



COLLECTIVE EXERCISE

TR9.1, TR9.2 and TR9.3

Objective

- Provide trainees with a practical knowledge on how to identifying and distinguishing between the main tuna species in their adult and juvenile forms and using standard identification guides to identify species of billfish, sharks and other fish bycatch.

Instructions

- Trainees are to pair up. Pairs should consist, if possible, of one experienced observer and a non-experienced one.
- One trainee should open this exercise in its computer, while the other should open the species identification guides:
 - Handbook ID of YFT and BET in Fresh Condition
 - IOTC Tuna Identification Cards
 - TR9.3 Presentation Indian Ocean Tropical and Neritic Tuna Species



Exercise TR9.1 & 9.2: Nomenclature and Anatomical Features

QUESTION 1

List at least three (3) anatomical differences between cartilaginous and bony fish.

QUESTION 2

List at least three (3) external anatomical features used in the identification of:

- bony fish
- cartilaginous fish

QUESTION 3

Each trainee is to give an example of a:

- bony fish
- cartilaginous fish



Exercise TR9.3: Indian Ocean Tropical and Neritic Tuna Species

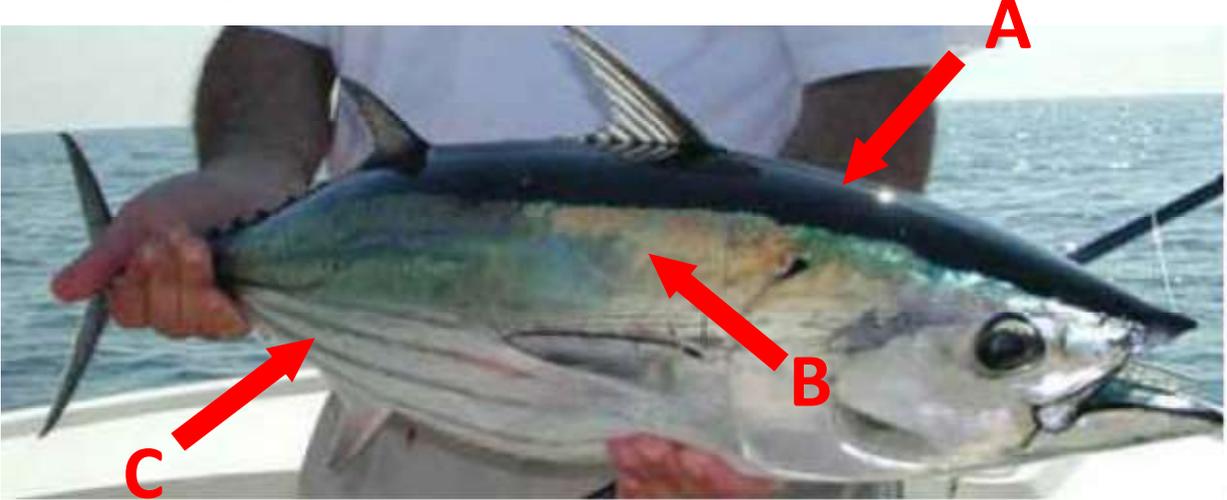
QUESTION 1

Use species identification guides to identify the following species of tuna. Justify your answers by stating visible key diagnostic features.



QUESTION 2

Identify the following tuna species and list the 3 main characteristics that helped you with its identification (A, B, and C).



QUESTION 3

Identify the following tuna species and list the two main characteristics that helped you with its identification (A and B).



QUESTION 4

Identify the following tuna species and list the main characteristics that helped you with their identification.



QUESTION 5

Identify the following tuna species and list the main characteristics that helped you with the identification.





QUESTION 6

Identify the following species of tuna using body markings.



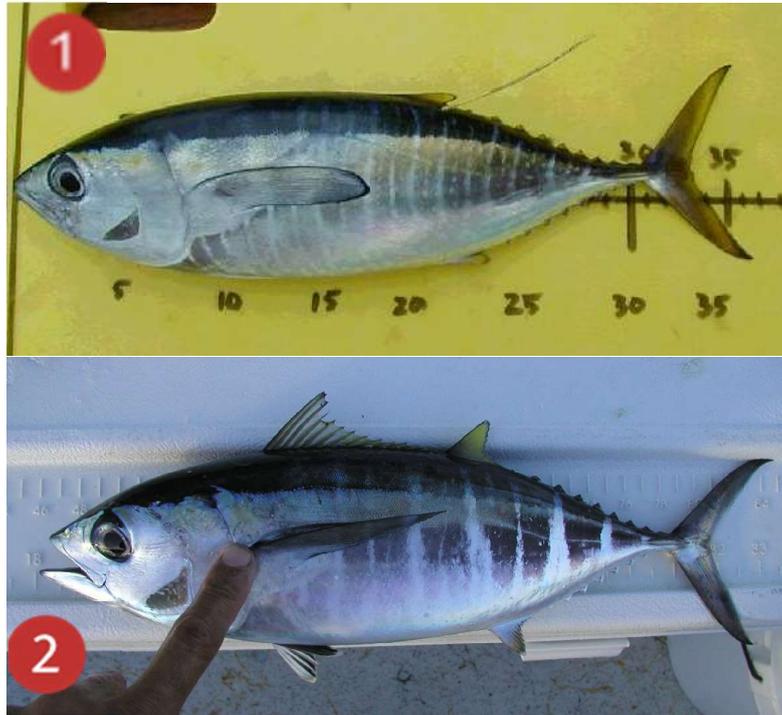
QUESTION 7

Identify the following species of tunas using head and body size.



QUESTION 8

Identify the following species of tuna using pectoral fin length and characteristics



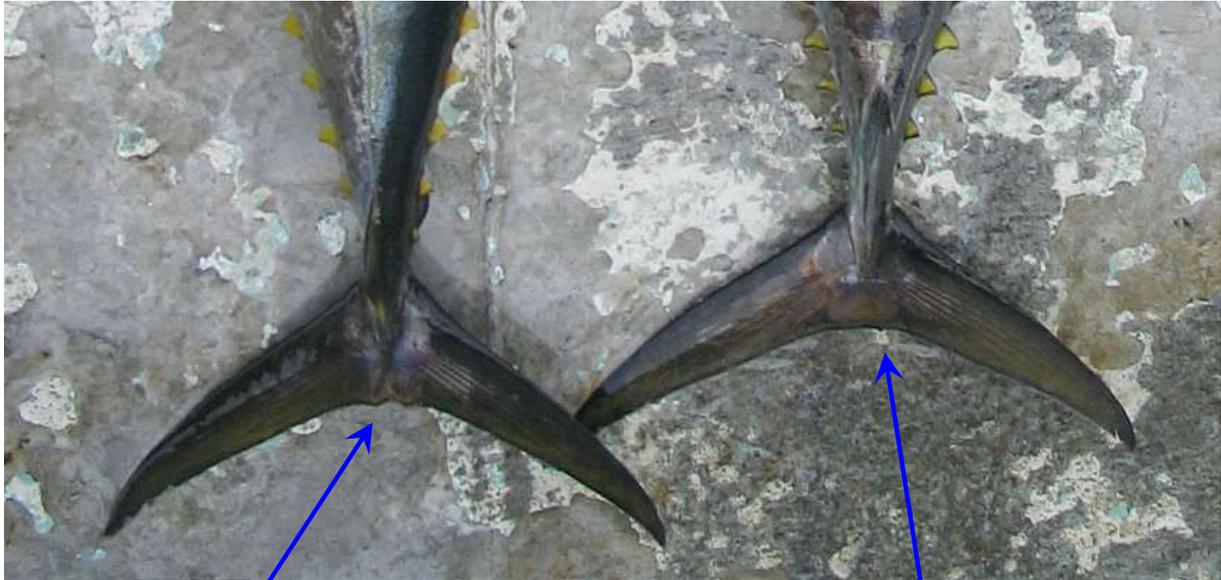
QUESTION 9

Identify tuna species using pectoral fin length and characteristics.



QUESTION 10

Identify the tails of the tuna in the photo using caudal fin characteristics.



1

2

QUESTION 11

Identify frozen tuna in the photo using pectoral fin characteristics.



1

2



QUESTION 12

Identify frozen tuna species mixed in a purse-seine well.

