

# EVALUATION OF COASTAL AQUATIC ANIMAL BIODIVERSITY IN THE TRABOCCHI COAST (CH): THE IMPORTANCE OF ECOSYSTEM HEALTH AND WILDLIFE CONSERVATION WITHIN THE CONTEXT OF GROWING HUMAN ACTIVITIES.

A. Di Serafino<sup>1</sup>, A. Arbuatti<sup>2</sup>

(1) Ph.D, MBA, National Order of Biologists, Rome, Italy  
(2) DVM, Adjunct Professor in Zoology and Ecology, University of Teramo, Teramo, Italy  
Presenting Author Email: [arbuatti@unite.it](mailto:arbuatti@unite.it)

## OBJECTIVES

This work is aimed to provide a qualitative evaluation of the aquatic fauna in a specific section of the Trabocchi Coast (Chieti, Italy), with a focus on the fish living between the shoreline and the breakwater rocks. This is a renowned territory in the Italian mid-Adriatic portion, characterized by a growing tourism for its environmental uniqueness.

## METHODS

Semi-submerged breakwaters in the southern coast of Rocca San Giovanni (Chieti, Italy) were inspected through dynamic Underwater-Visual-Census (UVC) from 2017 to 2020. In each immersion (20/year), 300 m were examined and filmed through a GoPro7 and Fujifilm XP. The recorded media were post-produced in order to classify the animal species observed.



(Google Earth, <https://earth.google.com/>)



*Diplodus sargus* (Linnaeus, 1758), *D. Vulgaris* (Geoffroy Saint-Hilaire, 1817) e *D. annularis* (L., 1758)

## RESULTS

We identified 2 Molluscae, 4 Crustacea, and 31 Osteichthyes, including *Sparidae* (10), *Mullidae* (1), *Moronidae* (1), *Atherinidae* (1), *Serranidae* (1), *Labridae* (3), *Gobiidae* (2), *Sphyrnaeidae* (1), *Mugilidae* (1), *Carangidae* (1), *Sciaenidae* (1), *Blenniidae* (5), *Pomatomidae* (1), *Belonidae* (1), *Congridae* (1).



*Sparus aurata* (L., 1758)



*Serranus scriba* (L., 1758)



*Sarpa salpa* (L., 1758) e *D. puntazzo* (Walbaum, 1792)



*Conger conger* (L., 1758)

## CONCLUSIONS

Results showed one of the richest Italian underwater coastal fauna, consistent with Arbuatti's previous findings in 2015, in which the research was performed 2520 mt further north. The completion of the cycle path by 2022 will determine a greater anthropic impact, due to a growing tourism. The existing infrastructure and services might not be sufficient to face touristic needs. To support local economy and prevent possible outcomes on biodiversity and ecosystems, an increase of structural investments, as well as scientific research and education are required to improve locals and tourists' environmental consciousness and to promote a real sustainable eco-tourism. The importance of this ecosystem, also as a nursery, is confirmed by the wide presence of young specimens. It is possible to conclude that this research results to be one of the most relevant underwater coastal biodiversity assessment in the Adriatic Sea.



*Trachinotus ovatus* (L., 1758)



*Mullus surmuletus* (L., 1758)



## CONSERVATION MEDICINE AND WILDLIFE HEALTH INTERNATIONAL SEMINAR

THURSDAY 16th and FRIDAY 17th JUNE, 2022 TERAMO - ITALY



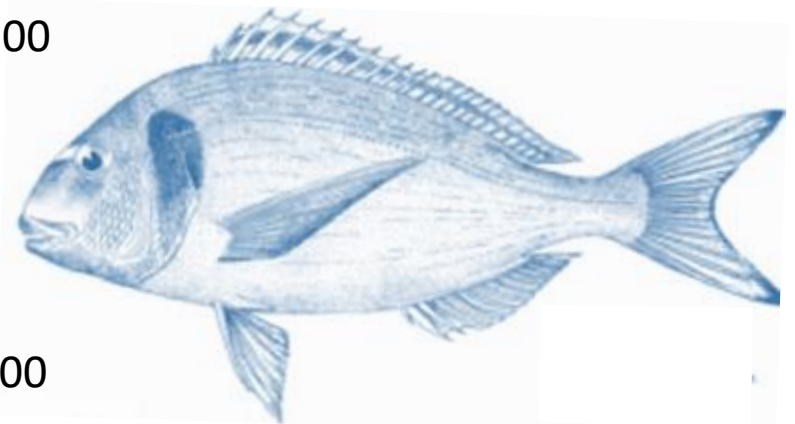
## AUTHORS

Alessandra Di Serafino, Ph.D, MBA

[alessandradiserafino@gmail.com](mailto:alessandradiserafino@gmail.com)  
 Scopus Author ID: 37074304700

Alessio Arbuatti, DVM

[arbuatti@unite.it](mailto:arbuatti@unite.it)  
 Scopus Author ID: 36150066900



## REFERENCES

- Arbuatti A. 2015, Studio qualitativo della fauna subacquea associata alle barriere artificiali sommerse nella costa dei trabocchi (CH), mediante Underwater Visual Census. 1° Congresso internazionale SIVAE, congresso SCIVAC.
  - All research items conducted on the Adriatic Sea were collected by Minelli. A et al., 2021. Supplement of Earth Syst Sci.data 1905-1923. [doi.org/10.5194/essd-13-1905-2021-supplement](https://doi.org/10.5194/essd-13-1905-2021-supplement)
- \*All photos are Alessio Arbuatti's Property. ©