

A close-up photograph of a whale's tail fluke as it breaks the surface of the water. The fluke is dark and sleek, with a lighter, textured edge. Water is splashing around the base of the tail. The background is a clear, vibrant blue sky.

*Whales in the  
South Pacific*





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South Pacific*



## Foreword

Whales have long formed part of the stories and traditions of Pacific island peoples. The movements and migrations of whales have many parallels with the voyaging of people.

During the last century, however, the great whales of the South Pacific were hunted to the brink of extinction. Today their numbers are recovering only slowly, if at all, and for some species the chances of ever returning to their former abundance are slight.

But this century has seen a strengthening of regional and national initiatives to conserve whales. Many Pacific island countries have protected whales within their waters by creating whale sanctuaries, now covering over eleven million square kilometres of the South Pacific Ocean.

Pacific island countries have further demonstrated their commitment to whale conservation by joining a variety of international agreements promoting the conservation of whales, including the recently-adopted Memorandum of Understanding for the Conservation of Cetaceans and their Habitats in the Pacific Islands Region, developed under the United Nations Convention on Migratory Species.

This booklet reviews the history of whales and whaling in the Pacific islands region and the current status of the great whale populations, including the humpback, which is now at the centre of a growing whale-watching industry in some South Pacific countries.

Also considered are continuing international efforts to protect whales throughout their annual migration paths, where some species remain under threat of hunting.

As Minister of Conservation for New Zealand, I am determined to ensure our country plays its part in regional and international efforts to conserve these wonderful animals. In this, I look forward to working with my Pacific colleagues.

Together, the nations of the Pacific islands can make a critical difference to the future prospects for whales, so that they will remain a part of the stories we all share.



**Hon Chris Carter**

*Minister of Conservation, New Zealand*





# People and Whales in the Pacific islands

Whales have always had a special significance in the Pacific. Stories featuring whales as guardians or even as relatives can be found in a variety of cultures throughout the Pacific.

Today, whales in some Pacific island nations, such as Tonga and Guam, are providing significant economic benefits through whale-watching tourism operations.



# Whale-watching – a major economic benefit of conservation

Whale-watching as an industry in the Pacific is growing much faster than whale numbers are recovering and is proving to be by far the most lucrative use of whales, with the added attraction of doing them no harm, provided that the operations are well managed.

The Melbourne-based consultancy, Economist at Large (Ecolarge), reported that in 2005, tourists and Pacific islanders made more than 110,700 visits to watch whales and dolphins in the Pacific islands region - a ten-fold increase on the previous figure of 10,300 in 1998<sup>1</sup>. This translates to average growth of 45% growth per year since 1998.

The report showed that money spent directly on whale and dolphin watching in the Pacific has increased from US\$500,000 in 1998 to more than US\$7.5 million in 2005. Tourists who went whale-watching in the region spent more than US\$21 million in 2005 (including indirect expenditure), up from US\$1.2 million in 1998<sup>2</sup>.

Currently the majority of whale and dolphin-watching tourism is in Guam and Tonga, but the activity is growing in the Cook Islands, the Solomon Islands, New Caledonia, Papua New Guinea, and Niue.

**1998: 10,300 Visits**



In 1998, whale and dolphin-watching businesses were reported in nine countries in the Pacific region. By 2005, 14 out of the 22 countries in the Pacific region that were studied in the Ecolarge report were actively involved in whale-watching tourism<sup>3</sup>.

Whale and dolphin-watching in the Pacific is dominated by overseas tourism, and is forecast by the South Pacific Tourism Organisation to continue its growth, not least because most of the great whale species return every year to the same Pacific wintering grounds. This growth will depend, however, on healthy populations of whales.

In 1999, an academic study showed that in Vava'u, Tonga, whale-watching is the largest single income earner during the winter months<sup>4</sup>. A single humpback whale returning to Tonga every year could generate US\$1 million in whale-watching revenue over the course of its lifetime.

### 2005: 110,700 Visits










# Whale Watch case study: Kaikoura, New Zealand

Kaikoura is today a small coastal community thriving because of the entrepreneurship, dedication and leadership of the indigenous people of the area who have put to good use the rich natural resources at their doorstep. The local Maori of Kaikoura consider themselves to be the modern-day descendants of Paikea, the legendary “Whale Rider” who called on the assistance of Tohora the great whale to carry him safely to the shores of Aotearoa/New Zealand.

Today, like their ancestor before them, the Kaikoura people have turned once more to the whales for assistance and they have been carried to prosperity, this time not through riding whales but by taking people to see these magnificent animals in their natural environment.

Whale Watch Kaikoura Ltd – which is wholly-owned by Maori - started from humble beginnings in 1987, with a single 6m vessel, carrying a modest 3000 passengers in its first year of operation. Today this multi-million dollar business provides to more than 80,000 visitors a year a whale-watching encounter of a lifetime, allowing visitors to get close to diving sperm whales. Marine mammal-watching has transformed Kaikoura, and today this town’s main street bustles with hotels and backpackers, restaurants, cafés and souvenir shops. Kaikoura has been rejuvenated, with around one million visitors each year visiting this coastal community.

Whale Watch Kaikoura Ltd is the largest employer in the town, with 70 staff during the peak tourist season and 50 staff year round. At the heart of this community are its natural resources – the whales, the coast and steep mountains rising out of the sea. The rapid growth in tourist numbers, as well as Kaikoura’s prosperity, shows that a well-managed natural resource can benefit the community without doing any harm to the whales.



A single humpback whale returning to Tonga every year could generate US\$1 million in revenue, over the course of its lifetime



# Life histories of whales

## Mammalian characteristics

Whales, dolphins and porpoises (collectively known as cetaceans) like humans, are mammals. They are large-brained, warm-blooded, breathe air and suckle their young with milk. The bond between mother and calf is particularly strong in cetaceans. Calves may remain with their mothers for up to ten years, depending on the species, and travel thousands of kilometres across the ocean with her.

Almost half of the 80 species of cetaceans (whales, dolphins and porpoises), can be found in the Pacific Ocean<sup>5</sup>.

Whales are divided into two main types: toothed whales, and those without teeth, known as baleen whales. Instead of teeth, baleen whales have a fringe of stiff hair-like material, or baleen, hanging from their upper jaw, which they use to filter small animals, such as shrimps, out of seawater. Baleen whales are large and generally solitary animals, although they gather together to feed and breed.

The majority of whale species are toothed whales. These whales often spend their entire lives in social groups, communicating with each other using underwater vocalisation or sound.



## Life span

All cetaceans (whales and dolphins) are long lived in the wild. The smaller cetaceans, such as dolphins, may live for a few decades and most of the great whales, such as humpbacks and blue whales live for 50 years or more, with a few species, such as the bowhead whale of the Arctic Ocean, living for more than 100 years. Despite their longevity, breeding rates and population growth rates are slow because whales give birth to only one calf at a time and they may breed only once every several years.





Whales return to the Pacific islands to breed over the winter season

Whales return to the Antarctic Ocean to feed over the summer season

## Migrations of great whales

Most species of large whales in the Southern Hemisphere migrate from the Pacific islands to the Antarctic Ocean each summer to feed and then return each winter to the Pacific islands to breed<sup>6</sup>. The first research to demonstrate this yearly cycle was conducted during the 1950s, when whales were marked by a metal tag (known as a Discovery tag) fired into their body from a modified shotgun and retrieved later when the whale was harpooned by commercial whalers. Discovery tags fired into humpback whales in Fiji and New Zealand were later retrieved from whaling boats in the Ross Sea.

Today the marking and recapturing is done with photographs because many whales can be individually identified by the markings on their bodies. For example, all humpback whales have different markings on the underside of their tails, and southern right whales have different patterns of barnacles (known as 'callosities') on their heads.

In the age of digital photography, scientists can learn a lot about the movements and migrations of many whales by comparing the photographs of individual animals. The South Pacific Whale Research Consortium, for example, holds a catalogue of more than one thousand tail flukes of humpback whales photographed in Pacific island locations ranging from French Polynesia to New Caledonia. Because many of these animals return regularly to the same Pacific islands for winter, a long-term photographic study allows the size of the population to be estimated through a mark-recapture analysis. This has provided estimates of a current population of 300-400 humpback whales in New Caledonia and similar studies suggest a population of perhaps 1,000 to 2,000 animals in Tonga. For both these sites, the populations are still far below the levels prior to commercial whaling last century.

Photo comparisons also reveal occasional movements of individual whales between different Pacific islands, both between and within breeding seasons, providing further information on their life histories.



What do whales eat?  
The question of whales and fish



Most baleen whales in  
the Southern Hemisphere  
do not eat fish.



Minke, fin and humpback whales (the species included in scientific whaling programmes in the Antarctic)  
**DO NOT EAT FISH.**  
Instead they eat small shrimp-like animals known as krill.



Most baleen whales do not eat at all when they are in tropical waters



Nauru

Kiribati

Tuvalu

Tokelau

Cook Islands

Solomon Islands

Wallis and Futuna

Samoa

French Polynesia

Vanuatu

Fiji

Tonga

Niue

American Samoa

New Caledonia


TROPICAL WATERS

New Zealand

There are no reports of baleen whales in the South Pacific eating tuma.

Bryde's whale are the only baleen whales that feed in the tropics, eating mainly small crustaceans (not fish)<sup>7</sup>

Because most of the large baleen whales feed on Antarctic krill, and this is not eaten by tuna, these whales have no impact on the food sources, or prey species, of commercial fish in the Pacific islands region.



Humpback Whale

Bryde's Whale

Large toothed whales, such as sperm whales, do feed in tropical waters, but they eat mainly deepwater squid which are not commercially harvested—they do not eat commercial fin fish species.

Toothed whales have been documented as taking fish from longlines, but damage to hooked fish by whales accounts for less than 1% of the number of fish hooked.<sup>8</sup>

< 1%

Minke Whale

Fin Whale

Sperm Whale



**Blue whales are bigger than  
the largest of the dinosaurs.**







Perhaps the only reason that Southern Hemisphere whales have been able to reach such huge sizes is that the cold waters of the Antarctic Ocean are highly productive, containing enormous swarms of krill in the spring and summer months.

The Antarctic feeding season typically lasts 80-100 days in spring and summer, during which baleen whales scoop up huge mouthfuls of krill. Humpback whales consume up to two tonnes of these tiny creatures each day, while a blue whale may eat up to five tonnes a day.

The krill eaten by whales in the summer is converted into a huge reserve of blubber, which sustains the whales for the next ten months. During this time they will swim many thousands of kilometres to and from their tropical breeding grounds. Over its lifetime, a humpback whale that breeds in the Pacific islands region will swim a distance equivalent to the moon and back again.

The sperm whale is the largest of the toothed whales. Although female and juvenile sperm whales spend most of their lives in warm tropical waters, they mainly feed on medium to large squid that are found at great depths and are not commercially harvested.

There are no reports of baleen whales in the South Pacific eating tuna. Furthermore, since tuna and other commercial South Pacific fish species don't eat Antarctic krill, there is also no competition for their food sources, or prey species, between baleen whales and tuna.

While there is no evidence of any impact on commercial fisheries in the South Pacific by baleen whales, some smaller toothed whales are known to sometimes take hooked fish from the longlines of tuna fishers, a behaviour described as 'depredation.'

The Secretariat for the Pacific Community (SPC) has estimated that the impact of depredation by whales on hooked fish in the region is relatively minor (0.8%), and is significantly less than the impact of depredation by sharks<sup>9</sup>.

In November 2002, in association with the New England Aquarium, the Secretariat of the Pacific Regional Environment Programme (SPREP) hosted the first international workshop specifically concerned with the issue of depredation. Depredation can also cause problems for whales, which may become hooked or entangled in the longline gear.

Participants agreed that a number of steps could be taken to improve our understanding of the interactions between whales and longline fisheries, including:

- Convening a predator identification workshop to establish clearly the differences between hooked fish eaten by toothed whales and those taken by other predators such as sharks, other fish or squid;
- Implementing a standard index of depredation for reporting such events;
- Placing marine mammal biologists at sea on longline vessels; and
- Providing fishers with identification sheets for whales and sharks.

# So who is eating the fish?

The major cause of the global decline in fisheries has been over-fishing. Healthy oceans will support healthy populations of both fish and whales, as they have done for millions of years before large-scale industrial fishing started in the 1950s.

Studies have shown that the main predators of commercial fish are other fish<sup>10</sup> (often larger individuals of the same species). In contrast, marine mammals and seabirds are relatively insignificant fish eaters. There is no evidence that taking marine mammals out of the marine food web would result in any increase in fish catches.





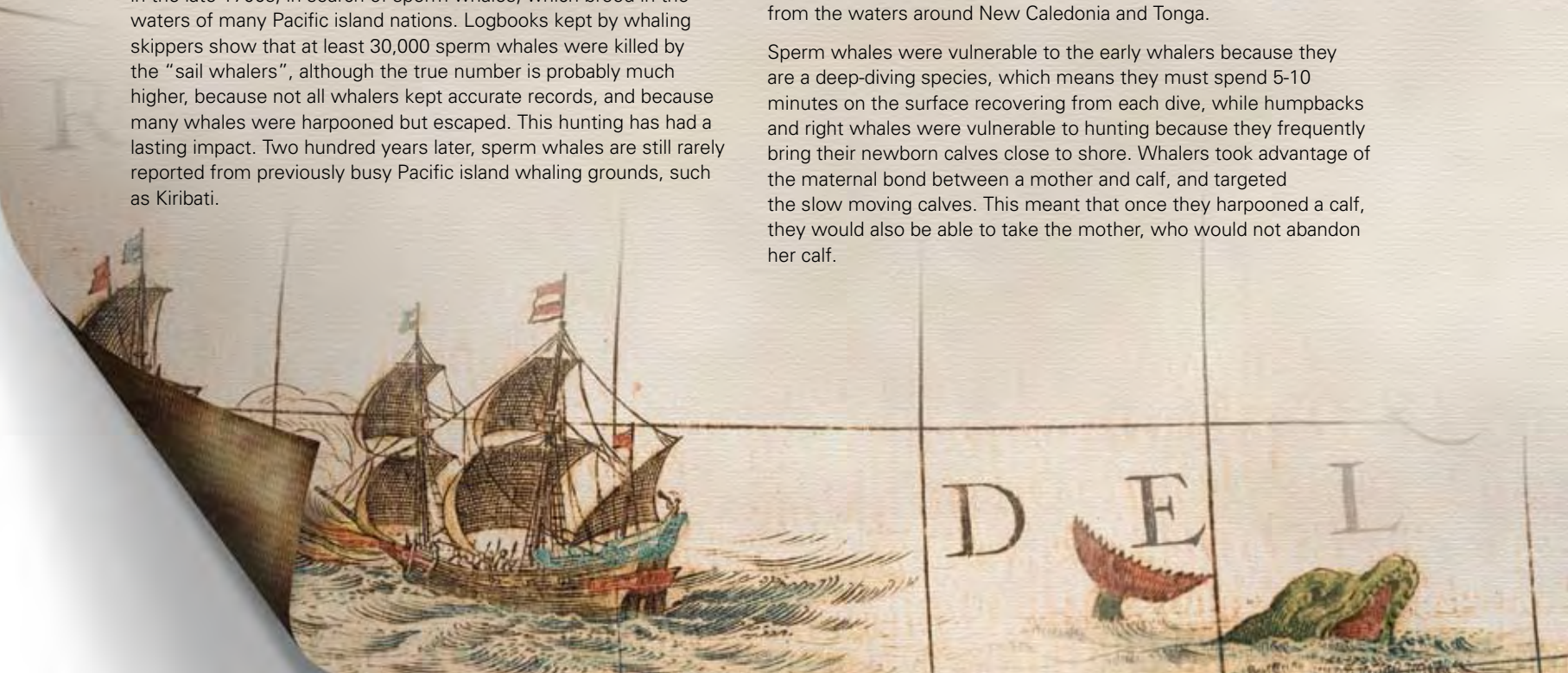
# Historical whaling in the Pacific islands region

## Early whaling

American and European whalers reached the Pacific islands region in the late 1700s, in search of sperm whales, which breed in the waters of many Pacific island nations. Logbooks kept by whaling skippers show that at least 30,000 sperm whales were killed by the "sail whalers", although the true number is probably much higher, because not all whalers kept accurate records, and because many whales were harpooned but escaped. This hunting has had a lasting impact. Two hundred years later, sperm whales are still rarely reported from previously busy Pacific island whaling grounds, such as Kiribati.

Although sperm whales were the prime target for the early whalers, several thousand baleen whales, mainly humpbacks, were also taken from the waters around New Caledonia and Tonga.

Sperm whales were vulnerable to the early whalers because they are a deep-diving species, which means they must spend 5-10 minutes on the surface recovering from each dive, while humpbacks and right whales were vulnerable to hunting because they frequently bring their newborn calves close to shore. Whalers took advantage of the maternal bond between a mother and calf, and targeted the slow moving calves. This meant that once they harpooned a calf, they would also be able to take the mother, who would not abandon her calf.





## Whaling from 1900-2000

In the late 1800s, the invention of the explosive harpoon gun and the diesel engine brought commercial whaling in the Southern Hemisphere to a new level of exploitation. The great whales could now be hunted from shore stations situated along the coast. The whaling stations were strategically placed along the migration routes to and from tropical breeding grounds in the winter and Antarctic feeding grounds in the summer.

The development in the early 1900s of large factory ships that could process whales at sea opened the remote and stormy feeding grounds in the high latitudes of the Southern Ocean, near Antarctica, to large fleets from the Northern Hemisphere. Despite a number of attempts to regulate and manage commercial whaling, over two million great whales were killed, the great majority of them before 1980<sup>11</sup>. So intense was the hunting that most species were reduced to less than 10% of their initial abundance and some to less than 1%. Although there are few reliable abundance estimates for whale populations in the Southern Hemisphere, blue, fin, and sei whales in the Southern Ocean are probably still at less than 10% of their original numbers, while humpback whales are probably less than 20% of initial abundance, and remain critically endangered in some Pacific island nations<sup>12</sup>.

Most of the whaling in the 20th century was conducted under the management of the International Whaling Commission (IWC) and its predecessors, which established the Antarctic waters to the south of the Pacific islands as a sanctuary between 1937 and 1954. Only after whale stocks were almost exhausted in the other areas of the Southern Ocean were the feeding grounds of whales from the Pacific Ocean opened to commercial whaling.

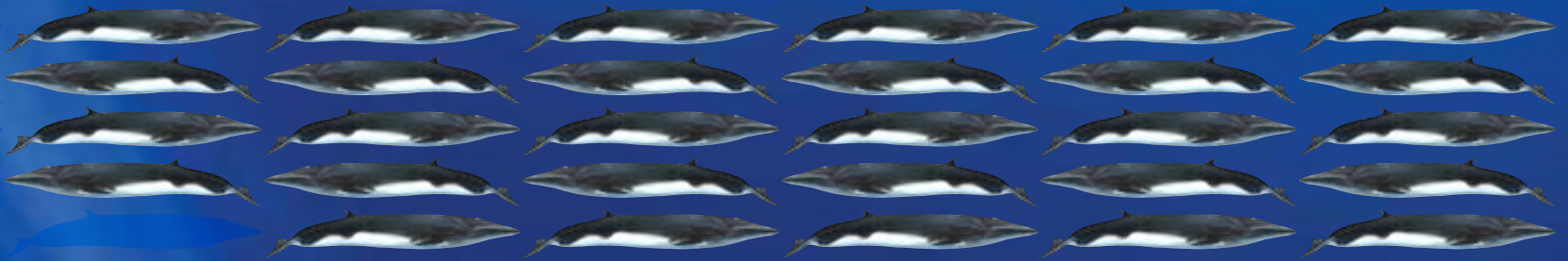
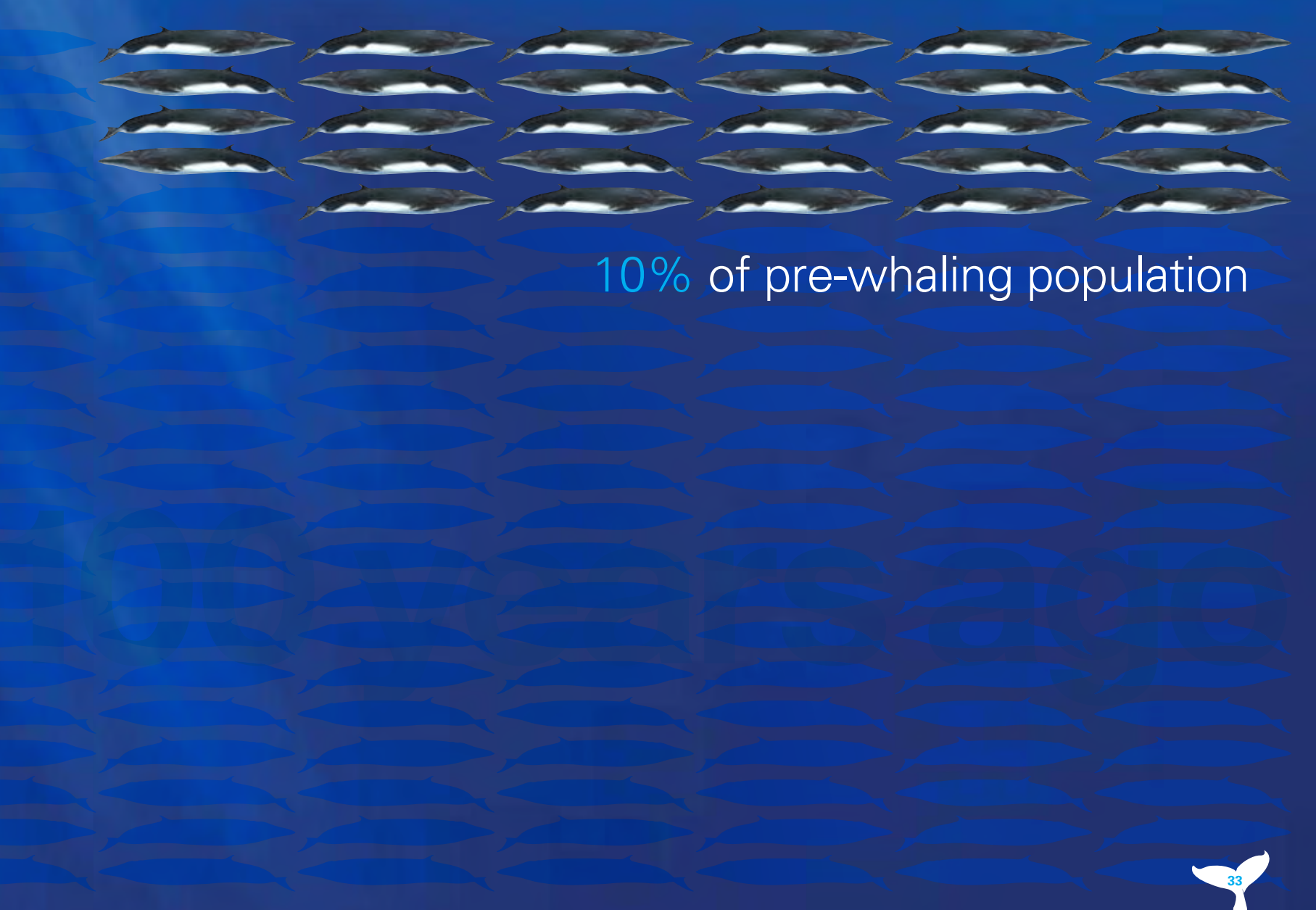
As a consequence, the great whales of the Pacific islands were the last to be exploited by commercial whalers, and have had the least time to recover.

Compounding the situation in the South Pacific, in the late 1950s and 1960s, the former Soviet Union conducted a massive illegal whaling operation, taking more than 80,000 whales, including 45,000 humpbacks<sup>13</sup>. Because the IWC was still issuing quotas for fin whales and minke whales, the Soviet fleet deliberately over-reported catches of these species to account for some of the whale products derived from the illegal hunting of humpbacks and other species.

Because whales are slow breeders, recovery of the whale populations in the South Pacific will probably take more than a century in even the best-case scenario. The resumption of hunting, or losses from other human-induced causes such as ship strikes and entanglement in fishing gear, would cause further delay. The impacts of climate change on the carrying capacity of the oceans may also prevent whale populations recovering fully.



PROPORTION OF **FIN WHALES** PRESENT IN THE SOUTHERN HEMISPHERE TODAY,



10% of pre-whaling population



# Status and trends of great whales in the Pacific islands region

## Impacts of commercial and illegal whaling on current humpback numbers

The impact of the illegal hunt on Pacific island humpback whales was undoubtedly profound. A single factory fleet in the Ross Sea during the four-month summer of 1960 took 12,900 humpbacks – approximately four times the remaining population estimated to be found in the entire region today.

When whale populations are reduced to very low levels, recovery (if it is possible) generally takes a very long time. Despite four decades of protection, the number of humpbacks wintering around many Pacific islands remains low. Some known breeding populations, including those around Fiji and Samoa, and those that migrate past New Zealand, virtually disappeared and have yet to show signs of significant recovery<sup>14 15</sup>.

In Fiji, for example, between 1956 and 1958, New Zealand whale scientist, Dr Bill Dawbin, sighted up to 120 humpbacks per day from his observation point. A single humpback sighting from the same place today is still an extremely rare event<sup>16</sup>.

## Highly variable recovery rates for humpbacks

Within the Pacific islands region, researchers have observed highly variable recovery rates for humpback whales. In Tonga, the population is now estimated to number 1000-2000, whereas for Fiji and Samoa, it is probably less than one hundred.

In contrast, on both the eastern and western coasts of Australia, humpback numbers are steadily increasing<sup>17</sup>. However, because humpback whales tend to return to the same overwintering grounds each year, a Pacific island humpback lost in Antarctic waters would not necessarily be replaced on its tropical breeding ground by an Australian whale<sup>18</sup>.



PROPORTION OF BLUE WHALES PRESENT IN THE SOUTHERN HEMISPHERE TODAY,

2% of pre-whaling population





Humpback whale: recovery variable, but unlikely to be more than 20-25% of pre-whaling population. Probably fewer than 4,000 humpbacks in the whole of Oceania (excluding eastern Australia)

Minke whale: unknown, probably abundant, although sighting cruises in the Antarctic indicate significant downwards trend over the past decade

Bryde's whale: unknown population size or status

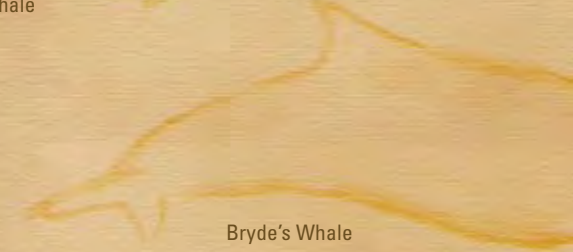
Sperm whale: depleted (from early whaling) and probably recovering, but at unknown rate



Humpback Whale



Minke Whale



Bryde's Whale



Sperm Whale



## Information on other great whale species

In the absence of any dedicated offshore surveys in Pacific island waters the estimates of Southern Hemisphere populations of other great whale species are based on sighting cruises conducted in the Southern Ocean. The numbers of sightings for many depleted species are too low to be confident about the exact numbers, and the International Whaling Commission (IWC) website ([www.iwcoffice.org](http://www.iwcoffice.org)) provides estimates only for blue and humpback whales in the Southern Hemisphere. We can be reasonably confident, however, about the proportion of whales present in the Southern Hemisphere today, compared to 100 years ago.

## Scientific whaling and its potential impact on Pacific island whales

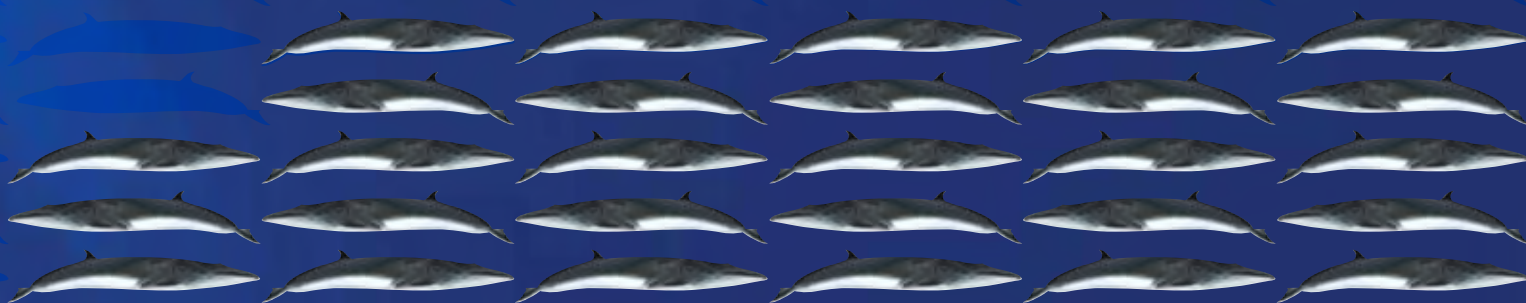
The International Whaling Commission (IWC) voted for a global ban on commercial whaling, which took effect in 1986. In 1994, it established the Southern Ocean Whale Sanctuary. Both measures should have resulted in more protection for Pacific island whales.

However, Article 8 of the International Convention for the Regulation of Whaling allows member countries to issue to themselves Special Permits, allowing unlimited numbers of whales to be killed for the purposes of scientific research.

Japan has been conducting scientific whaling in the Southern Ocean (the JARPA programme) since 1987. Over 6,800 Antarctic minke whales were killed for research between 1987 and 2005<sup>19</sup>. The area of operations and existing knowledge of minke whale migrations suggest that significant numbers of minke whales that had previously overwintered in the South Pacific were killed during this programme<sup>20</sup>.

PROPORTION OF SEI WHALES PRESENT IN THE SOUTHERN HEMISPHERE TODAY,

10% of pre-whaling population







## Whale Protection in the South Pacific

Whales are now protected under domestic legislation in more than 11 million square kilometres of Pacific islands' waters.

Pitcairn Islands



Australian Government  
Department of the Environment  
and Water Resources

## The impact of JARPA II on the whales of the South Pacific

The research programme has now been expanded, with an increase in the numbers and species of whales to be investigated. Under JARPA II, Japan has:

- Doubled the annual take of Antarctic minke whales to 850 per annum;
- Proposed the take ten fin whales per annum for the first two years of a “feasibility study”;
- Proposed the take of 50 humpback and 50 fin whales annually from 2007 onwards;
- Expanded the research area from which whales will be taken to include eastern Area V (south of New Zealand, Fiji and Tonga) and western Area VI (south of Cook Islands, Samoa, Niue).

The research area for JARPA II will include the feeding grounds of the great whales that spend their winters in tropical latitudes of the South Pacific. Humpback whales from very small and threatened populations will be exposed to the possibility of being killed on their Antarctic feeding grounds.

Thus, the annual take of 50 humpbacks for scientific research could set back by decades the recovery of endangered and genetically isolated populations of humpback whales in the South Pacific. The impacts of the proposed takes of fin and minke whales are unknown. While minkes are probably relatively abundant, fin whales in the South Pacific are classified as Endangered on the International Union for the Conservation of Nature (IUCN) Red List of Threatened Species (see [www.iucn.org](http://www.iucn.org)).

## South Pacific Whale Sanctuary

Whales are now protected under domestic legislation in more than 11 million square kilometres of Pacific islands’ waters.

Eight Pacific Island countries and territories (American Samoa, Cook Islands, Fiji, French Polynesia, New Caledonia, Niue, Samoa and Vanuatu) have shown their commitment to protecting whales by passing laws to declare their Exclusive Economic Zones as whale sanctuaries.

In recognition of the severely-depleted status of whales in the Pacific islands region, and the establishment by the IWC of whale sanctuaries in the Indian Ocean (at its 28th Annual Meeting in 1978) and the Southern Ocean (at the 44th Annual Meeting in 1994), New Zealand and Australia proposed to the IWC in 2001 the establishment of a South Pacific Whale Sanctuary. Under IWC rules, this required a three-quarters majority. While the proposal gained close to a two-thirds majority in 2002, it has never reached the 75% threshold.

The support of Pacific island nations for a South Pacific Whale Sanctuary, however, was shown in the Apia Statement, issued at the conclusion of a workshop held in Samoa in April 2001, at which the 15<sup>21</sup> delegations in attendance reaffirmed their commitment to a proposed South Pacific Whale Sanctuary.

Additionally, the Pacific Islands Leaders Forum has supported the concept of a South Pacific Whale Sanctuary at both its 29th (1998) and 31st (2000) Annual Meetings. The Guam Environment Ministers Forum Statement issued at the conclusion of the Environment Ministers Forum in 2000 also supported the South Pacific Whale Sanctuary proposal.

## CMS Memorandum of Understanding and SPREP Whale and Dolphin Action Plan

The Convention on the Conservation of Migratory Species of Wild Animals (CMS) is an international treaty, concluded under the United Nations Environment Programme in 1978, which aims to conserve terrestrial, marine and avian migratory species throughout their range<sup>22</sup>. CMS had 101 members at 1 March 2007.

The Secretariat for South Pacific Regional Environment Programme (SPREP) and the CMS Secretariat worked with Pacific island countries and territories on a Memorandum of Understanding (MoU) for the Conservation of Cetaceans and their Habitats in the Pacific islands Region. During that time Samoa and the Cook Islands joined Australia and New Zealand as CMS members in the region.

Nine countries - Samoa, Cook Islands, Fiji, Federated States of Micronesia, France, Niue, Vanuatu, Australia and New Zealand – signed this agreement when it opened for signature at the SPREP Ministerial meeting in September 2006. Papua New Guinea and the Solomon Islands signed the MoU in March 2007. Four signatures were required to bring the MoU into effect.

The MoU is potentially a very positive development for whale and dolphin conservation in the region, because of the commitment of at least eleven countries to protect these animals and learn more about whale conservation.

The Memorandum of Understanding for the Conservation of Cetaceans in the Pacific islands region expresses the region's desire to work together to conserve whales. It can guide future conservation work in the region with an action plan based on SPREP's Whale and Dolphin Action Plan<sup>23</sup>.

## Summary:

The Pacific Ocean has long been a home for whales and dolphins. Stories and legends of whales echo across the countries of the South Pacific. Whales are revered in many cultures as ancestors. Despite this, whaling countries of the 19th and 20th centuries laid waste to the region's precious whales.

While some countries, including New Zealand, have a long whaling history, the times have changed. Now, countries of this region are realising that there is economic benefit in having increasing whale populations on their doorstep. The popularity of whale-watching is growing along with its economic significance.

The importance of whales has been recognised by many Pacific island countries who have created whale sanctuaries covering millions of square kilometres of the South Pacific Ocean. Pacific island nations also play an important role in international agreements and conventions committed to the conservation of whales and dolphins.

However, whales don't adhere to national boundaries, and the great whales travel huge distances on annual journeys to Antarctic waters to feed. Scientific whaling in this area can impact on the whales that journey north every autumn to breed in tropical Pacific waters. We owe it to future generations to make sure they survive, and continue to breed so that their stories and their songs can echo across the Pacific for many centuries to come.

A dramatic photograph of a whale's tail breaching the ocean's surface. The tail is dark and sleek, with a prominent, curved fluke. Water is splashing around the base of the tail, creating a misty spray. The background is a vibrant sunset sky with layers of orange, red, and yellow clouds. The ocean surface is dark with small waves.

Annex 1

## Memorandum of understanding for the conservation of cetaceans and their habitats in the Pacific islands region

### The Signatory States and Territories,

Aware of international responsibilities to conserve cetacean populations of the Pacific islands region. In particular, pursuant to the Convention on Biological Diversity (CBD) for which the Convention on Migratory Species of Wild Animals (CMS), is the CBD lead partner in the global conservation of migratory species over their entire range;

Recognising the importance of cetacean conservation at the global level as reflected, *inter alia*, in the United Nations Convention on the Law of the Sea, the International Convention for the Regulation of Whaling, and the Convention on International Trade in Endangered Species;

Further recognising policies and strategies important to the Pacific islands region, in particular the Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States, the CBD island Biodiversity Programme of Work, the Pacific Islands Regional Ocean Policy, and the Action Strategy for Nature Conservation in the Pacific Islands Region;

Committed to the key regional role of the Pacific Regional Environment Programme (SPREP) and the important work done at the regional level for cetaceans and, in particular, the SPREP Whale and Dolphin Action Plan (2003-2007);

Further recognising that cetaceans, as an integral part of the marine environment which connect ecosystems and cultures, should be conserved for the benefit of present and future generations;

Conscious that many cetaceans migrate and disperse over vast distances making their survival dependent on their conservation over a wide area and in a range of marine and coastal habitats;

Emphasising that knowledge of the biology, ecology, migrations, population abundance, conservation status of many cetaceans is deficient and that international cooperation will facilitate research and monitoring of these species in order to develop and implement conservation measures;

Concerned that the conservation status of cetacean populations that frequent the waters of the Pacific islands region, particularly those that have been severely depleted, can be affected by factors such as directed take and by-catch, degradation

and disturbance of their habitats, chemical and noise pollution, decline in food availability, use and abandonment of fishing gear, ship-strikes, climate change, and ozone depletion;

Aware that many maritime activities in the Pacific islands region, such as fishing and tourism, are socially and economically important and that they should be conducted in an ecologically sustainable manner;

Acknowledging the shared responsibility of States and Territories, intergovernmental organisations and the non-governmental sector to achieve and maintain a favourable conservation status for cetaceans and their habitats in the Pacific islands region;

Emphasising that the particular vulnerability of cetacean populations warrants the implementation of conservation measures where they do not already exist;

Conscious that a number of cetacean species are listed on Appendices I and II of CMS and that some of these have been designated for concerted and cooperative action by the CMS Conference of the Parties, and that urgent action should be taken to achieve and maintain a favourable conservation status for these species and their habitats;

Noting that CMS calls for international cooperative action to conserve migratory species, and that CMS Article IV encourages CMS Contracting Parties to conclude Agreements, including legally non-binding agreements, in respect of any population of migratory species;

Recognising that the scientific bodies of the existing cetacean-based regional Agreements negotiated under CMS auspices, and the CMS Scientific Council, have scientific and technical expertise that can be shared with the Pacific islands region to support the implementation of this Memorandum of Understanding;

Confirming that the States and Territories in the Pacific islands region have the primary responsibility to implement this Memorandum of Understanding;

DECIDE to work closely together in the Pacific islands region, and to foster cooperation, build capacity and ensure coordinated region-wide actions to achieve and maintain a favourable conservation status for all cetaceans and their habitats occurring in the region, and to safeguard the associated cultural values for Pacific islands peoples. To these ends, in the spirit of mutual understanding and cooperation, the signatory States and Territories will individually or collectively:

1. Take steps to conserve all cetaceans and fully protect species listed in CMS Appendix I that occur in the region.
2. Consider, as appropriate, ratifying or acceding to those biodiversity-related international instruments that complement the intent of this Memorandum of Understanding so as to enhance the legal protection of cetaceans in the Pacific islands region, in particular CMS.
3. Review, enact or update, as appropriate, legislation to conserve cetaceans.
4. Implement, subject to availability of necessary resources, the provisions of the Action Plan attached as Annex 2 to this Memorandum of Understanding as a basis to conserve all populations of cetaceans in the Pacific islands region. The Action Plan will address:
  - a. Threat reduction;
  - b. Habitat protection, including migratory corridors;
  - c. Research and monitoring;
  - d. Education and public awareness;
  - e. Information exchange;
  - f. Capacity building;
  - g. Responses to strandings and entanglements;
  - h. Sustainable and responsible cetacean-based tourism; and
  - i. International cooperation.
5. Facilitate the rapid exchange of scientific, technical and legal information necessary to coordinate conservation measures and to cooperate with recognised experts and cooperating organisations so as to facilitate the work conducted in relation to the Action Plan.
6. Assess the implementation of this Memorandum of Understanding, including the Action Plan, at regular meetings to be attended by representatives of each of the signatory States and Territories concerned, and persons or organisations technically qualified in cetacean conservation.
7. Designate a competent authority for each signatory to serve as a focal point for communication between the signatories and for activities under this Memorandum of Understanding, and communicate the complete contact details of this authority (and any changes thereto) to the CMS Secretariat.
8. Provide to the CMS Secretariat a regular report on their implementation of this Memorandum of Understanding, the periodicity of which will be determined at the first meeting of the signatories. The Secretariat will transmit to each of the States, Territories and the collaborating organisations all of the reports received, together with an overview report that it will compile on the basis of the information at its disposal.

## Final Provisions

9. This Memorandum of Understanding is a legally non-binding agreement within the meaning of CMS Article IV, paragraph 4.
10. The Annexes to this Memorandum of Understanding form an integral part thereof.
11. Each signatory State and Territory, as appropriate, will implement the Memorandum of Understanding in the Pacific islands region with respect to:
  - a. its nationals and vessels; and
  - b. marine areas under its jurisdiction.
12. This Memorandum of Understanding will take effect when a minimum of four States and Territories from the Pacific islands region have signed it. It will remain open for signature indefinitely, and will become effective for each subsequent signatory on the date of signature. The Memorandum of Understanding will remain in effect indefinitely subject to the right of any signatory to terminate its participation by providing one year's written notice to all other signatories.
13. This Memorandum of Understanding, including its Annexes, may be amended by a consensus of all signatory States and Territories of the Pacific islands region.
14. Upon its entry into effect, the Memorandum of Understanding will be open to signature by States and Territories outside the Pacific islands region, subject to the confirmation or approval of all signatory States and Territories of the Pacific islands region.
15. Nothing in this Memorandum of Understanding will preclude signatories from implementing stronger measures than those specified in the Action Plan, in accordance with international law.
16. The original texts of the Memorandum of Understanding in the English and French languages will be deposited with the CMS Secretariat, which will act as the depositary. In the event of any discrepancies, the English version will be considered definitive.
17. The CMS Secretariat will provide secretariat functions to this Memorandum of Understanding. It may use the service of any reliable organisation to support the coordination of the Memorandum of Understanding. An organization to coordinate the implementation of the Memorandum of Understanding will be agreed by consensus of the signatories at their first meeting after consideration of all offers received. The signatories may also consider at their meetings suitable organizations to provide technical advice to support the implementation of the Memorandum of Understanding.



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