SERAWG-03-08

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PiNT – a tool for renaming observer photographs at sea

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Relates to agenda item: 4. Patagonian Toothfish Working paper ☒ Info paper ☐

Delegation of French Territory

Abstract

Once scientific observer programs begin to collect images related to protocols for monitoring tagging, fishing gear, or interactions with birds and marine mammals, the management of these images quickly becomes an issue. In order to maintain version control, to process and file the photographs efficiently, and to ensure compatibility and transferability between statistical subareas during different observer deployments, it is crucial to develop a common naming convention that allows to keep track of where, when, and on which vessel a picture was taken by whom, together with basic information on the picture content. This document describes the naming convention and the associated tool adopted by CCAMLR following discussions between MNHN, CapFish, MRAG and CEFAS and the development of an Excel tool available for members.

Recommendations

It is recommended that the SERAWG :

1. Notes that the method of naming photos and the tool to facilitate this work has been introduced and deployed to the whole CCAMLR area and could be adapted to the context of the SIOFA.

2. Recommends CCPs adopt and implement a common naming convention for images collecting by scientific observers based on the CCAMLR convention presented herein.

3. Recommends to the Secretariat centralize and store photos collecting in the SIOFA area by scientific observers.

4. Recommends to the Meeting of the Parties adopt a common naming convention for images collecting by scientific observers

1. Introduction

Within the CCAMLR area, high quantities of images are collected by scientific observers at sea while performing the tasks outlined the Scheme on International Scientific Observation (SISO). These include photos of tags, cetaceans, birds and bird bands, fishing gear, or unusual and unidentified species, and together form a record of the observer's deployment at sea during a given trip. The images are an essential reference collection that can be used either during or after the trip for analysis, data checks, identification help of species or any potential conflict or compliance issues. In order to maintain version control, to process and file the photographs efficiently, and to ensure compatibility and transferability between statistical subareas during different observer deployments, it is crucial to develop a common naming convention that allows to keep track of where, when, and on which vessel a picture was taken by whom, together with basic information on the picture content.

This issue was discussed during a meeting on observer data collection held at MRAG in London earlier this year with representatives from CCAMLR, MNHN, CapFish, MRAG and CEFAS. As a result, the present organisations who provide observers agreed to a common naming convention for their observers deployed within the CCAMLR Area (see below), and to the trial use of an excel tool for batch-implementing a chosen naming convention already used by French observers. The tool and naming convention are described below and in the annex. Sharing the same naming convention allows users to share scripts for data processing allowing among other things:

- enhanced photo identification,
- automation of picture-to-trip assignment based on defined codes; and
- Linking of each photo to the vessel C2 data using the fishing event reference.

In addition, the naming convention within the French EEZ also accounts for pictures taken of marine mammals taken from land, which is not done in other CCAMLR Subareas. The tool has been trialled at sea outside the French EEZ during the 2014/15 season and used since.

2. Naming convention

The naming convention between MRAG, Capfish, MNHN and Cefas for at-sea observer (or from dry land) photograph contains the following information:

	at sea		on dry land	
	1415 AUS 15 11 AUBA P_013 SPW		1415 CRO 15 12 AUBA P_098 KIW new group	
characters	description	example	description	example
4	CCAMLR Season. This will remain unchanged throughout the season	1415	season	1415
3	The vessel name, this uses a 3 letter code taken from the first 3 letters of the vessels name, or if two words are used the first letter from the first word and second two from the second	AUS	dry land location code using 3 letters	CRO
2	year start of trip	15	year of picture	15
2	month start of trip	11	month of picture	12
4	Name of the photographer. This uses a 4 letters code, this code is unique and related to one observer only.	AUBA	photographer	AUBA
5	longline number (or fishing event number, start at 1 and go up consecutively)	P_013	sighting ID	P_098
3	species (3 letters ccamlr code)*	SPW	species (ccamlr code)	KIW
no constraint	comment (optional and should be kept short)		comment (optional and should be kept short)	new group

***** The species are designated with the standard CCAMLR species code. However there are additional non-CCAMLR codes that can be used or developed, some examples are shown below:

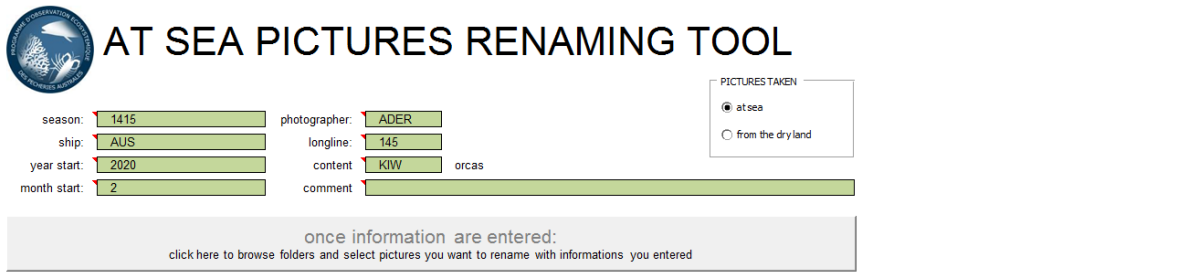
- **KSP –** Orcas and sperm whales together
- **TAG –** Tag return
- **BAN –** Bird band
- **GEA –** Fishing gear (hooks, line, weights etc.)
- **DEB –** Marine debris / oil
- **MIT –** Mitigation device
- **OTH –** Other event or object

- **Comment –** General comments, should be kept short. An example for tag recapture would be to enter the tag numbers with the lowest number first, space in between for example A213333 A213334.

3. The Picture Naming Tool (PiNT)

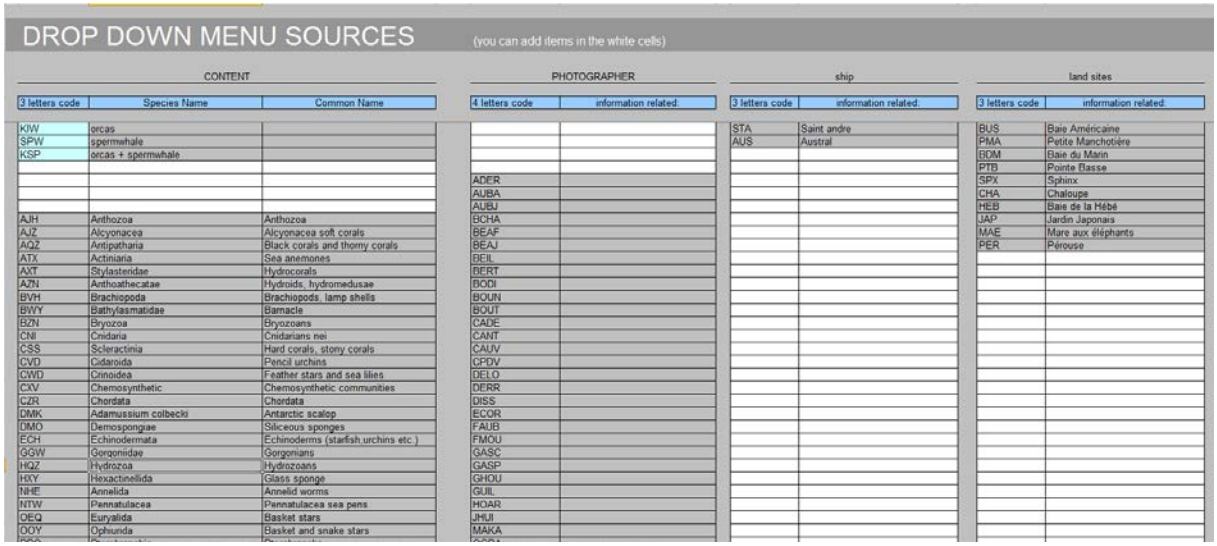
The picture naming tool allows observers to automatically rename anything from individual to large numbers of photos and to put them in a designated folder. Each photo will have a unique name generated through a number of fixed fields and codes. The instructions and outputs are shown below.

The interface allows to enter data using dropdown menus and to browse to folders to choose which pictures are to be renamed. Details are shown in the table below:



unique number	date and time	season:	ship:	year start:	month start:	observer:	longline:	content	information related	comment

Drop down menus can be filled according to Subarea specifications, and conditional formatting highlights data with incorrect number of characters:



CONTENT

3 letters code	Species Name	Common Name
KIW	orcas	
SPW	spermwhale	
KSP	orcas + spermwhale	
AJH	Anthozoa	Anthozoa
AJZ	Alcyonacea	Alcyonacea soft corals
AQZ	Antipatharia	Black corals and thorny corals
ATX	Actiniaria	Sea anemones
AXT	Stylasteridae	Hydrocorals
AZN	Anthoathecatae	Hydroids, hydromedusae
BVH	Brachiopoda	Brachiopods, lamp shells
BWY	Bathylasmatidae	Barnacle
BZN	Bryozoa	Bryozoans
CNI	Cnidaria	Cnidarians nei
CSS	Scleractinia	Hard corals, stony corals
CVD	Cidaroida	Pencil urchins
CWD	Crinoidea	Feather stars and sea lilies
CXV	Chemosynthetic	Chemosynthetic communities
CZR	Chordata	Chordata
DMK	Adamussium colbecki	Antarctic scallop
DMO	Demospongiae	Siliceous sponges
ECH	Echinodermata	Echinoderms (starfish,urchins etc.)
GGW	Gorgoniidae	Gorgonians
HQZ	Hydrozoa	Hydrozoans
HXY	Hexactinellida	Glass sponge
NHE	Annelida	Annelid worms
NTW	Pennatulacea	Pennatulacea sea pens
OEQ	Euryalida	Basket stars
OOY	Ophiuida	Basket and snake stars

PHOTOGRAPHER

4 letters code	information related:
ADER	
AUBA	
AUBU	
BCHA	
BEAF	
BEAJ	
BEIL	
BERT	
BODI	
BOUN	
BOUT	
CADE	
CANT	
CAUV	
CFDV	
DELO	
DERR	
DISS	
ECOR	
FAUB	
FMOU	
GASC	
GASP	
GHOU	
GUIL	
HOAR	
JHUI	
MAKA	

ship

3 letters code	information related:
STA	Saint andre
AUS	Austral

land sites

3 letters code	information related:
BUS	Baie Américaine
PMA	Petite Manchotière
BDM	Baie du Marin
PTB	Pointe Basse
SPX	Sphinx
CHA	Chaloupe
HEB	Baie de la Hébé
JAP	Jardin Japonais
MAE	Mare aux éléphants
PER	Pérouse

4. Conclusion

This paper gives a brief overview of a tool that can be used to easily rename photographs taken by observers during the season and suggests a format for the photograph names. Although SIOFA scientific observer program does not yet produce significant amounts of photographic information, we would recommend that a naming convention be considered by the secretariat, particularly in regards to those photos that are key to ensuring the quality of data collected, for example tag returns, so that they can easily be identified and accessed at a later date if necessary. We would also recommend that the PiNT be adapted to the SIOFA specificities and made available as a resource for other members to use. PiNt is already available and used by CCAMLR members.