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**Historical whaling in the Philippines:
origins of ‘indigenous subsistence whaling’,
mapping whaling grounds and
comparison with current known distribution:
a HMAP Asia Project Paper**

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ABSTRACT

Little is known about the history of whaling in the Philippines. This study aims to document the nature and extent of whaling in the Philippines from the seventeenth century to recent times, identify past whaling grounds and compare these with current distributions of the species of whales hunted. The comparison illustrates changes in the historical abundance and distribution of these species, enhancing understanding of what brought about these changes and providing a basis for further investigations into the ecological and social impacts of changing abundance and distribution. Field studies were conducted at known former whaling locations namely, Lila, Bohol; Sagay, Camiguin; and Salay, Misamis Oriental, as well as locations within the Sulu-Sulawesi Seascape where whaling was suspected to formerly occur, between June 2005 and February 2007. Key informant interviews were conducted in all sites. Historical records, published works, popular accounts, town records and news articles were also examined. Given the limited available data examined, the practice of whaling in the country is only traced back to the seventeenth century. Filipino whalers mainly hunted Bryde's whales. Whalers of Lila and Pamilacan in Bohol used a large 'gaff' hook while those in Sagay, Camiguin and Salay, Misamis Oriental used a harpoon similar to the toggle harpoon used by American whalers. All whalers used the same method of thrusting their hooks or harpoons by jumping onto a whale's back, a practise that is likely to have originated in Lila in the late 1800s and to have ended in 1986. Pamilacan and Sagay whale fisheries were derived from Lila and ceased at both localities by about 1997. American and British sperm-whalers frequented what were referred to as the 'Sooloo', 'Mindoro' and the 'Celebes' seas whaling grounds. British whaling in Philippine waters probably started in 1820 and ended in 1840 and American whaling probably in 1825 and 1880, with whaling by both nations most likely occurring alongside local or 'indigenous' whaling in Bohol. The Philippines engaged in a brief period of commercial whaling from 1981-86, with the allegedly shore-based whaling operation within the Philippine EEZ actually involving a small catcher/factory ship taking unknown numbers of Bryde's whales and possibly the pygmy species of Bryde's-like whales in international waters. Comparison of historical and current distribution of Sperm whales, Humpback whales and Bryde's whales indicate a decrease in numbers and areas of distribution. Decrease in the frequency of sightings and encounters are attributed to a number of factors which include past and recent commercial and small-scale whaling activities by foreign and local whalers and other disturbances such as increased boat traffic and habitat degradation due to development of coastal areas. Further research is needed to make a more comprehensive illustration of these changes and understand the factors that caused it.

INTRODUCTION

The full extent of whaling in the Philippines has not been officially documented. Little is known about its history: when it started, how it developed, how and why it ended, what is happening now, and what can be predicted to happen in the future.

When whaling is mentioned in the context of the Philippines, what usually comes to mind initially are popular accounts of the ‘whale jumpers of Pamilacan’¹ or the rapidly growing ‘whale-watching’ activities on numerous islands.² And perhaps for those more aware of persistent whaling issues, the brief period of ‘pirate whaling’ by the Japanese is also familiar.³ The history of whaling in the country seems to have begun and ended when the whale fishery in Pamilacan came under media and scientific attention. Shortly after reports of killing and the by-catch of cetaceans in fishing gear in Palawan, Central Visayas and Northern Mindanao caught the attention of the Department of Agriculture – Bureau of Fisheries and Aquatic Resources (DA-BFAR), investigations were conducted which soon resulted in the issuing of Fisheries Administrative Order (FAO) 185,⁴ banning the taking or catching, selling, purchasing and possessing, transporting and exporting of dolphins in 1992.⁵ This did not necessarily stop the killings and by-catches but instead drove the activities and the market underground, making data collection more difficult.⁶ Although this did not affect the Bryde’s whale hunting in Pamilacan, given the ban only included dolphins, it was not long after, in 1997, that FAO 185-1 was issued, amending the first law to include ‘all cetaceans’, including whales and porpoises. This, as far as it has been documented, marked the end of whaling in the Philippines.

Internationally, the country is known to have had a brief career in commercial whaling. The Philippines attended the annual meetings of the International Whaling Commission (IWC) from 1981 to 1986⁷ and shifted its membership and participation from a ‘non-whaling nation’ to a ‘coastal whaling nation’ between 1982 and 1987.⁸ This engagement in coastal whaling was a contentious one as it involved the Japanese nationals apparently owning the company and operating all activities,⁹ and violated IWC rules and CITES regulations.¹⁰ These whaling operations were supposed to have ended after the IWC issued the moratorium in 1986 but it is believed in some quarters to have continued for a few months thereafter.¹¹ According to Barut¹² from the DA-BFAR, the company withdrew from the fishery because of declining catches, after which the government ceased issuing commercial whaling licenses.

Rumours still circulate that some opportunistic whaling still exists, if not in Bohol, then in other areas of the Philippines.¹³ Opportunistic whaling is, of course, quite difficult to prove with certainty due to the fact that the ban is well-known and therefore illegal whalers

are presumably quite aware of the consequences of being caught. At present, the Philippines is recognized as a non-IWC member country that once had a small-scale whale fishery¹⁴ or which practiced aboriginal subsistence whaling.¹⁵

In an archipelago with more than 1,700 islands, about 1.3 million fishers and their families depend on fisheries for their livelihood.¹⁶ With declining fisheries in the region¹⁷ it is not surprising to find fishers increasing their fishing effort, shifting their target species or becoming less selective in fishing, changing their fishing gear, searching for new fishing grounds, or engaging in the opportunistic capture of other, larger marine animals. With such dependence on marine resources it is important to understand the complexity of this ecosystem in order to manage resource-use more effectively. Cetaceans are intricately linked in this ecosystem and can be considered to be at the top of the marine food chain. Most great whales were hunted to the brink of extinction or to very low numbers in the past. Removal of excessive numbers of whales has had a profound effect on the ecosystem, and consequently on the fisheries upon which peoples depend.¹⁸ One way of understanding these consequences is to look into historical records of catch and distribution of these whales in order to compare it with current data. Knowledge of the historical context of marine resources can play an important, if not crucial, role in improving our understanding of present status of these fisheries. It is no longer sufficient to know what is out there now or to use what is known at the start of one's career as a baseline, and then as generations pass, use the current stock as the new baseline. This 'shifting baseline syndrome' has been recognized in several recent fisheries studies, and using history to overcome this syndrome is recommended.¹⁹ A knowledge of what the resource was like centuries ago, what quantities were available then, how the resource was utilized in the past and what its status is now can serve as a better guideline in making management decisions and assessing the effectiveness of existing policies.

The objectives of this study are to document the nature and extent of whaling in the Philippines from the seventeenth century to the present, to investigate the origins and development of whaling in the Philippines, and to identify whaling grounds used in the past and compare these with currently-known areas of distribution of the species of whales previously exploited in the country. This comparison aims to illustrate changes in the historical abundance and distribution of these whales. It also aims to understand what brought about these changes and to instigate further investigation into the ecological and social impacts of these changes.

This report focuses particularly on the islands of Bohol (including Pamilacan Island), Camiguin and Salay, Misamis Oriental, where local whaling practices have previously been

known to occur,²⁰ and on the Sulu-Sulawesi seas which were frequented by nineteenth century American whalers.²¹

METHODS

This study was conducted in two phases. The first phase was based on field and archival studies conducted in the Philippines between 14 June and 4 July 2005, literature searches at the University of Oxford libraries from April to August 2005, and archival research at the New Bedford Whaling Museum Research Library in December 2005. Previously known whaling towns in Central Visayas and Mindanao²² were also visited, where semi-structured and key informant interviews were conducted.

The second phase of the study was based on field and archival research conducted in the Philippines from January to September 2006, searches for other relevant literature in libraries at Uppsala University, the National Library of Sweden (*Kungl. Biblioteket*) and the Maritime Museum (*Sjohistoriska Museet*) in Stockholm (October to December 2006), and follow-up research at the New Bedford Whaling Museum Research Library in 2007. Other areas suspected to have a history of whaling within the Sulu-Sulawesi seascape were visited, namely: Puerto Galera in Oriental Mindoro, Balabac in Southern Palawan, and the islands of Tawi-Tawi. Semi-structured and key informant interviews were similarly conducted in coastal communities.

In the interviews a series of pre-determined questions were asked to each respondent, while allowing a free-flow of other related or follow-up questions, discussions and sharing of comments or insights. During the site visits, former whalers, old fishermen, community leaders (i.e. *barangay*²³ captains, municipal mayors) and other knowledgeable locals were asked the following questions:

- (1) When were you born?
- (2) How long have you lived in this town?
- (3) Have you ever caught a whale?
- (4) From whom did you learn to catch whales?
- (5) What do you use to catch them? Please describe how and what materials/instruments and boats you use.
- (6) When was the first time you caught a whale?
- (7) When was the last time you caught a whale?
- (8) Where do you hunt for whales? Please point on the map the areas where you hunt or used to hunt.
- (9) How often do you catch them? How many times a year? / a month? / a week?

- (10) What kind of whale do you hunt? Please look at the photos and identify which one.
- (11) How was the whale divided or distributed among the people?
- (12) Have you eaten or tasted whale meat? If so, when was the first time?
- (13) How long have people been hunting whales in your town?
- (14) Based on your knowledge, where did the technology/knowledge of hunting whales in your town come from?
- (15) Do you know of any other place where people hunt whales?
- (16) Do you think the ban on hunting of whales affected the livelihood of the people in your town? If so, how?

Additional questions were also asked to adjust to the type of fishery in the area. If the respondents did not eat or hunt whales, they were asked if they ate or hunt dolphins instead. A similar line of questioning was also applied for dugongs. Photograph-postcards²⁴ of cetacean species found in the Philippines, as well as the Dugong (*Dugong dugon*) and the whale shark (*Rhincodon typhus*), were shown to interview respondents for verification of the animal being referred to during interviews. As much as possible the interviews were conducted one-on-one, and away from other people so as to avoid influencing the responses of the interviewees.²⁵ Interviews within each municipality were conducted either within a day or within two consecutive days in order to reduce the chances of the interviewees sharing post-interview information.²⁶

All available town records or municipal records were scanned for any indication of past whaling activities or related practices and traditions. The following data-holding institutions were visited: the Municipal Library of Lila, Bohol; the Xavier University (Ateneo de Cagayan) Museum, Cagayan de Oro City; the Jesuit Archives and the American Historical Collection of the Rizal library at the Ateneo de Manila University; the Philippine National Museum; Filipinas Heritage Library in Makati; the Puerto Galera Museum; the Palawan Museum in Puerto Princesa City; and the Library of the National Fisheries and Research and Development Institute (NFRDI) and the Permits division of the Department of Agriculture – Bureau of Fisheries and Aquatic Resources (DA-BFAR), Manila. An attempt was made to look at records of fisheries permits at the DA-BFAR, however records for the years 1981 to 1984 (the years when whaling was allowed in the country) and earlier were apparently no longer available. When it was not possible to look at documents or records in a library or museum, the author interviewed knowledgeable persons who were in charge of those collections in the library or museum (i.e. Philippine National Museum, Jesuit Archives).

A total of ten municipalities were visited: Baclayon, Lila and Jagna in Bohol; Sagay in Camiguin; Salay in Misamis Oriental; Guiuan in Eastern Samar, Puerto Galera in Oriental

Mindoro; Balabac in Southern Palawan; Bongao and Sitangkai in Tawi-Tawi. The total number of respondents was 93: 6 respondents from Pamilacan Island, Baclayon; 8 in Lila; 11 in Jagna; 4 in Sagay; 11 in Salay; and 6 in Guiuan; 11 in Puerto Galera; 24 in Balabac; and 12 in Tawi-Tawi. Respondents were from different barangays and were selected based on their age and length of residency in the town, occupation or position. The majority were former whalers and fishers above the age of 60, while others were elders in their community or people holding key positions in the local government office and non-government institutions.

Archival research conducted at the Research Library of the New Bedford Whaling Museum in Massachusetts, USA involved examining several American whaling logbooks that cruised the Philippine seas while referring to eighteenth and nineteenth century old maps.

All readily-available documents were surveyed including relevant published works, scientific papers, and popular articles as well as other sources, such as news transcripts, web pages and unpublished reports/papers from various institutions and non-governmental organizations for any information on whaling activities in and around the Philippines.

For the comparison of past and current known distribution of whales, ArcGIS 9 was used to plot maps. Documentation on whaling grounds and sighting locations were used to mark areas on the map. If exact latitudes and longitudes were not available, areas were approximated by marking with big dots or by shading the entire 'sea' or region.

RESULTS AND DISCUSSION

Lila, Bohol

Residents of the municipality of Lila started hunting for whales, locally known as '*bongkaras*' before the turn of the twentieth century. This can be demonstrated through the testimonies of respondents who were born in the early 1900s (i.e. 1916, 1926) that their fathers and grandfathers hunted whales before them. All whalers and locals of Lila who were interviewed claim that the practice of whaling (including the technology used) originated in their town. They learned to hunt whales from their fathers and other elders by participating in the hunt as apprentices, whose usual role is to paddle or '*taga-bugsay*'. Some of them started joining the hunts at the age of 15 or 16. No resident recalled any story of foreigners coming to the islands and teaching the people how to hunt. The technique of jumping on the back of the whale and thrusting a large hook is derived from the same method they use for catching manta rays.²⁷ Fishermen of Lila never relied solely on whales for their livelihood. They only hunted whales seasonally, during the months of April, May and June,²⁸ but catch manta rays and other species of fish throughout the year.

The boats used for the hunt was called '*pilang*' and the technique of using a large hook is termed '*pamimilak*'. Prior to the use of motors, these boats were made from a whole carved tree, with outriggers on both sides and a sail. The boats were about nine to ten meters long and were manned by a total of six men: three rowers or oarsmen ('*taga-remo*'), two paddlers ('*taga-bugsay*') and one jumper ('*manuung*'). The details of the procedure of the hunt have been documented by Dolar et al²⁹ and will not be discussed here. In the early years, their hunting grounds used to be only along the shores of Lila, between five to fifteen kilometres from shore.³⁰ When they noticed that whales were no longer frequently seen along the shores, and motorized boats became available, fishers ventured further away from Lila towards Pamilacan, where apparently the whales were more plentiful.³¹

The reported method of distributing the catch among the crew varied slightly among some of the respondents. One described it as such: the jumper or '*manuung*' receives two shares, the owner of the boat also receives two shares and the rest receives one share each'.³² Another respondent claimed that the '*taga-remo*', who is usually the older and stronger member of the crew also received two shares while the rest will divide equally amongst themselves whatever remained of the whale.³³ Not only crew members partook of the catch, but whoever helped in the catch or the cutting up of the whale also received a share. Members of the crew did as they wish with their shares. They either 'bartered' or exchanged it for local produce, sold it to the market or to their neighbours, or took it home to eat.³⁴

The town of Lila is also dubbed as the 'Town of Adventurers' and is known for its 'peddlers'.³⁵ They venture off to nearby Cagayan, Camiguin, and Leyte, 'peddling' or selling tobacco and other products.³⁶ One old whaler interviewed said that during his earlier years he spent weeks in Samar and Leyte selling tobacco and when he returned he would resume whaling.³⁷ This lifestyle could have made it easy for them to transfer the practice or technology to other islands.

The municipal profile of Lila states that two barangays, Taug and Tiguis 'are known of catching '*sanga*' (manta ray) and '*bongkaras*'',³⁸ however this document was only very recently written and could not be used to determine the duration of the whaling practice. There were no other older documents in the municipal library pertaining to whaling or whales locally. Church records would have been a good source of information about the town and its people but the church of Lila has been burned down more than once by the Americans during the war and no one knows if records have been saved.³⁹

An interesting story popular among locals is the etymology of the term '*bongkaras*', which is the name they call whales, as opposed to '*Bugangsiso*' which residents of Pamilacan call it.⁴⁰ The story goes as follows:

There was a resident of Lila whose surname was ‘Bongkaras’. He was running for office at the local government elections a hundred or so years ago. He arranged for a meeting in the town to promote his candidacy and on the day appointed, he arrived in town surprised to see that no one was there. He came to know that everyone was in the ‘aplaya’ (beach) taking part or watching the yearly hunt for whales. He decided to take advantage of this captive audience and went to the beach. He apparently stood on top of a dead whale that was landed on the beach and made his speech from there! Since then, people called that type of whale ‘bongkaras’.⁴¹

The etymology of ‘bugangsiso’ is apparently unknown to the locals of Pamilacan.

Locals have a term for each part of the whale which was different from that used for parts of other animals. ‘*Kubaw*’ or the layer of skin and fat on the back of the whale⁴² and ‘*auto-auto*’ for the layer of skin and fat on the ventral side (‘*taba sa tiyan*’) of the whale,⁴³ particularly the throat grooves⁴⁴ of the whale, are a few of these names. Essentially the entire whale is utilized, except for the bones.

Pamilacan Island, Bohol

Pamilacan Island is under the jurisdiction of the municipality of Baclayon. Some say the island derived its name from the practice by local islanders of catching manta rays using a hook locally called ‘*pilak*’⁴⁵ and referred to as ‘*pamilak ug sanga*’.⁴⁶ It may have also been because Lila fishers who ventured in their boats away from their town’s shores opened the surrounding waters of the island as a new hunting ground of manta rays and whales and started landing their catch on the island. The whaling practice in Pamilacan was clearly derived from the whale fishery in nearby Lila. The oldest respondent from the island, Mr. Marcelino Valeroso, who was born in 1924 said that residents of the island didn’t use to catch ‘*bugangsiso*’ or ‘*bongkaras*’ but instead ‘*taga-Lila*’ (people from Lila) did.⁴⁷ He recalls that it was in 1939 that fishers from Lila started catching whales around their island. They would land it there, cut up the animal and sell the meat in Lila. Sometimes when islanders helped, they would give them meat for free.

A couple of respondents, however, believe that the fishers of Pamilacan learned to catch whales on their own.⁴⁸ An island native called Ciriaco Pineda was known to some as the pioneer of whale hunting in Pamilacan, although the year when he started hunting could not be determined.⁴⁹ The boats and techniques of hunting used in Pamilacan are essentially the same as that used by Lila fishers. The meat from the catch is also either consumed locally or sold to the people of Lila. Furthermore, just like in Lila, the fishers of Pamilacan did not rely on whales as the source of livelihood. Their main target species are manta rays and whale sharks (‘*balilan*’), caught using the hook, while other fish species are caught using nets

and hook and line.⁵⁰ Whales were caught opportunistically and seasonally. They also hunted whale sharks until it was banned in 1998.⁵¹

Sagay, Camiguin

Whalers in Sagay used a locally manufactured iron toggle harpoon called '*isi*' similar to that used by American whalers in the middle of the nineteenth century,⁵² except it was shorter and the toggle blade was slightly different in shape. This harpoon is attached to the end of a wooden pole about 3 meters long and secured with a rope. The other end of the rope is tied to the boat. According to respondents the harpoons were only made by one blacksmith from the nearby town of Mambajao.⁵³ Dolar et al⁵⁴ stated that this harpoon is most likely an adaptation from the American whalers and gives some indication that this fishery may have been influenced by this source.

However, when respondents were asked where they think the practice originated, they said it originated in Sagay, Camiguin. Two of the respondents claimed that they learned to hunt from their fathers and grandfathers.⁵⁵ One respondent's father was born in 1901, putting the date of practice to at least as early as 1900. An interview with one whaler indicated that his grandfather, who was also a whaler, came from Bohol and moved to Sagay to settle. This points to another possible origin of the practice.

The boat used was called a '*pamilacan*', and unlike the boats used in Bohol it did not have a sail. The respondents said that a sail would have made it dangerous to use when going after a whale against the wind. There were also five crewmen ('*taga-bugsay*') and one jumper ('*taga-bangkaw*'). Just like in Pamilacan and Lila, the jumper leaps off the boat to thrust the harpoon (instead of a hook) into the whale. Their original hunting grounds were along the shores of Sagay, extending to the towns of Guinsiliban and Catarman. Using a motorboat, they were later able to reach across Balingoan in Misamis Oriental. The season for the hunt was mainly during the months of March, April and May, although for some it extended from as early as January until June.

The fishers divided the catch in the following way: half was given to the man who harpooned the whale ('*nakabangkaw*'), and the other half was divided among all the other people who helped or participated in the catch.⁵⁶ This includes a share for the owners of the implements used in catching the whale, namely: '*isi*' (harpoon), '*baroto*' or '*pamilacan*' (boat), '*pisi*' (rope), and '*gangso*' (hook). The other respondent described the sharing slightly differently, recalling that the whale was divided equally among the people who took part in the hunt (including owners of whaling implements) but the '*taga-bangkaw*' received two shares. As in Lila and Pamilacan, participants were free to do whatever they wished with

their shares.⁵⁷ Whalers of Sagay do not have unique terms for the parts of the whales. Just like in Bohol, all parts of the whale are eaten, including the baleen.⁵⁸

Salay, Misamis Oriental

The origins and extent of whaling in Salay is unclear. Mr. Nazarito Abrio claimed that the practice or technology originated from Bohol.⁵⁹ His father hunted whales and learned it from his elders including his grandfather who used to hunt whales in Camiguin using a locally crafted harpoon. His grandfather was originally from Camiguin and moved to Balingasag, Bohol in 1861 and then again to Salay in 1900 where he married and settled. Mr Abrio claims that his father first caught a whale in 1923. The harpoon his father used was imported from the U.S, and was ordered through his father's friend from the municipal hall. The last two harpoons used were made in Bryg. Lakas, Mambajao, Camiguin in 1948. He further claims that in December 1941, his father and two others were to be taken to Hawaii by Americans to catch whales. Apparently, the technique his father and others used in killing whales was faster compared to the technique which the Americans used at that time. Although an actual harpoon wasn't available for inspection at the time of interview, the respondent was able to make a clear illustration of what it looked like. It is almost the exact likeness of the toggle iron harpoon used by whalers of Sagay, Camiguin, and thus, bears close resemblance to the harpoon used by American whalers.

The municipal profile showed no indication of a whaling tradition or any references to whales as marine resources, although fishing is one of the main sources of livelihood for local peoples. Municipal staff interviewed indicated that the fishers of the neighbouring town of Talisayan used to hunt 'whales'.⁶⁰ However, upon careful interrogation, it was verified that they were actually referring to whale sharks and not whales. Whale sharks are locally called '*taluki*' or '*tawiki*'. Talisayan fishers apparently used to hunt whale sharks just like in Pamilacan until it was banned by the government.⁶¹

Decline in Whale numbers

Respondents in all sites where whaling was practised voluntarily described how the number of whales in their area decreased in number over the years. Lila respondents noticed how the whales used to be formerly seen in good numbers five to ten kilometres from shore each season. Some say that it was after people started using outboard motors on their boats that whales became more difficult to find. This is when they started venturing to Pamilacan, where apparently the whales were still plentiful. Motorized boats also made this longer trip possible. When asked why they think the whale numbers decreased some say '*ambot kaha*'

(who knows or I don't know). One respondent, however, believed that it was because people stopped making '*buhat-buhat*' or offerings to the spirits.⁶² He said that during his whaling years an old spiritual leader would make an offering to the spirits of the sea before the whaling season started, and that since people stopped doing this, the whales have disappeared.

Camiguin respondents on the other hand claim that, for unknown reasons, the whales disappeared when the government issued the ban to catch them. 'It was as if the gods didn't want us to catch the whales and get imprisoned for it'.⁶³

None of the respondents expressed any recognition of the link between the hunting of the whales and the decrease in numbers. This apparent inability to perceive a possible crisis in the resource can be likened to Pollnac and Johnson's argument on important considerations for testing fisher folk-knowledge and management of marine resources.⁶⁴ Fish, or as in this case whales, are relatively invisible and mobile which makes it difficult if not impossible to determine quantity. Just like whale harvests, fish harvests are so variable that 'fishers are prone to assume that the fish [or whales] are elsewhere, or that they have just been unlucky'.⁶⁵ Some, like the old whaler from Lila, lay the blame on spirits,⁶⁶ just like fishers of Central Maluku Islands, Indonesia who believe that low catches are due to the status of their relationship with local spirits rather than a decrease in the resource.⁶⁷ Fishers often commented that 'those [whales] do not run out'.⁶⁸ This echoes the belief of fishers that there are so many fish in the large oceans that the prey will not be exhausted no matter how much they harvest.⁶⁹

Almost all of the respondents asked if the ban was going to be lifted soon. Some expressed that it would be very good if the ban was lifted because catching whales provided a livelihood for a lot of the people. Others however believed that the ban of hunting whales did not affect their livelihood much, but instead that the ban on hunting whale sharks did because the price of whale shark meat and fins was much higher in the market.⁷⁰

Whale meat consumption by locals

The municipality of Jagna in Bohol was visited because of its well-known tradition of manta ray fishing, the same fishery from which the practice of whaling in Lila is suspected to derive from.⁷¹ Barangay Bunga Mar is the center of the manta ray fishery in Jagna. The people here have been hunting manta rays, also known as '*sanga*', for over a century as their main target species.

The harpoon or '*isi*' used by the fishers in Barangay Bunga Mar to catch '*sanga*' is identical to that used by the whalers in Sagay, Camiguin and Salay, Misamis Oriental (Figure

6). The hook or ‘gangso’ used by the Jagna-anons to secure the manta ray after it is struck with the harpoon is similar to the hook used by the whalers of Lila and Pamilacan, except that it is more slender and made of wrought iron instead of stainless steel. Fishers interviewed claim that the harpoon and hooks are all locally designed and made by blacksmiths in Cantagay. Interestingly, the boat used to hunt manta rays is locally called ‘pamilacan’, just like in Sagay, Camiguin.

The similarity in techniques, hunting instruments, and boats used, as well as the corroborating stories of Boholanos migrating or travelling to Camiguin and Misamis Oriental, may lead one to conclude that the fishery in Lila, Pamilacan, Sagay and Salay may all have been derived from the manta ray fishery in Jagna.

Respondents in Jagna said that whales were never hunted directly with the ‘isi’. However, one respondent described how one whale, apparently seen circling near shore, was struck using an ‘isi’, dragged to Lila and butchered there. This happened sometime between 1970 and 1972, long after the people of Lila started hunting whales. Another respondent showed a photo of two sperm whales caught with a net 30kms off shore, in 1979 or 1980, which were also apparently butchered and eaten by the locals. Seven respondents claim to have eaten whale meat. Five out of these seven respondents said that the meat came from a whale that had stranded, and was not directly caught.

Interviews in Puerto Galera showed no indication of whaling or direct catches of whales by locals or foreigners. However, when found stranded, whales are butchered and eaten. Whales are locally called ‘bugangsiso’, just like in Pamilacan. Several respondents explained that the whale was named as such because it ‘blows out’ (‘buga’ in Tagalog) small fishes from ‘the hole on the top of its head’⁷² (in Tagalog: ‘*bumubuga ng isdang pino mula sa tuktok*’). Some fishers have seen whales along the Verde passage and describe them as having brownish or dark, smooth skin, with a slightly tapering head.⁷³

Commercial whaling-Guiuan, eastern Samar

The municipality of Guiuan website refers to a historical link to the Marianas and Guam which were American whaling grounds. According to Putong, a local historian, ‘Guiuan was convenient emergency stop for the galleon and from the late seventeenth century was a take off point for the Marianas’.⁷⁴ American whalers frequented the Marianas in the 1850’s and 1860’s to hunt for humpbacks.⁷⁵ Although it may be too presumptuous to think that this could indicate a possible whaling activity in Guiuan, or at least some influence of whaling practices, it may be worth investigating further. This testimony and a locally-written article by Kühlmann⁷⁶ which refers to the historical utilization of whales as food and a source of

income by the coastal population of Samar prompted the author to visit the municipality of Guiuan.

All respondents in Guiuan said that whales were never hunted along the coasts of their municipality. However, two out of six respondents admit that some people have eaten whale and dolphin meat in the past.⁷⁷ Mr Adesna recalls of a stranding of a whale in Homonhon Island after a big storm in the 1950's, wherein 'residents of all eight barangays on the island took part in it...cutting up the whale'.⁷⁸

Four out of six respondents confirmed the presence of a so-called whaling station on Homonhon Island. Upon investigation, it was clear that the whaling station on the rocky coast of Barangay Inapulangan was very small and only the two cemented iron posts remained at the time of visiting. This small whaling station in Homonhon is a legacy of a recent and very short, but controversial, modern commercial whaling period in the Philippines. A summarized account of this whaling period was written by Davies from the Greenpeace Environmental Trust.⁷⁹ This account describes how the First International Sea Harvest Corporation (FISH) was set up in Manila, Philippines in May 1982 and how MV Faith 1 operated as a whale-catcher/factory ship. Based on this account, the Faith 1 utilized waters around Palau Islands, New Guinea and East and west of the Caroline Islands as hunting grounds during the winter and moved north, to the Marianas Islands Chain and 200-300 nautical miles south of Japan during the summer.⁸⁰ The species taken were Bryde's whales⁸¹ and also reportedly humpback whales.⁸² Although the ship was based in Cebu and the meat was exported to Japan from Manila, there was no clear indication of hunting within Philippine territorial waters.

The visit to DA-BFAR and NFRDI to look at licensing records and other possible landing records of whales was unproductive. It is not known if (and where) the records have been kept.⁸³ It was later concluded that records dating back more than 10-20 years must have been disposed of.

Foreign whaling in the Philippines

Documents pertaining to pre-colonial and colonial whaling by the Spanish, Americans, and other foreigners within Philippine waters are scarce, if not elusive. The Spanish (the Basques) were some of the earliest whalers in the world's oceans⁸⁴ and one would presume that they would have brought this practice with them when they visited and colonized the Philippines. Information on this was not however found.

As the Spanish missionaries were focused on their mission of evangelization of the peoples of the islands, they have written volumes to document this endeavour. Thus, it was

recommended to the author to examine Jesuit letters to see if there was any reference to a whaling tradition by early Filipinos.⁸⁵ The author was only able to browse through three volumes of translated Jesuit letters and it did not indicate any reference to any activities relating to cetaceans, whether by the Spanish or the native peoples. However, it could be worth investigating colonial trade records, local contemporary newspapers and yearbooks as this may give information on whale oil and the sale of whaling equipment as well as whale-product imports and exports.⁸⁶

It is also possible for the Chinese to have had some involvement in whaling in and around the country as they too practiced whaling ‘even though the documentation in Western literature is scarce.’⁸⁷ Richard Ellis wrote, in his chapter on ‘Chinese whaling’:

The Chinese have a naval tradition that dates back to the Mongols in the thirteenth century. Chinese naval power reached dramatic heights in the fifteenth century with the exploratory voyages of the legendary eunuch admiral, Cheng Ho...From 1405 to 1434, the Ming ships visited the Philippines, Indochina, Sumatra, Java, the East Indies, Ceylon, and perhaps even the Red Sea. Of course there are whales in these waters, but references to their capture are few.⁸⁸

Ellis⁸⁹ further adds that the Chinese hunted whales near and around Hainan rather effectively, and the harpoon used was described in an 1844 edition of *The Friend* (the whalemens’ newspaper) as follows: ‘...has only one barb, and about fifteen inches from the point of the iron it is made with a socket; above which, an eye is wrought, with a cord attached to slack along the wooden shaft so that when the fish is struck, the iron and the line tightens, the shaft draws out, and leaves less chance of the iron cutting out of loosing its hold on the skin of the fish’.⁹⁰ This description is reminiscent of the harpoon head used in Lombok, Indonesia, which as mentioned in a later section of this report, resembles the harpoon head excavated in Cagayan de Oro.

The earliest contact with the Chinese probably dates back to 982 A.D.⁹¹ Documents of the Sung trade indicate that among hundreds of items of import, one of the most important were aromatics and drugs such as ‘ambergis’.⁹² Ambergis comes from sperm whales. Although this may suggest the presence of sperm whales, it is possible to find ambergis without having a whaling industry.⁹³

American whaling

Fifteen American whaling logbooks have been examined, that of the *Daniel Webster*, Bark *Avola*, Ship *Corinthian*, Ship *Harrena* (Ship *Warrens*), Ship *Swallow*, Ship *Samuel Robertson*, Ship *William & Eliza*, Bark *Ellen*, Bark *Orlando 1869* (abstract), *Mary of*

Edgartown, *Bark Newark* (abstract), *Rose Pool/Pearl* (abstract), *Martha* of Fairhaven, *George Howland* of New Bedford, and the *Alaska*. Several of the logbooks recorded catches of sperm whales within Philippine waters, mainly in the Sulu and Celebes seas. The logs were from the period of 1838-39, 1853-55, 1863-64 and 1868-69.

In Townsend,⁹⁴ reference to the extent and area of whaling in the country can be found:

Sperm whales were taken in great numbers during all seasons of the year in whaling grounds known as...‘Sulu sea’, ‘Celebes Sea’...

Based on records of logbooks of American whalers examined by Townsend, it can be clearly seen that the sperm whaling grounds were much larger than what was strictly known as the ‘Sulu’ and ‘Celebes Seas’. As indicated in his charts, sperm whales were also taken from the South China Sea, from west of Manila Bay and Mindoro all the way down to south western Palawan, within the Sibuyan Sea, Bohol Sea and to the east along the Philippine Sea.

A document referring to American whalers and traders in the Philippines from 1817 to 1899 indicated the presence of American whalers in the country, however no detail was given on the exact nature and location of whaling activities.⁹⁵ Investigation of the microfilm collection to which the document is a guide, gave the impression that ‘the only role the Philippines had in American whaling was as a drop-off for the sick and rowdy whalers’.⁹⁶

However, the significance of the Philippines in the history of American whaling is further substantiated by Clark where he notes that: ‘Sperm-whaling was formerly carried on with good success around the Ladrone Islands, also in the Sooloo or Mindora Seas, and around the East India Islands, where ships continued to cruise until within about three years.’⁹⁷ The ‘Sooloo Sea’ is again identified by Scammon as one of the sperm whale grounds in the Pacific.⁹⁸

Based on different accounts American whaling in the Philippines probably started in 1825 and ended in 1880 when the Sulu grounds were finally abandoned.

British whaling

British whaling in the Philippines most likely started in 1820 and ended in 1840, if not earlier.⁹⁹ Similar to the Americans, the British frequented the whaling grounds known as the ‘Sooloo Sea’.¹⁰⁰ The extent of this whaling could not be determined. During the period of this study no British whaling logbooks were examined.

‘Indigenous’, derived or influenced?

The question of indigenesness of the whaling practice in Lila has not been often raised. Clearly, this was not considered when the DA-BFAR decided to ban the catching, killing and selling of all cetaceans in the country. And even during the brief period when the country was a member of the IWC, the Philippine government seemed to have bothered only with matters of commercial whaling.¹⁰¹ There is no known document that refers to any attempt by the country to claim rights for indigenous whaling. Reeves considered the whaling practice in the Philippines as one of the ongoing aboriginal subsistence hunts not subject to IWC management.¹⁰² He also concludes that some of the whaling was introduced while some of it was locally invented within the last hundred years.¹⁰³

The word 'indigenous' has been often used interchangeably with 'aboriginal'.¹⁰⁴ The IWC defined 'aboriginal subsistence' whaling as whaling 'for purposes of local aboriginal consumption carried out by or on behalf of aboriginal, indigenous or native peoples who share strong community, familial, social and cultural ties related to a continuing traditional dependence on whaling and on the use of whales'.¹⁰⁵ Based on this definition, it can be argued that the practice of whaling in Lila, Bohol can be considered as indigenous or aboriginal. The evidence to prove it is a long-term practice of more than a hundred years may be insufficient for it to be placed in the same category as the whalers of Indonesia but this shouldn't be a reason to classify it as non-indigenous. It certainly deserves a more in-depth study. Although it may have been derived from the fishery of another resource (i.e. manta rays) practiced for much longer, it was quite clear based on interviews that the people of Lila depended on the seasonal income from whaling to supplement their livelihood. It may be difficult to ascertain when exactly this 'shift' occurred but it may have simply been an opportunity taken by a fisher desperate for a big catch; a chance taken that later turned out to be a lucrative enterprise which benefited the entire town.

The whale fishery in Pamilacan may also be classified under 'aboriginal subsistence' whaling. Although the practice may have been derived or influenced by the fishery in Lila, it is clear that the natives of the island share community, social and cultural, and even familial ties with the natives of Lila. This can be demonstrated by the generations of migrants between the two places, the islanders' participation in the hunt, and the sharing and trading of the catch.

The whaling in Camiguin is almost positively derived from the fishery in Lila and was most likely also influenced by the fishery in Jagna (in terms of harpoon used). This can be proven by the fact that not only do the old whalers claim ancestry in Bohol, but because the instrument used is almost identical to harpoons used by Jagna-anons to catch manta rays. It can be speculated that fisher/trader migrants from Bohol introduced the practice (hunting for

both manta rays & whales) in Camiguin. Soon after this introduction, the blacksmiths of Camiguin (e.g. Municipality of Mambajao) could have copied the harpoon model from the manta ray hunters of Jagna and used it to catch whales. However, the possibility that, upon contact with Americans sperm whaling in the region during the 1800s, the fishers of Camiguin copied the toggle-harpoon model and began manufacturing it locally, cannot be entirely discounted. Whether or not the harpoon design was copied from the Americans or Jagna-anons, it cannot be denied that the basic technique of jumping on the whale's back is local.¹⁰⁶

The case of Salay is a bit more uncertain, however, it is likely that a similar development occurred as in Camiguin. The data gathered from this site is inadequate to determine the origins and extent of the practice. However, it is probable that either migrants from Bohol or Camiguin introduced the fishery to the town.

Traditional (Indigenous) knowledge or local (folk) knowledge?

It should be noted that there were several inconsistencies or disagreements between claims of respondents regarding the origins and development of the practice of whaling in their locality. These inconsistencies should be taken as a sign for precaution in making conclusions on origins of behaviour because determining if something originated in a specific locale can be subject to error.¹⁰⁷ This points to the problems of differentiating traditional or indigenous knowledge from local or folk knowledge. By definition, traditional knowledge (and management) is limited to that which is passed down through generations.¹⁰⁸ This is problematic because as Pollnac and Johnson say, 'the time depth of specific human behaviours is difficult to ascertain, especially in locales where attributing something to the ancestors lends weight to its acceptance'.¹⁰⁹ In cases such as the whaling practice in Lila, respondents may say it was practiced by their fathers and grandfathers simply to give it some legitimacy. Another limitation of indigenous knowledge is that it requires local development, with little or no outside influences.¹¹⁰ The origin of a behaviour or practice is difficult to determine because people have the tendency 'to lay claim to certain behaviours as being their own rather than someone else's'.¹¹¹ For example, some of the fishers of Pamilacan could claim that they invented the technique of whaling themselves when, in fact, it was introduced from the outside (i.e. Lila). The same can be said of the whalers in Salay, Misamis Oriental. The relative ease in long-distance travel (i.e. travelling by boat from Bohol, to Camiguin or to Salay takes less than a day) and mass communication (i.e. local newspapers and radio) allows the flow of so much inter-societal information that it will be difficult to pin-point were

something came from. This emphasizes the difficulty of determining the origins of a behaviour or practice without historical or archaeological research.¹¹²

Historical and Current distribution of whales

Written documentation of the occurrence or distribution of whales before the 1980s is scant. Published reports are of Slijper et al's distribution of Sperm whales, Humpback whales and rorquals in the Pacific Ocean;¹¹³ Herre's brief description of the stranding of a 32-foot baleen whale in Bacoor, Cavite Province which he identified as *Balaenoptera rostrata*;¹¹⁴ and Townsend's charts showing the distribution of certain whales based on logbooks of American whaling ships between 1761 to 1920.¹¹⁵ Data on the current distribution of these whales, although still incomplete, has been increasing for the past ten years. The majority of this data on current distribution of whales was obtained from actual vessel surveys conducted by WWF-Philippines (*Kabang Kalikasan ng Pilipinas*) and strandings reported by members of the Inter-Agency Task Force on Marine Mammal Conservation, which were also compiled by WWF-Philippines.¹¹⁶ Vessel surveys have been conducted in the central Visayas and south western Mindanao. Several surveys have also been conducted in the North and North eastern coast of Luzon.

Sperm Whale distribution

Sperm Whales (*Physeter macrocephalus*) have been hunted in the Pacific (and around the world) for centuries, including in the Philippines, and identification of historical whaling grounds can give a good indication of their past distribution. Unfortunately, sperm whaling records in the Philippines are elusive. So far, it is only from Townsend's charts that one can obtain a vivid imagery of the extent of the distribution (and exploitation) of this species.¹¹⁷ Although it is only the Sulu Sea that is mentioned as one of the sperm whaling grounds,¹¹⁸ it can be clearly seen from the logbooks of American whaling ships that sperm whales were found and hunted in almost every sea in and around the archipelago throughout most of the year.¹¹⁹

Another illustrative account is given by Slijper *et al*, when the authors plotted points on a grid-map of locations of sightings of sperm whales.¹²⁰ Although the Philippines was not mentioned in the text, maps showed sightings on the eastern coast of Luzon, southwest of Palawan, Sulu sea, and all along the south and east coast of Mindanao (Map 1). Slijper notes that sperm whales were found year-round in the Indonesian archipelago and further adds that most calves were sighted in the Indonesian Archipelago.¹²¹

Currently, sperm whales appear to be found in almost all major seas within the Philippine archipelago, however most sightings are of solitary animals. The occurrence of this species is usually recorded in the Philippines through stranding reports. So far only encounters documented by Van Lavieren¹²² and Wang¹²³ mention a group of more than two individuals sighted along the eastern coast of Luzon, while sighting cruises in 1993 to 1995 by Miyashita indicated a mean school size of 2.6.¹²⁴ Miyashita et al sighted a total of 7 schools (12 animals) in the South China Sea close to the Philippines.¹²⁵ In addition, observations of sperm whales made by De Boer in 1999 during a cruise from Mauritius to the Philippines led him to suggest that the Balabac Strait might represent a migration route for sperm whales between Sulu Sea and the South China Sea.¹²⁶

Humpback Whale distribution

Similarly, Slijper *et al* illustrated in maps locations of humpback whales (*Megaptera novaeangliae*) and other rorquals around the Philippines.¹²⁷ Their maps showed humpbacks sighted in southwest of Palawan, Sulu Sea and along the south, west and east coast of Mindanao (Map 2). Taiwan is known as one of the historical wintering grounds of humpback whales in the North Pacific.¹²⁸ And based on whaling records, the best-documented breeding grounds were off the southern end of Taiwan, just 325kms north of the Babuyan Islands.¹²⁹ This is further supported by records of an American whaling ship *Corinthian* that indicate humpbacks seen along the eastern coast of Taiwan and east China Sea.¹³⁰ The ship's master also noted a sighting of a humpback whale as they approached Hong Kong from Guam, after passing the Batanes Islands.

Humpback whales used to be only known publicly in the Philippines through a stranding reported in a local newspaper.¹³¹ Although there have been a few other unconfirmed reports of sightings of the species in northern Luzon, it wasn't until 1999 that a breeding ground in the Babuyan islands, northern Luzon, was verified.¹³² The species is now confirmed to occur around the Babuyan group of islands going down along the eastern coast of Cagayan and Isabela, northern Luzon (Map 2).¹³³ There are also several unconfirmed sighting reports in northern Palawan, Albay and northern Mindanao.

Bryde's Whale (*Balaenoptera edeni*) and other rorqual distribution

Historical distribution of Bryde's Whales can be based on the hunting grounds of fishers of Bohol, Camiguin and Salay, Misamis Oriental. These fishers found the species to be abundant in the Bohol and Mindanao Seas (Map 3). Slijper et al also indicates sightings off the eastern coast of Mindanao.¹³⁴

The data on the current distribution of rorquals such as the Bryde's whales is scant. In 1994 and 1995, Dolar only had three encounters of Bryde's whales in the eastern Sulu Sea.¹³⁵ In 1994, Miyashita et al sighted the species at 7°N, 128°E off the Pacific coast of the Philippines (off eastern Mindanao).¹³⁶ This area is also noted by Kishiro as covered by the distribution of Bryde's whales in the Pacific.¹³⁷ Recent surveys in the Bohol Sea did not indicate sightings of the species.¹³⁸ However, interviews indicate that locals of Lila and Camiguin have recently seen the species not far from their shores.¹³⁹

Rorquals referred to by Slijper et al included Sei, Bryde's, fin and blue whales.¹⁴⁰ They noted the occurrence of rorquals in the eastern coast of northern Luzon, southern Palawan and southern Mindanao (Map 4). An American whaling ship recorded a sighting of a 'finback' in the coast of Luzon, inside or very close to Lingayen Gulf.¹⁴¹ They also found 'finbacks' as they were cruising the 'Sooloo isles'. Recent surveys have not encountered other species of baleen whales except for the humpback whales mentioned in the previous section and fin whales (*Balaenoptera physalus*) in the Sulu Sea.¹⁴² But photos taken by a volunteer photographer in 2005 show a lone baleen whale encountered near Palaui Island (Sta. Ana, Cagayan, Northern Luzon).¹⁴³ Identification of the species is yet to be confirmed, but it is definitely not a humpback whale.¹⁴⁴ In the Bohol Sea, a sports & adventure television production crew was able to film an encounter of a baleen whale mother & calf pair near Pamilacan Island in 2004.¹⁴⁵ This was later identified through photographs as a blue whale (*Balaenoptera musculus*).¹⁴⁶ Furthermore, De Boer sighted fin whales in the South China Sea and also suggested that the Balabac strait might represent a migration route not only for sperm whales but for fin whales between the Sulu Sea and the South China Sea.¹⁴⁷

Comparison of past and present distribution

In overlaying a map of historical distribution upon currently-known distribution it seems that sperm whale and humpback distribution have changed quite considerably (Maps 1 and 2). This change in distribution could be due to a number of factors. Firstly, there may have been a drastic decline in the population of the species due to intensive whaling. Secondly, there is a substantial lack of data (both past and present) to verify status and distribution of species. Finally, the populations previously occupying these areas may have moved into different areas.

The southern Palawan and southern Mindanao regions, which were identified by Slijper *et al* as areas where sperm whales were sighted,¹⁴⁸ are lacking recent cetacean survey data. Given the currently available survey data, it appears that the area along the eastern and western coasts (facing the South China sea) of Luzon, the Bohol Sea and Sulu Sea are the

areas where sperm whales can still be frequently sighted. However, unlike in the early 1800s when ‘schools’ of sperm whales were sighted, the animal is more often encountered solitary. It would not be surprising that the sperm whale population in the Sulu-Sulawesi seas could have been severely depleted during the years of American whaling in the region.

It is interesting that humpbacks were not historically documented to be present along the Babuyan Islands chain and eastern coast of Luzon, despite its proximity to the historical Taiwan grounds. Instead, humpbacks were sighted in the past in the southern Philippines (southern Palawan and Mindanao).¹⁴⁹ This apparently ‘new’ breeding ground of humpback whales in the Babuyan Islands is arguably a result of the movement of the remnant population from the Ogasawara-Okinawa and southern Taiwan grounds. This can be further supported by the matches of fluke photo-identification between Japan and the Philippines.¹⁵⁰ However, it is also possible that this area simply remained unknown to whalers and explorers in the past. Slijper et al concluded that the northern and southern Pacific stocks of Humpback whales were wintering in the Indonesian archipelago.¹⁵¹ Current data does not, or no longer, support this conclusion. Humpback whales have not been sighted recently in the Celebes Sea (Sulawesi sea), along the coast of Malaysia, Borneo and northern Sulawesi.¹⁵²

The noticeable decrease in the frequency of sightings or encounters of Bryde’s whale in the Bohol Sea¹⁵³ may lead some to conclude that this decline was a consequence of over one hundred years of hunting by locals (Map 3). It could be argued that other factors can be also considered, such as disturbance due to increase in boat traffic and habitat degradation due to development of coastal areas.¹⁵⁴ Another aspect for consideration is the consequence of the recent commercial whaling along the eastern coast of the Philippines. It is thought that Bryde’s whale populations migrate from Japan moving down along the eastern coast of the Philippines,¹⁵⁵ so it is possible that this population is the source of the animals that used to frequent the Bohol Sea. It can be speculated that a large-scale and efficient hunting of the species along this route may have caused the decline in numbers in the area.

Whale taboos in Balabac, Palawan, and Bongao & Sitangkai, Tawi-Tawi

In Balabac whales are locally called ‘*kahumbo*’, or for migrants from Tawi-Tawi, ‘*gadja mina*’. Interviews in Balabac indicate no history of local whaling and direct catches of dolphins, and the locals do not eat them. Significantly, they have traditional and religious beliefs that discourage this type of fishery. They claim that their parents and elders do not eat whales and dolphins and that they are forbidden.¹⁵⁶ They believe whales that strand bring sickness to those who will eat it. Some say they are forbidden to eat cetaceans because they

are considered '*baboy sa dagat*' or pigs of the sea.¹⁵⁷ And based on their Islamic beliefs, it is forbidden to eat animals that are unclean such as pigs.

In Bongao and Sitangkai, the Badjao and Samal people do not hunt whales either. Their traditional beliefs inscribe fear unto the people. Their elders believed that when you are spattered with the 'water' from the 'spout' of the whale, you will die. Coming into contact with that water will make you itch so bad that it reaches to your bones.¹⁵⁸ When they see whales at sea, they immediately move away to avoid them. Although the Badjaos and Samals hunt and eat dolphins, there are special circumstances that are exceptions. They are not to eat dolphin meat when they have an illness that involves bleeding from body orifices or openings, such as the nose or mouth (i.e. symptoms of tuberculosis), and when a woman is menstruating.¹⁵⁹ If they do so, they believe that they will die.

Based on interviews, it seems the Tausugs of Tawi-Tawi (migrants from Jolo) do not eat dolphins. They say it is forbidden because their elders believe that dolphins are the equivalent of pigs in the sea.¹⁶⁰

CONCLUSION

The documented history of whaling in the Philippines can, at the writing of this report, be traced back to the era of American whaling (1800's). Given the abundant local terms relating to whales and whaling and the recollections of some older residents in the area, it seems likely that American whaling occurred alongside local or 'indigenous' whaling in Bohol. The exact beginnings of this locally initiated fishery cannot be determined given the present data. The development or evolution of the whaling practice in Bohol seems to have come about as a derivation from manta ray fishing, most likely from the town of Jagna. How the change in hunting instruments (from toggle-harpoon to hook) came about cannot be determined for certain, but it can be speculated that Lila fishers tried using the hooks (used by Jagna-anons to secure the manta rays) and found it a more effective method. This whale fishery, including the practise of catching the whale by jumping on its back with a hook, was transferred to nearby Pamilacan Island. Through the years of frequent seafaring trade and 'adventures' of Boholanos, the practice was most likely further transferred to Camiguin and probably to Salay, Misamis Oriental. The use of the toggle-harpoon can be speculated to have been copied from either the Boholanos who migrated to the islands, or through contact with American whalers sperm whaling in the region. The extent of foreign whaling in the Philippines during the seventeenth century is still unclear given the present data. Links to whale fisheries in neighbouring countries such as China, Taiwan, Japan, and Indonesia are

yet to be established. However, it is probable that the Filipinos learned or adapted this type of fishery during earlier contacts (pre-American) with other South and Southeast Asian peoples.

Other areas in the Philippines still need to be investigated for any history (ancient or recent) of whale hunting or cetacean utilization in general. The 'whale harpoon head' found in the archaeological site in Cagayan de Oro city could be an indication of an ancient practice of hunting marine animals such as cetaceans and should be looked into further. Other islands where a similar instrument may have been used should be investigated. Archaeological sites such as the Duyong Cave have great potential for providing historical information on use and presence of cetaceans and other marine animals. Other sites such as the Bolobok cave in Tawi-tawi should be investigated for cetacean and other marine mammal remains.

Comparison of available data on historical and current distribution of sperm whales, humpback whales and Bryde's whales indicate that there is a decrease in numbers of animals as well as area of distribution or occurrence. These changes in numbers and distribution can be attributed to several factors: (a) a decline in populations due to intensive whaling; (b) lack of historical and current data on abundance and distribution; and (c) movement of animals into a different area.

In order to illustrate a more comprehensive historical distribution map of exploited whale species in the Philippines it is essential that all possible records be investigated. Key information may be found in pre-colonial and Spanish colonial trade records as well as pre-World War Two records. A complete examination of records of all American, as well as British whaling ships that frequented the Pacific and Indo-China should be conducted. Such historical data can provide for the construction of systematic information which can be used to estimate not only historical abundance but also to determine seasonal and spatial distribution of whales and, changes in population productivity.¹⁶¹

For more recent data on whale distribution, vessel survey data should be updated and should cover previously less studied areas such as the south and western coast of Palawan, southern and eastern Mindanao, eastern coast of central Luzon, and north western Luzon.

Accessing historical data in the country has been very difficult. It is either a situation where the data does not exist, or it has been lost (i.e. discarded, burnt, or current location unknown). If it does exist, it is not kept within the country and is not readily accessible. The national ban on the catching or killing of cetaceans also influenced the accessibility of data, particularly from interviewing fishers and local officials. Most people are aware of the ban and would more than likely be cautious in giving information that will show that they (and their town's people) are conducting illegal activities or that they are not aware of the law.

It is evident that people in different regions in the Philippines have been eating whales and dolphins for centuries. Different tribes with varying beliefs and practices, utilize these marine mammals in different ways. The origin of each practice is difficult to determine given the present available data. Each group of people cannot be taken in isolation from one another, as they are inextricably linked socially, culturally and geographically.

To this day, whales and dolphins in the Philippines are caught directly, incidentally and opportunistically. Although national legislations prohibiting these acts are present and well-known, they are obviously not adhered to by the locals and not enforced by the responsible government agencies.

Given the inadequacy of pertinent data, namely baseline and current data on whale distribution and stock abundance, it is not recommended for the Philippine government to lobby for the resumption of commercial whaling. With regard to the national ban on hunting and killing cetaceans, it is recommended that a thorough study of the socio-economic impacts of this policy on the communities of Pamilacan, Lila, Sagay, and Salay be conducted. Although a lifting of the ban is not imminent, the apparent decrease in numbers of Bryde's whales within the waters of these areas alone indicates that necessary precautions need to be made before reconsideration of the current policy.

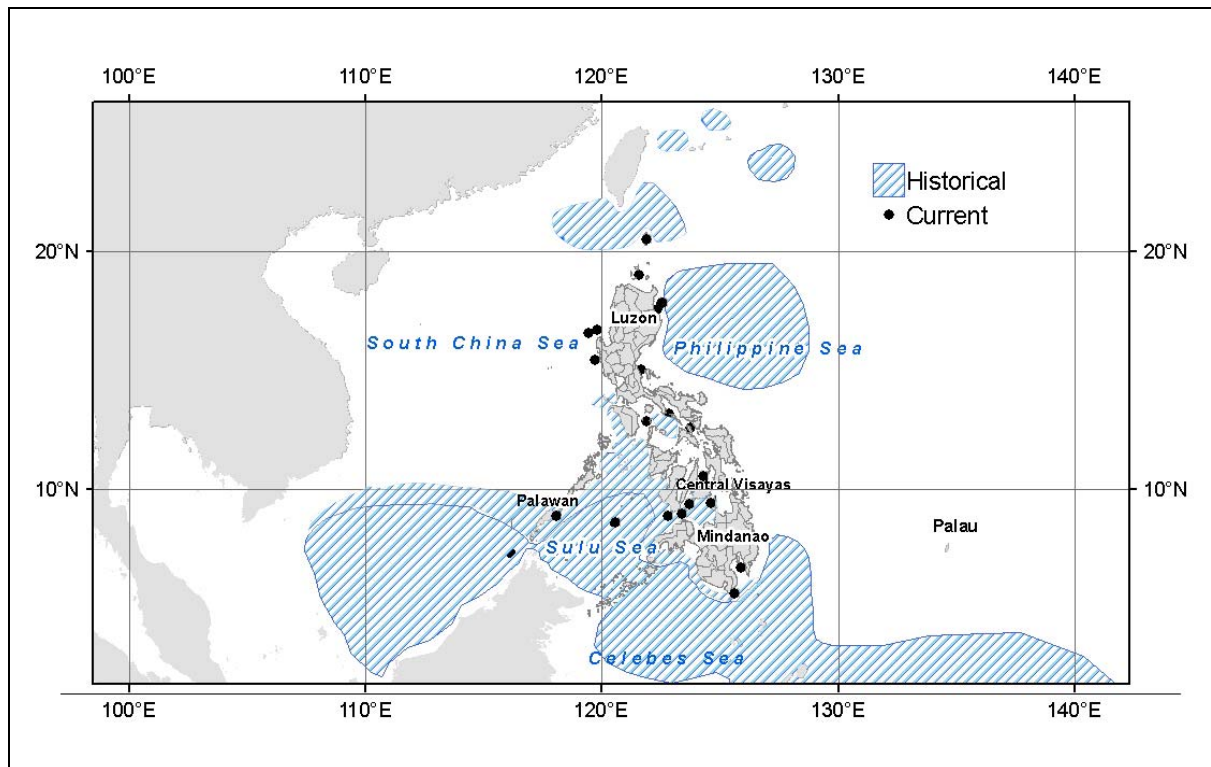
Jo Marie Vera Acebes, or Jom, is a Philippine national born and raised in the city of Marikina. She has a Bachelor of Science in Biology from the Ateneo de Manila and a Doctor of Veterinary Medicine from the University of the Philippines at Los Baños. Jom has extensive experience working with local people in the Babuyan Islands, northern Luzon, having first started her work in the area in 2000. Her background in marine conservation and local stakeholder involvement is extensive, having worked for WWF-Philippines for more than four years. She started as a volunteer for the Species Conservation Unit of WWF-Philippines. Within a few months she was hired as the project team leader of the Cetacean Research and Conservation Project wherein her main responsibilities were conducting baseline cetacean research in identified sites around the country and acting as the coordinator of the National Marine Mammal Stranding Network. Towards the end of 2000, she was tasked to manage the Humpback Whale Research and Conservation Project of WWF where she was responsible for the work and financial plans of the project while leading the conduct of the research component of the project (i.e. photographic identification and acoustics study; population distribution and abundance). She not only served as a resource person in environment-related trainings and workshops but she also contributed technical inputs for WWF's information, education and communication campaigns. In 2001, she was accepted in

the Duke University Marine Lab Global fellows program and participated in the International Marine Conservation Program at North Carolina, USA. In 2003, she was given the opportunity to work on a bigger WWF project as the wildlife research coordinator of the Northern Sierra Madre Natural Park- Conservation and Development Project. Under this project, her work responsibilities broadened to encompass all terrestrial and marine wildlife-related research and conservation issues within the park. She has represented non-profit organizations at both local and national levels and has a passion for training local environmental leaders, having conducted and coordinated on-the-job trainings for local staff and partners to enhance local capacity for faunal research. In 2004, she pursued a Masters degree in Biodiversity, Conservation and Management at the University of Oxford. For her masters thesis she began research on the “Historical whaling in the Philippines: origins of ‘indigenous subsistence whaling’, mapping whaling grounds and comparison with current known distribution.” During the course of her research she found new networks through her involvement with the History of Marine Animal Populations (HMAP) – Asia project of the Census of Marine Life. Upon acquiring her masters degree and subsequent return to the Philippines she has been successful in getting new funding to continue her research on humpback whales in the Philippines as well as funding for new projects such as ‘Historical whaling in the Philippines’ and ‘Marine education and sustainable fisheries awareness program in Jagna, Bohol’. She continues to work in the field of marine conservation and management through these independent research projects, as a project manager of the Center for Rural Empowerment and the Environment (CREE) and her consultancy work for Conservation International - Philippines as the Marine Species Specialist of the Sulu-Sulawesi Seascape Project. Jom is currently a PhD candidate with the Asia Research Centre at Murdoch University.

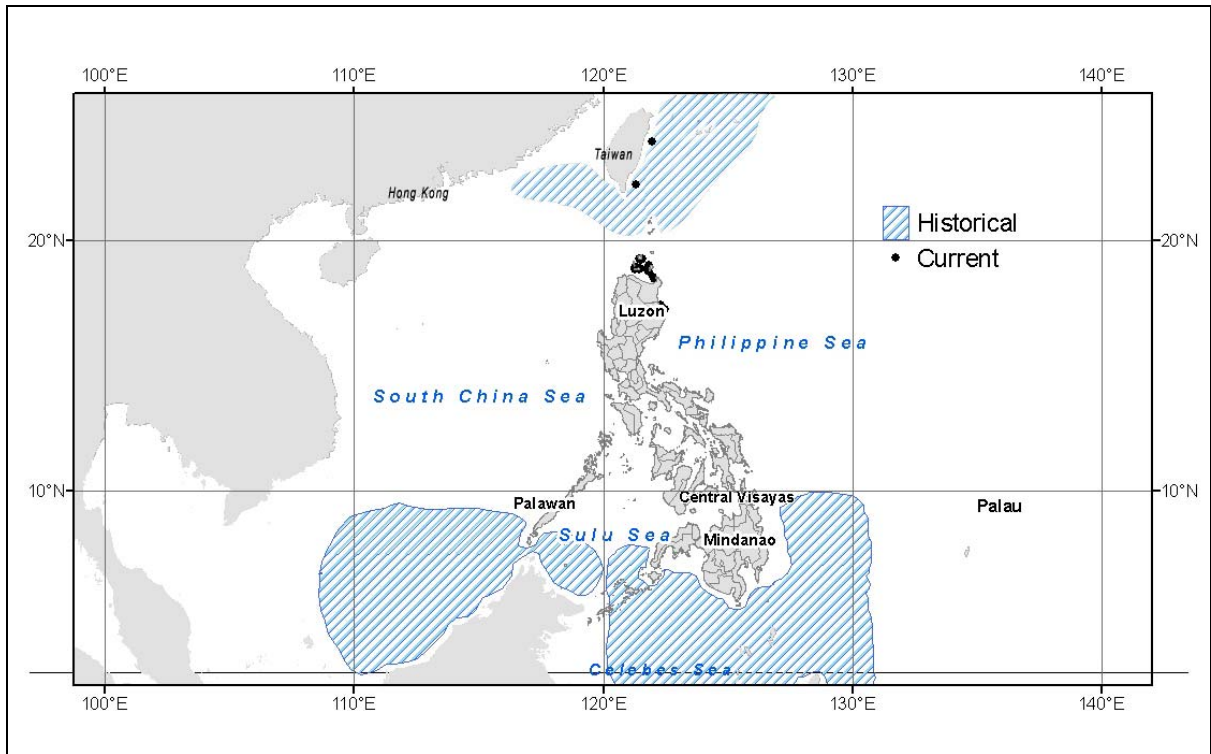
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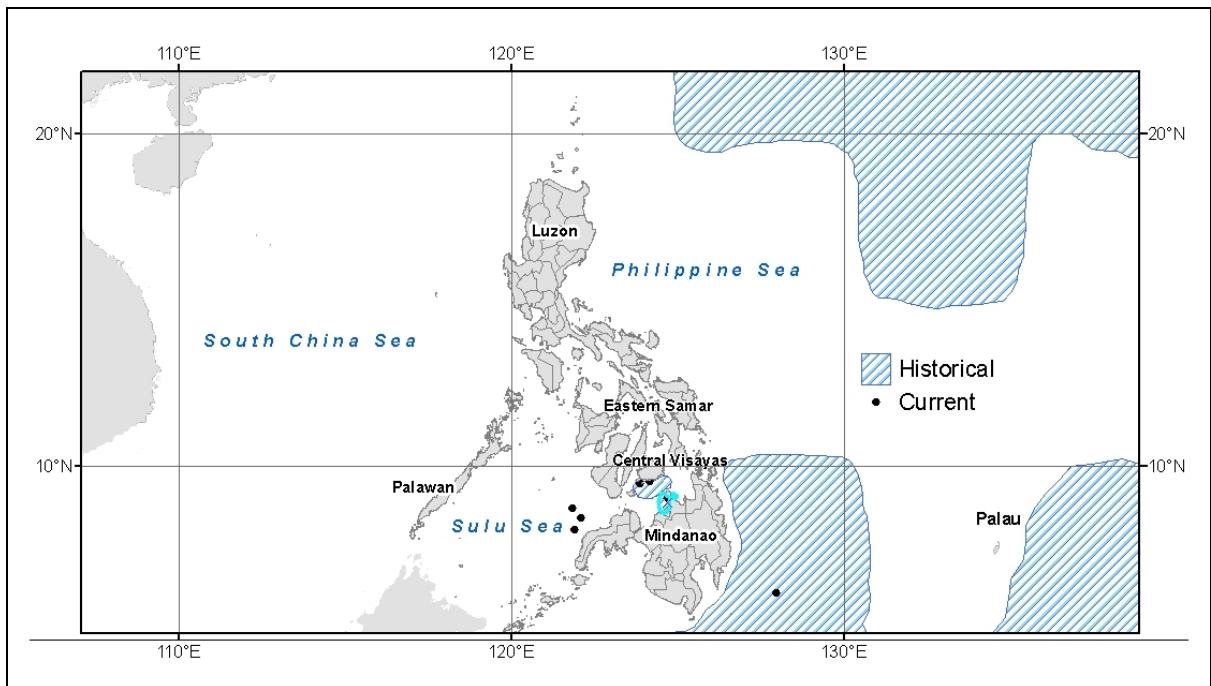
library, Beth Josephson, Richard Ladle, Tim Smith, Kelly Dolan, Leonard Soriano, Pierre Palallos, Randy Reeves, Malcolm Tull, Bill Perrin, Rhys Richards, Rasmus Larsen, Archie Gonzales, my father, the staff of WWF-Philippines in Puerto Galera, Oriental Mindoro and Bongao, Tawi-Tawi; Art Faburada, Moonyeen Alava and the friendly people of Lila, Pamilacan, Sagay, Salay, Guiuan, Jagna, Puerto Galera, Balabac, Bongao and Sitangkai.



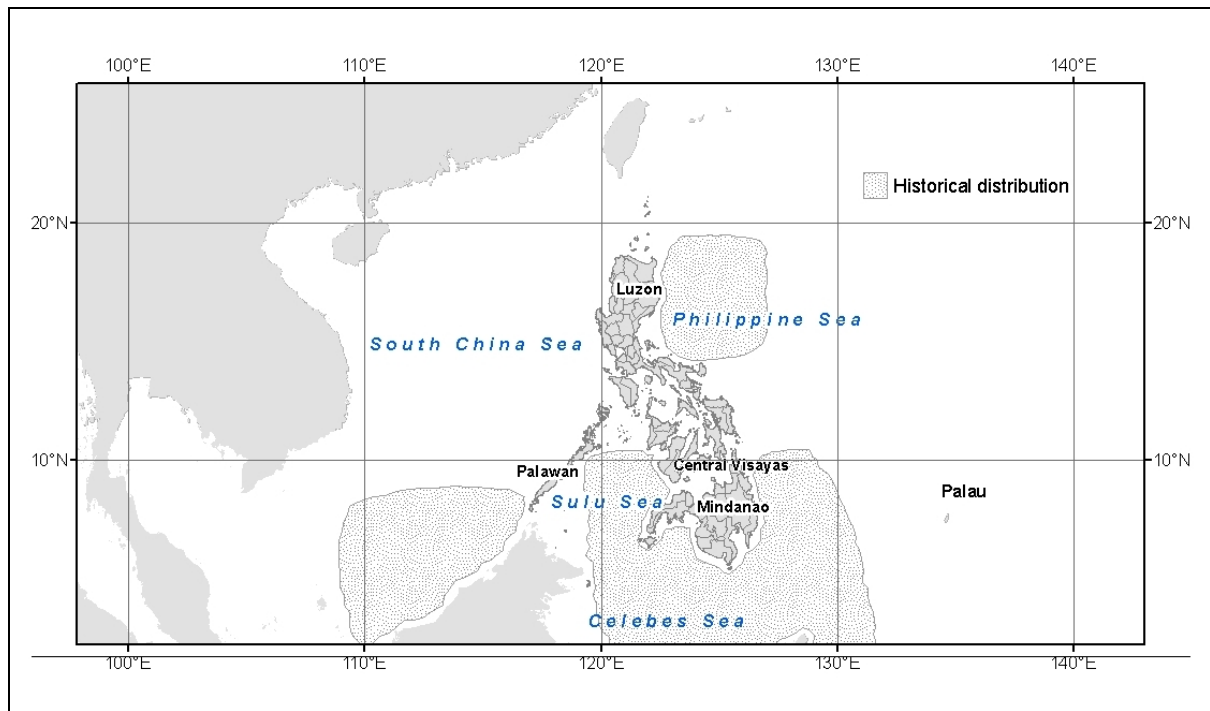
Map 1. Historical and current distribution of Sperm whales in and around the Philippine archipelago.



Map 2. Historical and current distribution of Humpback whales in and around the Philippine archipelago.



Map 3. Historical and current distribution of Bryde's whales in and around the Philippine archipelago.



Map 4. Historical distribution of rorquals in and around the Philippine archipelago

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- ⁵⁶ Interview 31. This description corresponds with Dolar et al. 1994.
- ⁵⁷ See also Dolar et al 1994.
- ⁵⁸ Interview 33.
- ⁵⁹ Interview 26, Salay, 23 June 2005.

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