

Curriculum Vitae

PERSONAL INFORMATION

Name **MANTZOUNI IRENE**
Work Address FISHERIES RESEARCH INSTITUTE, KAVALA
NEA PERAMOS, GREECE

RESEARCH EXPERIENCE

- 2016-2017 **Lecturer on Fisheries dynamics** (undergraduate course)
Institute: Department of Fisheries and Aquaculture Technology, Technological Educational Institute Of Messolonghi, Greece.
- 2016 Construction and evaluation of innovative fishing barrier traps in lagoons for the escapement of undersized fish to the coastal zone..
Institute: University of Patras, Greece
- 2012-2014 **SAGE10** Establishment of an impact assessment procedure as a tool for the sustainability of agro-ecosystem: the case of Mediterranean olives (LIFE09 ENV/GR/000302 SAGE 10)
Expert on the IAP (Impact Assessment Procedure) Method Development
Institute: Benaki Phytopathological Institute (BPI), Greece
- 2011-2012 **SAGE10** Establishment of an impact assessment procedure as a tool for the sustainability of agro-ecosystem: the case of Mediterranean olives (LIFE09 ENV/GR/000302 SAGE 10)
Scientific secretary
Institute: Benaki Phytopathological Institute (BPI), Greece
- 2010-2011 **Postdoc Researcher**
Institute: Center for Macroecology, Evolution and Climate (CMEC), Department of Biology, University of Copenhagen,

Denmark

2006-2010 **META-OCEANS:** Elucidating the structure and functioning of marine ecosystems through synthesis and comparative analysis (EU Marie Curie Early Stage Training PhD network)

PhD thesis: Meta-analysis of carrying capacity and abundance-area relationships in marine fish species

Institute: University of Copenhagen/ National Institute of Aquatic Resources (DTU-Aqua) - Department of Marine Ecology and Aquaculture

2004-2006 **ANREC** “Association of Physical and Biological processes acting on Recruitment and post Recruitment of Anchovy” (*European commission-D.G. XIV*)

Institute: University of Patras

ACADEMIC EDUCATION AND TRAINING

ACADEMIC TITLES

2006-2010 **META-OCEANS Marie Curie EST PhD student**

Project title: Meta-analysis of carrying capacity and abundance-area relationships in marine fish species

Supervisor: B.R MacKenzie

Institute: University of Copenhagen/ National Institute of Aquatic Resources (DTU-Aqua) - Department of Marine Ecology and Aquaculture

2003-2006 **MSc. in Ecology- Management and Protection of the Natural Environment**

Project title: Matrix model for the study of the structure and dynamics of the N. Aegean anchovy (*Engraulis encrasicolus*) stock; construction, analysis and simulation

University of Patras (Greece)- Dept of Biology

1998-2003 **BSc. in Biology**

University of Patras (Greece)- Dept of Biology

SKILLS & COMPETENCES

COMPUTER SKILLS

- Statistical Software (eg SPSS, R, WinBugs, FISAT)
- Modelling Software (eg Matlab, R)
- Databases-Spreadsheets
- Microsoft Windows environments and Office package

LANGUAGES

GREEK NATIVE LANGUAGE

ENGLISH Excellent/ Degree: Certificate of Proficiency in English -
University of Cambridge

GERMAN Good/ Degree: Mittelstufe - *Goethe Institut*

RESEARCH INTERESTS

- Modelling fisheries population dynamics, especially under the influence of a spatio-temporally fluctuating environment, aiming to fisheries management under an ecosystem perspective
- Meta-analysis of fish species recruitment dynamics to derive species-level responses to changing climate and borrow strength from a broader dataset to reduce uncertainty in estimating management reference points
- Statistical analyses, including frequentist and Bayesian approaches, to analyse ecosystem influence on carrying capacity and productivity of fish populations
- Construction, analysis and simulation of matrix population models
- Historical reconstruction of population abundance using stock assessment methods

RESEARCH PUBLICATIONS

1. **Mantzouni, I.**, Somarakis, S., Moutopoulos, D.K., Kallianiotis, A. & Koutsikopoulos, C., 2007. Periodic, spatially structured matrix model for the study of anchovy (*Engraulis encrasicolus*) population dynamics in N Aegean Sea (E Mediterranean). *Ecological Modelling* 208: 367-377
2. **Mantzouni, I.** and MacKenzie, B.R. 2008. Hierarchical modelling of temperature and habitat effects on carrying capacity and maximum reproductive rate of North Atlantic cod in the Baltic Sea, Gulf of St Lawrence, and throughout the North Atlantic. ICES CM 2008/J:07
3. Brander, K., Chouinard, G., **Mantzouni, I.** and Mohn, B. 2008. Comparative dynamics of cod populations in the Baltic Sea, the Gulf of St Lawrence, and other areas. ICES CM 2008/J:01
4. **Mantzouni, I.** and MacKenzie, B.R. 2009. Why is haddock overtaking cod? Comparing the effects of temperature and habitat size on both species recruitment dynamics across the N Atlantic. ICES CM 2008/C:04
5. **Mantzouni, I.** and MacKenzie, B.R. 2010. Productivity responses of a widespread marine piscivore, *Gadus morhua*, to oceanic thermal extremes and trends. *Proceedings of the Royal Society B: Biological Sciences* 277(1689):1867-1874.
6. **Mantzouni, I.**, Sørensen H., O'Hara, R. and MacKenzie, B.R. 2010. Hierarchical modeling of temperature and habitat effects on population dynamics of North Atlantic cod. *ICES Journal of Marine Science* 67(5): 833-855.
7. Moutopoulos D.K., Prodromitis G., **Mantzouni I.**, Koutsikopoulos C. 2016. Quantifying the implementation of Common Fisheries Policy: Patterns of fisheries violations and penalties imposed in Greek waters. *Marine Policy*, 70: 65-76.
8. **Mantzouni, I.** and MacKenzie, B.R. (*in prep.*). Effects of temperature, habitat size and life-history on herring (*Clupea harengus*) productivity and carrying capacity across the N Atlantic. *Ecology*.

Contributions to the ICES Working Groups Reports:

9. Report of the Workshop on Cod and Future Climate Change (WKCFC). ICES CM 2008/OCC:09
10. - Report of the Workshop on historical data on fisheries and fish (WKHIST). ICES CM 2008/RMC:04

**PRESENTATIONS IN
CONFERENCES-
WORKSHOPS**

1. Mantzouni, I., Moutopoulos, D.K., Kallianiotis, A., Somarakis, S. & Koutsikopoulos, C. Matrix models for the study of anchovy (*Engraulis encrasicolus*) population structure and dynamics in N. Aegean Sea. **12th Pan-Hellenic Conference of Ichthyologists 2005**: 48-51.
2. Mantzouni, I., Moutopoulos, D.K., Kallianiotis, A., Somarakis, S. & Koutsikopoulos, C. Study of the N. Aegean anchovy (*Engraulis encrasicolus* L., 1758) dynamics through a matrix model application. **8th Pan-Hellenic Symposium of Oceanography and Fisheries. Thessaloniki- Greece 2006**. (poster)
3. Mantzouni, I. and MacKenzie, B.R. Meta-analysis of carrying capacity and abundance-area relationships in marine fish species-Planning and Objectives. **1st Meta-Oceans Workshop, AZTI, Pasaia (Spain), 24/01/2007**. [Oral presentation]
4. Mantzouni, I. and MacKenzie, B.R. Meta-analysis of carrying capacity and abundance-area relationships in marine fish species-1 year Progress. **2nd Meta-Oceans Workshop, CSIC, Barcelona (Spain), 24/01/2008**. [Oral presentation]
5. Mantzouni, I. and MacKenzie, B.R. Carrying capacity of cod in N. Atlantic: the effect of temperature. **Cod-workshop organised, DTU-Aqua (Denmark), 5/02/2008**. [Oral presentation]
6. Mantzouni, I. and MacKenzie, B.R. Could warmer years mean good years for cod? - A pan-Atlantic meta-analytic perspective. **ICES/PICES/IOC International Symposium on "Effects of Climate Change on the World Oceans", Gijón (Spain), 19 - 23 May 2008**. [Poster presentation]
7. Mantzouni, I. and MacKenzie, B.R. Could warmer years mean good years for cod? A pan-Atlantic meta-analytic perspective. **ICES Workshop on Cod and Future Climate Change (CCCWG), Copenhagen (Denmark), 17-20 June 2008**. [Oral presentation]
8. Mantzouni, I. and MacKenzie, B.R. Possible linkages between historical reconstruction and meta-analysis. **ICES Workshop on historical data on fisheries and fish (WKHIST), Copenhagen (Denmark), 11-15 August 2008**. [Oral presentation]
9. Mantzouni, I., Sørensen H., O'Hara, B. and MacKenzie, B.R. Hierarchical modeling of temperature and habitat effects on population dynamics of North Atlantic cod. **ICES 2008 Annual Science Conference, Halifax (Canada), 22-26 September 2008**. [Oral presentation]
10. Mantzouni, I. and MacKenzie, B.R. The response of herring recruitment to ocean warming: a North Atlantic meta-analysis. **Euroceans Open European Conference on "Global Change and Marine Ecosystems", Rome (Italy), 25- 27 November 2008**. [Oral presentation]
11. Mantzouni, I., Sørensen H., O'Hara, B. and MacKenzie, B.R. Meta-analysis and hierarchical modeling to identify temperature and habitat effects on North Atlantic cod carrying capacity and maximum reproductive rate. [Oral presentation given during invited visit at the **Boris Worm Lab, Department of Biology, Dalhousie University (Canada)/ Fall 2008**]

12. Mantzouni, I., Sørensen H., O'Hara, B. and MacKenzie, B.R. Meta-analysis and hierarchical modeling to identify temperature and habitat effects on North Atlantic cod carrying capacity and maximum reproductive rate. [Oral presentation given during invited visit at the **Ocean Process Analysis Laboratory, University of New Hampshire (USA) / Fall 2008**]
13. Mantzouni, I., Sørensen H., O'Hara, B. and MacKenzie, B.R. Meta-analysis and hierarchical modeling to identify temperature and habitat effects on North Atlantic cod carrying capacity and maximum reproductive rate. [Oral presentation given during invited visit at the **Woods Hole Oceanographic Institution (USA)/ Fall 2008**]
14. Mantzouni, I. and MacKenzie, B.R. Temperature Effects On Herring Carrying Capacity: A N. Atlantic Meta-Analysis. **ASLO Aquatic Sciences Meeting, Nice (France), 25-30 January 2009** [Oral presentation].
15. Mantzouni, I., Sørensen H., O'Hara, B. and MacKenzie, B.R. Hierarchical modeling of temperature and habitat size effects on carrying capacity and maximum reproductive rate of cod throughout the North Atlantic. **4th UNCOVER Workshop, Barcelona (Spain), 24-27 March 2009** [Oral presentation].
16. Moutopoulos, D.K., Dimitriou, E., Dimitriou, N., Katselis, G., **Mantzouni, I.**, Spala, K., Koutsikopoulos, C., 2016. Barrier trap selectivity improvement for the management of coastal lagoons: Case study from an Eastern Mediterranean lagoon. **MARES Conference, 1-5 February 2016.** (Poster)