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# ON THE DIALOGUE BETWEEN KNOWLEDGE BACKGROUNDS INVOLVED IN TAGGING PROGRAMS

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# Introduction

Large-scale tuna tagging programs, imply the participation of people with very different knowledge.

Dialogue, empathy and basic mutual understanding between these different backgrounds is paramount.

Main features of two backgrounds involved (fishermen and scientists) and guidelines to improve the dialogue between these backgrounds

From observations done during ICCAT/GBYP Phases 2, 3 and 4 tagging programs in the Bay of Biscay, Gibraltar Strait and Central Mediterranean, and during the ICCAT/AOTTP Phase 1 tagging programs in Northwest Africa, Gulf of Guinea Ecosystem, Canary and Azores Islands.



# Knowledge backgrounds: Fishing vessel captain's vs Scientist goals

## Captains' knowledge background

Concern about resource availability  
Tunas: highly mobile and unpredictable. Captains strategy oriented to short-term

Value to empirical knowledge  
Captains value scientific knowledge not empirically obtainable, but when own empirical knowledge developed, always given more value

Emulation  
Eagerness about performing better than other skippers, transposed to scientific tagging

Control eagerness to be in control of the situation

## Scientists' goals

Quantitative  
Amount of tagging required to get a relevant number of long-term recoveries

Synergies or conflicts

Qualitative  
Spreading out the tagging effort for a good representativeness of migration and growth estimates for each species



# Interactions between captains and scientists during tagging programs

## CONFLICTS

Captains' concern about resource availability VS need to spread out the tagging effort over time or space

- The cruise leaders impose a quota of fish to be tagged by day
- Captains have real time info about distribution of the targeted.



# Interactions between captains and scientists during tagging programs

## CONFLICTS

Skipping species or size category = loss of opportunity.

The captains must sail to an area in which tagging is required but for which they have no real-time good indication regarding tuna availability, whereas they have good indications for another area that was not accepted by the cruise leader or project coordinator (e.g. because it was already intensively tagged).

Severe conflicts, mean ignoring his empirical knowledge, use bait, time and energy for a very low tagging.

This could heavily damage the good will of the captain for the rest of the tagging survey and put at risk the fulfillment of the quantitative objectives and future collaborations, especially if existing penalties in the contract due to no achievement of the quantitative tagging objective.

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# Interactions between captains and scientists during tagging programs

## SINERGIES

Simultaneous use of two vessels to enhance positive emulation (e.g. GBYP Phase 4 in the Gibraltar Strait; IOTTP in the Indian Ocean)

Following the captain's advice regarding a zone where no or little tagging was done historically (e.g. AOTTP Phase 1 in the Sierra Leone Rise)

Encouraging the captain to show his capacity to find a given species or size-category (e.g. GBYP Phase 2 in the Bay of Biscay). We can know more than we can say !



# General recommendations

## Agreements with vessels:

- according to the variability of tuna presence, and to the use of a local or non-local vessel

## Trade-offs and negotiations

- Imposing tagging quotas vs following the captains' concern regarding tuna availability
- Voluntarily spreading the tagging effort vs following a current narrow distribution of the tunas
- Voluntarily skipping a species or size-category whereas another one is missing

## Permanent dialogue and empathy

Dialogue between tagging scientists and captains is a key component of the success of a tagging survey





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