ARQDAÇO(Q2): BOTTOM LONGLINE SURVEY FOR DEMERSAL DEEP-WATER SPECIES OF THE AZORES

Mário Pinho

Pinho, M.R; Medeiros-Leal, W.M.; Sigler, M.F; Santos, R.V.S.;Novoa-Pabon, A.M; Menezes, G.M. and Silva, H.M. 2019. (Submitted). Azorean demersal longline survey abundance estimates: Procedures and variability.

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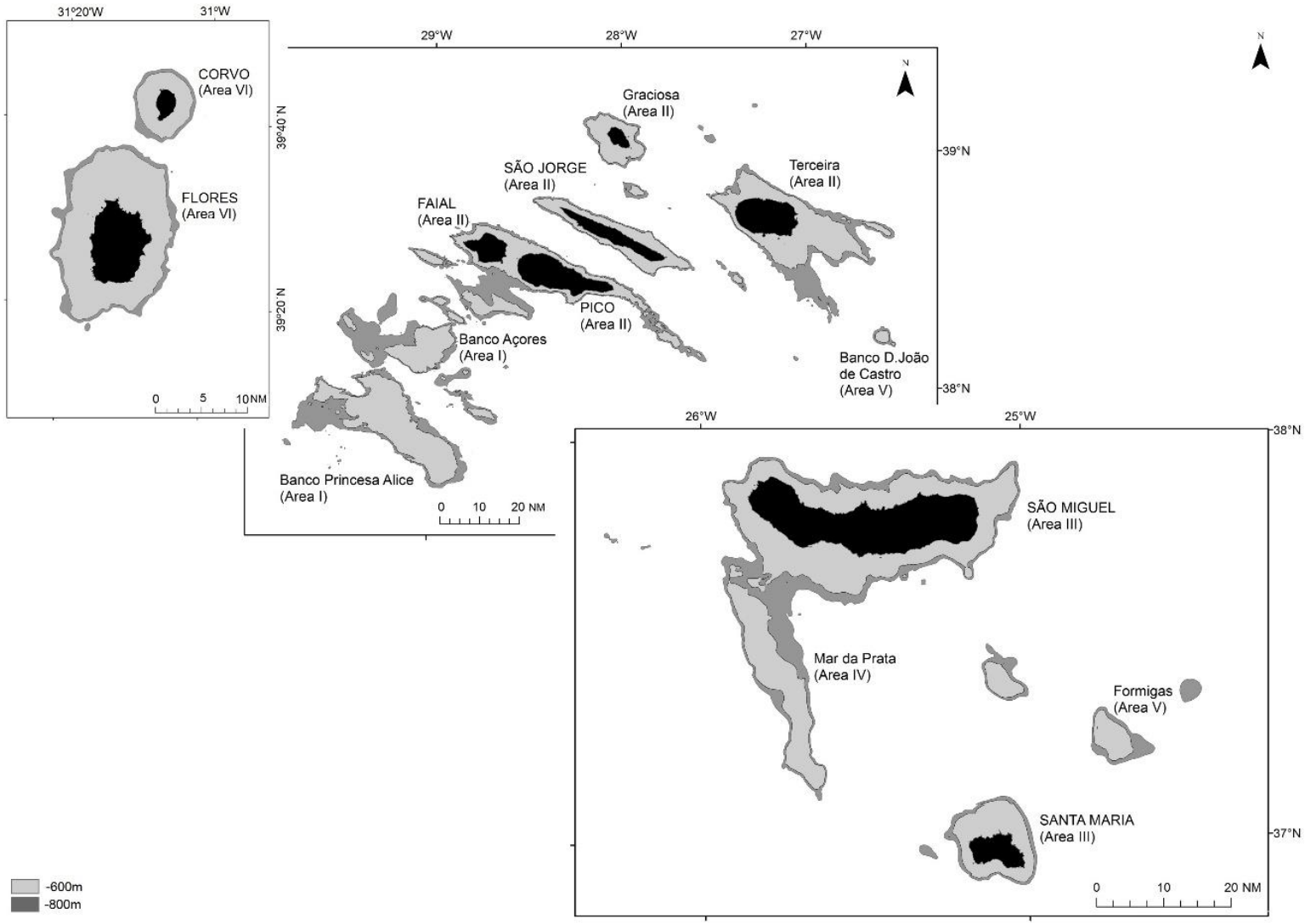
SURVEY OBJECTIVES:

- Provide fishery independent estimates of abundance and size composition for commercially important demersal species;
- Collect information for biological studies on growth, reproduction, diet and migration;
- Obtain information for ecological studies, such as depth distribution and community structure.

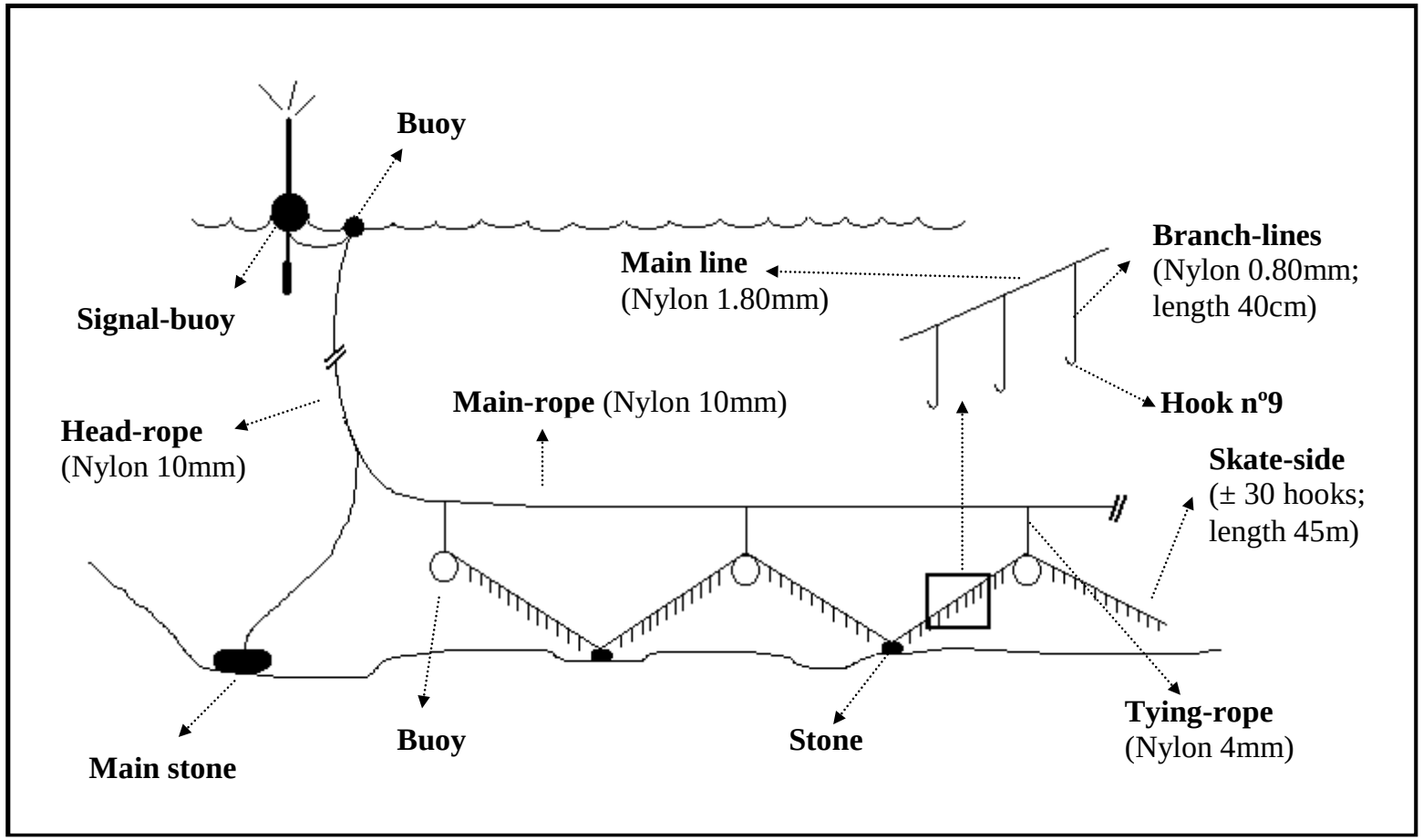
METHODS

Survey area



METHODS

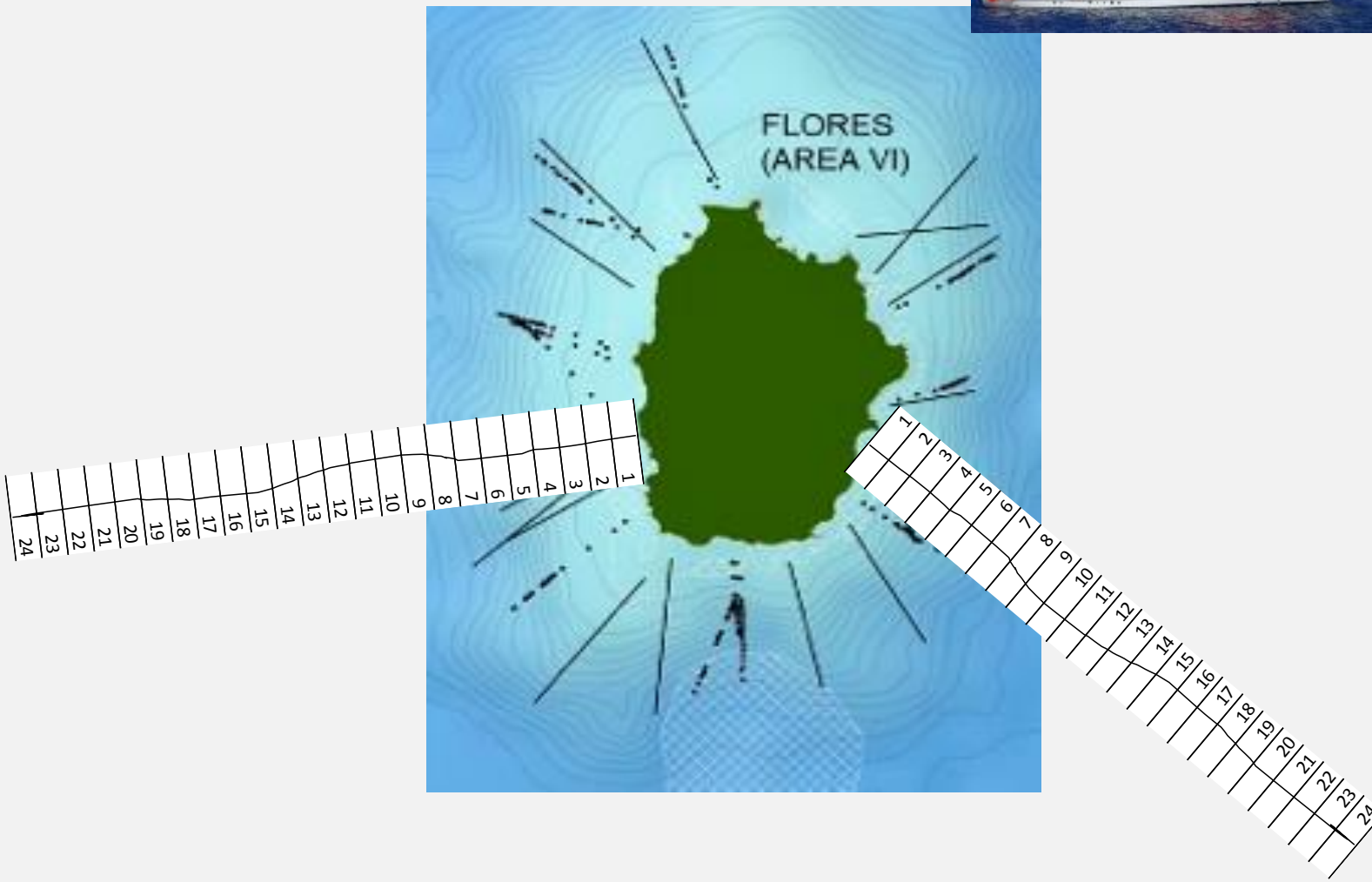
Survey gear



METHODS

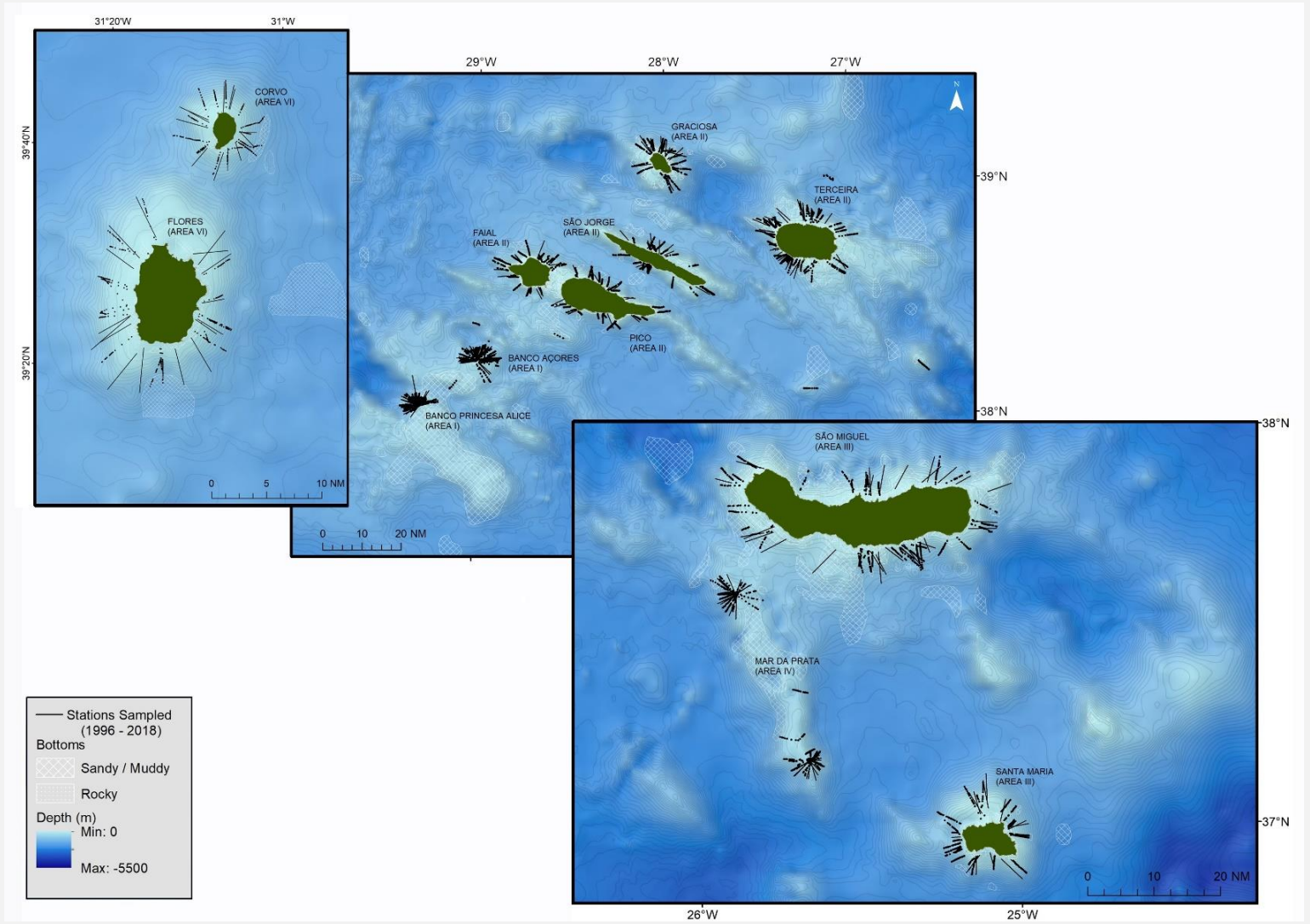
Survey design:

Random stratified by depth and area



METHODS

Survey design



(Pinho et al, 2019)

SOME RESULTS

Species and assemblages

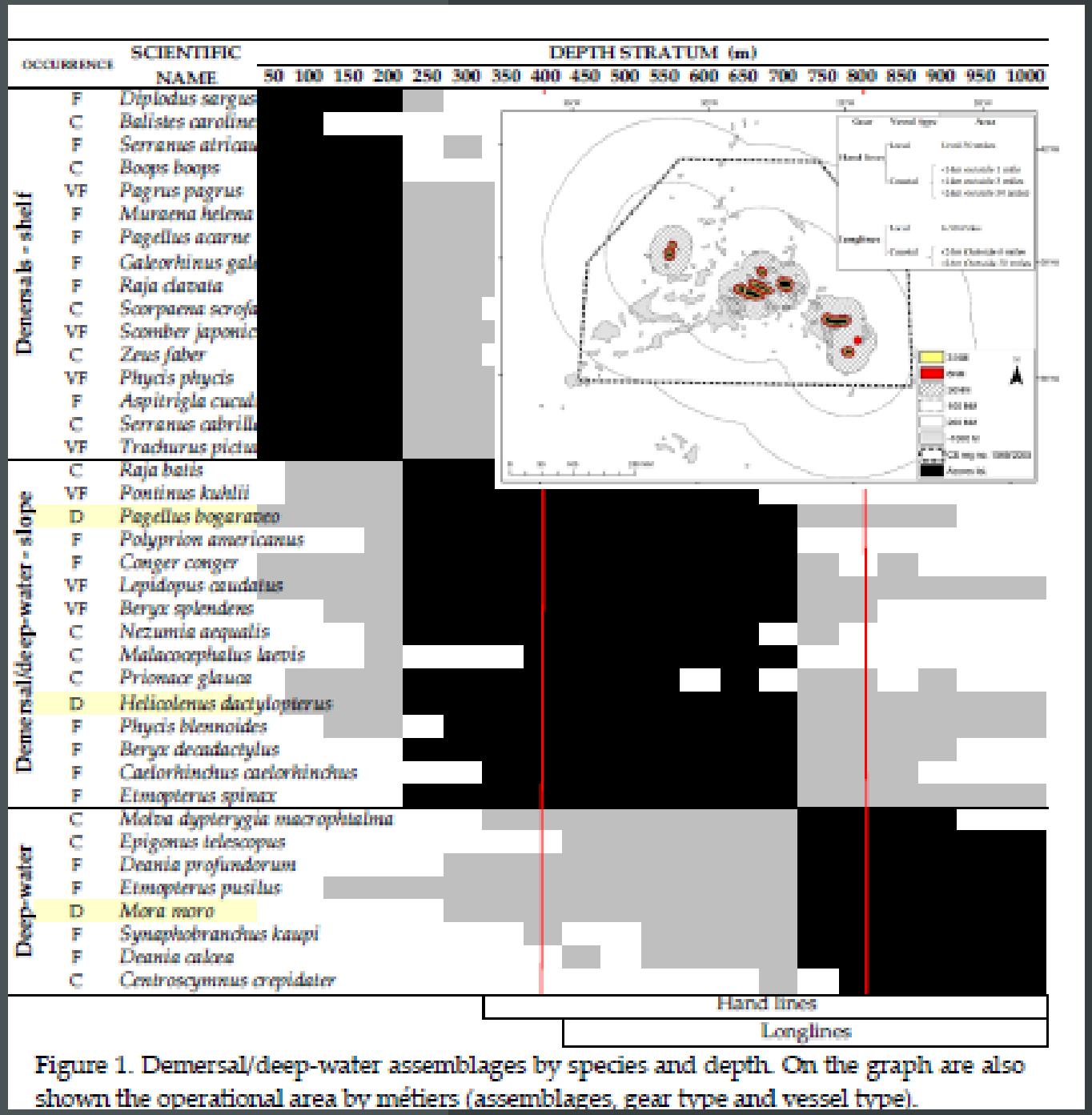
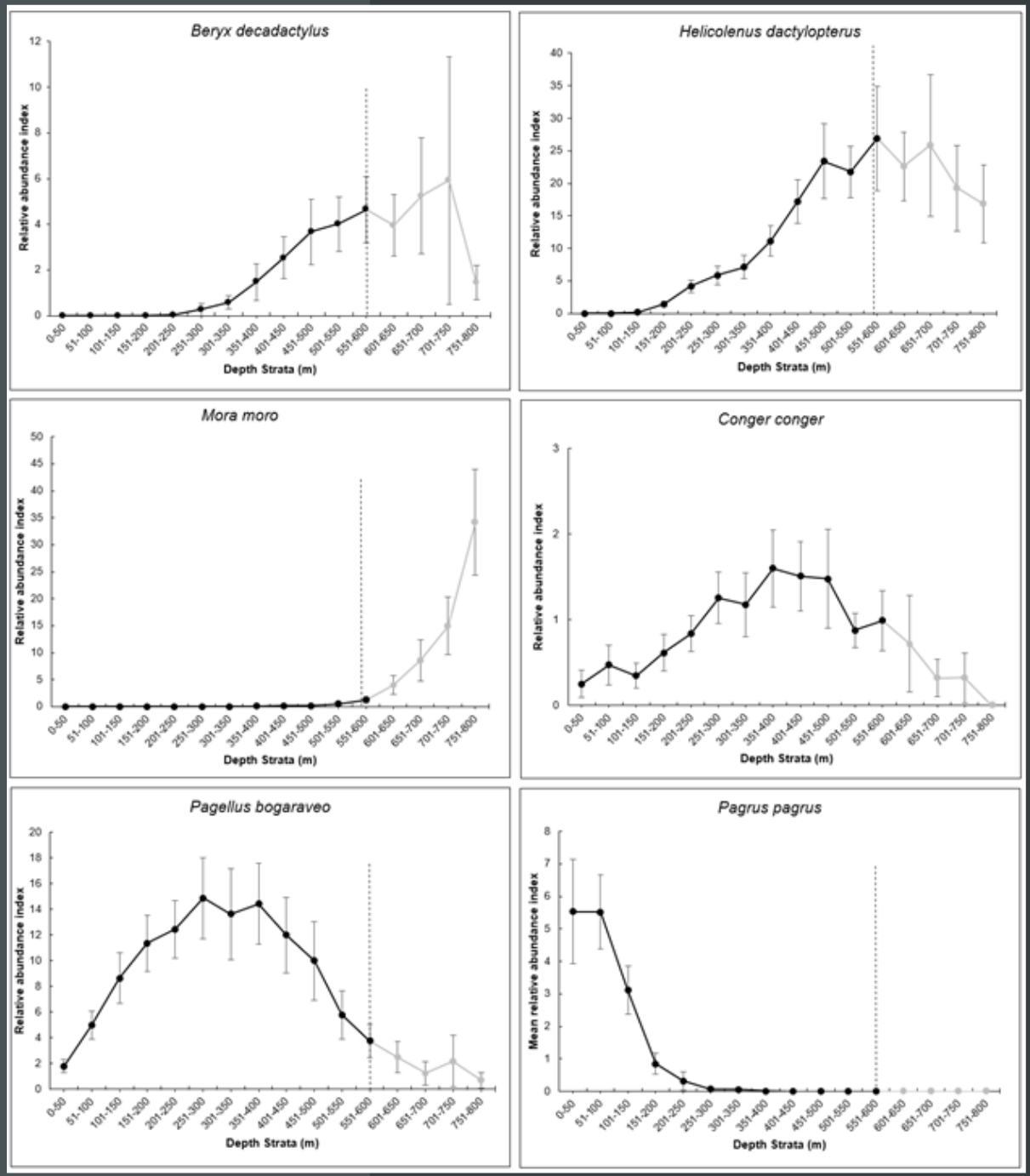


Figure 1. Demersal/deep-water assemblages by species and depth. On the graph are also shown the operational area by métiers (assemblages, gear type and vessel type).

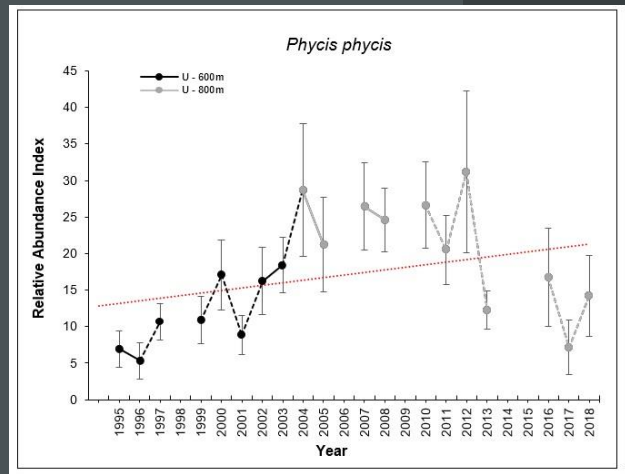
SOME RESULTS

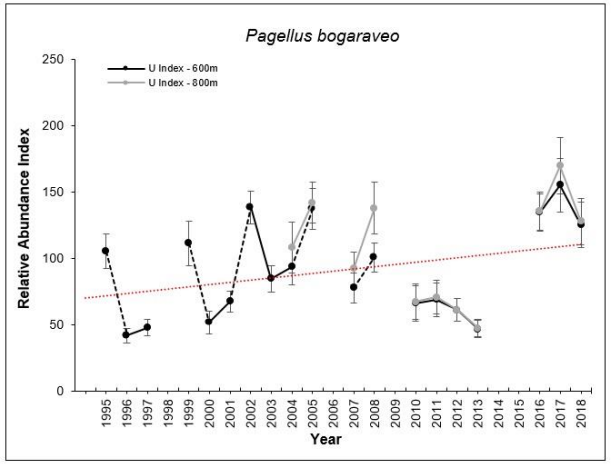
Mean abundance index by species and depth strata for the period 1995-2018

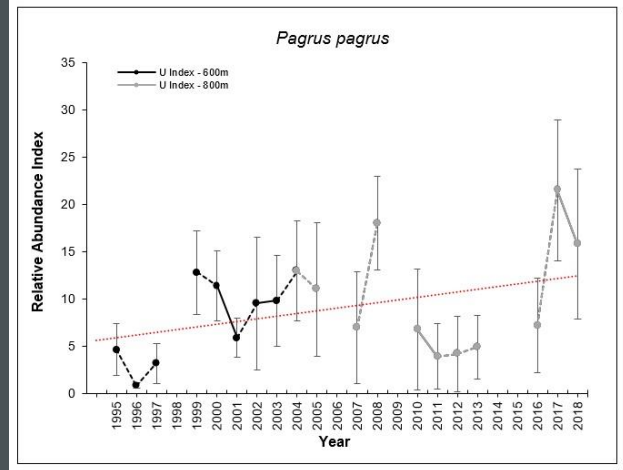


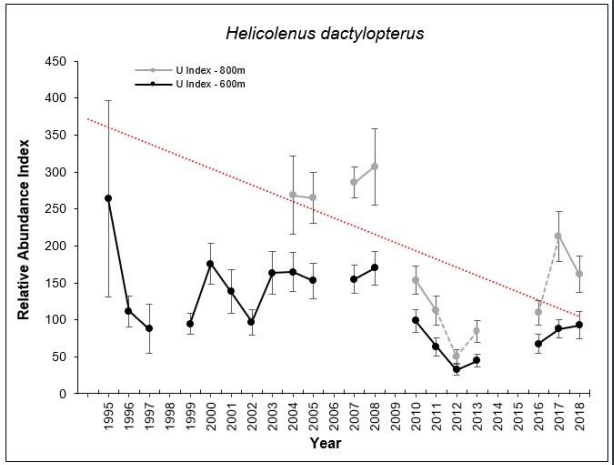
SOME RESULTS

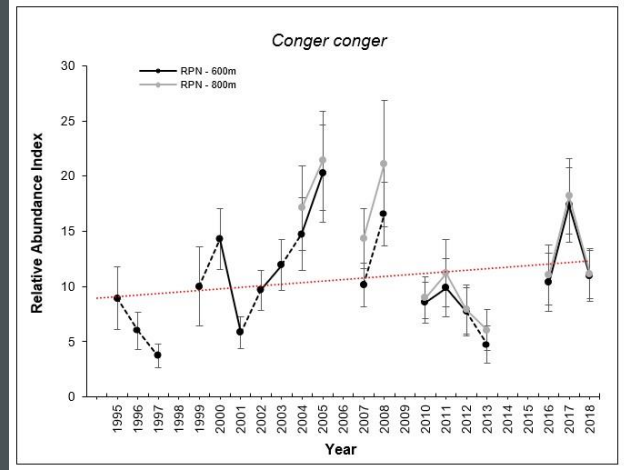
Annual abundance index by species and area for 0-600m and 0-800m. CI from bootstrap

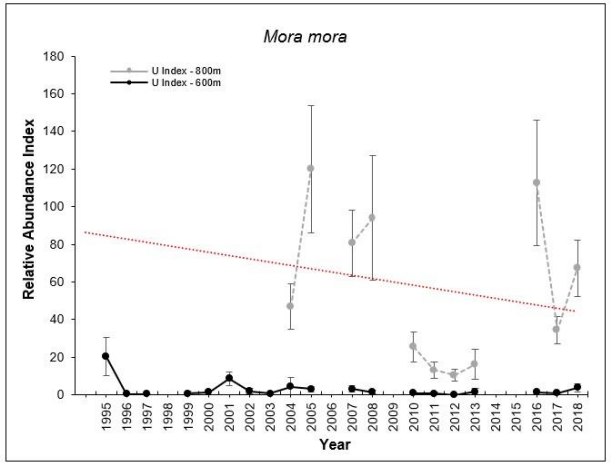












PRACTICAL APPLICATION:

Stock assessment and advice for management

ICES Advice on fishing opportunities, catch, and effort
Azores Ecoregion
Published 11 June 2019

Blackspot seabream (*Pagellus bogaraveo*) in Subarea 10 (Azores grounds)

ICES advice on fishing opportunities

ICES advises that when the precautionary approach is applied, catches should be no more than 553 tonnes in 2020.

Stock development over time

Catches have been lower since 2010 compared to 1989–2009. Survey data are variable, but the index in the last three years is high.

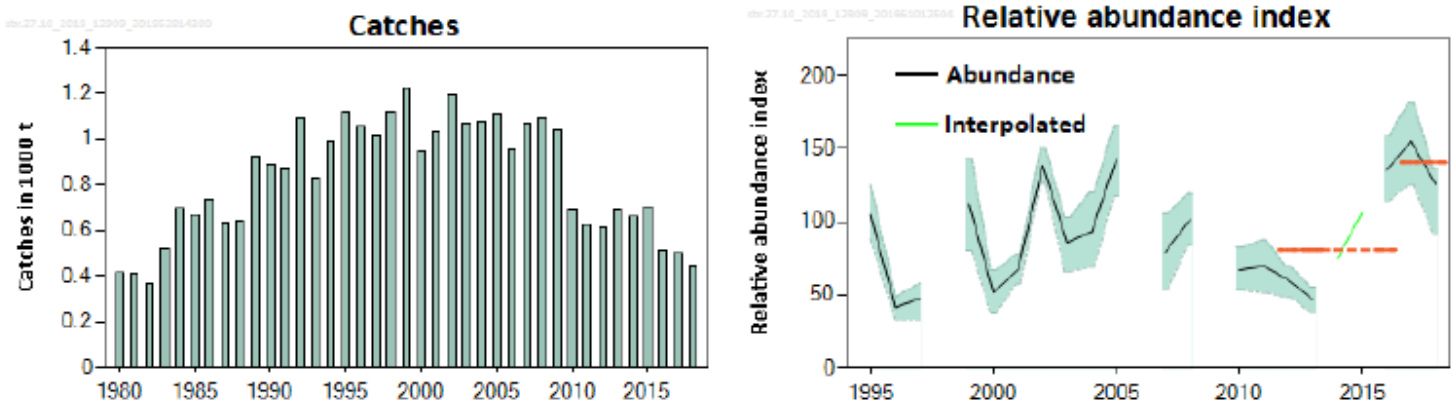


Figure 1 Blackspot seabream in Subarea 10. Left: Catches (in thousand tonnes) from Azores Division 10.a. Right: Relative abundance index from bottom longline survey (ARQDAÇO). The dashed orange lines indicate the average of the abundance index for 2017 to 2018 and for 2014 to 2016 (2014 and 2015 are interpolated values) used to calculate the advice. The shaded areas on the relative abundance index plot represent 95% confidence intervals.

DISCUSSION FOR THE CONFERENCE:

Q1

For what species is the current ARQDAÇO survey reliable for management?

Para que espécies a atual campanha de investigação ARQDAÇO está adaptada à sua gestão?

Q2

What are the priorities for answering the previous question?

Quais são as prioridades para podermos responder à questão anterior?