

PROGRESS REPORT
on the
Movement, Range, and Population Size
Estimate: Aspects in Cetacean
Conservation in the North-western
Mindanao Sea, PHILIPPINES

Prepared by

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This project received an approval from RSG on June 4, 2010. Grant amount was facilitated on June 15, 2010 with total funding of £5996.26 equivalent to US\$8599.88.

Initial correspondence with the concerned local government units (LGUs) of the Province of Bohol and other environmental agencies were done from July to October 2010. The first batch of fieldwork was conducted last October 10-16, 2010. Two days prior to the actual survey, the team traveled to site and visited the offices of the five different municipal mayors, the provincial governor, and the Bohol Environmental Management Office or BEMO as a form of courtesy to them and introduces the project.

The survey team was composed of members from Silliman University-Institute of Environmental and Marine Sciences graduate program, Tubbataha Management Office, Palawan State University, and marine mammal volunteers.



This study seeks to provide an estimate of the population size, address movement patterns and habitat range of the most frequently sighted cetaceans within the project site.

To achieve these objectives, a systematic line-transect survey was conducted on October 12-15, 2010 and November 21-30, 2010 covering an on-effort distance of approximately 540.0 km. To date, 46 cetacean encounters has been documented identifying 6 different species namely: *Grampus griseus*, *Lagenodelphis hosei*, *Peponocephala electra*, *Physeter macrocephalus*, *Stenella longirostris* and *Tursiops sp.* Catalogue of marked individuals is still on-going. Re-sighting of *G. griseus* has been observed and the sperm whale seen in October was again encountered in November based on its dorsal fin markings. Species seen were predominantly *Grampus griseus*.

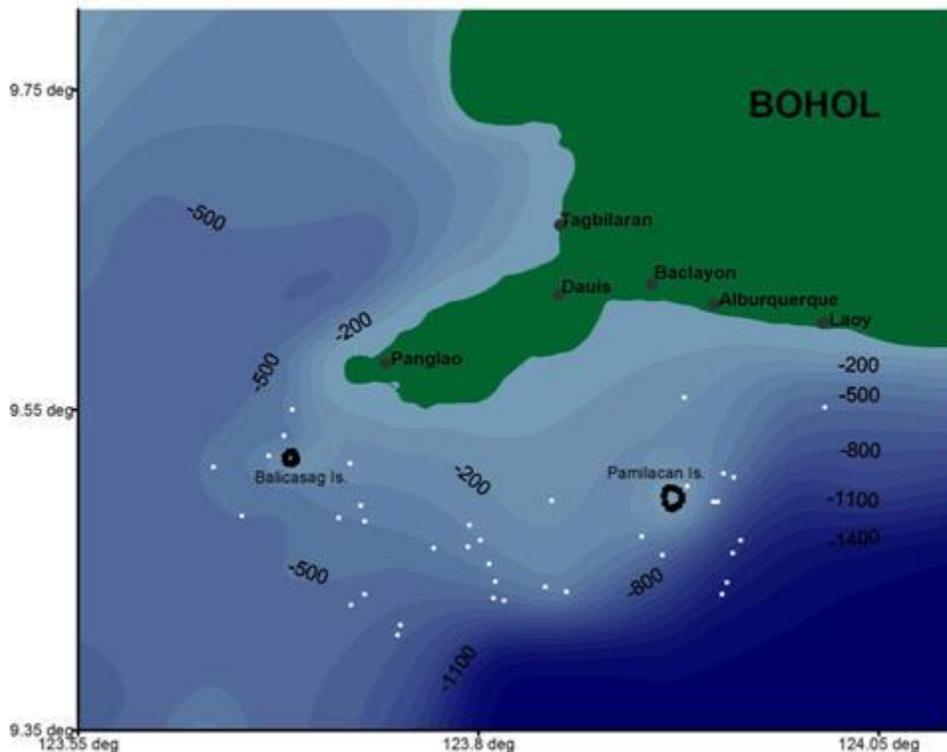


Fig. 1. Sighting locations (white circles) of cetaceans during the October and November 2010 surveys.

Behaviors observed were feeding, mating, milling, logging, nursing, and sailing. Data are insufficient at the moment and preliminary to compute for an abundance estimate. Analysis of the distinctly marked individuals is still ongoing since images taken throughout the survey were quite large in number. Physical parameters like temperature and salinity are collected in each survey and isolines are presented below.

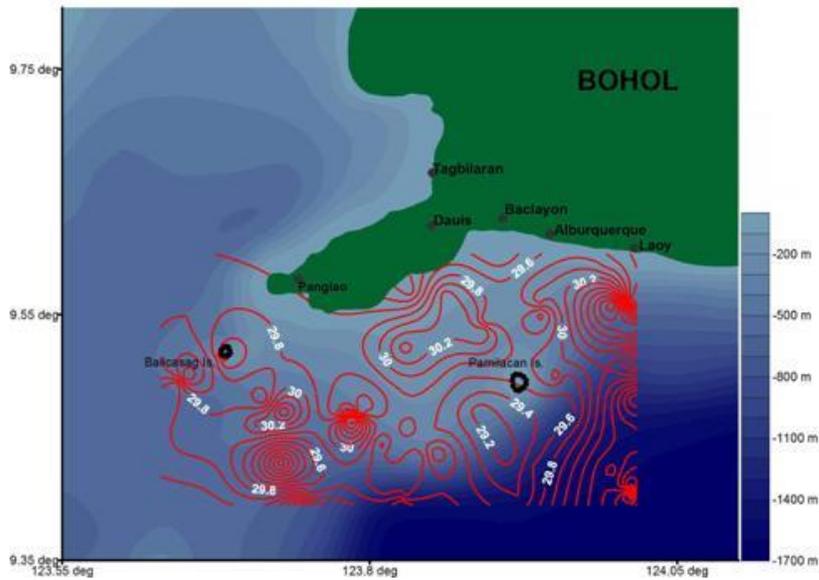


Fig.2. Temperature isoline within the study site. Mean temperature = 29.91°C (n=75; SD=0.66).

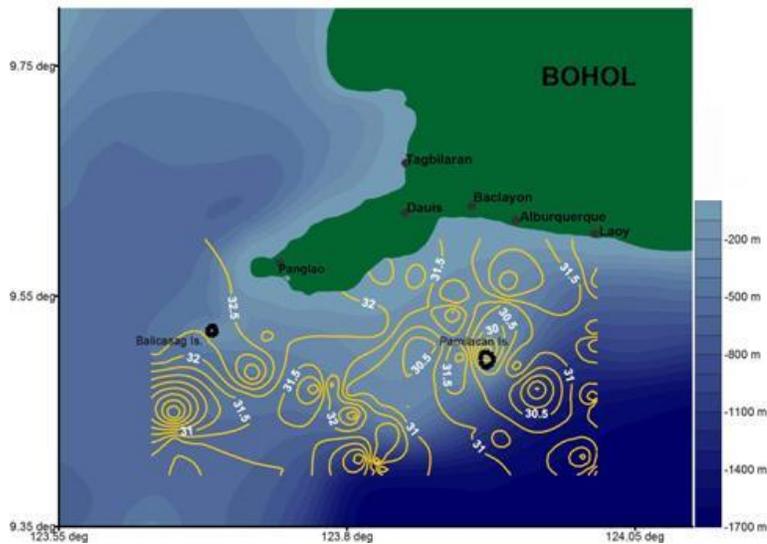


Fig.3. Salinity isoline within the study area. Mean salinity = 31.52ppt (n=70; SD=1.15).

This undertaking serves as the spring-board between the university and local NGOs (Condura and Ayala Foundation, Inc.) to initiate a memorandum of agreement to support marine mammal studies within the area. Likewise, the principal investigator was also given additional funding support from OPCFHK to complement this project thereby increasing field effort days for a more robust data collection.

More effort surveys are scheduled in the months of March to May 2011 which have longer durations compared to the previous trips. IEC materials are created and ready for reproduction (see examples below). It will be disseminated to the five LGUs and other agencies on the next field survey. Preliminary results will be presented to the municipal local council as well. It is also anticipated that the catalog of marked individuals will be in place by next months.

GUIDELINES ON CETACEAN INTERACTION
(Based on DA & DOT Joint AO No. 1, s. 2004)

ALL ZONES

- No aircraft flying below 300m altitude.
- No jetskis or wave runners.
- No swimming.
- No feeding of cetaceans.
- No touching of cetaceans.
- No playback of any sound or recording underwater.
- No throwing/discarding of garbage overboard.

CETACEAN AWARENESS ZONE

- Slow Down. Speed less than 7 knots or 13 kph
- Avoid abrupt course changes
- Working areas or distance of other vessels or boats whenever two (2) or more are already within the Stand-by & Caution Zones

STAND-BY ZONE

- Constant speed and direction
- NO head-on and tail-end approach
- Approach and depart on the side parallel to the dolphin/whale's swimming direction
- Start speed should not be faster than slowest animal
- No dropping of anchors

CAUTION ZONE

- Maximum of 2 vessels only. Maximum of 20 minutes interaction
- Constant speed and direction. Slower than the slowest animal
- DO NOT create water "switch" to facilitate "head-on" approach for distant whale vessels
- vessel operators should coordinate with each other at all times
- NO dropping of anchors
- DO NOT approach a group
- Maximum distance to the animal: Small dolphins < 100 m; Whales > 100 m.

NO APPROACH ZONE

- NO approach to cetaceans

SPECIAL CONSIDERATIONS

- NO chase and pursue mother & calf groups at ALL TIMES
- NO approach within 200 m of whales with calf or calves
- In case the animals come close to the boat, maintain speed and direction
- Among bow and stern-riding dolphins: Encourage them by holding your course, moving at reduced speed. DO NOT drive through groups of dolphins

WHALES & DOLPHINS (CETACEANS) OF THE NW BOHOL SEA

Species commonly seen:

Species sometimes encountered:

Logos at the bottom: Rufford, Condura, Ayala Foundation, OPCFHK, and other partners.

