# SC/66a/WW/1 Rev4

Panacetacea efforts for a participatory conservation planning of the dolphin watching industry in Bocas del Toro, Panama

Laura Johanna May-Collado, Lissette Trejos, Betzi Perez, Monica Gamboa-Poveda, Jose Julio Casas, Gabriel Jacome and Angel Gonzalez



# Panacetacea efforts for a participatory conservation planning of the dolphin watching industry in Bocas del Toro, Panama

Laura Johanna May-Collado<sup>1,2</sup>, Lissette Trejos<sup>1,2</sup>, Betzi Perez<sup>2</sup>, Monica Gamboa-Poveda<sup>2</sup>, Jose Julio Casas<sup>2,3</sup>, Gabriel Jacome, and Angel Gonzalez<sup>4</sup>

<sup>1</sup>Panacetacea.org

<sup>2</sup>Departament of Biology, University of Vermont.

<sup>3</sup>Universidad Maritima Internacional de Panama

<sup>4</sup>Alianza Bocas/Promar

Abstract: The dolphin watching industry of Bocas del Toro has grown fast and in a disorganized manner for the past 10 years. The rapid growth has lead to an unsustainable industry that is negatively impacting the local bottlenose dolphin population and its habitat. Despite past IWC's recommendations the Government of Panama has shown apathy for the situation. Concern with the urgency of the situation last year we took the initiative to develop a community planning effort for BDT. A total of 80 people (30 from the BDT community and 50 from multiple tour companies and associations) participated in the initiative. In addition, we organized five meetings with local leaders and representatives of the government agencies responsible for the protection of marine resources in Panama including ARAP (Authority of Aquatic Resources), ANAM (Ministry of the Environment), AMP (Maritime Authority) and ATP (Authority of Tourism). These meetings took place on August 27, September 4, September 6, November 11, December 23, and May 30. As result of these meetings we identify the three most urgent issues that needs to be address within the next year: (1) restructuration of the tour offer by having specialized tours to significantly reduced the use of Dolphin Bay, and other threaten ecosystems; (2) build a Dolphin Center at the entrance of Dolphin Bay that can serve as a control post for number of boats entering the bay and as a visitor center for tourists where they can obtain information (Sitar et al. for tourist perspectives about BDT); and finally (3) the implementation of the dolphin watching licensing process (and compliance evaluation), to reduced the tour boat fleet using the Bay. The only governmental agency that actively responded to these meetings was ATP and the Vice-Governor of Bocas del Toro Mr. Esteban Chacon. ATP will be funding the construction of the Dolphin Center this year. Unfortunately ARAP the institution responsible for organize the licensing process and ensure compliance to guidelines is still updating the process of certification, which is not clear in the current resolution. This process has taken an unnecessary long time due to changes in government and staff delaying the actualization multiple times. In conclusion, the Dolphin Center will help to reduce boat traffic within Dolphin Bay but until the responsible government agencies implement the licensing and evaluation process this effort may not be enough. The Panamanian whale watching resolution was published 8 years ago without a training, licensing, and evaluation process. The lack of this process promotes an uncontrolled and disorganized whale-watching industry.

### INTRODUCTION

The Bocas del Toro (BDT) region sustains one of the largest boat-based tourism industries in Panama. Thousands of tourists visit every year to observe dolphins, coral reefs, starfish beaches, and visit indigenous communities. In 2008 the Government of Panama evaluated the status of Bocas del Toro tourism industry as part of their national plan for sustainable development. The study revealed a rapid, disorganized, and unbalanced growth of the industry

in the area. Despite this evaluation, the Government of Panama has approved the expansion of the local airport to receive larger planes in BDT and in October 2014, weekly cruises from Cartagena, Colombia started to arrive to Bocas del Toro as part of the government agenda to increase tourism in the area.

In SC64WW2, SC65aSM15, SC65bWW09, SC65bWW06, we showed how unsustainable dolphin watching activities in Bocas del Toro are negatively impacting the resident population of bottlenose dolphins (also see other reports presented this year). As result of these reports the IWC expressed in "At SC/64, the Committee expressed concern over the impacts of ineffectively managed dolphin watching in Bocas del Toro, on the Caribbean coast of Panama, and recommended continued monitoring of the impacts of dolphin watching activities on this population (IWC, 2013). This recommendation was 'strongly' reiterated at SC/65a (IWC, 2014). The resident bottlenose dolphin (Tursiops truncatus) population in the entire archipelago of Bocas del Toro is probably less than 250 dolphins (unpublished data), but only 105 of these dolphins frequent Dolphin Bay, where dolphin watching activity is concentrated" (Annex M, 2014). Despite IWC recommendations the responsible governmental agencies of Panama for the protection of marine mammals has shown apathy for the situation transcending to the ignorance of past recommendations from the Scientific Committee (2012, 2014).

Unfortunately the problem of unsustainability on tour activities goes beyond the dolphins. The marine ecosystems of BDT have been severely impacted e.g., runoff due to coastal development is affecting coral reefs, and famous starfish beaches are running out of them due to souvenir demand and misuse of the area by businesses. Without the proper management plan any future increase in tourism can have serious consequences on marine diversity of this area. Despite of our efforts to raise awareness to local government agencies, the Government of Panama last year authorized the arrival of cruises to BDT from Cartagena. Clearly there is a complete governmental disregard for the urgency of the situation and the well being of the BDT community. Concern with the situation and thanks to the support of the Waitt Foundation we dedicated 2014 (July to November) to form a unified scientific and community initiative that can ensure the discussion of restructuration and sustainable development of ecotourism activities in BDT. Here we present a summary of the outcome of this initiative and highlight the agreed steps to take in the next five years.

#### **DESCRIPTION OF ACTIVITIES**

We organized an open forum with the community (public, stakeholders, tour operators) and two workshops. During these activities the scientists presented the evidence of the impact the dolphin watching boats are having on the local dolphin population and their habitat. We proceeded to open time for discussion about the concerns and opinions of the impact of the tour industry as is and what possible solutions. At the end of these activities we listed the top issues identified by the community as urgent and proceeded to discussed the resolution ADM/ARAP No.01 (2007) for dolphin watching and procedures needed to be taken in order to obtain a licensing to observe dolphins in the near future. We provided examples of good practices of marine ecotourism in other countries and talked how different communities develop a sense of ownership that helps them to develop strategies to protect their natural resources. Participants received a diploma of participation which can be used to demonstrate their initiation in the training process as part of the requirements to get a dolphin watching license. Finally we took the opportunity to interview participants and obtained information about their social background.

Finally, we organized six meetings with local leaders and representatives of multiple government agencies including ARAP, ANAM, AMP, and ATP one on August 27, September 4, September 6, November 11, December 23, 2014 and May 30, 2015. The purpose of these meetings was to convey the concerns and strategies discussed in the activities above.

#### **RESULTS**

Community and Tour operators concerns: We had a total of 30 participants in the community open forum and 50 participants in the two one-day training workshops. Table 1 shows the number of participants in each activity. Among the topics described above we also opened space for discussion of concerns in regards to the licensing process. Some of the major concerns were that the regulation request for tour guides but there are not tour guides in Bocas del Toro. The boat captain is not only in charge of taking the tourists to locations; he is also expected to be the tour guide, for which, most of them are not prepared for. This is a major concern since many boat captains do not read and write. Thus the production of visual material that can help these captains to understand the regulation and do a better job if fundamental. We also agreed on the need of initiatives that give the local community leaders more support such as regular training, but primarily the implementation of the licensing to limit the amount of tour boats transiting the Archipelago. Another addressed need was tour itineraries, changes in the itinerary and pricing are key to ensure sustainable activities as well as active presence of regulatory authorities.

# **Overall agreements**

- The need for zonation map of the Archipelago identifying areas in need of limited access with estimation of quotas for boat access and restrictions within these zones.
- Creation of a Dolphin Center that serves for education and control of boats entry to Dolphin Bay.
- Increased implementation of tour licenses and of best practices by tour operators and local leaders.
- Involvement of the indigenous communities in sustainable ecotourism initiatives and decision-making.
- More emphasis on guided tours that enhance public awareness of marine conservation. Tour operator participation in scientific data collection.
- Need to generate the following information: boat carrying capacity for currently visited areas, a new tour schedule, enforcement of regulations, and diving regulations in coral reefs.

# Meeting with community leaders and local representatives of responsible agencies: Meeting August 27, 2014

**Participants**: Martin Downer (Mayor of Bocas), Esteban Chacon (Vice-Governor of Bocas), Angel Gonzalez (Promar), Gabriel Jacome (STRI), Deyanira Garrido (AMP), Laura J May-Collado and Monica Gamboa (Panacetacea). During this meeting we reached consensus on the following items:

The need to identify community leaders

- Create an agenda of immediate goals
- Invite representatives from the following institutions: ANAM, ARAP, AMP, ATP, and local government, and NGOs.
- The Major acknowledge the need for in situ regulations.
- Funding to build a Dolphin Museum or Dolphin Center in Dolphin Bay.

# Meeting September 4, 2014

**Participants**: Esteban Chacon (Vice-Governor of Bocas), Angel Gonzalez (Promar), Gabriel Jacome (STRI), and Monica Gamboa (Panacetacea) visited Dolphin Bay to raise awareness about the excessive boat traffic in the bay. Although the Major promised to accompany us or send a representative, neither him nor anyone from his office showed up. However, the Vice-governor witnessed the interaction of 10 tour boats aggressively following a group of dolphins. We surveyed together the area and discussed the need for alternative activities that can reduce the pressure of boat traffic in dolphin habitat. Among these the following were proposed:

- Dolphin Museum and Center: an eco-friendly center at the entrance of the bay where boats have to stop register and the tourists received information about the tour, the natural history of the dolphins, an opportunity to buy souvenirs. There was an informal promise for funding by the government to build the center.
- Strengthen local business within the bay such as restaurants so that operators can offer one location tours instead of taking tourists to all locations at once due to lack of services.
- Obtain information from AMP about the boat fleet of Bocas.

# Meeting September 6, 2014

Participants: Gabriel Jacome (STRI) met with Jesus Sierra Victoria, Minister of Tourism de Panama, Merei Endara, Administrator of the Ministry of the Environment (ANAM), Director of ANAM Zuleika Pinzon and Ingre Candanero, and Enrique Castillo personal adviser of the Director. Gabriel presented the above items and the Minister of Tourism offered the funds needed to start the construction of the Center. This offer was made in the presence of the Major Martin Downer and Tito Thomas representative of the operator community of Bastimentos. However later in October we learn that the Minister of Tourism retracted his offer of funding and rephrase it as a loan. The local NGO Alianza Bocas/Promar will take the responsibility of this loan and build the center.

# Meeting November 11, 2014

**Participants**: Gabriel Jacome (STRI) and Monica Gamboa (Panacetacea) presented formally to the Major and Governor of Bocas a list of recommendation approved by our scientific team and the community in search of support.

# Meeting December 23, 2014

**Participants**: Participants Gabriel Jacome (STRI), Lissette Trejos (ARAP), Ricardo Sandoval and Eric Velasquez (ATP). We presented the conservation and scientific work of Panacetacea in Panama, and particularly the urgent need of good marine ecotourism practices in Bocas del Toro and the logistics needs of the local leaders in the region. The above proposal was evaluated and ARAP is looking for venues to support with the construction of the dolphin center and the training for tour operators. We confirmed that the NGO Alianza Bocas/Promar will be in charge of administrating the construction of the center and Panacetacea will be in

charge of the education and training of tour operators. ATP also promised better communication with ARAP and AMP in addressing the certifications for tour operators that will begin to be implemented in 2015.

### Meeting May 30, 2015

Participants: Ricardo Sandoval Director of Planning (ATP), Irene Ortiz (ATP), Maria Gallardo and Isabel Torres (ATP-Project Ecotour) and Laura J May-Collado (Panacetacea). During this meeting we discussed the steps required to construct the Dolphin Center: location, land permits, cost, designed. Angel Gonzalez (Alianza Bocas/Promar) is applying for concession of the land and building permits. About the designed we decided the Center has to be big enough to hold minimum 20 people at one time and it should have educational memorabilia about the dolphins of Dolphin Bay, souvenirs, and full-time and bilingual staff that can provide information about the natural history of the dolphins and that is also authorized to regulate and sanction those boat-captains that are not following good practices of dolphin watching. The Center should have a high look out point so that the staff can monitor boat-dolphin interactions following protocol by Panacetacea.

#### **CONCLUSION**

As shown by May-Collado et al. (see report on community and residency) the bottlenose dolphin population of the Archipelago of Bocas del Toro consists of two dolphin communities. Outside Dolphin Bay a transient community occupies most of the archipelago while the Dolphin Bay consists of 37 dolphins that year around observed within the Bay. These dolphins are daily expose to high boat noise levels (see May-Collado and Wartzok report) disrupting their foraging activities (May-Collado et al., Kassamali-Fox et al. and Sitar et al., reports) and their communication (May-Collado Quinones-Lebron, 2014, SC64WW2, May-Collado report).

The BDT community, including both public and tour operators are willing to make changes to their current tour itineraries and offers. They support not only the implementation of a control center that can help regulate boat traffic within Dolphin Bay but also they want more involvement from the responsible government agency ARAP to ensure a transparent process of certification and a system that ensure the control of compliance in situ. Until now only ATP the Authority for Tourism of Panama has responded immediately by offering to cover the cost of the Dolphin Center. The Center will help to reduce boat traffic but this reduction may not be enough if every person that owns a boat continuous to do dolphin watching in the bay. The licensing and evaluation must start this year. ARAP has taken a very long time updating the current regulation which current certification process is unrealistic and unclear. Since the publication of **Resolution ADM/ARAP NO. 01, 2007** whale watching operators have received very little training (most by independent NGOs). This lack of involvement has created frustration, confusion, and indisposition to comply with the resolution. This whalewatching resolution was published 8 years ago without a training, licensing, and evaluation process that accompanies it, without this key part of the process the whale watching industry will continue to grow in Panama uncontrolled and disorganized affecting coastal marine mammal populations.

#### Acknowledgments

We thank STRI Bocas del Toro Research station staff: Rachel Collin, Gabriel Jácome, Plinio Góndola, Demetrio and Rene Georget, Arnulfo, Christian Harris, Ericka Bakk, Morris, Marlon Smith, Urania, Zurenayka, Marcela, and Orelis. Several people assisted in the meetings: Gigi Veve, Cole Rachman, Joel Sanchez, Whitey Kwiers, Evelyn, Roberto Santamaria. Funding for this project came the Waitt Foundation ROC grants.

#### **REFERENCES**

Barragán-Barrera DC, May-Collado LJ, Quiñones-Lebrón SG, Caballero S. 2013. Population at risk: low genetic diversity in bottlenose dolphins of Bocas del Toro, Panama. International Whaling Commission; SC/65a/SM15: 1–11.

May-Collado, L.J. and S. Quinones-Lebron. 2014. Accepted. Dolphin changes in whistle structure with watercraft activity depends on their behavioral state. Journal of the Acoustical Society of America Express Letter 135, EL193-198.

May-Collado, L. J.1,2, Barragán-Barrera, D. C.3, Quiñones-Lebrón, S. G.1, & W. Aquino-Reynoso1. 2012. Dolphin watching boats impact on habitat use and communication of bottlenose dolphins in Bocas delToro, Panama during 2004, 2006-2010. International Whaling Commission. SC/64/WW2.

Sitar, A., May-Collado, L. J., Parsons E. C. M. 2014. High levels of non-compliance with whale-watching regulations in Bocas del Toro, Panama and effects of non-compliance on bottlenose dolphin behavior. International Whaling Commission, Slovenia. SC/65b/WW09.