





The monitoring of the bycatch of seabird and other non-commercial marine life using the Olrac Dynamic Data Logger

**Presented by** 

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## Who is OLRAC SPS?

# General Specialization

- Data collection technology
- Data analysis, and
- The development of predictive models based on historic data

#### **Fisheries**

- Stock Assessment and development of management plans
- Survey designs
- Data Analysis
- The developers of the Olrac Fisheries Data Management Software Solution

#### Offices

- Cape Town and Johannesburg, South Africa
- London and Newcastle, UK
- 30, mainly technical staff

#### Alliances

- Work as IBM and SAS technology distributors and developers
- Distribution partners in: UK, Holland, Belgium, Greece, Australia, New Zealand, USA, Canada, Argentina, Other...

### Statement of the Problem

The incidental bycatch or mortality of seabirds through fishery interactions are said to be a key threat to many species.

Longline and trawl fisheries have been recognized as having a significant impact on albatross, petrels and shearwaters, with seventeen of the 22 species of albatross currently threatened with extinction.







### Who is Albatross Task Force?

In 2005 BirdLife International founded the Albatross Task Force (ATF): an international team of mitigation instructors working directly with the fishing community to collect necessary data and then identify best practice designs and practical mitigation measures.







## The ATF Project

ATF instructors deal with a variety of fishing fleets across the Southern Hemisphere. Each fleet includes up to 300 vessels where individual vessel characteristics means every line set or net hauled is done so in a unique set of operational and environmental circumstances. The project requirement for Olrac was to customize the Olrac eLog solution to be used as the ATF primary data gathering tool for its entire observers team.







## The Olrac System: An overview

# The Olrac Software suite consists two main components:

- 1. Olrac Dynamic Data Logger (Olrac-DDL): This is an onboard and shore data-logging and management software tool. Capable of collecting, analysing, plotting, mapping, reporting, tracing and transmitting all data related to vessel activities. The shore unit of Olrac DDM can combine data from many Olrac DDL vessel units.
- 2. Olrac Dynamic Data Manager (Olrac-DDM): This is a web application which can receive, store and disseminate data, reports, summery statistics, graphs, tables and maps based on data coming form Olrac DDL units and/or other, 3rd party, eLogs.

## Olrac-ATF

On Olrac-ATF, data can be collected in many forms and formats including, alphanumeric, lookup tables, pictures, video clips and free text.



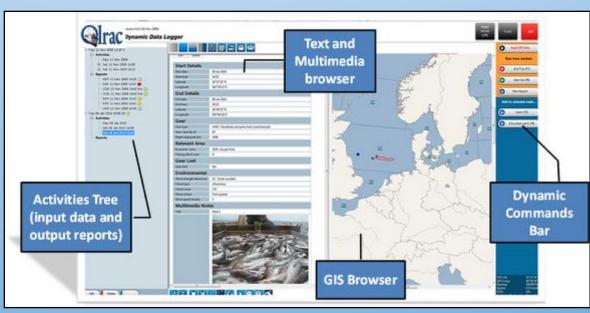




#### Olrac-ATF

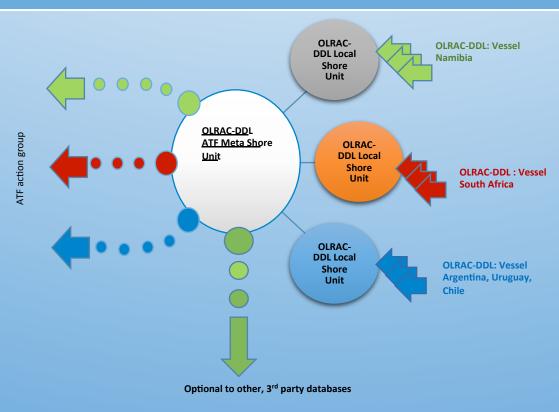
Olrac SPS, developed for the ATF team a customised version of its Olrac eLog solution which allows observers to capture 320 different fields including target and bycatch species, fishing gear configuration, mitigation measure configurations plus wildlife surveys and extensive environmental variables.





## **Project Results**

The ATF teams are now using Olrac for over 5 years. Through Olrac, a large and diverse collection of operational and environmental factors is recorded and sent as reports to various ATF offices across the globe. Reports are also sent to the UK headquarters of the ATF parent organization, BirdLife International.



## Project Results (Cont.)

Because Olrac is able to collect, record and transmit such a diverse collection of data, the ATF is increasingly able to identify and prescribe the most up-to-date, efficient and effective mitigation measures for a whole fleet, or even on a vessel-specific basis.











## **Thank You and Questions**

