



CAML TOURIST RESEARCH PROJECT DRAFT 1

Prepared by Yan Ropert-Coudert, Tokyo, 12/12/2006 and updated 15/03/07 with comments from Diego Rodriguez and Victoria Wadley

This is a first draft, for consideration by IAATO and CAML.

The Census of Antarctic Marine Life (CAML) is an international cooperative project that will investigate the distribution and abundance of Antarctica's marine biodiversity and how it is affected by climate change. The scientific objectives of CAML are articulated in our Science Statement, downloadable from the website www.caml.aq. CAML works closely with the Antarctic data portal SCAR-MarBIN www.scarmarbin.be. The public visibility of this research will be greatly enhanced through our linkage with the Education and Outreach resources of the Census of Marine Life (CoML www.coml.org). The CoML is supported by the Alfred P Sloan Foundation.

IAATO is a member organization founded in 1991 to advocate, promote and practice safe and environmentally responsible private-sector travel to the Antarctic.

Over the past century, a number of research cruises have aimed at censusing the populations of top-predators in the Antarctic and its surrounding waters. However, the number of research cruises per year is still limited with regards to the vastness of the water masses to be monitored. Incidentally, the development of tourism in the Antarctic means that the number of boats and people cruising in the Southern Ocean is expanding quickly. Involving tourists into a global eco-monitoring effort would, therefore, provide a unique opportunity for improving our knowledge of the distribution of Antarctic wildlife, while simultaneously allowing tourists, both confirmed and novices, to get involved in studies of Antarctic biodiversity.

WHAT WOULD A TOURIST OPERATOR HAVE TO DO?

Tourist operators will send advance details of the cruise (expected route and timing of the year) to a designated scientist (introduced by a CoML or CAML representative and coordinated by the CAML office). In return, the designated scientists will provide simple, illustrated (using the SCAR-MarBIN photo gallery) manuals of the species expected to be encountered during the trip, with brief outlines on the status and biology of each species. This manual will serve as a basis for the operator to give introductory lectures to the tourists on the Antarctic fauna. In addition, the CAML will produce monitoring forms to be completed by the tourists so as to standardize the surveys. Tourist operators will also serve as a liaison between the captain of the ship and the tourists, feeding the observers with information such as the position of the boat at regular intervals (perhaps 3 times a day), the meteorological conditions using a standard Beaufort scale, etc.

WHAT WOULD TOURISTS HAVE TO DO?

- Whenever possible, security and weather permitted, the tourist will make several rounds of 20 minutes (maximum) observations per day (depending on motivation), ideally 5 minutes on each side of the boat, to identify, count and describe the activity of all top-predator wildlife present around the boat or at a specific site on land (e.g. penguin colony, land features...). This information will be compiled daily by the tourists into monitoring forms. In collaboration with SCAR-MarBIN, we are investigating the possibility to have an on-line form that can be filled in by those vessels with internet access, following advice from IAATO about feasibility. The form will include the following parameters:

NAME OF BOAT/ BASE:				CRUISE NUMBER:			
DATE / TIME / POSITION (BOAT OR SPECIFIC SITE ON LAND):				NAME OF OBSERVER:			
ENTRY				SPECIES	NUMBER	ACTIVITY	DISTANCE
1	Seabird	Petrels	Gadfly?	?	3	Flying	far
2	Seabird	Petrels	Prion	Blue petrel	1	Sea surface	medium
3	Cetacean	Whale	Baleen		5	Group	close

- Photos: the CAML, as well as the general public, are looking for pictures of Antarctic wildlife and would welcome the input of the tourists in this regards. Some rare species or those species difficult to observe such as cetaceans, are not yet covered by the SCAR-MarBIN photo gallery and related institutions. Possibly an internet-based contest for the best photo of Antarctic wildlife could be organized to stimulate this collaboration.

Top-predators: any birds, seals and or cetaceans present around the boat at a given time. Note that some species are more difficult to observe or to identify than others, e.g. penguins on land, albatrosses, seals, penguins at sea, dolphins, large whales, gadfly petrels, dark petrels, storm petrels, ranked by order of difficulty of observation and identification.

Any mode of observation is welcome although binoculars would be of great help to identify small species of petrels or to detect shy species. Note that it is important to indicate the degree of certainty of identification: an unsure identification is more useful than a wrong identification. Finally, the observers should keep a safe/minimum distance with animals for both security reasons and ethical guidelines. Some of the Antarctic animals can be extremely dangerous and some others particularly vulnerable to the presence of humans. Tourist operators should receive the existing guidelines and inform the tourists of the relevant risks and precautions.

OUTCOMES

The data collected by the tourists will be gathered and compiled by the CAML with SCAR-MarBIN which will produce an internet-based distribution map of the species sighted. Each contributor will be acknowledged on the web page and a newsletter giving the latest additions, as well as detailed information on each species, will also be posted online.

QUESTIONS AND SUGGESTIONS

1- Do you only deal with English-speaking tour operators or do we need to translate this pamphlet into French, Japanese...?

What are the official nationalities/languages of the tourist operators? Maybe IAATO can advise on this, and add to their brochures.

2- How easily can we get the routes of the boats reasonably early for someone to prepare the forms and manuals?

For discussion with IAATO; CAML has schedules for a few operators.

3- Who will be in charge of preparing the manual and forms and compile the data (this can be a big job)?

This will be an extensive task. From experience, it will be better to prepare a single and very simple form, with the probability of seeing some species in specific areas. To produce regional manuals is beyond our capacity. If funds are available, CAML could coordinate (perhaps by perhaps hiring some student time) the production of manuals for selected groups such as marine mammals, penguins and flying birds.

4- Depending on how developed the manual will be, would it be possible to get a publisher involved?

CAML has contacts with the Cousteau Foundation and the CoML E&O office and could investigate collaboration on this initiative. Tourist operators could perhaps sponsor this, in return for advertising space.