

FCT
Fundação
para a Ciência
e a Tecnologia



Quantifying
**FOOD WEB
DYNAMICS** in
invaded **STREAM
COMMUNITIES**



UNIVERSIDADE
DE LISBOA



CONTEMPORARY FOOD WEBS AND FISH INVASIONS

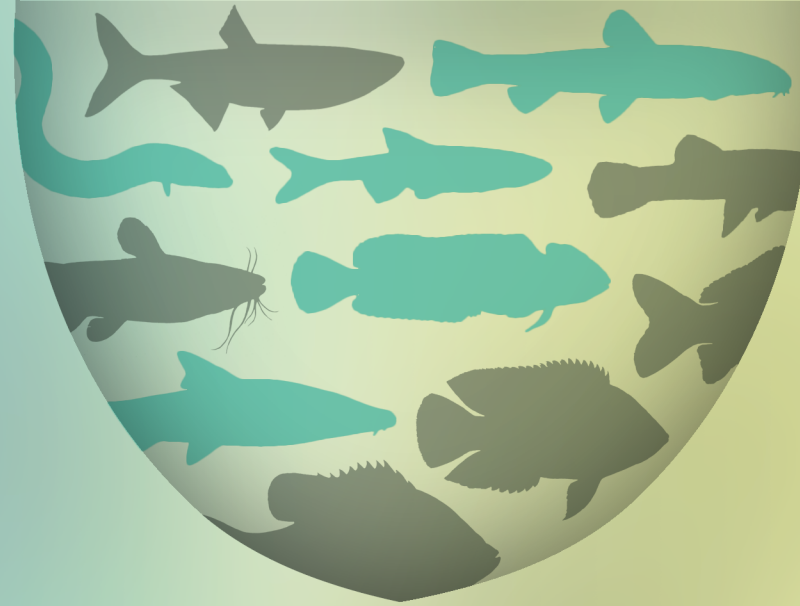
FISH INVASION modifies the structure of **FOOD WEBS** in the Lower Guadiana Basin

➔ **NATIVE FISHES** occupy **LOWER TROPHIC POSITIONS** in communities with less non-native fishes.

➔ **NATIVE FISHES** eat **MORE DIVERSE PREY** in communities with less non-native fishes, but still share most prey with them.

➔ **NON-NATIVE FISHES** eat the **SAME PREY** and occupy the **SAME TROPHIC POSITIONS** in every community.

➔ **FOOD WEBS** involve a **HIGHER DIVERSITY OF PREY** but **LESS TROPHIC POSITIONS** in communities with less non-native fishes.



HISTORICAL CHANGES IN FOOD WEBS

FOOD WEBS in the Lower Guadiana Basin have changed over the last **40 YEARS**

➔ The **TYPE OF PREY** eaten and the **TROPHIC POSITIONS** of native and non-native fishes have **CHANGED**.

➔ **NATIVE FISHES** in lower trophic positions have **REDUCED** the diversity of prey eaten.

➔ **NON-NATIVE FISHES** have kept their trophic positions but have **INCREASED THE DIVERSITY OF PREY** eaten.

➔ Eating **LESS DIVERSE PREY** may have been a response of native fishes to invasions, and probably indicates **PREY DIVISION** with non-native fishes.