

Monitoraggio Pomo I-UWTV survey

Principal Investigator
Dr. Michela Martinelli
*Institute for Marine Science
(CNR-ISMAR)*



RV G. Dallaporta
category: Regional
gross register tonnage (GT): 285
length overall (m): 35.3
breadth (m): 7.7
depth (m): 4.1
draft (m): 3.0
service speed (kn): 11.5

Cruise Location
Northern-Central Adriatic Sea

Disciplines
Oceanography
Biology Resources
Marine ecology and monitoring

Activities
Fisheries sampling
Underwater video inspections

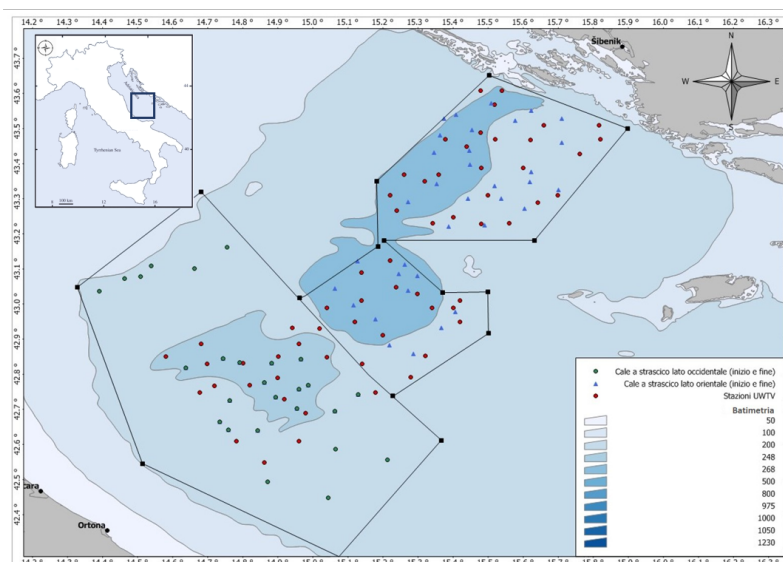
Main Equipment
**SCANMAR sensors, UWTV
system, CDT, Fishery and
Oceanography Observing
System (FOOS)**

Scientific collaboration
**International Council for the
Exploration of the Sea - ICES**
**Institute of Oceanography and
fisheries**
FAO-AdriaMed
**Ministry of Agricultural Food
and Forestry Policies**

Since the year 2015, some management measures have been implemented in the Pomo Pits area (Figure 1); for a proper assessment of the effectiveness of such measures on fisheries resources and on the ecosystem in general, periodic monitoring of the area is required. Therefore, based on the experience gained and on the time-series previously collected, MIPAAF entrusted the CNR-ISMAR of Ancona with the task of monitoring the area with 2 specific surveys per year. Since 2009, spring surveys have been conducted in the area in collaboration with the IOF of Split and the FAO-AdriaMed program. In addition to information on the main populations of commercial and of ecological interest species (e.g. hake, Norway lobster, shrimps) collected by means of trawl hauls (carried out with an experimental net), the use of the UWTV methodology (which involves the use of a towed camera for the assessment of densities of some species) allow the collection of additional useful information in the context of an ecosystem approach to resource management. An additional trawl survey in the western part of the area is also carried out in autumn since 2015.

The continuity of the periodic monitoring and the application of the same methodologies ensure that the results obtained before and after the implementation of the technical measures (i.e. fishery closure) can be compared, in order to provide data in support of the definition of the future management of the Pomo Pit.

Figure 1: Investigated area



Russo T., Morello E.B., Parisi A., Scarcella G., Angelini S., Labanchi L., Martinelli M., D'Andrea L., Santojanni A., Arneri E., Cataudella S. (2018) A model combining landings and VMS data to estimate landings by fishing ground and harbor. *Fisheries Research* 199: 218-230

Bastardie F., Angelini S., Bolognini L., Fuga F., Manfredi C., Martinelli M., Nielsen J R., Santojanni A., Scarcella G., Grati F. (2017) Spatial planning for fisheries in the Northern Adriatic: working toward viable and sustainable fishing. *Ecosphere* 8 (2)

Angelini S., Hillary R., Morello E.B., Plagányi É.E., Martinelli M., Manfredi C., Isajlović I., Santojanni A. (2016) An Ecosystem Model of Intermediate Complexity to test management options for fisheries: A case study. *Ecological Modelling* 319: 218-232

Martinelli M., Morello E.B., Isajlovic I., Belardinelli A., Lucchetti A., Santojanni A., Atkinson J.A., Vrgoč N., Arneri E. (2014) Towed underwater television towards the quantification of Norway lobster, squat lobsters and sea pens in the Adriatic Sea. *Acta Adriatica* 54(1): 3 - 12