogenic removals—including bycatch—should not exceed 1.7% of the estimated abundance level to ensure the population's long-term survival. However, harbor porpoise mortalities in fishing gear in the Central and Southern North Sea amount to at least 7,000 each year, which is 4.3% of the 1994 abundance estimate; in the Celtic Shelf region, bycatch is even higher—6.2% of the subpopulation size. Despite a substantial lack of accurate information about size and structure of the population and the real level of bycatch, the population appears to be under serious threat. In 2001, WWF led a national campaign in Germany to create public pressure for European environment ministers to address this problem at the fifth International Conference on the Protection of the North Sea in 2002. As part of the campaign, we published a report on the status of harbor porpoise in the North and Baltic Seas and a recovery plan for the North Sea. Due to these efforts and the swell of public interest it generated, environmental ministers from the North Sea range states of Belgium, Denmark, France, Germany, the Netherlands, Norway, Sweden, Switzerland, the UK and Northern Ireland, as well as the European Commission, agreed to reduce bycatch to below 1.7% of the best population estimate as an interim goal, and to less than 1% of the population as an ultimate objective. In addition, they agreed to adopt a recovery plan as soon as possible, and WWF will help ensure that they follow through on this commitment.



©WWF-Canon/Bernd Lammel

Through ASCOBANS, WWF also has been calling on individual Parties and Member States to enact more effective measures, under the **European Union** (EU) Common Fisheries Policy (CFP), to reduce unsustainable bycatch of all cetaceans—not just harbor porpoise. Through a joint campaign, WWF and our partner organizations have been pressing the EU to define cetacean bycatch limits and ensure adherence to them. This helped lead to passage of the North Sea Declaration, which puts heavy pressure on European fisheries ministers to radically reform the CFP. New commitments include drastically reducing the accidental capture of marine mammals in fishing nets and designating a network of marine protected areas in the North Sea to safeguard threatened and declining species and habitats.

North America

The **vaquita**, a porpoise endemic to **Mexico's** Gulf of California, is the world's most endangered small marine cetacean. With fewer than 600 left, high levels of entanglement in fishing gear threaten imminent extinction if current trends continue. WWF is leading a coalition of local and international NGOs and working with the Mexican government to phase out gillnet fishing in the area, ensure the sustainability of other types of fishing, improve enforcement of protection laws and enlarge an existing sanctuary to cover the vaquita's entire range.



Through high-level meetings involving President Vicente Fox and Environment Minister Victor Lichtinger and WWF senior officials and board members, we helped initiate a ban on large mesh-size gillnets in the fall of 2002 as the first step in the proposed phase-out. Meanwhile, fishermen who would be affected by fishing restrictions need a safety net to ensure their economic security. We are supporting a study to design and test vaquita-safe shrimp pots and determine their viability as an alternative to gillnets, and exploring other ways for fishermen to make a living.

©WWF

There are fewer than 350 **North Atlantic right whales** left and entanglement in fishing gear is a leading cause of mortality. In **Canada's** Bay of Fundy, WWF is supporting the work of local fishermen to test alternative types of lobster fishing gear designed to reduce risk of entanglement of right whales. Traditionally, individual lobster traps are connected by lengths of rope that float upward, forming loops of rope that can ensnare whales. These experiments are testing rope that will sink or be neutrally buoyant, hopefully presenting less risk to the whales while enabling the fishermen to continue to earn their living by harvesting lobsters.



©Center for Coastal Studies

South America

The **franciscana**, or **La Plata river dolphin**, is distributed only along the coasts of **Argentina**, Uruguay, and Brazil. This small riverine and coastal dolphin is thought to be the most threatened cetacean species in the Argentine Seas. Bycatch in fishing gear, pollution and overfishing of its food supply are the most pressing threats. WWF's associate in Argentina, Fundación Vida Silvestre Argentina, is managing a study to determine population abundance, structure, distribution and frequency of incidental catch by artisanal fishermen in the franciscana dolphin distribution area, and to identify alternative fishing practices to minimize the most significant threat, incidental capture in fishing gear.



©Eduardo Secchi

When the Argentine hake fishery collapsed in the late 1990's, fishing shifted to other species including the Patagonian anchovy. Several species of cetaceans, including the **dusky dolphin**, **common dolphin**, and **Commerson's dolphin**, are experiencing high mortality rates in this fishery. WWF, through FVSA, is supporting a research project to assess the mortality rates and the relationship between tourism and incidental catch by commercial fisheries of these three dolphin species.

Reducing ship collisions

For the past 5 years, WWF has supported an initiative to shift commercial shipping lanes in the Bay of Fundy to reduce ship collisions with **North Atlantic right whales**. Ship strikes have caused more than half of all documented right whale deaths. **Canadian** transportation authorities, shipping and fishing industry



representatives, conservationists and other local interest groups worked together to come up with alternative lanes that are safe for whales and ships, drawing on 12 years of scientific data on right whale distribution in these feeding grounds. These intensive efforts led to a groundbreaking decision by the Canadian government to submit a proposal to the International Maritime Organization (IMO)—the UN body that regulates shipping—to move ship traffic lanes in the Bay of Fundy so that they skirt the area where most whales are found. The IMO voted in 2002 to approve the new lanes, which will reduce the risk of ship collisions with right whales by 80%. This was the first time that international shipping lanes had ever been moved to protect an endangered species. The Canadian government will implement the change on 1 July, 2003.

©New England Aquarium

Promoting recovery of endangered and vulnerable species and populations at risk

Blue whales

For two decades WWF has supported projects in **Antarctica**, including providing input on the development of Southern Ocean krill fishery management through the Convention for the Conservation of Antarctic Living Marine Resources (CCAMLR). The aim of this initiative is to ensure that enough krill is available for baleen whales that feed on krill—such as **blue whales**—as well as other krill-dependent species in the Antarctic food chain.

Bottlenose whales

In the Gully, Nova Scotia (**Canada**), a vast underwater canyon rich in marine life that may also be rich in petroleum and mineral deposits, WWF supports a long-term study of a small, isolated population of **bottlenose whales**. A research team surveyed potential habitat for this species from New Jersey to Newfoundland, and sighted the species only in the Gully and two smaller, adjacent canyons. The population is genetically distinct from other bottlenose whales off the coast of northern Labrador. WWF also continues to urge the Canadian government to declare the Gully as a marine protected area and we are playing an active role in designing the management plan for it. In the meantime, we are working with industries that operate in the area, such as fishing and oil and gas, to help minimize their impact on this sensitive area.



©Hal Whitehead

Bowheads

In **Canada**, WWF has completed a long-term conservation strategy for the endangered **bowhead whale** populations of the eastern Arctic with experts from Nunavut communities, co-management and wildlife boards, the federal fisheries department and bowhead whale scientists. The strategy will be published by summer 2003. The goal of this partnership is to produce a long-term, ecosystem-based strategy for recovery and conservation of these endangered whales. Actions flowing from the conservation strategy will address threats such as disturbance, pollution, seismic activities and overhunting, while taking into account the traditional interests of the Inuit people of Nunavut. The conservation plan is supported by our fieldwork, which we conduct with the assistance of local Inuit communities. During the 2003 season, the team continued to analyze and map bowhead whale distribution data and initiated a habitat monitoring project, working closely with local Inuits.

Ganges river dolphins

WWF recently completed the first-ever surveys of the **Ganges river dolphin** in **India** in the states of Rajasthan, Madhya Pradesh, Uttar Pradesh, Bihar, West Bengal and Assam. In all, 20 rivers were surveyed, covering approximately 6,000 km. An estimated population of 1,800 dolphins was recorded. Comparisons between earlier surveys (1997-2000) and this most recent one appear to indicate that the population of dolphins in the main Ganga river has not undergone drastic reductions in the intervening period. The surveys identified a number of river stretches as critical for the Ganges river dolphin population in the country, and based on these results, WWF formulated an action plan for the state of Uttar Pradesh with the help of the state's forest department. We are also collaborating with the state forest departments of Madhya Pradesh and Rajasthan to develop action plans for those states.

A more detailed study was also conducted along two river stretches: the Upper Ganga River in the state of Uttar Pradesh, and the Chambal River Sanctuary in the states of Madhya Pradesh, Uttar Pradesh and Rajasthan. The purpose was to identify ways to stop people from killing **Ganges river dolphins**. WWF has developed an

effective network for Ganges river dolphin conservation in India including partners like the state forest departments, Wildlife Institute of India, Patna University, Nature Exploration Group, Narora, Dolphin Conservation Society, Guwahati, the Ministry of Environment and Forests, Bombay Natural History Society (BNHS) and the Mandar Nature Club.

Gray whales

The critically endangered **Western Pacific gray whale** population in the Sea of Okhotsk may number as low as 100, and WWF and its conservation partners have been instrumental in strengthening protection for these whales. We succeeded in curtailing seismic surveys by Exxon Neftegas Ltd. and Sakhalin Energy Investment Company (SEIC), subsidiaries of the Exxon and Shell oil companies, that were shown to displace gray whales from an important feeding area around Sakhalin Island, and we have been advising the **Russian** government on ways to limit the impacts of underwater noise, oil and chemical contamination and any other potential effects on the feeding habitat and benthic food communities these whales depend on. We have been urging the Russian government to establish a gray whale sanctuary off Sakhalin Island. Currently, WWF is pushing for stricter environmental standards for offshore oil and gas projects that seriously threaten **gray whales**, and we will lead direct negotiations with SEIC regarding the most harmful aspects of their operations. The principal goal is to convince SEIC to relocate a drilling platform and pipeline to an area outside the whales' feeding habitat. We are also running a public campaign to raise awareness among people in Russia and internationally concerning the threats the Sakhalin offshore oil and gas projects pose to whales.

Humpbacks

WWF continues to study **humpback whales** in the Babuyan Islands in Northern Luzon, **the Philippines**, a breeding ground discovered by WWF scientists in 1999. Photo-identification studies have catalogued at least 40 individuals, 10 of which match with whales that visit a nearby breeding area in Ogasawara and Okinawa, Japan, thus confirming the link of the Babuyan whales with the Asian population of Northern Pacific humpbacks. The project has been recording humpback whale vocalizations or "songs" in the Babuyan Island's waters since 2000.



Preliminary analyses show that the songs heard here are the same as those in Hawaii, leaving little doubt that there is a connection between the Hawaiian and Philippine groups. Furthermore, the 2003 survey has added another species to the list of cetaceans living in these waters—the **Risso’s dolphin**. With 12 species, the cetacean diversity of the Babuyan Islands is unparalleled in **the Philippines**. Strengthening partnerships with local people, WWF continues to engage volunteers in the annual survey, including students from the local university and residents from the islands. Working with local stakeholders, we are leading the development of an overall conservation plan for the Babuyan Islands. WWF researchers have also conducted cetacean surveys in a number of other areas in Philippine waters that have never been studied, such as the southeastern Luzon area.

Indo-Pacific humpback dolphin

In the late 1980’s, WWF initiated a scientific research and public awareness program in **Hong Kong** highlighting the plight of the local population of **Chinese white, or pink, dolphins** (more widely known as **Indo-Pacific humpback dolphins**), which are threatened by increasing pollution, entanglement in fishing gear, collision with shipping traffic, competition with fisheries and habitat loss. The WWF program is now conducting long-term monitoring of the dolphin population’s social dynamics, habitat use and abundance, so that informed conservation and management strategies can be recommended to the Hong Kong government. In addition, these studies provide educational material for local schools. WWF is currently conducting new research into the diving behavior of the local dolphin population using suction cup-attached time-depth recorders and has received permission from the Chinese authorities to conduct systematic surveys into adjacent, previously restricted, Chinese waters. This new information will assist in better understanding population behavior underwater and the full extent of population distribution.



©WWF/Lindsay Porter

Indus river dolphins

In the past year WWF collaborated with the Wildlife Department of Sindh, **Pakistan**, and specialists from the Lahore Zoo to rescue a total of 23 **Indus river dolphins** that had become stranded in lateral irrigation canals and return them to the river, an important short-term approach to reducing dolphin mortality. On the basis of the record of stranded dolphins, a GIS-based map has been developed to indicate the location of stranded individuals.

Pakistani coast cetaceans

In **Pakistan**, WWF has initiated a cetacean census off the coast of Balochistan Province. Seasonal data on the occurrence of species and relative abundance are being compiled by interviewing fishermen using a specially prepared questionnaire and a cetacean identification guide.

Right whales

One of the greatest mysteries about **North Atlantic right whales** is their very low birth rate. WWF is supporting an innovative project testing a technique to compare current pregnancy rates in the population with the actual calving rate. By comparing these pregnancy rates with historical ones for the same population, the researchers hope to determine patterns that may clarify the low birth rate in recent years.



©Center for Coastal Studies

Southern right whales migrate from their feeding grounds in the Southern Ocean to their coastal breeding grounds off **South Africa, Argentina** and **Australia** between May and December. Since 1995, WWF’s

associate, Fundación Vida Silvestre Argentina (FVSA), has been supporting a study of population trends and distribution of whales during the reproductive season on the Valdes coast. The introduction of boat-based whale watching has reinforced the need to provide baseline data to assess the possible effects of this activity. At the two most important breeding grounds around the southern and southwestern coasts of South Africa and the Valdes Peninsula, WWF and FVSA have assisted in monitoring the recovery of southern right whales by supporting aerial surveys since 1990. Off South Africa, the population is now increasing at about 7% per year, although it is still depleted compared to its estimated pre-whaling level. The 2002 survey revealed a record breaking 194 calves in South Africa and model projections suggest there are more southern right whales now than there have been for 150 years. The Valdes population numbered some 1,200 individuals in 2002, with the density of whales in the San José Gulf reaching up to 200 individuals in a single day. WWF and FVSA helped make this species a National Monument of Argentina in 1984.

South Pacific cetaceans

Since 2001, WWF has been campaigning to secure a network of whale sanctuaries in the **South Pacific** region. We are working with governments, regional institutions and other NGOs to encourage Pacific Island countries and territories to designate their entire exclusive economic zones (EEZs) as whale sanctuaries and pass the relevant national legislation to protect marine mammals in their respective EEZs. This region is a critical habitat through which a number of whale species pass as they migrate from their feeding grounds in the Southern Ocean to their breeding grounds in Pacific waters. In May 2002, the Prime Minister of **Papua New Guinea** announced that his country would declare its EEZ a whale sanctuary. Current research shows that **sperm whales, fin whales**, and numerous other cetacean species are found in this area, and certain species may breed here as well. WWF also successfully lobbied the **Fiji** Government to declare its EEZ a whale sanctuary. This was approved by the Fiji Cabinet in March 2003. Fiji joins a growing number of Pacific Island countries and territories which protect whales within their EEZs, including Australia, Cook Islands, French Polynesia, New Zealand, Niue, Norfolk, Papua New Guinea and Samoa.

Tañon Strait (Philippines) cetaceans

In the **Philippines**, WWF has launched a cetacean conservation program in the Tañon Strait Protected Seascape. Proclaimed in 1998, it has nine of the country's 22 species of whales and dolphins and is its only protected area for cetaceans. The Tañon Strait is threatened by the overexploitation of fishery populations, conversion of coastal habitats (e.g. mangroves) and disturbance from inter-island travel using speedboats. Sugar plantations and sugar mills found on the western border of the strait are sources of organic pollutants that reach the coastal and marine habitats. WWF's Tañon Strait Initiative has three primary goals: community and constituency building, marine biodiversity conservation and policy advocacy.



©WWF

Timor Sea cetaceans

WWF offices in Hong Kong, Australia and Indonesia have initiated a joint research and training program for cetaceans of the Timor Sea. Under the Convention of Migratory Species (CMS), WWF assisted in a small cetaceans survey in the Timor Sea, the aquatic habitat shared by **northern Australia, Indonesia and East Timor**. We also helped conduct a marine mammal survey techniques workshop in Jakarta, Indonesia, that was well attended by government officials from the three nations surrounding the Timor Sea area, regional NGO staff and university students. WWF plans to establish cetacean research groups throughout Asia, the area from which the marine dolphin family is known to have evolved but where the pressure of development severely

compromises marine conservation efforts.

Protecting cetaceans from chemical contaminants

In collaboration with Inuit communities in Nunavut and Trent University's Nunavut Wildlife Health Project (NWHP), WWF is pioneering a new research project in **Canada** on the health of wildlife populations in relation to contaminant loads in their bodies. This pilot project is operating in the northern communities of Arviat, Coral Harbor and Pangnirtung and integrates conventional scientific methods with Inuit traditional knowledge of what constitutes a healthy or unhealthy animal, to enhance scientists' ability to detect subtle changes in wildlife health status that they might miss if guided by science alone. NWHP also will assist the Inuit in developing policies and risk management options tailored to their own communities' needs. Community consultations contributed significantly to the design of the study and 30 experienced hunters from the three communities are participating in the Inuit traditional knowledge survey through one-on-one interviews. The second part of the project is to investigate the impact of contaminant body burdens on wildlife health. In the fall of 2002, community-training workshops generated a baseline assessment of wildlife health. Currently, organ and tissue samples from Arctic char, ringed seal and **beluga whales** from each of the three communities are being collected to assess contaminant levels and examine the condition of specified tissues in each animal. It will take several years of data collection and analysis to determine if contaminant levels are compromising wildlife health. The project's third component engages hunters in documenting the health condition of their harvests, including polar bears, beluga whales, ringed seals, walrus, caribou and Arctic char.



©WWF/UNEP/TOPHAM

We have also done groundbreaking analysis of the risks to whales posed by chemical contaminants such as DDT, PCBs, dioxins, heavy metals and plastics. Recognizing the far-reaching effects of pollution to whales and other wildlife throughout the world, we continue our global initiative to investigate toxic chemicals and their relationship to biodiversity, seek alternatives to harmful synthetic agents and educate the public and policymakers about the dangers of toxics. The goal is to phase out the production, release and use of bioaccumulative, persistent and endocrine disrupting chemicals by 2020. The major tool for reducing or eliminating these chemicals in the environment has been an intergovernmental global treaty known as the Stockholm Convention that targets 12 of the most insidious of POPs. WWF has been active in promoting the rapid ratification of the treaty and effective implementation of its provisions.

Addressing climate change and its impact on cetaceans

Global warming and other effects of climate change threaten the survival of cetaceans and other wildlife and the wellbeing of people around the world. Our planet is warming faster than at any time in the last 10,000 years, due to increased emissions of carbon dioxide and other gases that blanket the world and trap heat. Warming at the earth's poles could destabilize the ecology of the Arctic and **Antarctic** feeding grounds of many large whales. This would acutely jeopardize the **bowhead**, **narwhal**, and **beluga**, which live in Arctic waters year-round, and the **blue**, **fin**, **sei** and **southern minke whales** which feed on krill in the Antarctic in the summer. Changes in ocean temperature shift the distribution of plankton and fish species, as we see during El Niño years. The more rapid and far-ranging these changes are, the more drastically they may disrupt the feeding patterns of cetaceans that consume them.

WWF's Climate Change Campaign is working in more than 25 countries to raise awareness of the threats and to persuade governments to introduce responsible policies. Our primary goal is to ensure that industrialized nations set in motion a permanent downward trend in their domestic emissions of CO₂ as a first step toward substantial reductions by 2010. WWF is also pushing nations to accelerate the introduction of innovative technologies that use energy more efficiently with less pollution, and to increase the contribution from clean renewable energy sources.

Supporting whale watching

Whale watching has been expanding at an astonishing rate in **Iceland**, with the number of whale watchers growing from only 100 in the whole country in 1991 to 62,250 in 2002, and 25,000 in the northeastern town of Husavik alone. Since 1998, WWF has been providing support to The Whale Center, an interactive museum devoted to whales and the history of whaling in Husavik, which has become Iceland's most popular whale watching town. Attendance at The Whale Center has skyrocketed since its first season, when 1,100 travelers visited. Since then, the museum has welcomed more than 61,000 guests. WWF's support helped make possible the expansion of The Whale Center into a larger space—an event that the museum celebrated with an opening ceremony attended by Iceland's Ministers of Education, Science and Culture, and the President of Parliament, along with the ambassadors from the U.S., the U.K. and Japan. For his dedication to cetacean conservation, the manager of the Whale Center, Mr. Asbjorn Bjorgvinsson, was named one of Time Magazine's Environmental Heroes of 2003.

An estimated 1,200-1,500 **humpback whales** visit the coast of northwestern Ecuador, **Colombia** and Southern Panama each year to reproduce. This represents 5-8% of all Southern Hemisphere humpbacks and is one of the only populations that breeds north of the equator. WWF has been supporting efforts to monitor whale populations and assess the impact of whale watching in Colombia's Bahia Málaga, one of the principal breeding sites. Up to 20,000 tourists visit Málaga from August through mid-October when the humpbacks are present. Whale watching is an important source of income for local people, but tourism must be managed carefully to minimize its impact on whale behavior and habitat quality. We are helping to address the effects of whale watching in Málaga Bay, examine habitat use and behavior of humpbacks in Malaga Bay and identify factors causing contamination of the marine and coastal environment. We are also assessing the potential for establishing a new protected area around Bahia Málaga and have joined other NGOs to hold a yearly festival along the Colombia coast to raise awareness about humpbacks, marine turtles and coastal birds in the Pacific.

WWF has launched a website on **Arctic** whale watching: <http://www.ngo.grida.no/wwfap/whalewatching>. This simple, information-based website is primarily a vehicle to help explain the importance of whale watching within the overall context of whale conservation and includes basic information about where and when one can see whales in the Arctic. It lists the tour operators that offer trips, indicating the ones that support the International Whaling Commission's recommendations for sound whale watching practice.

Bringing whaling under IWC control

Although it has to operate within the partly outdated bounds of the 1946 International Convention for the Regulation of Whaling, the IWC is the only international organization with the authority to regulate for whale conservation worldwide. Without the IWC, there would be no international control on whaling and no ocean sanctuaries where whaling was prohibited. Ever since 1965, WWF has been closely involved in trying to make sure that the IWC operates as much as possible as a whale conservation body. A small team of WWF observers attends the annual meetings of the IWC, consulting with scientists, lobbying government delegates and commenting on the results to the media and the public.

Despite the global moratorium on commercial whaling put in place by the IWC in 1986, whales are still being caught commercially. More than 23,500 whales of five different species have been killed by commercial whalers during the moratorium, and the rate is increasing. Japan continues to catch hundreds of whales annually (many in the Southern Ocean, designated by the member states as an IWC whale sanctuary), exploiting a loophole for 'scientific research', and sells the meat commercially in Japan. Norway conducts an openly commercial hunt under a legal "objection" to the moratorium. Japan and Norway's actions undermine the spirit and intent of the moratorium, and proceed without IWC approval and in the face of repeated censure by the Commission. No sound, precautionary, or enforceable IWC management scheme currently exists to ensure tight controls on whaling, although a Revised Management Scheme (RMS) that could help to do so has been under discussion in the IWC for several years.

As well as working on ways to regulate commercial whaling, the IWC is turning its attention increasingly to other aspects of whale conservation, and WWF is active in promoting this. Among the issues being addressed by the IWC and its Scientific Committee are conservation measures for small cetaceans (dolphins, porpoises and small whales), the growth of whale-watching and environmental threats to whales such as marine pollution and climate change.



©WWF

WWF has active cetacean conservation projects in the following countries and regions:

Antarctica

Argentina

Australia

the Baltic Sea

Canada

Colombia

Fiji

Germany

Ghana

Hong Kong, China

Iceland

India

Indonesia

Mexico

New Zealand

the North Sea

Pakistan

Papua New Guinea

the Philippines

Russia

Samoa

Senegal

South Africa

Togo