

## Pietro Battaglia



Born in Messina (Italy) on 06/06/1976

Tel.:

Fax:

e-mail: [battaglia.pietro@szn.it](mailto:battaglia.pietro@szn.it)

Skype: pieroboceano

**Current Position:** Researcher

**Current Affiliation:**

Integrative Marine Ecology Department, Stazione Zoologica Anton Dohrn, Napoli (Italy)

### **Education/Training/Experience**

<b>Institute and Location</b>	<b>Degree / Function</b>	<b>Year</b>	<b>Field of Study</b>
Department of Animal Biology and Marine Ecology, University of Messina, Italy	MSc (Laurea)	1995-2000	Biological sciences
Department of Animal Biology and Marine Ecology, University of Messina, Italy	Ph.D.	2002-2005	Fishery management and resources
ICRAM, Laboratory of Milazzo, Italy	Research grant	2006-2008	Marine Ecology
ISPRA, Laboratory of Milazzo, Italy	Research contract (assegno ricerca)	2010-2011	Marine Ecology
ISPRA, Laboratory of Milazzo, Italy	Researcher	2011-2018	Fishery management and resources, Fish ecology and biology
Stazione Zoologica Anton Dohrn, Milazzo, Italy	Researcher	2018-present	Fishery management and resources, Fish ecology and biology

## **Appointments and awards**

2015-2016: ISPRA contact person for the Laboratory of Ichthyology and Marine Ecology from 09 July 2015 to 31 December 2016.

2016-2018: Member of the Governance Team of Local Management Plan of Licata for fishery in Sicily (Italy) – FEAMP 2014-2020

2016-2018: Member of the Scientific Team of the Plastic Buster Project/Consortium (<http://plasticbusters.unisi.it/>)

2012-2018: ISPRA scientific-technical contact person for Marine Strategy Framework Directive with regard to Descriptor 3 (Commercially exploited fish and shellfish) and ECAP Process of UNEP/MAP with regard to Ecological Objective 3 (Populations of commercially exploited fish and shellfish).

## **Students' Supervision**

Tutor and co-tutor of Master Degree's, Undergraduate and Graduate Degree' students. Student supervision (past and present)

## **Publications**

Author of 57 publications on ISI-journals (h index: 14) and 1 international report

### ***List of publications of the last 10 years:***

#### **Peer-reviewed publications:**

Consoli P., Falautano M., Sinopoli M., Perzia P., Canese S., Esposito V., Battaglia P., Romeo T., Andaloro F., Galgani F., Castriota L., 2018. Composition and abundance of benthic marine litter in a coastal area of the central Mediterranean Sea. *Marine Pollution Bulletin*, in press.

Consoli P., Kovačić M., Battaglia P., Romeo T., Scotti G., Andaloro F., Patzner R.A. (2018). First record of two gobiid fish from the Strait of Sicily (central Mediterranean Sea): *Odondebuenia balearica* (Pellegrin & Fage, 1907) and *Vanneaugobius dollfusi* (Brownell, 1978). *Cahier de Biologie Marine*, in press.

Castriota L., Esposito V., Falautano M., Battaglia P., Andaloro F. (2018). Observations on the diet of adult *Oblada melanura* (Sparidae) in the Strait of Sicily (central Mediterranean). *Cybium*, in press.

Consoli P., Andaloro F., Altobelli C., Battaglia P., Campagnuolo S., Canese S., Castriota L., Cillari T., Falautano M., Pedà C., Perzia P., Sinopoli M., Vivona P., Scotti G., Esposito V., Galgani F., Romeo T. (2018). Marine litter in an EBSA (Ecologically or Biologically Significant Area) of the central Mediterranean Sea: Abundance, composition, impact on benthic species and basis for monitoring entanglement. *Environmental Pollution* 236: 405-415.

Battaglia P., Ammendolia G., Esposito V., Romeo T., Andaloro F. (2017). Few but relatively large prey: trophic ecology of *Chauliodus sloani* (Pisces: Stomiidae) in deep waters of the central Mediterranean Sea. *Journal of Ichthyology*, 58 (1): 8–16.

- Esposito V., Andaloro F., Canese S., Bortoluzzi G., Bo M., Di Bella M., Italiano F., Sabatino G., Battaglia P., Consoli P., Giordano P., Spagnoli F., La Cono V., M. Yakimov M.M., Scotti G., Romeo T. (2018). Exceptional discovery of a shallow-water hydrothermal site in the SW area of Basiluzzo islet (Aeolian archipelago, South Tyrrhenian Sea): An environment to preserve. *PLoS ONE* 13(1): e0190710.
- Gaglio G., Battaglia P., Costa A., Cavallaro M., Cammilleri G., Graci S., Buscemi M.D., Ferrantelli V., Andaloro F., Marino F. (2018). *Anisakis* spp. larvae in three mesopelagic and bathypelagic fish species of the central Mediterranean Sea. *Parasitology International*, 67: 23-28.
- Fossi M.C., Pedà C., Compa M., Tsangaris C., Alomar C., Claro F., Ioakeimidis C., Galgani F., Hema T., Deudero S., Romeo T., Battaglia P., Andaloro F., Caliani I., Casini S., Panti C., Baini M. (2018). Bioindicators for monitoring marine litter ingestion and its impacts on Mediterranean biodiversity. *Environmental Pollution*, 237: 1023-1040.
- Battaglia P., Perzia P., Pedà C., Esposito V., Consoli P., Andaloro F., Romeo T. (2018). Evolution, crisis and new scenarios of the Italian swordfish harpoon fishery. *Regional Studies in Marine Science*, 21, 94-101.
- Cavallaro M., Battaglia P., Guerrera M.C., Abbate F., Levanti M.B., Ammendolia G., Andaloro F., Germanà A., Laurà R. (2017). Structure and ultrastructure study on photophores of the Madeira lanternfish *Ceratoscopelus maderensis* (Lowe, 1839), Pisces: Myctophidae. *Acta Zoologica*, DOI: 10.1111/azo.12236 Q2; IF(2017): 0.989; SJR(2016): 0.421
- Battaglia P., Ammendolia G., Cavallaro M., Consoli P., Esposito V., Malara D., Rao I., Romeo T., Andaloro F. (2017). Influence of lunar phases, winds and seasonality on the stranding of mesopelagic fish in the Strait of Messina (central Mediterranean Sea). *Marine Ecology*, 38(5), e12459.
- Raicevich S., Battaglia P., Fortibuoni T., Romeo T., Giovanardi O., Andaloro F. (2017). Critical inconsistencies in early implementations of the Marine Strategy Framework Directive and Common Fisheries Policy objectives hamper policy synergies in fostering the sustainable exploitation of Mediterranean Fisheries Resources. *Frontiers in Marine Science*, 4: 316.
- Consoli P., Esposito V., Falautano M., Battaglia P., Castriota L., Romeo T., Sinopoli M., Vivona P., Andaloro F. (2017). The impact of fisheries on vulnerable habitats: the case of trawling on circa-littoral grounds in the Strait of Sicily (central Mediterranean Sea). *Marine Biology Research*, 13: 1084-1094.
- Battaglia P., Andaloro F., Consoli P., Pedà C., Raicevich S., Spagnolo M., Romeo T. (2017). Baseline data to characterize and manage the small-scale fishery (SSF) of an oncoming Marine Protected Area (Cape Milazzo, Italy) in the western Mediterranean Sea. *Ocean & Coastal Management*, 148: 231-244.
- Renzi M., Romeo T., Guerranti C., Perra G., Canese S., Consoli P., Focardi S.E., Berti C., Sprovieri M., Gherardi S., Salvagio D., Giaramita L., Esposito V., Battaglia P., Giacobbe S., Andaloro F. (2017). Are shipwrecks a real hazard for the ecosystem in the Mediterranean Sea? *Marine Pollution Bulletin*, 124(1), 21-32.

- Sinopoli M., Battaglia P., Barreiros J.P. (2017). Unusual presence of *Coryphaena hippurus* Linnaeus, 1758 (Perciformes: Coryphaenidae) under an offshore oil platform in Southern Brazil. *Journal of Coastal Life Medicine*, 5(6): 239-241.
- Romeo T., Ammendolia G., Canese S., Andaloro F., Battaglia P. (2017). Recent records of swordfish attacks to harpoon vessels in the Mediterranean Sea. *Acta Adriatica*, 58(1): 147-156.
- Jawad L., Sabatino G., Andaloro F., Battaglia P. (2018). Morphology and ontogenetic changes in otoliths of the mesopelagic fishes *Ceratoscopelus maderensis* (Myctophidae), *Vinciguerria attenuata* and *V. poweriae* (Phosichthyidae) from the Strait of Messina (Mediterranean Sea). *Acta Zoologica*, 99(2): 126-142.
- Castriota L., Falautano M., Battaglia P., Maraventano G., Prazzi E., Ammendolia G., Andaloro F. (2017). First record of *Physalia physalis* in the Pelagic Islands (Strait of Sicily) and additional records in the Strait of Messina. *Cahiers de Biologie Marine*, 58: 243-246
- Cavallaro M., Battaglia P., Guerrera M.C., Abbate F., Levanti M.B., Andaloro F., Germanà A., Laurà R. (2017). New data on morphology and ultrastructure of skin photophores in the deep-sea squid *Histioteuthis bonnellii* (Férussac, 1834), Cephalopoda: Histioteuthidae. *Acta Zoologica*, 98(3): 229–327.
- Cavallaro M., Ammendolia G., Andaloro F., Battaglia P. (2017). First record of the mesopelagic fish *Diaphus dumerilii* (Bleeker, 1856) in the Mediterranean Sea. *Marine Biodiversity*, 47(2): 585-588.
- Consoli P., Esposito V., Battaglia P., Altobelli C., Perzia P., Romeo T., Canese S., Andaloro F. (2016). Fish distribution and habitat complexity on banks of the Strait of Sicily (central Mediterranean Sea) from Remotely-Operated Vehicle (ROV) explorations. *PLoS ONE* 11(12): e0167809.
- Jereb P., Cannas R., Maiorano P., Bello G., Garibaldi F., Mereu M., Ancona F.G., Ammendolia G., Battaglia P., Duysak Ö., Hoving H.J.T., Lefkaditou E., Lipinski M.R., Melis R., Peristeraki P.N., Ragonese S., Romeo T., Salman A., Santos M. B., Villari A., Cuccu D. (2016). The deep-water squid *Octopoteuthis sicula* Rüppell, 1844 (Cephalopoda: Octopoteuthidae) as the single species of the genus occurring in the Mediterranean Sea. *Marine Biology*, 163(9): art.192.
- Perzia P., Battaglia P., Consoli P., Andaloro F., Romeo T. (2016). Swordfish monitoring by a GIS-based spatial and temporal distribution analysis on harpoon fishery data: a case of study in the central Mediterranean Sea. *Fisheries Research*, 183: 424-434.
- Romeo T., Pedà C., Fossi C., Andaloro F., Battaglia P. (2016). First record of plastic debris in the stomach of Mediterranean lanternfishes. *Acta Adriatica*, 57(1): 115–124.
- Battaglia P., Andaloro F., Esposito V., Granata A., Guglielmo L., Guglielmo R., Musolino S., Romeo T., Zagami G. (2016). Diet and trophic ecology of the lanternfish *Electrona risso* (Cocco 1829) in the Strait of Messina (central Mediterranean Sea) and potential resource utilization from the Deep Scattering Layer (DSL). *Journal of Marine Systems*, 159: 100–108.
- Maisano M., Cappello T., Oliva S., Natalotto A., Giannetto A., Parrino V., Battaglia P., Romeo T., Salvo A., Spanò N., Mauceri, A. (2016). PCB and OCP accumulation and evidence of hepatic

alteration in the Atlantic bluefin tuna, *T. thynnus*, from the Mediterranean Sea. *Marine Environmental Research*.

- Battaglia P., Pedà C., Musolino S., Esposito V., Andaloro F., Romeo T. (2015). Diet and first documented data on plastic ingestion of *Trachinotus ovatus* (L. 1758), Fam: Carangidae, from the Strait of Messina (central Mediterranean Sea). *Italian Journal of Zoology*, 83(1), 121-129.
- Esposito V., Castriota L., Battaglia P., Consoli P., Romeo T., Scotti G., Andaloro F. (2015). Fish community in a surf zone of the northern Sicilian coast (Mediterranean Sea): diversity and functional guild composition. *Mediterranean Marine Science*, 6(3): 502-512.
- Battaglia P., Malara D., Ammendolia G., Romeo T., Andaloro F. (2015). Relationships between otolith size and fish length in some mesopelagic teleosts (Myctophidae, Paralepididae, Phosichthyidae and Stomiidae) from the central Mediterranean Sea (Strait of Messina and Strait of Sicily). *Journal of Fish Biology*, 87: 774–782.
- Battaglia P., Potoschi A., Valastro M., Andaloro F., Romeo T. (2015). Age, growth, biological and ecological aspects of *Remora osteochir* (Echeneidae) in the Mediterranean Sea. *Journal of the Marine Biological Association of the United Kingdom*, 96(03): 639-645.
- Romeo T., Battaglia P., Pedà C., Consoli P., Andaloro F., Fossi M.C. (2015). First evidence of presence of plastic debris in stomach of large pelagic fish in the Mediterranean Sea. *Marine Pollution Bulletin*, 95: 358–361.
- Battaglia P., Canese S., Ammendolia G., Romeo T., Sandulli R., Tunesi L., Andaloro F. (2015). New records and underwater observation of the rare fish *Scorpaenodes arenai* (Scorpaenidae) from the central and western Mediterranean Sea. *Italian Journal of Zoology*, 82(3), 454-458.
- Pedà C., Battaglia P., Scuderi A., Voliani A., Mancusi C., Andaloro F., Romeo T. (2015). Cephalopod prey in the stomach contents of odontocete cetaceans stranded in the western Mediterranean Sea. *Marine Biology Research*, 11(6): 593-602.
- Romeo T., Battaglia P., Raicevich S., Perzia P., Andaloro F. (2015). Swordfish harpoon fishery in the Mediterranean Sea: recent data to implement the Marine Strategy Framework Directive and the EcAp (Ecosystem Approach) process. *Fisheries Research*, 161: 191-199.
- Cavallaro M., Battaglia P., Laurà R., Guerrera M.C., Abbate F., Germanà A. (2015). The morphology of photophores in the garrick, *Cyclothone braueri* (Family: Gonostomatidae): an ultrastructure study. *Acta Zoologica*, 96(3), 296-300.
- Falautano M., Castriota L., Battaglia P., Romeo T., Andaloro F. (2014). First record of the Lessepsian fish *Hemiramphus far* (Forsskål, 1775) (Hemiramphidae) in Italian waters. *Cybium*, 38(3): 235-237.
- Battaglia P., Esposito V., Malara D., Falautano M., Castriota L., Andaloro F. (2014). Diet of the spottail lanternfish *Diaphus metopoclampus* (Cocco 1829), Pisces: Myctophidae, in the central Mediterranean Sea. *Italian Journal of Zoology*, 81(4): 530-543.
- Battaglia P., Ammendolia G., Esposito V., Romeo T., Andaloro F. (2014). Additional data on the rare fish *Microichthys sanzoi* (Epigonidae) from the central Mediterranean Sea. *Acta Adriatica*, 54(1): 3-12.

- Castriota L., Falautano M., Battaglia P., Oddo A., Andaloro F. (2014). New biological data on *Fistularia commersonii* in the central Mediterranean Sea. *Cybium*, 38(1): 15-21.
- Battaglia P., Musolino S., Esposito V., Ammendolia G., Andaloro F., Romeo T. (2013). Feeding habits of juvenile fishes belonging to 3 medusivorous species (Centrolophidae and Nomeidae) from the Strait of Messina (central Mediterranean Sea). *Marine Biology Research*, 10 (9): 927–933.
- Battaglia P., Pedà C., Sinopoli M., Romeo T., Andaloro F. (2013). Cephalopods in the diet of young-of-the-year bluefin tuna (*Thunnus thynnus* L. 1758, Pisces: Scombridae) from the southern Tyrrhenian Sea (central Mediterranean Sea). *Italian Journal of Zoology*, 80(4): 560-565.
- Romeo T., Consoli P., Battaglia P., Andaloro F. (2013). A support to manage the swordfish (*Xiphias gladius* Linnaeus, 1758) IUUF (illegal, unreported and unregulated fishing): an easy method to identify the legal size. *Journal of Applied Ichthyology*, 30: 114-116.
- Battaglia P., Ammendolia G., Romeo T., Esposito V., Andaloro F. (2013). Additional data of the infrequent deep water eel *Facciollera oxyrhyncha* (Bellotti, 1883) (Nettastomatidae) from its type locality, the Strait of Messina, central Mediterranean Sea, including a rare post-larval specimen. *Cahiers de Biologie Marine*, 54: 319-323.
- Consoli P., Sarà G., Mazza G.; Battaglia P.; Romeo T.; Incontro V.; Andaloro F. (2013). The effects of protection measures on fish assemblage in the Plemmirio marine reserve (central Mediterranean Sea, Italy): a first assessment 5 years after its establishment. *Journal of Sea Research*, 79: 20–26.
- Battaglia P., Andaloro F., Consoli P., Esposito V., Malara D., Musolino S., Pedà C., Romeo T. (2013). Feeding habits of the Atlantic bluefin tuna, *Thunnus thynnus* (L. 1758), in the central Mediterranean Sea (Strait of Messina). *Helgoland Marine Research*, 67(1): 97-107.
- Battaglia P., Ammendolia G., Romeo T., Andaloro A. (2012). Finding of *Eretmophorus kleinenbergi* (Moridae) in the central Mediterranean Sea 93 years after its previous record, with a first description of sagittae and fresh coloration. *Marine Biodiversity Records*, 5 (e20): 3pp.
- Castriota L., Falautano M., Finoia M.G., Consoli P., Pedà C., Esposito V., Battaglia P., Andaloro F. (2012). Trophic relationships among scorpaeniform fishes associated with gas platforms. *Helgoland Marine Research*, 66 (3): 401-411.
- Romeo T., Battaglia P., Pedà C., Perzia P., Consoli P., Esposito V., Andaloro F. (2012). Pelagic cephalopods of the central Mediterranean Sea determined by the analysis of the stomach content of large fish predators. *Helgoland Marine Research*, 66 (3): 295-306.
- Romeo T., Perzia P., Esposito V., Malara D., Battaglia P., Consoli P., Canese S., Andaloro F. (2011). Relationship between swordfish swimming behaviour and sea surface temperature in the central Mediterranean Sea during the reproductive period. *Marine Biology Research*, 7: 186-194.
- Romeo T., Consoli P., Punzon A., Modica L., Raffa F., Perzia P., Battaglia P., Esposito V., Andaloro F. (2010). Swordfish (*Xiphias gladius* Linnaeus 1758) harpoon fishery: a method of

evaluation of the swordfish presence in the Strait of Messina (Central Mediterranean Sea). *Journal of Applied Ichthyology*, 26: 886-891.

Consoli P., Battaglia P., Castriota L., Esposito E., Romeo T., Andaloro F. (2010). Age, growth and feeding habits of the bluemouth rockfish, *Helicolenus dactylopterus* (Delaroche, 1809) in the central Mediterranean (southern Tyrrhenian Sea). *Journal of Applied Ichthyology*, 26: 583-591.

Battaglia P., Malara D., Romeo T., Andaloro F. (2010). Relationships between otolith size and fish size in some mesopelagic and bathypelagic species from the Mediterranean Sea (Strait of Messina, Italy). *Scientia Marina*, 74 (3): 605-612.

Battaglia P., Castriota L., Consoli P., Falautano M., Romeo T., Andaloro F. (2010). Age and growth of pearly razorfish, *Xyrichtys novacula* (Linnaeus 1758) in the central Mediterranean Sea. *Journal of Applied Ichthyology*, 26: 410–415.

Battaglia P., Romeo T., Consoli P., Scotti G., Andaloro F. (2010). Characterization of the artisanal fishery and its socio-economic aspects in the central Mediterranean Sea (Aeolian Islands, Italy). *Fisheries Research*, 102: 87-97.

Esposito V., Battaglia P., Castriota L., Finoia M.F., Scotti G., Andaloro A. (2009). Diet of Atlantic lizardfish, *Synodus saurus* (Linnaeus, 1758) (Pisces: Synodontidae) in the central Mediterranean Sea. *Scientia Marina*, 73 (2): 369-376.

Potoschi A., Battaglia P., Castriota L., Andaloro A. (2009). First record of *Gonostoma elongatum* Gunther, 1878 (Gonostomatidae) in the central Mediterranean Sea. *Cybium*, 33 (2): 173-174.

### **International Reports:**

Zampoukas N., Palialexis A., Duffek A., Graveland J., Giorgi G., Hagebro C., Hanke G., Korpinen S., Tasker M., Tornero V., Abaza V., Battaglia P., Caparis M., Dekeling R., Frias Vega M., Haarich M., Katsanevakis S., Klein H., Krzyminski W., Laamanen M., Le Gac J.C., Leppanen J.M., Lips U., Maes T., Magaletti E., Malcolm S., Marques J.M., Mihail O., Moxon R., O'Brien C., Panagiotidis P., Penna M., Piroddi C., Probst W.N., Raicevich S., Trabucco B., Tunesi L., van der Graaf S., Weiss A., Wernersson A.S., Zevenboom W. (2014). Technical guidance on monitoring for the Marine Strategy Framework Directive. JRC Scientific and Policy Reports. Joint Research Centre of the European Commission, Luxembourg: Publications Office of the European Union. doi: 10.2788/70344.