



Date of birth: 1st of October of 1982 **Place of Birth /Citizenship:** Porto, Portugal/Portuguese **Current address:** Avenida Nascente, 20 Praia de Faro 8005-520 Faro

Education:

UNIVERSITY OF AZORES

2009-2013 PhD in natural resources management (Approved with honours and distinction). **Thesis:** How can science contribute for the sustainable management of natural resource? Praia da vitoria bay and Guadiana estuary, a comparative study. Defended on 5th of April 2013

Work supervised by: Professor Tomaz Dentinho (GGCN director, Azores University) and Professor Tomask Boski (CIMA director, Algarve University)

ALGARVE UNIVERSITY

2007 Master in Integrative Management of marine resources **Thesis:** Contribution for the development of an integrated management plan for conservation of the meadows of *Zostera noltii* in Ria Formosa”

Work supervised by: Alexandra Cunha (CCMAR, Algarve University), Rosemarie Luís (ICNB) and João Filipe Marques (CIEO, Algarve University)

ALGARVE UNIVERSITY

2006 Basic Honours Degree in Marine Biology

ROYAL HOLLOWAY, LONDON UNIVERSITY

2004 Erasmus Student Exchange Program

Appointments and professional activities:

MAR 2014- TODAY: Post-Doc grant in Policy guidelines for the regeneration in shrinking cities project, FCT funded project at Algarve University

JAN 2013-FEV 2014: Post-Doc grant in FarmPath (*Farming Transitions: Pathways towards regional sustainability of agriculture in Europe*) EU project at Évora University

JAN 2009 – DEC 2012: PhD grant at Azores University in collaboration with Algarve University, Portugal

OCT 2008– DEC 2008: Research assistant at Centre for Marine and Environmental Research (CIMA), Algarve University, Portugal

JUL 2008 – SEPT 2008: Research assistant at Flanders Marine Institute (VLIZ), Oostende, Belgium.

JAN 2007 – FEV 2007: Research assistant at Sustainable Regional Development Office, Azores University

JUL 2006 – JUL 2006: Research assistant, at Center of Marine Sciences of Algarve, Algarve University

Research interests:

Territory and landscape studies	Participatory approaches	Integrative modelling
Systems thinking/ Social-ecological systems	Governance	Transdisciplinarity
Environmental and ecological economics	Regional Science	Sustainability

Projects participation:

- [POPA - Azores fisheries observer programme](#) (2004)
- [LobAssess – Norway lobster stocks in Portugal: Assessment using information on larval production and ecology](#) (2005-2008)
- [Avaliação Custo-Benefício do Plano Nacional do Ambiente Acção e Saúde](#) (2007-2013)
- [Marbef - Marine Biodiversity and Ecosystem Functioning EU Network of Excellence](#) (2004-2009)
- [SPICOSA - Science and policy integration for coastal systems assessment](#) (2007-2011)

- [PGaE-VALUE- Feasibility Study on the Valuation of Public Goods and Externalities in EU Agriculture](#) (2011-2012)
- [FARMPATH - Farming Transitions: Pathways towards regional sustainability of agriculture in Europe](#) (2011-2014)
- Policy Guidelines for the regeneration in shrinking cities (2014-today)

Journal Publications:

Guimarães H., Boski T., Dentinho T. (2014). [Economic Base Model for Guadiana Estuary - An application for Integrated Coastal Zone Management](#). *Marine Policy Journal* 43: 63–70 (impact factor 1.865)

Guimarães, M. H., Ballé-Béganton, J., Bailly, D., Newton, A., Boski, T., Dentinho, T. (2013). [Transdisciplinary conceptual modeling of a social-ecological system — A case study application in Terceira Island, Azores](#). *Ecosystem Services Journal* 3: 22–31

Guimarães M., Cunha A., Luis R., Marques J. (2012). [The distribution of seagrass \(*Zostera noltii*\) in the Ria Formosa lagoon system and the implications of clam farming on its conservation status](#). *Journal for Nature Conservation* 20: 30-40 (impact factor: 1.864)

Guimarães, M. E., A. Mascarenhas, C. Sousa, T. Boski, and T. Ponce Dentinho. 2012. [The impact of water quality changes on the socio-economic system of the Guadiana Estuary: an assessment of management options](#). *Ecology and Society* 17(3): 38. (impact factor of 3.310).

Guimarães, M., Sousa C., Garcia T., Dentinho T., Boski T. (2011). [The value of improved water quality in Guadiana estuary—a transborder application of contingent valuation methodology](#). *Letters in Spatial and Resource Sciences* 4(1): 31-48.

Guimarães, M. (2010). The use of Q-methodology to obtain stakeholder Discourses on the future development of Ria Formosa Coastal zone, south of Portugal. *Revista Portuguesa de Estudos Regionais* 23, 5-19.

Guimarães, M., Mascarenhas A., Sousa C., Boski T., Dentinho T. (2010). System Approach for Coastal Zone Management: Application in Southeast Coast of Terceira Island and Guadiana Estuary. *Geographic Technologies Applied to Marine Spatial Planning and Integrated Coastal Zone Management*. H. Calado and A. Gil. Ponta Delgada, S. Miguel, Açores, Centro de Informação Geográfica e Planeamento Territorial. Agosto 2010.

Guimarães M., Madureira L., Nunes L., Santos, J. (accepted, in revision). Measuring bird watchers' preferences: a case for using online networks and mixed-mode surveys. *Tourism Management*.

Guimarães M., Vasconcelos L., Dentinho T., Boski T (accepted, in revision). Q methodology to define policy issues and promote stakeholder dialogue in Praia da Vitória Bay in Terceira, Azores. *Journal of Environmental Planning and Management*

Guimarães M., Madureira L., Nunes L., Santos J., Sousa C., Boski T., Dentinho T. (accepted, in revision). Bird watching in Praia da Vitória Bay, Azores: Can tourists get involved in nature management? *Ecological Economics*

Conference proceedings:

- Guimarães M., Barreira A., Panagopoulos T. (2014). Shrinking Cities in Portugal – where and why. 20th APDR Congress – Renaissance of the regions of Southern Europe. Évora 2014

- Guimarães M., Pinto-Correia T. (2013). The role of transdisciplinarity while studying transitions to sustainability in farming. ESADR 2013 - Economia, Sociologia, Ambiente e Desenvolvimento Rural, Évora, 2013

- Guimarães M., Madureira L., Nunes L., Santos, J. (2012). Getting closer to unlisted target populations using mixed-mode surveying. An application of choice modeling to international birdwatchers in Terceira Island, Azores. 19th Annual Conference of the European Association of Environmental and Resource Economists (EAERE), Prague, 2012.

- Guimarães M., Madureira L., Nunes L., Santos J., Sousa C., Boski T., Dentinho T. (2012). Bird watching in Praia da Vitória Bay, Azores: Can tourists get involved in nature management? 18th Annual Conference of the Portuguese Association of Regional Development (APDR), Faro, 2012.

- Guimarães, M. H., Ballé-Béganton, J., Bailly, D., Newton, A., Boski, T., Dentinho, T. (2012). Transdisciplinary conceptual modeling of a socio-ecological system. 6th International Congress on Environmental Modeling and Software (iEMSs) 1 - 5 July 2012, Leipzig, Germany.

- Guimarães M., Vasconcelos L., Dentinho T., Boski T (2011). Q methodology to define policy issues and promote stakeholder dialogue in Praia da Vitória Bay in Terceira, Azores. 51st Congress of European Regional Science Association (ERSA), Barcelona, 2011.

Book Chapters:

- Gil F., Guimarães M. (2011). Avaliação de atitudes e valores de agentes de desenvolvimento regional. Metodologia Q., in: Silva Costa J, D.T., Nijkamp P (Eds.). (Ed.), Compêndio de Economia Regional, vol II: Métodos e técnicas de análise regional. . Principia, , Coimbra, pp. 643-662.

- Pinto Correia, T. Mckeen A., Guimarães M. (2014). Transdisciplinarity in Deriving Sustainability Pathways for Agriculture In: Sutherland L., Darnhofer I., Wilson G., Zagata L. (Eds), Transition pathways towards sustainability in European agriculture. ©CAB International 2014

Reports and Thesis:

- Guimarães, M. H. (2013). How can science contribute for the sustainable management of natural resources? Praia da Vitória bay and Guadiana estuary – a comparative study. PhD Thesis. Azores University.

- Madureira L., Lima Santos J., Ferreira A., Guimarães H. (2012). Feasibility Study on the Valuation of Public Goods and Externalities in EU Agriculture. Final Report. University of Trás-os-Montes e Alto Douro. A study Commissioned by: European Commission, Joint Research Centre. Institute for Prospective Technological Studies, Agriculture and Life Sciences in the Economy, Contract No. 152423

- Guimarães, M. H. (2007). Contribution for the development of an integrated management plan for conservation of the meadows of *Zostera noltii* in Ria Formosa. Master Thesis, Algarve University.

Oral Presentations:

- Guimarães M., Madureira L., Nunes L., Santos, J. (2012). Getting closer to unlisted target populations using mixed-mode surveying. An application of choice modeling to international birdwatchers in Terceira Island, Azores. 19th Annual Conference of the European Association of Environmental and Resource Economists, Prague, 2012.

-Guimarães M., Madureira L., Nunes L., Santos J., Sousa C., Boski T., Dentinho T. (2012). Bird watching in Praia da Vitória Bay, Azores: Can tourists get involved in nature management?, 18th Annual Conference of the Portuguese Association of Regional Development (APDR), Faro, 2012.

- Guimarães M., Ballé-Béganton J., Bailly D., Newton A., Boski T., Dentinho T. (2012). Transdisciplinary conceptual modeling of a socio-ecological system. International Congress on Environmental Modeling and Software, Leipzig, 2012

- Guimarães M., Vasconcelos L., Dentinho T., Boski T (2011). Q methodology to define policy issues and promote stakeholder dialogue in Praia da Vitória Bay in Terceira, Azores. 51st Congress of European Regional Science Association (ERSA), Barcelona, 2011.

- Guimarães H., Boski T., Dentinho T. (2011). Economic Base Model for Guadiana Estuary - An application for Integrated Coastal Zone Management. 51st Congress of European Regional Science Association (ERSA), Barcelona, 2011.

- Guimarães M. (2011). System Approach Framework. Seminar about Scientific Culture on the 21st century, Terceira, 2011

- Boski T., Mascarenhas A., Guimarães M., Sousa C. (2011). GUADEX. Plataforma de Gestão Costeira Integrada aplicada no Estuário do Guadiana. Forum Guadiana, Isla Cristina, 2011.

- Guimarães M., Ballé-Béganton J., Bailly D., Newton A., Boski T., Dentinho T. (2011). Conceptual Models as Tools to Design a System in a Transdisciplinary Setting, case study application in Terceira Island, Azores. 2nd International Symposium on Integrated Coastal Zone Management, Arendal, 2011 **AWARDED AS THE BEST STUDENT PRESENTATION**

- Guimarães M., Mascarenhas A., Sousa C., Boski T., Dentinho T. (2010). System Approach for Coastal Zone Management: Application in Southeast Coast of Terceira Island and Guadiana Estuary. Summer School for Marine Spatial Planning GISlands, São Miguel, 2010 **HONORABLE MENTION**

- Guimarães M., Dentinho T. (2010). Formation and occupation of the Atlantic Coastline – preliminary contribution. International Seminar on Formation and Occupation of Atlantic Coastline, Porto, 2010.

- Guimarães M., Mascarenhas A., Dentinho T., Boski T. (2010). System Approach Framework for Coastal Management. Science and Wine Event, Terceira, 2010

- Guimarães M., Cunha A., Luis R., Marques J. (2010). Implications of clam farming and stakeholder's perception on the *Zostera noltii* cover distribution in Ria Formosa (Southern Portugal). International Conference on Coastal Conservation and Management, Estoril, 2010

- Guimarães M., Mascarenhas A., Sousa C., Boski T., Dentinho T. (2010). System Approach Framework for coastal management – a comparative study. 16th APDR Congress - Space of hinge, border channels and Nodes, Madeira, 2010

- Boski T., Mascarenhas A., Guimarães M., Sousa C. (2010). Knowledge Integration Platforms for a better Management of an Environmental Pearl - The case of the Guadiana Estuary. International Conference Series on Innovation for Sustainability, Faro, 2010

- Boski T., Mascarenhas A., Guimarães M., Sousa C. (2010). System Approach Framework Development Guadiana Estuary SSA 11. 5th SAF Meeting, Istanbul, 2010.

- Guimarães M. (2009). The use of Q-methodology to obtain stakeholder Discourses on the future development of Ria Formosa Coastal zone, south of Portugal. 15th APDR Meeting, Cape Verde, 2009. **BARTOLOMEU PRIZE FOR YOUNG SCIENTISTS**

- Guimarães M., Dentinho T. (2009). Economic component of SAF in Guadiana estuary. 4th SPICOSA annual meeting, Rome, 2009

- Guimarães M., Dentinho T. (2009). Economic component of SAF in Guadiana estuary. 4th SPICOSA annual meeting, Economic Workshop, Brussels, 2009

- Guimarães M., Sousa C., Garcia T., Dentinho T., Boski T. (2009). The value of improved water quality in Guadiana estuary—a transborder application of contingent valuation methodology. 49th Congress of ERSAs, Lodz, 2009

- Guimarães M., Cunha A., Luis R., Marques J. (2006). The distribution of seagrass (*Zostera noltii*) in the Ria Formosa lagoon system and the implications of clam farming on its conservation status Second seminar of lagoon system, St. André, 2006

Teaching:

1) Conceptual Modeling – Nature Conservation Master, Terceira, 2010 Edition, 2) Simulation Modeling - Nature Conservation Master 2010 Edition, 3) Q Methodology Workshop- Azores University, 2010, 4) Q Methodology - Nature Conservation Master 2011 Edition 5) From 2005-2007 I worked at a science center dedicated to communicate science and I was constantly providing guided tours to visitors, explaining the expositions, I also did the same task at the basic schools level and in specific events. In addition I was also a nature tourism guide.

Research stays:

1) Brest University, Brest (France) 2011: Project based SAF training seminar. 2) Stockholm University, Department of Systems Ecology (Sweden) 2009: SAF Training workshop. 3) Brussels University (Belgium), 2009: Economic and Extend Simulation model workshop 4) VITO, Flemish Institute for Technological Research (Belgium) 2008: Extend Simulation modeling 5) Vlaams Instituut voor Zee (VLIZ), Oostend (Belgium), 2008: ICZM tools 6) Royal Holloway, London University (England). 2004. Animal Behavior. 7) Marine Biology Station, Concarneau (France). 2003: Physiological ecology of algae

Editorial activity:

Reviewer for Ocean and Coastal Management, Journal of Ecosystem Services and Estuarine, Coastal and Shelf Science journals

Awards & Grants:

1) Socrates Program Grant 2003, Erasmus student Grant 2004, Leonardo da Vinci Grant 2008, [DRCT](#) PhD grant (2009 to 2012), 5) DRCT project 2012, 6) 2009-2012 DRCT, Algarve and Azores University grants for conference attendance 7) [Bartolomeu Award](#) in 2009 for the work presented in Associação Portuguesa para o Desenvolvimento Regional 2009 Meeting, 8) Honourable Mention in the [Summer School for Marine Spatial Planning GISlands](#) 2010, 9) First Prize for best student Presentation at the [2nd International Symposium on Integrated Coastal Zone Management](#), 2011, 10) Honourable Mention in the Competition of Ideas to create Innovative Companies 2011, [Division of Technological Transfer and entrepreneurship of Algarve University](#)

Research results, publications, teaching etc., taking into account the level of experience

I have participated in natural science project from my degree until my master studies. From my first incursion in research projects I acquired competence for research design following the principals of replicability and rigor. This is still present in my current research project and I considered it very useful when dealing with socio-economic issues. At the natural science level I used GIS to produced baseline data on seagrass distribution. This work was the first map produce for Ria Formosa lagoon system concerning *Zostera noltii* distribution. Nowadays the work is used by several other scientists trying to track population evolution. In parallel to this work I have used social science tools to understand stakeholders' perception about seagrass value. With this data I concluded that although population distribution data was incomplete to clearly state if the specie was threaten, clam farmers did not recognized its value. However, I also understood that the problem was not so simple has lack of environmental knowledge. Ria Formosa is a Natural Park in Portugal and its management is done by a governmental institution that uses a top-down approach After this I was motivated to explore tools that would help provide management guidance to resource users. Within the following project I explore the potential of Q methodology a semi-quantitative social science tool, very useful for

identification of consensus and disagreement concerning natural resource management. It is a tool I still used and I recently submitted a paper that uses Q methodology in an innovated way by mixing it with participatory tools. I started working in multidisciplinary teams and realized the need to develop tools that promote scientist interaction towards the creation of integrative knowledge or else scientists continue to work with their own “scientific pets”. Systems thinking are quite relevant to face this challenge. Science and policy integration for sustainable resources management requires the involvement of all stakeholders (including scientist) from the beginning of the process and scientific tools need to be defined towards their actually utility rather than a predefined paradigm. At my current position, I am exploring the use of transdisciplinarity, as well as, governance systems and Transition Theory.

The above experience has culminated in: **1)** 5 international and peer-reviewed articles as first author, **2)** 3 articles in different stages of submission in international and peer reviewed journals, as first author, **3)** 2 articles in National Research Journals, as first author, **4)** 1 chapter in a edited book about Regional Economy, **5)** 1 chapter in a edited book about Transition pathways towards sustainability in European agriculture, **6)** 1 technical report to the Joint Research Center, **7)** Participation in 4 EU funded projects (Marbef, SPICOSA, PGaE-VALUE, FarmPath)

I have around 200 hours of teaching experience Açores and Évora University, as well as, in primary and secondary in Faro district. I have participated in the supervision of 4 master students.

I have participated in 18 international congresses mostly with oral presentations, wrote 5 conference proceedings as lead author and was awarded 2 prizes and 2 honourable mentions for work presented.

I am a reviewer for 3 international peer review journals and my international research experience includes stays in 5 different countries.