

Risso's dolphin (*Grampus griseus*) photo-identification catalogue in Southern Portugal



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INTRODUCTION

Very few information is available on occurrences of Risso's dolphin (*Grampus griseus*) in Portuguese continental waters (**Fig. 1**). Most of the information comes from stranding records (Sequeira, 1992; Sequeira, 1996). Researchers have been collaborating successfully with fishers and maritime-touristic companies to collect data.

This study presents the first catalogue of Risso's dolphin in the area.

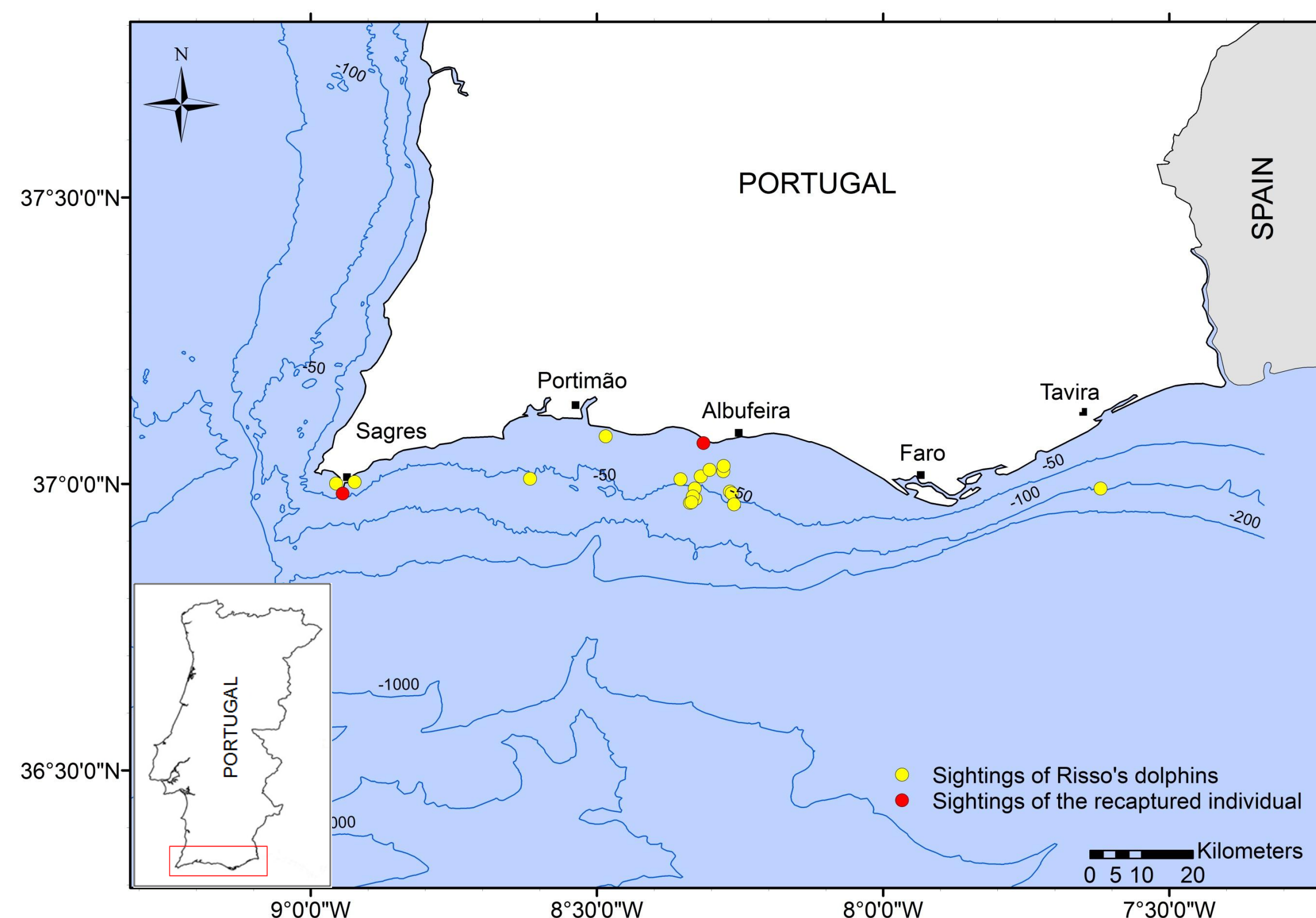


Figure 2. Map of the study area with the Risso's dolphin sightings (yellow), including the recaptured individual (red).

RESULTS

During the study period 20 sightings of Risso's dolphin were recorded (**Fig. 2**). The group size ranged from 1 to 14 individuals in the study area. Associations with other species were not registered, except in one sighting where common dolphins (*Delphinus delphis*) were present.

A total of 1140 photos were analysed and ca. 60% were considered for identification purposes (quality Q1 and Q2). Twenty-three individuals were catalogued, corresponding to 20 adults and 3 juveniles (**Table I**).

A recapture was made; an individual first sighted in August 2008 was resighted in October 2010 (**Fig. 3**).

Table I. Individuals catalogued using the left, right and both sides of the dorsal fin

	Left side	Right side	Both sides	Total
No. Individuals catalogued	3	11	9	23

ACKNOWLEDGMENTS

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REFERENCES

Sequeira, M., Inácio, A. & Reinen, F. 1992. Arrojamentos de mamíferos marinhos na costa portuguesa, entre 1978 e 1988. *Estudos de Biologia e Conservação da Natureza* 7, SNPRCN, Lisboa.
Sequeira, M., Inácio, A., Silva, M. & Reinen, F. 1996. Arrojamentos de mamíferos marinhos na costa continental portuguesa, entre 1989 e 1994. *Estudos de Biologia e Conservação da Natureza* 19, SNPRCN, Lisboa.



Figure 1. Risso's dolphin (*Grampus griseus*) in the Southern coast of Portugal.

METHODS

Information on Risso's dolphin was gathered, between 2008 and 2010, along the entire South coast of Portugal, i.e. from Tavira to Sagres. Boat-based photo-identification techniques to collect individual data were performed by experienced cetacean observers and skippers of whale watching companies.

Dorsal fin notches, nicks and scratches, as well other body marks were used to identify individuals. The best quality photos of both sides of the dorsal fin were used for the analysis. Age classes were defined from the degree of scarring on the body and newborns were not considered for the catalogue.

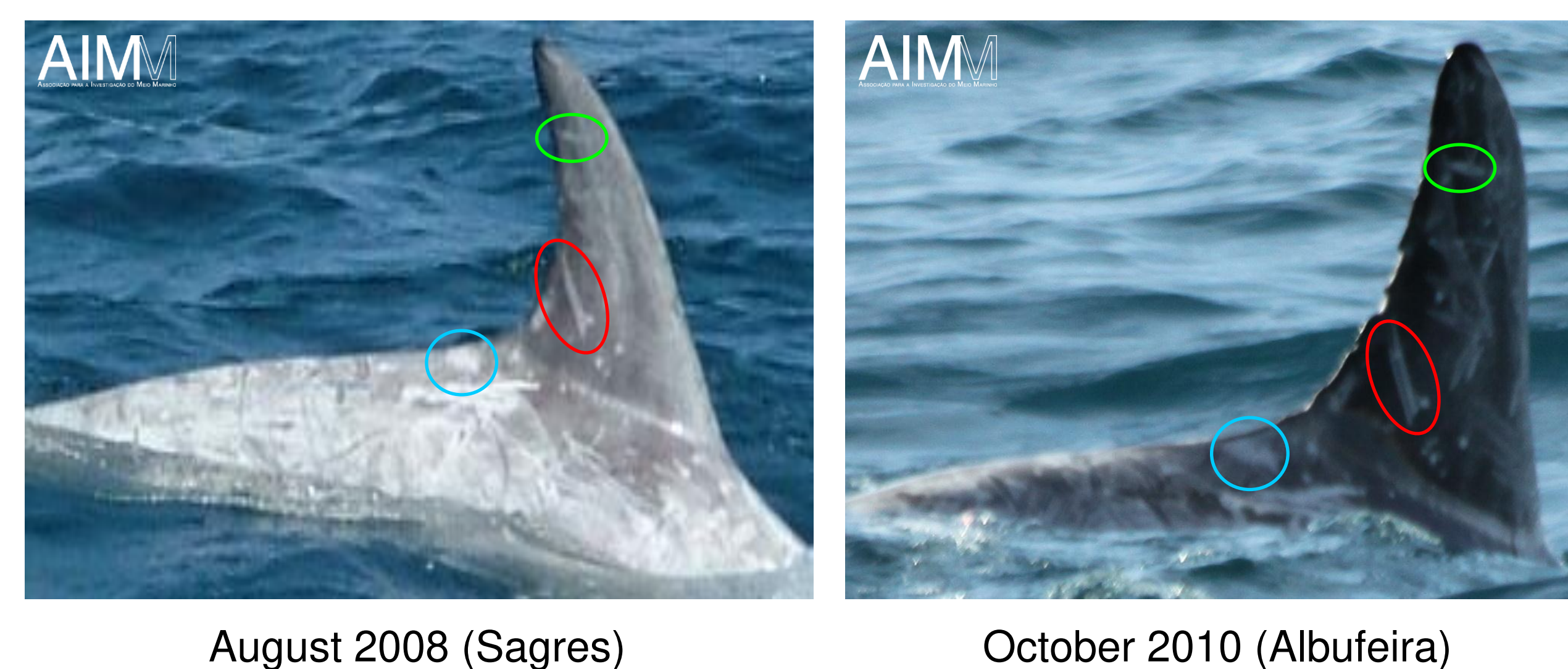


Figure 3. Recaptured individual in two different years within the study area. Circles indicate most visible marks.

DISCUSSION

This preliminary study suggests that this area might be important for the Risso's dolphin, even though further studies are necessary to better understand their distribution, abundance and habitat use. This knowledge is essential since whale watching industry is growing and it also targets this species despite its fairly rare occurrence. Additionally, interactions with fishing boats should also be considered.