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Research plan for a COMHAFAT cetacean
sighting survey in coastal waters of
western North Africa in winter 2015/16

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Research plan for a COMHAFAT cetacean sighting survey in coastal waters of western North Africa in winter 2015/16

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ABSTRACT

A plan is proposed for a cetacean sighting survey conducted by COMHAFAT in coastal waters of western North Africa in winter 2015/16. The study area is set in the coastal waters from Mauritania to Guinea-Bissau, except for shallow waters less than 20 m for safe sailing. Zigzag track lines with around 840 nm of length are placed in the area. A 15-days survey period is set in winter of 2015/16 season (from November of 2015 to February of 2016). The survey is started off Nouakchott, Mauritania and finished off Guinea-Bissau. The research vessel, GENERAL LANSANA CONTE of Guinea (198 tons), will be engaged. Researchers from COMHAFAT member states conduct the survey. Scientists from nonmember states, however, can be onboard, if the COMHAFAT and vessel capacity allow it. Cetacean searching is conducted from line transect method, under good weather condition (Beaufort wind scale of 3 or less and greater than 2 nm in visibility). Researchers search the sea surface for cetaceans from the vessel following the pre-determined track lines at around 10 knots. The normal closing mode survey is carried out, in which closing is made for all cetacean species encountered on the track lines.

INTRODUCTION

COMHAFAT (Convention Régionale sur la Coopération Halieutique entre les Etats Africains Riverains de l'Océan Atlantique)(in English, ATLAFCO: the Ministerial Conference on Fisheries Cooperation among African States Bordering the Atlantic Ocean) was founded in 1989, as an intergovernmental organization of 22 countries from Morocco to Namibia.

The Constituent Convention of COMHAFAT, which is "the Regional Convention on Fisheries Cooperation among African States bordering the Atlantic Ocean", adopted on July 5, 1991, in Dakar-Senegal, fixed areas and modalities of the Regional Fisheries Cooperation among member states. The Protocol relating to the institutional framework of COMHAFAT was adopted on October 19, 1999, in Conakry – Guinea.

The headquarters of the Organization is based in Rabat – Morocco since October 24, 2009. The Executive Secretariat is responsible for boosting the activities of the Organization in carrying out all administrative, organizational and co-ordination tasks assigned to it by the Conference of Ministers and the Bureau which are the policy and decision-making body and the coordinating and monitoring body respectively.

The main objective of COMHAFAT is an effective and active co-operation between member states for conservation and sustainable development of fisheries in the region.

Therefore, the Conference encourages:

1. The promoting co-operation in management and development of fisheries;
2. The development, co-ordination and harmonization of efforts and capacities of member states to maintain, operate, develop and commercialize the fishery resources;
3. The strengthening of solidarity with African States landlocked and geographically disadvantaged States in the region.

Operations are including:

1. The strengthening of maritime technical and professional training;
2. The development of fisheries research and marine sciences;
3. The promotion of trade and development of fishery products;
4. The implementation of laws regulating responsible fishing.

Regarding to the development of marine scientific research, COMHAFAT encourages member states to exchange their experiences in scientific research and promotes co-ordination between their institutions and the sharing of scientific data on fish stocks. In this respect, COMHAFAT started cetacean sighting surveys in maritime waters of member states, to obtain scientific information on cetaceans.

The Cetaceans are high migrating species. They play a significant role in the balance of the marine ecosystem where they represent the top predators and the most important species within the marine ecosystem. Thus, their information is very important for fisheries resources management.

In the western North Africa, the COMHAFAT zone, the studies on cetaceans are relatively recent. In Guinea the research on the cetacean is conducted by the Centre National des Sciences Halieutiques de Boussoura (CNSHB) that has developed a research program on the survey for the African continent. Thus, cetacean sighting surveys were initiated and carried out by the CNSHB in collaboration with the bordering African countries of the Atlantic since 2002. The CNSHB organized and executed the surveys with the collaboration of some African institutions of fisheries and fisheries research centers such as the Direction General des Pêches in Gabon, the CRO of Abidjan in Côte d'Ivoire, the IMROP of Nouadhibou in Mauritania, the CRODT of Dakar in Senegal, the Direction des Pêches of Cotonou in Benin, the MFRD of Tema in Ghana, the SSRHO IRAD of Limbe in Cameroon and the CIPA of Bissau in Guinea Bissau.

The COMAHAT founded the first cetacean sighting survey in Gabonese waters in 2011 and the second one in the gulf of Guinea covering the EEZ of Côte d'Ivoire, Ghana, Togo and Benin in 2013. The results were reported by Diallo et al. (2013). COMHAFAT will continue cetacean sighting surveys in waters of member states, where scientific information on cetaceans are relatively insufficient. Here, I present a plan of the third cetacean sighting survey by COMHAFAT in the western North Africa.

RESEARCH PLAN

Research vessel

The research vessel, GENERAL LANSANA CONTE of Guinea (198 tons), will be engaged (Fig. 1). Length of the vessel is 29.9 m.

Researchers on board

Researchers from COMHAFAT member states conduct the survey. Scientists from nonmember states, however, can be onboard, if COMHAFAT and vessel capacity allow it.

Schedule

A 15-days survey period is set in winter of 2015/16 season (from November of 2015 to February of 2016). Survey schedule will be fixed under discussion of COMHAFAT, Guinean researchers, and relevant persons. Tentative schedule is noted below.

1 st Day	The research vessel leaves Conakry of Guinea.
4 th Day	The research vessel arrives at Nouakchott.
5 th Day	Participants go aboard the research vessel, then the vessel leaves Nouakchott. The survey is commenced.
14 th Day	The research vessel arrives at the end point of lines set off Guinea-Bissau. The survey is finished.
15 th Day	The research vessel arrives at Conakry. Participants disembark.

Research area and track line

The research area is set in coastal waters of western North Africa from Mauritania to Guinea-Bissau (Fig. 2). Shallow waters less than 20 m are excluded from the area, for safe sailing. In the area, zigzag track lines with 840 nm of length will be placed. Tentative lines are shown in Figure 2. The start point of the lines is set off Nouakchott, Mauritania and the survey is finished when the vessel arrive at the end point of the lines set off Guinea-Bissau. The final lines will be fixed after discussion of COMHAFAT, Guinean researchers and relevant persons.

Sighting activity

The survey is conducted in accordance with the line transect method. The normal closing mode survey is carried out, in which closing is made for all cetacean species encountered on the track lines. Searching is carried out, following the procedure and protocol used in the IWC/IDCR and SOWER cruises (Matsuoka et al. 2003) and in COMHAFAT 2011 and 2013 surveys (Diallo et al. 2013).

The daily survey is commenced at 08:00, if weather condition is good for cetacean searching: Beaufort wind scale of 3 or less and greater than 2 nm in visibility. The daily survey is ended at 18:00, after 10 hours searching and then the vessel drifts, anchors, or steams to next point. If weather condition is bad, the vessel will drift for wait for good weather, or steam under no searching from tight schedule. Researchers search the sea surface for cetaceans from the vessel following the pre-determined track lines at around 10 knots. Searching activity is carried out with naked eyes. Binoculars are also used to identify species and to count school size. Photographs of cetaceans encountered are also taken for species identification and school size counting.

DATA MANAGEMENT AND ANALYSIS

All data and samples collected during the survey belong to the COMHAFAT. Survey results can be presented, under agreement of participating countries and the COMHAFAT.

REFERENCES

- Diallo, S. T. and Bamy, I. L. 2013. Report of the cetacean sighting surveys in the COMHAFAT zone: coastal zone of Gabon in September 2011, Gulf of Guinea (Ivory Coast, Ghana, Togo, and Benin) in March-April 2013. Paper SC/65a/IA13 submitted to IWC Scientific Committee. May 2013, (unpublished). 31pp.
- Matsuoka, K., Ensor, P., Hakamada, T., Shimada, H., Nishiwaki, S., Kasamatsu, F. and Kato, H. 2003. Overview of minke whale sightings surveys conducted on IWC/IDCR and SOWER Antarctic cruises from 1978/79 to 2000/01. *Journal of Cetacean Research and Management* 5:173–201.

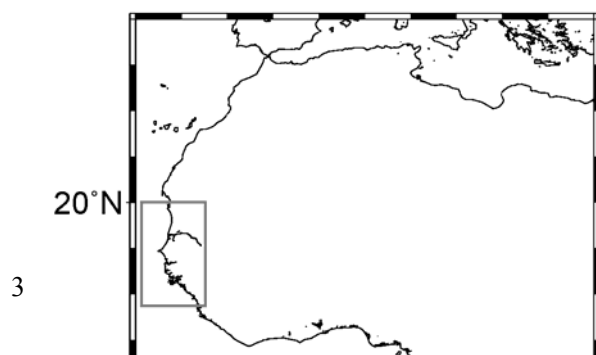


Figure 1. The research vessel “GENERAL LANSANA CONTE” used for the COMHAFAT cetacean sighting survey conducted in coastal waters of the western North Africa, winter 2015/16.

Figure 2. Study area set in coastal waters of western North Africa from Mauritania to Guinea-Bissau, where the COMHAFAT cetacean sighting survey will be conducted in winter 2015/16.

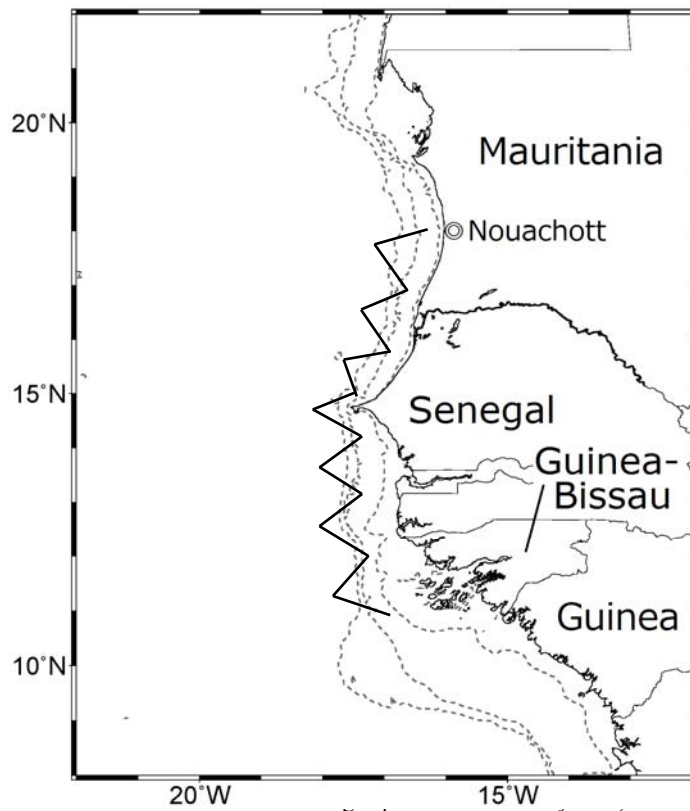


Figure 3. Tentative survey track for the COMHAFAT cetacean sighting survey conducted in winter 2015/16. Isobaths of 20m, 200m, and 1000m are also shown.