

# WHALE SHARK (*RHINCODON TYPUS*) WATCHING AND TOURISM IN BARANGAY TAN-AWAN, OSLOB, CEBU: ECOLOGICAL INSIGHTS FROM LOCAL KNOWLEDGE

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The study describes the ecological knowledge of whale sharks held and used by the fisherfolks in Tan-awan, Oslob, Cebu, as they transition to becoming boat guides for tourists. Locals perceive that their coastal area is the favored home of whale sharks primarily because of the gentle attention and the kind of food fishers give them, as well as the calm sea currents that prevail there. Residents seek to maintain a harmonious relationship with the species and their surrounding environment as a way of protecting the community or their own families. The knowledge, beliefs, and practices shared clearly manifest a human-whale shark relationship which has been established over several decades. Informants possess detailed observations regarding whale shark survival and described how close encounters should be handled in the most appropriate manner. Such local insights are useful to efforts in developing adaptable resource-management strategies, at the same time as they manifest change in the context of the marine wildlife tourism in the community.

***Keywords:** Wild life tourism, whale sharks, Local Ecological Knowledge, fisherfolk culture, Oslob*

## **Introduction**

This article examines whale shark tourism in the municipality of Oslob, a once sleepy town located in southeast Cebu, Philippines and which today is considered one of the major tourist destinations in the country due to the presence of whale sharks. Specifically, the study investigates the cultural knowledge of fisherfolk on whale sharks, their beliefs and practices, and what they have to say about the tourism industry, including its effects, on the community in which they live. Data findings are useful to understand the dynamics of marine wildlife tourism in the study site

and contribute to efforts in developing adaptable resource management strategies.

The whale shark (*Rhincodon typus*, popularly known in the Philippines as “*butanding*”) is one of the world’s largest fish as well as one of the most wide-ranging marine vertebrates, but is also one of the least known shark species (Castro 2007). Whale sharks are considered harmless and gentle to humans and are widely distributed in almost all tropical and subtropical waters except in the Mediterranean (Colman 1997). The migratory pelagic fish can be encountered at many different locations in the Philippines such as Sorsogon, Negros Oriental, Cebu and Bohol. In other countries, they are seen in Mozambique and Seychelles in South Africa, Ningaloo Reef in Western Australia, and Belize in Central America, among others (Holmberg 2009, Rowat 2007, Alava 2002). Whale sharks have been a targeted species vulnerable to exploitation in fisheries. The fins and the oils attract a high price on Asian markets (Chen & Philipps 2002). Indiscriminate fishing on the whale sharks has been suggested as a factor for their population decline (Chen & Philipps 2002, Norman 2002), evident in the decreasing number of sightings of whale sharks in the Pacific and Indian Oceans. Since 2002, *Rhincodon typus* is classified as a vulnerable species and is included in the Red List of Endangered Species of the International Union for the Conservation of Nature or IUCN (Norman 2002). It is further afforded international legal protection by its enlistment in Appendix II of the Convention on Trade in Endangered Species of Flora and Fauna (IUCN 2014). Many countries with aggregation sites for whale sharks have banned the harvesting and sale of whale shark products (Camhi 2009).

In tropical countries, the presence of whale sharks provides a new experience for wildlife tourism. It offers alternative income-generating activities for local communities amid growing nature-based tourism (Catlin 2010, Heyman 2001, Norman 2007). According to Colman (1997), the business of sighting whale sharks has become lucrative in the tourism industry. Ecotourism in the Philippines started way back in 1996 in Bais City, Negros Oriental with whale shark watching as the highlight (Evacitas 2005). Since then, whale shark watching activities have been initiated in other parts of the Philippines. This prompted the Philippine government to pass laws and administrative orders such as the Wildlife Resources Conservation and Protection Act or RA9147, to set guidelines on how people and operators should interact with whales, dolphins, and other marine species (Evacitas 2005). The Fisheries Administrative Order No. 193 series of 1998 was passed in response to international conservation laws and to provide legal protection to whale sharks in

Philippine waters. The law stipulates that it is unlawful to catch, wound or kill whale sharks and manta rays in the course of catching other species of fish, or to sell, purchase, possess, transport, or export these in any form.

Ecotourism, defined by the International Ecotourism Society as “Responsible travel to natural areas that conserves the environment and sustains the well-being of local people” (TIES 2003), has been promoted as an alternative form of livelihood using a ‘non-consumptive capital’ to reduce exploitation (Alava et al. 2002). The tourism/ecotourism activities associated with whale shark watching have provided employment, alternative economic activities, improved incomes for the local community, and more generation of the local government revenues (Pine et al. 2003). However, although whale shark tourism increases rapidly, unregulated management may have detrimental impacts on the animals, e.g. there are tourists swimming with the animals blocking the path of the whale sharks (Pine et al. 2003). Donsol used to be known as the whale shark capital of the country and it has transformed the economic benefits on the life of local people, however there is concern about the compliance with code of conduct in the interactions with the whale sharks (Quiros 2007). To ensure sustainability of whale shark tourism, sightings of the whale sharks must be included in the development plan to make such ecotourism an alternative income for the local community. Encounters and sightings of whale sharks all over the world are seasonal and said to depend on the availability of the food source (Gallagher & Hammerschlag 2011).

In Oslob, Cebu, specifically in barangay Tan-awan, there is an assurance of daily sightings of two to 23 different whale sharks for the entire year. Researchers have noticed that presence of the whale sharks can be seasonal and also increased to 46 sightings of the whale sharks (Araujo et al. 2014). Since the official opening of whale shark watching and swimming in Oslob, it had sold more than 140,000 trips or the equivalent of over US\$1million, which is now considered as one of the largest for marine wildlife tourism in Southeast Asia (Araujo et al. 2014). At the same time, tourism management in Oslob has experienced an increasing number of violators of the Municipal Ordinance regarding the guidelines of whale shark watching (Schleimer et al. 2015).

Some experts consider tourism to potentially disrupt, disturb and damage natural habitats. In rural settings, tourism can lead to dramatic ecological, cultural, and economic changes for the local residents (Scheyvens 1999). There may be inconsistencies or differences between perspectives and attitudes of tourists, local people, and management.

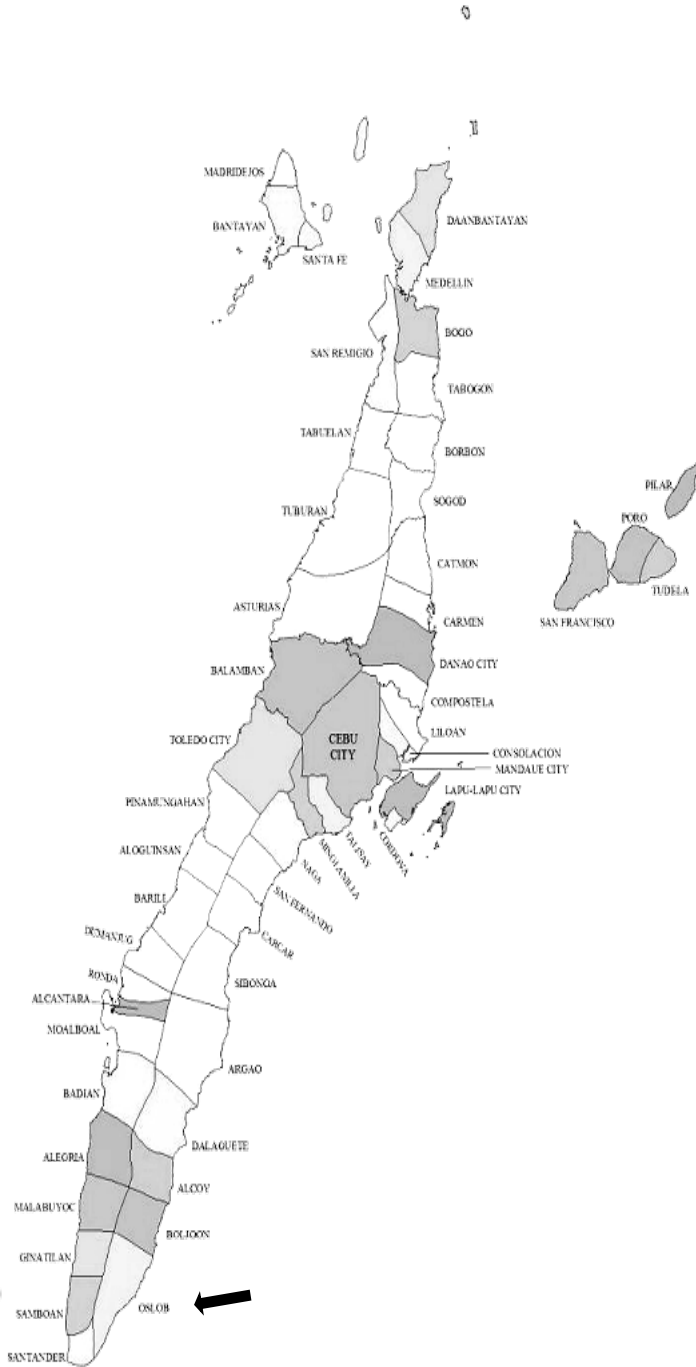
Sustainability of wildlife tourism also depends on the harmonious relationship between humans and animals (Qingming et al. 2012). For whale shark tourism, ‘provisioning’ ecotourism (offering a non-natural food source) or feeding the animals in order to get them closer to the tourists, has been subject to scientific criticism due to possible long and short term disturbance or change of whale shark behavior. Orams (2002) contends that the host, tourists, and management agencies must consider the impacts on wildlife of whale shark feeding.

The usual approach to fishery management based exclusively on Western standard scientific methods disregards information acquired from local knowledge or local communities (Dolncao & Reis 2002). The “top-down” approach is complicated, inoperative and expensive to the local fishermen and thus, not applied (Hanna & Jentoft 1996). Despite its ecological importance, detailed knowledge of whale sharks such as their life history, reproductive patterns, and migratory destinations remains to be limited (Colman 2007, Rowat 2012). More and more ecologists, conservationists, and any management to sustainable tourism have recognized the need to engage with local knowledge holders (Pitcher & Pauly 1998) and for culturally-informed solutions (Kottak 1999). Community-based conservation has consistently become one of the most important factors considered as part of management plans. To have long-term efficacy and consistency in tourism programs, these must incorporate customary ecological management practices held by the local people in the community and support local people in co-management (Drew 2006), drawing on ‘Traditional Ecological Knowledge’—defined as “a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment” (Berkes et al. 1998:1252). Understanding the relationship between humans and the physical environment also highlights the need for observation and participation in community events toward a better interpretation of the dynamics and social conditions of the community being studied (Berkes et al. 1998), as well as the symbolic meaning people attribute to events that have occurred (Miraglia 1998). The cultural knowledge of people (in this study, the fisherfolk) can be used as guide in environmental response initiatives, even as it will not be expected that all local or traditional knowledge and practices are ecologically sound. Conservation plans, policies and regulations, and interventions must therefore recognize the importance of engaging with locals as well as give special attention to their felt needs.

### **Methodology, background information about Oslob and Tan-awan**

Fieldwork was carried out from October 2012 to November 2014. I did several community visits to develop rapport with residents and fisherfolk. I gained familiarity with barangay events as well as observed human activities that relate to whale shark management and tourism. Using a topic guide, semi-directed interviews (cf Huntington 1998) were done with 40 key informants who, at the time of the study, were directly involved as boat guides in the tourism industry of the municipality. The number of participants was not intended to target or to reach a quota of 40 informants. Study participants were predetermined using the following parameters: (i) must be a resident of the study community for not less than five years, (ii) must have been engaged in fishing as primary means of livelihood for at least two years, and (iii) must possess knowledge of the whale shark watching and tourism industry in the community. Potential participants were recruited through the chain referral technique (Huntington 1998), that is, a key informant was requested to refer the researcher to another fisherfolk-informant who fell within the inclusion criteria and could give further information regarding whale shark knowledge. There was also information gathered through informal interviews conducted with those who did not fit the abovementioned categories such as boat guides who were previously corn farmers and who did not have sufficient knowledge about the whale sharks. In this study, and owing to the fact that boat guides in the area are all males, only men [and no women] who were willing to participate in the study and share their thoughts and opinions were interviewed. At the time of the study, all 40 key informants were married, Roman Catholic, and born in Barangay Tan-awan. Eight of them have reached high school, the rest have had some elementary education.

The municipality of Oslob, located approximately 118 kilometers from Cebu City and bounded by the municipalities of Boljoon, Santander and Ginatilan, on its north, south and west respectively is a fourth class municipality (Fig.1). and its products include rice, coconut, root crops, fruit trees, corn, fishery, livestock & poultry, and limestone (Zosa 2004). The municipality has a population of 26,116 residing in 5,413 households (Gultiano et al. 2010). Travel time, from the Cebu City South bus terminal to Oslob, is approximately three hours. Oslob consists of 21 barangays including Barangay Tan-awan, the study site and the place where whale shark tourism is taking place.



**Figure 1.** Map of the Province of Cebu

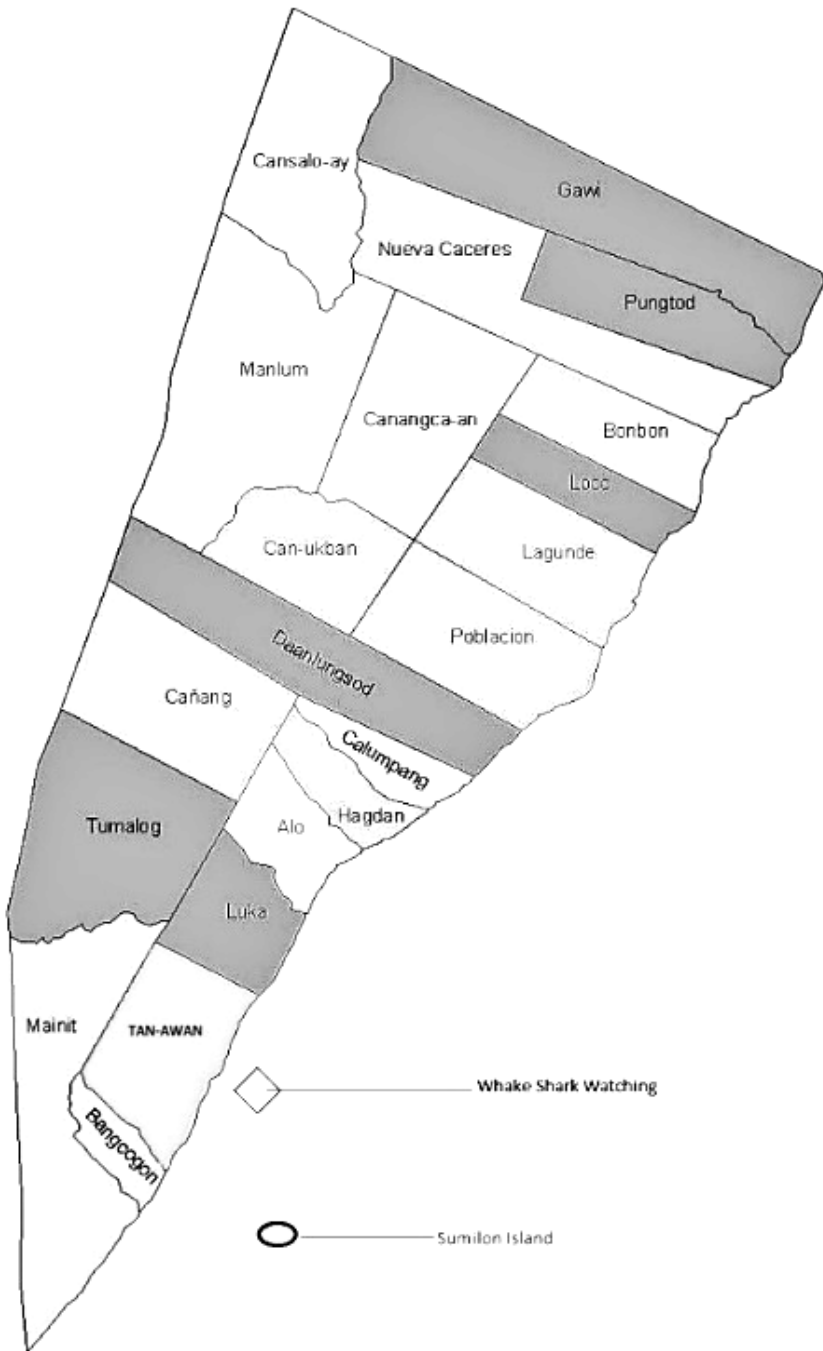


Figure 2. Map of the Municipality of Oslob

Tan-awan is approximately 20 minutes from the town proper and about an hour of travel by boat from the city of Dumaguete, in the province of Negros Occidental which is another destination for wildlife tourism in the Philippines. Oslob is now considered one of the major tourist destinations in the country due to the presence of whale sharks, specifically in the coastal area of barangay Tan-awan where since 2008, hundreds of local and foreign tourists have been coming just to see whale sharks. The barangay is comprised of agricultural lands on the western part and maritime water in the eastern part. The primary means of livelihood are fishing and farming. Others work as laborers or pump boat crew at the scuba diving shops or scuba diving recreational facilities at Sumilon Island [also part of Oslob see Fig. 2], which is a well-known diving area. There are also some Oslob residents who have migrated to Cebu and Negros Occidental to work in the service sector. The town of Oslob has several nature-based tourism destinations, for which it was known before the whale shark tourism, such as the Mainit Spring, Sumilon Island with the historical site of Baluarte watchtower, and the Tumulog falls (Anticuando & Amper 2016).

Before the advent of whale shark watching and tourism, life in Tan-awan was perceived to be difficult and people did not think of whale sharks in terms of income opportunities they can bring to their community. The primary source of livelihood of people living in the coastal area was fishing, with a monthly income between ₱4,000 - ₱5,000. Others would either be working at resorts as laborers or pump boat crew for scuba diving shops, or traveling to Cebu city and Negros Occidental to be employed as carpenters, baggers in a department store, or working as laborer in any port area. Common among the fishermen before was to be hired as a “Moro Ami” fisher – a fishing technique where fishermen encircle the coral reefs, pound or destroy the reefs in order to drive fish out so the fish could be captured.

### **Local knowledge of whale sharks**

Whale sharks are locally known as “*tuki*” in Tan-awan because of the distinctive blueish or gray spots on the body. These spots are associated with the gecko lizard locally known as “*tuko*” or “*tiki*” (tokay gecko, *Gekko gekko*). The common description of the whale shark is that it has a broad and flattened head, a large terminal mouth and marked with a pattern of spots and stripes on a dark background (Compagno 2005). In the eyes of ordinary people or tourists coming to Tan-awan, whale sharks are identical in color, spots, and the flat rounded face. Even the other boat guides who were not originally fishermen or the farmers from the western



part of the barangay cannot distinguish one whale shark from another. However, our informants observe that every whale shark has unique spot patterns as well as other distinct features such as spot arrangements, facial features, and complexions (Figs. 3 and 4). For them, there are no two whale sharks that look exactly alike and each has a different shape from the other. Aside from the spot formations, whale sharks have different variations in skin color.

According to our informants, they are always able to identify the whale sharks. They can recognize which ones are new to the area as opposed to those they often see in their coastal waters. Certain whale sharks have been given names by the locals such as “Fermin”, “*Bali*”, “Lucky 7”, “Lucas”, and “*Taya*”. “Fermin” and “Lucas” are named after fishermen. Fermin the fisherman is known as the ‘nicest person in the community’, likewise “Fermin” the shark is the most obedient and less annoying of all the whale sharks. When it is given food/“*uyap*” and coaxed farther from where fisherfolk are trying to catch fish, “Fermin” obeys. One shark was named “Lucas” after a fisherman because this whale shark would only take feeds from him. Study participants described both whale sharks as having distinctive physical features such as the blueish gray color which they say is darker compared to the others, the alignment of the spots, and facial features. The whale shark with distinctive spots formed like the number seven is called “Lucky 7”, while the one with an unusual tail is called “*Bali*”. In Cebuano, *bali* means ‘fracture’. Locals say that “*Bali*” looks like its tail has been injured in the past. The whale shark which locals say has some kind of stain in the jaw area is called “*Taya*”. *Taya* refers to a ‘stain’ in Cebuano.

In the eyes of outsiders, the whale sharks in Oslob may look the same, but for locals, they are identified based on distinctive features. There are times when the whale sharks would leave the coastal area of Oslob for about two to five months, but locals say that whale sharks have been in their community for several decades.

### **Fishing practices and beliefs**

Whale sharks in Oslob (particularly in barangay Tan-awan), are considered just an ordinary fish that the fishers are accustomed to see in their coastal waters. Participants in the study confirmed that from as early as four years of age, they have accompanied their grandfathers or fathers in fishing for daily consumption and have seen whale sharks since childhood. As fishers they have keen knowledge about the surface and underwater sea currents because they have to position their small boats



**Figure 3.** Whale shark spot formations



**Figure 4.** Face of a whale shark



**Figure 5.** Whale shark surfaces from the water with rounder mouth



**Figure 6.** A whale shark's spots and wider flat mouth

according to the sea current in one direction and determine the wind direction on the opposite directions in order to maintain their positions.

If the fishermen notice a group of small pink shrimps (family Sergestidae, locally known in Cebuano as “*uyap*”) within knee level of water, it indicates that the whale sharks are lurking in their waters. Study participants said that they learned from their parents of whale sharks going to eat shrimps/*uyap*, and said that among fishermen it is common knowledge that whale sharks will be with them while fishing because whale sharks are interested to eat the shrimps/*uyap* that they use as bait. The fishing technique they use is called “*kopog*”. *Kopog* fishing is done with a handful of shrimps bundled to a stone or heavy object with the hook at the end of the nylon line. The moment they drop the stone, the bait takes a small tornado form and the fish will come close to the bait. The technique is ideal for capture of the following kinds of fishes in their area such as “*dalagang bukid*” (yellow tail fusilier) and “*anduhaw*” (island mackerel). On a single drop of bundled bait, they may be able to catch five to eight fishes. They hope to catch as much as twenty kilos of fish for an entire day of fishing.

They also say that the presence of whale sharks in their area has something to do with the supernatural. The stories say that fairies, locally known as “*encanto*”, are the real owners of the whale sharks. Being ‘pets’ of the fairies, causing harm or injury to the whale sharks is perceived as bringing bad luck or unfortunate events to the family of the wrongdoer. As narrated by one informant, there are stories about some people in the community who attempted to hurt the whale sharks and that such behavior led to bad luck in the family. One of the participants shared that his grandmother used to sing or serenade the whale sharks while feeding them *uyap* and asking for good luck to have a good catch for the day. Feeding the whale sharks with *uyap* is a way of asking permission to fish and to lure the whale sharks to stay in an area far from where fishing activities are being undertaken.

Locals had high respect for the whale sharks even before they have realized the income opportunities it has brought to their community. Residents in Tan-awan do not kill or eat the meat of whale sharks. In the 80s, it is reported that there were fishermen, allegedly from Bohol, who became curious of its taste and killed a whale shark. Rumors spread in the community that the meat is not delicious. Some locals also became very angry of the incident not only because a whale shark was killed but because of the very foul smell of the remaining parts that were not disposed of properly. Since the ‘80s and late ‘90s, it was said that 15

whale sharks have been captured and slaughtered by fishermen allegedly from Bohol, and another two by moro-ami divers. Locals reported that whale shark hunting was rampant from 1990 to 1998 due to high demand for whale shark fins (not to include other meat or parts of the whale shark's body), but they are sure that none of the offenders come from the municipality of Oslob.

### **On whale shark movements and favored coastal areas**

The whale shark sightings have consistently been in the coastal areas in barangay Tan-awan, Oslob and not from any other coastal areas in the entire province of Cebu. The fishermen believe that whale sharks prefer to stay longer in the coastal waters of Oslob because they are regularly fed with *uyap* by the fishers. They suspect that whale sharks have a way of communicating with others and that information regarding the feeding process or how they are being fed by the community has lured others to come to Oslob. In the words of one key informant,

The number of whale sharks in our coastal area has increased because we do not hurt them. There is also an abundance of shrimps in our sea water and this is what we regularly feed them. It appears that they communicate with each other regarding places where food is abundant and where humans do not hurt them.

*[Nagkadaghan ning tuki dire sa among lugar kay dili man namo sila pasakitan. Dayon daghan sab kaayo mig uyap sa among dagat nga mao jud ila kaonon unya sige pa jud namo sila lawgan. Murag magsturya na sila tingali og asang lugar ang daghan og pagkaon ug asa sab sila nga dili mahilabtan o pasakitan sa mga tawo.]*

It was said that other areas in Cebu with some whale shark sightings have tried to imitate the feeding of whale sharks but to no avail. Locals believe that whale sharks stay longer in Oslob, not only because of the abundance of the shrimps *uyap*, but also because the sea current is not so strong. For this reason the whale sharks just hover around the coastal area of barangay Tan-awan to the Island of Sumilon. Whale sharks reportedly go to the deep waters only during heavy rains or typhoon.

The local fishers know that while whale sharks may often be slow-moving creatures, there are times when they can have sudden or unpredictable movements that may be particularly dangerous to humans. Touching the whale sharks must be avoided because it is extremely

dangerous for humans to be hit or dragged away by a whale shark resorting to sudden and violent movements. A fisherman has experienced that when he held the upper fin of one of the whale sharks it tried to shrug him off so quickly and swam away, he narrated how he feared that if the whale shark had hit him, he would have been seriously injured. In his words,

As I have experienced, I swam with the whale shark, we used to play with them before, I held its fin and swam with it. Whale sharks swim fast just like a fish. One time I was astonished because when I let go of the fin of the whale shark, I almost got hit by the tail, and if I was really hit at that time, I am sure I would have fainted and would not have been able to surface.

*[Sa akong nasuwayan, nilangoy ko kauban ang tuki. Amo mana sila maduwaan sa una. Nikupot ko sa iyang tapay aron uban mi og langoy sa tuki. Kusog mana molangoy ang tuki ug paspas kaayo murag parehas sa ubang isda. Sa kadtong higayona nakurat ko kay pagbuhi nako sa iyang tapay hapit ko maigo sa iyang ikog unya sa akong paminaw kusog jud to pagkalihok sa iyang ikog kay napalid man ko. Kon naigo pako ato, aw way siguro di nako kabalik og saka kay kuyapan jud ko adto.]*

In another incident, a fisherman narrated that while in deep waters he accidentally dropped a paddle (*bugsay*), directly hitting the whale shark and causing it to make an instant dive and accidentally hitting the side of the small boat. The boat sank but the fisherman was saved by another fisherman who happened to be around.

According to one informant, whale sharks make a ‘coughing sound’ when disturbed. One evening while he went out fishing, he could not drop the bait because a whale shark was following him. He became so annoyed he threw a piece of rock into the mouth of the whale shark. Suddenly, he heard a “coughing” sound, and to his surprise, the whale shark spat out the rock from its mouth and this hit the lamp on the boat. Afraid of what might happen to him next, the fisherman hurriedly went home. Incidents such as these enabled them to understand the strength and the capacity of whale sharks to respond to certain situations.

### **Whale shark tourism in Oslob**

The whale shark tourism in Oslob informally began in 2008 when a fisherman started to earn money by showing the whale sharks to tourists who came to the municipality to experience and enjoy scuba diving in the Island of Sumilon. From this activity, he earned approximately ₱900 to ₱2000 per day. Since then, the fisherman needed to catch only two kilos of fish for home consumption, and he spent the rest of his time showing the whale sharks to the tourists. Upon knowing of the opportunity, other fisherfolk in the community started to do the same. Except during typhoons and heavy rains that make the water bland, whale sharks are visible in the coastal area of Barangay Tan-awan. However, this form of tourism was informal and no protocols were followed. Tourists would just jump into the waters and swim with the whale sharks. Tourists would even be allowed to touch any parts of the body of the whale sharks.

In 2009 particularly, when Oslob became very famous to both local and foreign tourists, the local government of Oslob obtained a formal permit to promote wildlife tourism and operate whale shark watching activities in Barangay Tan-awan from the Region 7 Department of Environment and Natural Resources (DENR 7) and the (Department of Agriculture) Bureau of Fisheries and Aquatic Resources (BFAR 7). Presently, as a primary means of livelihood, they worked as boat guides in the tourism industry of Oslob, to include Sumilon Island. A people's organization called Tan-awan Oslob Sea Warden and Fishermen's Association (TOSWFA) was organized to ensure smooth implementation of the newly-established tourism industry and make the community understand wildlife tourism laws and regulations. A series of lectures and seminars regarding wildlife tourism management were given to them by a non-government organization called Large Marine Vertebrates Project (LAMAVE) through the Municipal Tourism Office. Among other things, LAMAVE consistently discouraged people from touching the whale sharks not only because of the unpredictable behaviors that might arise but because of the possibility that humans experiencing some kind of illness or disease might contaminate the whale sharks or vice versa.

Since then, and given the income opportunities brought about by whale shark watching activities, many of the fisherfolk in Oslob started to work as boat guides, rest house or resort caretakers, or tricycle drivers. A close encounter with the whale sharks usually starts at 6:00 in the morning and ends at 1:00 in the afternoon. Beyond 1:00 in the afternoon is intended for the whale sharks to rest or to hunt food on their own. Full-time boat guides earn a minimum of ₱800 per day. If the weather is good,

particularly during weekends and regular holidays, they earn as much as ₱3,500 a day. During the Christmas holidays in 2014, just three days from December 27-29, 2014, each boat guide earned an average of ₱19,554. Informants reveal that their income as boat guides has enabled them to meet the basic needs of the family including the education requirements of their children. Unlike before, life in the present day is perceived as better and residents are appreciative of the government's support to the tourism industry in Oslob.

This is also the opportunity for the organization LAMAVE and government agencies to monitor and continue their research on the whale sharks. Data from the Department of the Environment and Natural Resources (DENR) Region VII show that the industry has generated an income of ₱34,698,918 from January-September 2012 (Arregadas et al. 2012). Approximately, 98,295 tourists (local and foreign) visited Oslob for whale watching tourism. While 66,800 of the tourists are Filipinos, about 9,497 of them are foreigners (Arregadas et al. 2012).

Based on the Municipal Ordinance S91-12, sixty percent of the income generated goes to TOSWFA to cover maintenance and equipment expenses, food for the whale sharks, other incidental expenses, and the share of 180 TOWSFA members. Thirty percent goes to the general fund of the Municipality of Oslob, and the remaining 10%, to the general fund of Barangay Tan-awan. TOWSFA has 30 small boats, each with a capacity to carry seven to ten persons. Three of these boats are used for monitoring and ensuring strict implementation of guidelines. In the ordinance, a distance or perimeter of five meters from the tail part of a whale shark and two meters from the front of the whale shark has to be maintained.

A close encounter with whale sharks involves 30 minutes per person watching on board the small boat, or swimming and snorkeling. In the beginning of the day, there are around three to five small boats with 7-10 tourists doing the whale shark watching and swimming. However, around 9:00 in the morning most of the 25 small boats will be in the water. There are days also that the viewing and swimming with the whale shark goes beyond 1:00 in the afternoon depending on the number of visitors that arrive.

Rules and regulations including penalties for any violation, particularly in the aspect of manipulations and unnatural feeding of the whale sharks, are indicated in the local ordinance provided by the Municipal Council of Oslob. Table 1 shows the prices set for both locals and foreign tourists. Tourists are required to attend the orientation before



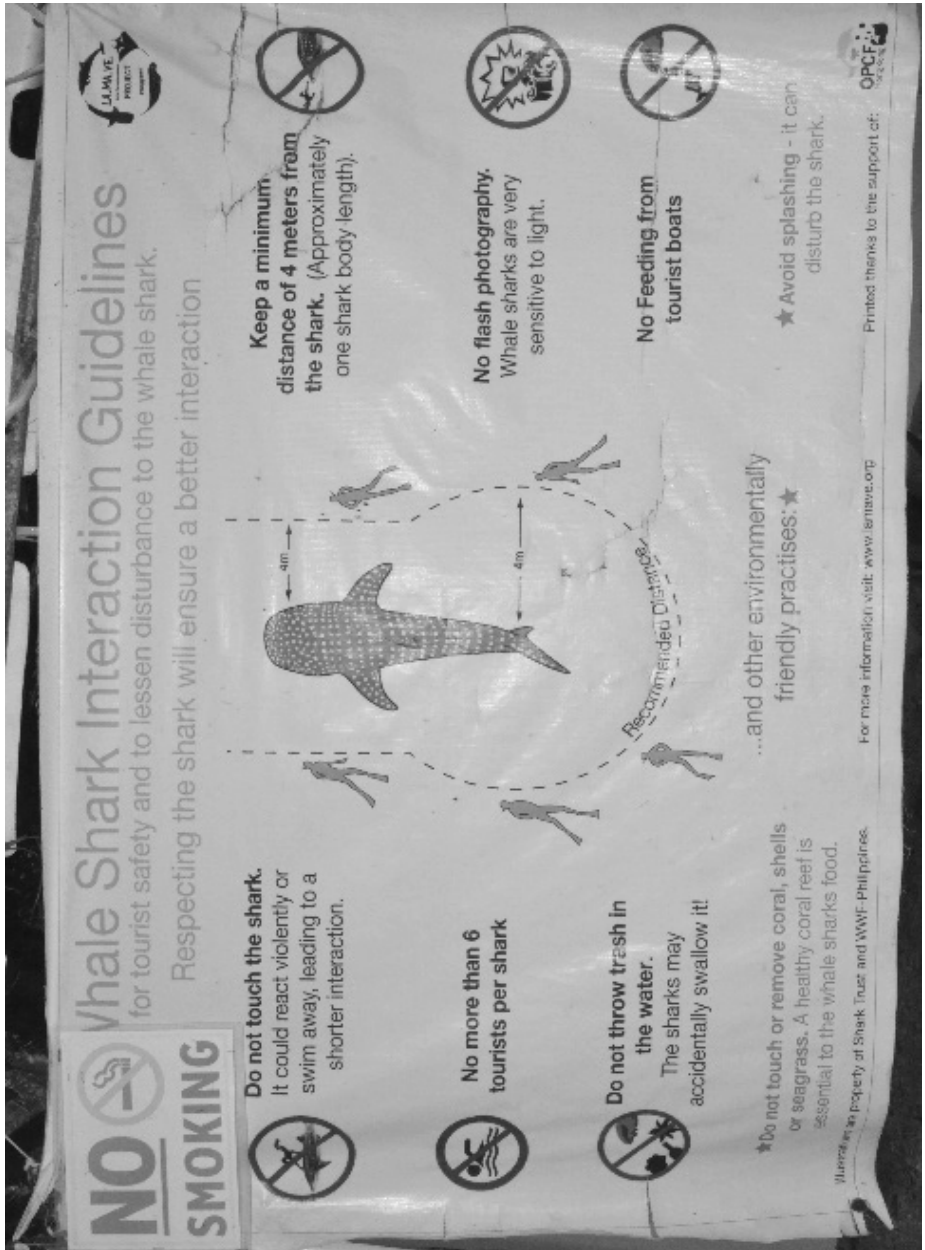
going to the water (Figs. 7 and 8), and wildlife experience and whale sharks watching are supposed to be done only 30 meters from the shore and at depth of 12 feet (Figs. 9 and 10). Sea wardens, locally known as “bantay dagat,” are deployed during whale watching activities to ensure proper implementation of the local ordinance particularly in preventing tourists from touching or having very close encounters with the whale sharks. In the entire operation, only one or two bantay dagat are monitoring the whale shark watching operations.

**Table 1.** Rates for locals and foreign tourists

Activities	Rate for Local Tourists	Rate for Foreigners
Use of small boats	₱ 300 per person	₱ 500 per person
Snorkelling	₱ 500 per person	₱ 1000 per person
Scuba Diving	₱ 600 per person	₱ 1500 per person

### Effects of tourism on fisherfolks and on the whale sharks

Informants reveal that most of the fisherfolk in Barangay Tan-awan have become dependent on the whale shark and tourism industry in Oslob. They fish only for household consumption and their children also work as boat guides or are employed in the resorts or eatery businesses that cater to both locals and tourists. Fishing techniques are not taught to the younger generation and knowledge of the environment is not well cultivated among them as they are more inclined to serve in the tourism industry. They still do fishing, but only for household consumption. There is a new fishing technique innovation because of the abundance of fish in their coastal area known as “*guyod-guyod*”. “*Guyod*” is the Cebuano term for ‘drag’ or ‘pull’. In this technique, a fisherman catches fish with the use of a piece of cloth tied to the fish hook. One does not have to go far in order to catch fish because a variety of fish can already be seen about 50 meters from the shoreline. The situation raises the question of what would become of the younger generation who has been deprived of learning the skills in fishing if ever the coastal waters of Oslob become unsuitable for whale sharks.



**NO SMOKING**

**Whale Shark Interaction Guidelines**  
for tourist safety and to lessen disturbance to the whale shark.

Respecting the shark will ensure a better interaction

**Do not touch the shark.**  
It could react violently or swim away, leading to a shorter interaction.

**No more than 6 tourists per shark**

**Do not throw trash in the water.**  
The sharks may accidentally swallow it!

**Do not touch or remove coral, shells or seagrass.** A healthy coral reef is essential to the whale sharks food.

**Keep a minimum distance of 4 meters from the shark.** (Approximately one shark body length).

**No flash photography.**  
Whale sharks are very sensitive to light.

**No Feeding from tourist boats**

**Avoid splashing - it can disturb the shark.**

Recommended Distance

...and other environmentally friendly practises: ★

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Figure 7. Guidelines for whale shark interaction



**Figure 8.** Tourists listening to the orientation conducted by the Tourism Officer



**Figure 9.** View from the shoreline of whale shark interaction.



**Figure 10.** Underwater interaction with the whale sharks

In the past, a fisherman usually prepares only one to two kilos of *uyap* per *kopog* fishing activity and only a handful of shrimps/*uyap* are offered or given to the whale sharks. Today, more than 20 kilos to 50 kilos are prepared and given to the increasing number of whale sharks in the locality and the demands from the whale shark tourism. The fisherfolk also believe that such feeding practice has become a tradition among fisherfolk because it gives good luck and good catch. The high demand of whale shark tourism has led the fisherfolk or TOSWFA (the Tan-awan Oslob Sea Warden Fishermen's Association) to resort to buying "*uyabang*" in order to lure the whale sharks to come near to the small boats. *Uyabang* is a bigger kind of shrimp which is not available in Tan-awan but can be procured in Negros Oriental or other neighboring areas of the province. As years went by, locals say that they have observed an increase in the number of sightings of whale sharks in Oslob. Many of the fishers are no longer familiar with the new whale sharks that have come to join the others. Before whale shark tourism, the fisherfolk would notice one or two at most three whale sharks while fishing. However, since the beginning of whale shark tourism, all of them have noticed the increasing number of whale sharks such that there are sightings of as many as six to eight different whale sharks at the same time.

**Conclusion**

A perceived contributory factor to the success of the whale shark tourism industry in Barangay Tan-awan, Oslob, Cebu is the predictability of seeing whale sharks. The consistency of sightings in the area could mean that Barangay Tan-awan is part of the migratory route of the species. Except during heavy rains and typhoons, whale sharks abound in the Oslob coastal waters, unlike in other areas where its presence is seasonal. Locals think that the increasing number of whale sharks in the community is primarily due to the gentle attention and the kind of food they give. The whale shark tourism industry in Oslob has brought about significant changes in the lives of residents in the community. They are engaged in various income-generating activities on land and their incomes has improved. However, there is still need to control the number of tourists flocking or overcrowding the whale sharks in the waters in order to make the waters less exploited because fisherfolk still catch fish if only for household consumption purposes.

The knowledge, beliefs, and practices shared by locals is a clear manifestation of a human-whale shark relationship which has been established for several decades. Names given to whale sharks and recognition of distinguishing characteristics originate from the shared thoughts of locals and based on their close encounters and experience with the whale sharks. Being able to identify one whale shark from the other illustrates the close relationship that fisherfolk have established with the species. Key informants possess detailed knowledge of several concerns that have to do with how fisherfolks can go on with their day-to-day lives without having to fear the whale sharks that surround them while they are engaged in fishing. They are also concerned with whale shark survival. They understand how close encounters should be handled in an appropriate manner and using the kind of food the whale sharks prefer. Residents in Oslob maintain a harmonious relationship with the species and their surrounding environment as a way of protecting the community and their own families. Instead of disturbing or annoying the whale sharks, they feed them well with shrimps so the whale sharks would stay in one area and would give them time and space to catch fish.

Such basic information can contribute to decision-making regarding sustainable management. The government of Oslob can initiate alternative livelihood programs and teach younger generations culturally-appropriate fishing techniques. Results of scientific investigations should also be disseminated to locals as they are in the best place to understand the

various aspects of whale shark survival. It is recommended that local knowledge of community residents, being the primary stakeholders, must be well-respected and considered in intervention responses. The local community would continue to monitor and preserve the species in order to ensure that residents enjoy the economic benefits brought about by the whale shark watching and tourism industry.

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