

**Luca Marazzi**

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**EDUCATION AND TRAINING****Ph.D.: 2014** University College London (UCL), Environmental Change Research Center, London, UK**Postgraduate Teaching Assistant Course: 2013.** UCL Centre for the Advancement of Learning and Teaching. Higher Education Academy accredited**Post-lauream course: 2005** University of Milano, Italy, Department of Human Geography. Environment and Landscape Management: Instruments for Action**MSci. (5 yr program): 2003** University of Milano Bicocca, Italy, Department of Environmental Sciences. Dissertation on migratory routes and biomonitoring of populations of Passerine birds in northern Italy**ACADEMIC AND PROFESSIONAL APPOINTMENTS****Jan. 2015 – Present:** Postdoctoral Associate at Florida International University (FIU), Dr. Evelyn Gaiser's [Periphyton Research Group](#), Southeast Environmental Research Center (SERC)**Sep. 2012 – Jan. 2017:** Senior Academic Consultant for Geography at Macat, a global leader in developing critical thinking skills via advanced e-learning materials (part time)**Feb. – Aug. 2011:** Outreach executive & free-lance writer at Responding to Climate Change (RTCC). Involving sponsoring partners, such as regional governments and businesses, in the RTCC magazine**Sep. 2010 – Jun. 2014:** Private tutor in Geography, Mathematics, Statistics and Italian A-level and GCSE, also in collaboration with Campbell Harris Tutors, and Greater London Tutors**Dec. 2009:** Outreach executive for the 15<sup>th</sup> United Nations Framework Convention on Climate Change Conference of the Parties (UNFCCC COP15) in Copenhagen. RTCC and Climate Change TV**Sep. 2008 – Dec. 2014:** Self-funded Ph.D. Candidate at UCL, Environmental Change Research Centre**Nov. 2008 – Apr. 2014:** Tutor at UCL: Human Ecology, Physical Geography, Statistics for Environmental Geographers, Global Environmental Change, Lakes, Wetlands**Mar. 2007 – Jul. 2008:** Researcher at Fondazione ENI Enrico Mattei. Biodiversity, Ecosystem Services, Climate Change and Energy (in collaboration with environmental economists)**Feb. 2004 – Feb. 2007:** Researcher at Fondazione Lombardia per l'Ambiente. Air pollution and Climate Change. Research and project management**Jun. – Sep. 2005:** Intern at the Parabiago City Council (Milano); Agenda 21 sustainability practices**Sep. – Dec. 2004:** Lecturer. Italian Association of Environmental Sciences (Kids4Energy project)**VOLUNTEERING AND INSTITUTIONAL ROLES****2015-ongoing:** Climate Reality Leadership Corps training led by Al Gore (Miami, Sep 2015); volunteering on raising awareness about the impacts of and solutions to climate change**2012-2013:** UCL Union Postgraduate Representative - Faculty of Social and Historical Sciences**2004-2008:** Co-founder of the Ecoistituto TerreMutanti (Milan). Organization of conferences on climate change and of a course on environmental issues for local authority civil servants**2003:** Volunteer at the 9<sup>th</sup> UNFCCC Conference of the Parties in Milan. Responding to Climate Change**1999-2006:** Italian Red Cross first aid team member and leader, ambulance driver**1995-1996:** Campaigning and fund-raising at LEAL, Lombardy League for Antivivisection**1995:** Assistance to veterinaries at the WWF Vanzago Natural Reserve (Milano)**LANGUAGES (spoken and written)**

Italian – Native; English – Fluent; French – Intermediate; Spanish: Basic

**SOFTWARE SKILLS**

European Computer Driving License – Office tools; SPSS, CANOCO, R, EstimateS, C2, ArcMap, Illustrator; developing content for websites with Wordpress and blog posts with Blogger

**OTHER QUALIFICATIONS**

**2017:** Boating Safety Education course. State of Florida

**2010:** Mountaineering skills course. United Kingdom

**PUBLICATIONS****Refereed Publications:**

**Marazzi L.**, Gaiser E.E., Tobias F.A.C. 2017. Phosphorus scarcity and desiccation stress increase dominance in wetland benthic primary producer communities. *Aquatic Ecology* 51: 571-589.

**Marazzi L.**, Gaiser E.E., Jones V.J., Tobias F.A.C., Mackay A.W. 2017. Algal richness and life-history strategies are influenced by hydrology and phosphorus in two major subtropical wetlands. *Freshwater Biology* 62: 274-290.

**Marazzi L.** 2016. A Macat analysis of Mathis Wackernagel and William Rees's 'Our Ecological Footprint: Reducing Human Impact on the Earth'. CRC Press.

**Marazzi L.** 2013. Okavango Delta - Biodiversity of Microalgae, precious invisible plants. – In: Oldeland, J., Erb, C., Finckh, M., Jürgens, N. [Eds.]: *Environmental Assessments in the Okavango Region. – Biodiversity & Ecology* 5: 161-163.

Williamson D.B. and **Marazzi L.** 2013. A new *Cosmarium* (Chlorophyta, Desmidiaceae) variety from the Okavango Delta, Botswana. *Quekett Journal of Microscopy* 42: 35:37.

**Marazzi L.**, Caserini S., Lapi M., Crovetto G.M., Ballarin Denti A. 2006. "Estimate of wood consumption for domestic heating in Lombardy: survey methodology and environmental implications". *La Rivista dei Combustibili*, n. 5 (in Italian).

**Book chapters:**

Bosello F., **Marazzi L.** (2008) Italian Alps and climate change: elements of environmental and economic vulnerability and possible adaptation strategies. In "Climate change and adaptation strategies in Italy, an economic valuation". Carraro C. (Ed). *Il Mulino* (in Italian).

**Reports and press:**

Owen M.J., Drake K.R., Maslin M.A., Comberti, C., **Marazzi L.**, Mitchell L.T. 2012. Structural vulnerability and potential catastrophic loss scenarios for North Sea oil and gas infrastructure, A report by the UCL Environment Institute for JLT Reinsurance Brokers Limited. 220 pp.

McGregor J., Busani M., **Marazzi L.** 2011. "Case Study Zimbabwe" in "Foresight: Migration and Global Environmental Change Final Project Report". The UK Government Office for Science.

Bigano A., De Miglio R., Galeotti, M., Gargiulo M., Gorla A., Lavagno E., **Marazzi L.**, Sfera F., Zanoni D. 2008. Adoption and application of the MARKAL-TIMES model for the creation of a mitigation plan for the Lombardy region. Report FEEM - Kyoto Lombardia Project.

**Marazzi L.** Self-funded PhD students deserve support, not stigma and secrecy. *The Guardian, Higher Education Network*, Jun. 2013.

**SELECTED WORK IN PROGRESS**

Sola A., **Marazzi L.**, Gaiser E.E. (in review) Short-term effects of drying-rewetting and long-term effects of nutrient loading on periphyton nutrient stoichiometry. *Water*.

Kominoski, J., E.E. Gaiser, E. Castañeda-Moya, S.E. Davis, S.B. Dessu, D.Y. Lee, **L. Marazzi**, V.H. Rivera-Monroy, A. Sola, D.D. Surratt, R. Travieso, T. Troxler. (in review). Enhanced marine connectivity and freshwater restoration increase spatiotemporal synchrony of phosphorus concentrations across wetland ecosystem compartments in a coastal landscape. *Ecosystems*.

**Marazzi L.**, Tobias F.A.C., Gaiser E.E. (in preparation). Core diatom species stabilize temporal community variance in wetland benthic mats.

- Marazzi L.**, Mackay A.W., Jones V.J. (in preparation) Algal species abundance patterns are driven by flooding, conductivity, and habitat in a near pristine, subtropical flood-pulsed wetland.
- Marazzi L.**, Finlayson M.C., Kominoski J.S., P. Julian, and E.E. Gaiser (in preparation). Successful Wetland Restoration Must Benefit Human Societies and Ecosystems. Solutions: Special Issue “Whole River Perspectives for Conservation Challenges”.
- Marazzi L.**, Gaiser E.E., Sah J., Castaneda E. (in preparation) Conserving oligotrophic wetland foundation species to enhance ecosystem adaptive capacity. Water: Special Issue “Multiplicity, Characteristics, Main Impacts, and Stewardship of Natural and Artificial Freshwater Environments: Consequences for Biodiversity Conservation”.

## CHAIRING

### Sessions (co-)organized:

- Periphyton Responses to Water Flow and Nutrient Loading and Implications for Everglades Restoration. Greater Everglades Ecosystem Restoration conference. April, 2017
- The Next Generation of Wetland Science: Ecosystems, Applications, and Engineering. 10<sup>th</sup> INTECOL Wetlands conference, Changshu (China), Sep. 2016

### Sessions (co-)chaired:

- Wetlands: monitoring and management. 10<sup>th</sup> INTECOL Wetlands conference, Changshu, Sep. 2016.
- Deltas and wetlands & Water policies. “Water resources and wetlands – 2<sup>nd</sup> International Conference”. Tulcea (Romania), Sep. 2014.

## SELECTED PRESENTATIONS

### Invited talks:

- Marazzi L.** Benthic algae form submerged and floating forests. FIU Plant Talk. Nov. 2017.
- Marazzi L.** How do freshwater algae respond to hydrology and limiting nutrients? Intercontinental comparisons across major subtropical wetlands. Nanjing Institute of Geography and Limnology, Chinese Academy of Sciences. Sep. 2016.
- Marazzi L.** Algal tales from the Okavango Delta. 40<sup>th</sup> London Freshwater Group. Natural History Museum. London (UK), Nov. 2013.
- Marazzi L.** Diatoms vs Green Algae in the Okavango Delta. British Diatomists Meeting, Norfolk, Oct. 2011.
- Marazzi L.** Migrations in the climate change era. Seminar, LIPU – Italian League for the Protection of Birds. Cesano Maderno (Milan), Italy, Oct. 2007 (in Italian).
- Marazzi L.** Emissions de particules par la combustion du bois en Lombardie (Italie). Winter smog in Quebec” Montréal, Canada (in French via teleconference), Oct. 2005.

### Contributed talks:

- Marazzi L.** Subtropical wetlands: comparing primary producer diversity and dominance and addressing restoration challenges. [Society of Wetland Scientists Webinar](#). Sep. 2017.
- Marazzi L.** and Gaiser E.E. How do primary producer diversity and dominance vary in (sub)tropical wetlands? Society of Wetland Scientists Annual Meeting. San Juan, Puerto Rico, Jun. 2017. Session “Human-Induced Impacts on Coastal Wetlands in the Caribbean”.
- Marazzi L.**, Gaiser E.E., Jones V.J., Tobias F.A.C., and Mackay A.W. Drivers of Algal Richness in the Okavango Delta and Everglades: resources, hydrology (and habitat). 10<sup>th</sup> INTECOL Wetlands conference, Changshu (China), Sep. 2016.
- Marazzi L.** The importance of metaphors and paradigms for wetland conservation. 10<sup>th</sup> INTECOL Wetlands conference, Changshu (China), Sep. 2016.

- Marazzi L.**, Tobias F., and Gaiser E.E. Algal diversity enhances periphyton quality in the Florida Everglades, while dominant cyanobacteria maximize resource use efficiency. Ecological Society of America Annual Meeting, Fort Lauderdale, Florida, Aug. 2016.
- Marazzi L.**, Gaiser E.E., Jones V.J., Tobias F.A.C., Mackay A.W. Algal richness in the Okavango Delta and Everglades: patterns and environmental controls. 2016. Florida Coastal Everglades Long-Term Ecological Research All Scientists Meeting. Miami, Florida, Mar. 2016.
- Marazzi L.**, Mackay A.W., Jones V.J. Flooding disturbance and habitat heterogeneity enhance algal biodiversity in the Okavango Delta. Water resources and wetlands – 2<sup>nd</sup> International Conference. Tulcea (Romania), Sep. 2014.
- Marazzi L.**, Mackay A.W., Jones V.J. Hydrological and habitat controls on algal biodiversity and biomass in a subtropical flood-pulsed wetland. 11<sup>th</sup> INTECOL Congress, Ecology: Into the next 100 years. London (UK), Aug. 2013.
- Marazzi L.**, Mackay, A.W., Ramberg L. Phytoplankton biomass and biodiversity in the Okavango Delta. Flood Pulsed Wetlands Symposium. Maun (Botswana), Feb. 2010.
- Esposito S., Manfreda S., **Marazzi L.**, Mari L., Marzadri A., Nicotina L., Pellachini C., Rubol S. Imitation of Sustainable Behaviors. Presentation of results of the Working group in Theoretical Ecology. Summer School “Pathways to Environmental Sustainability”, Venice, Jun. 2007.
- Marazzi L.** and Caserini S. An extensive survey on wood combustion for domestic heating in Lombardy: implications for PM emission inventory (oral presentation and conference paper). 14<sup>th</sup> US-EPA International Emission Inventory Conference. Las Vegas, USA. Apr. 2005.

#### Posters:

- Marazzi L.**, Gaiser E.E., and Tobias F.A.C. Algal dominance increases with phosphorus scarcity and desiccation stress in the Everglades. Florida Coastal Everglades Long-Term Ecological Research All Scientists Meeting. Miami, May 2017.
- Sola A., Gaiser E.E., **Marazzi L.** Effects of water depth change on phosphorus flux in benthic microbial mats: improving mechanistic models and their application in restoration. Florida Coastal Everglades Long-Term Ecological Research All Scientists Meeting. Miami, May 2017.
- Marazzi L.**, Gaiser E. Algal biodiversity in subtropical wetlands: an opportunity for comparative research. Greater Everglades Ecosystem Restoration. Coral Springs (FL, USA), Apr. 2015.
- Marazzi L.**, Mackay A.W. What drives growth and biodiversity of algae in the Okavango Delta. 9<sup>th</sup> INTECOL International Wetlands Conference. Orlando Florida (USA), Jun. 2012.
- Domptail S., **Marazzi L.**, Costa L., et al.. Diversitas OSC2. Educating scientists for interdisciplinary research on biodiversity and ecosystem management. Cape Town, South Africa, Oct. 2009.
- Marazzi L.**, Bosello F., Mackay A.W. Study of the impacts of climate change on ecosystem services: environmental and economic aspects. Peyresq, France, Sep. 2008.

#### FUNDING

- 2016:** Travel funding from the 10<sup>th</sup> INTECOL Wetlands conference organizers and the FIU School of Environment, Arts and Society
- 2016:** FIU SERC travel funding for the 101<sup>st</sup> Ecological Society of America Annual Meeting
- 2014:** UCL Graduate School 2<sup>nd</sup> conference fund - “Water resources and wetlands”
- 2012:** UCL Graduate School 1<sup>st</sup> conference fund - “9<sup>th</sup> INTECOL International Wetlands”
- 2011:** British Phycological Society meeting attendance fund - “Advanced Course Blue-Green and Green Algae”, University of Durham
- 2009:** Postgraduate Research Award for two six-weeks fieldtrips in the Okavango Delta. Royal Geographical Society – Institute British Geographers (RGS-IGB)
- 2009:** UCL Graduate School Research Projects Fund

**GRANT PROPOSALS WRITTEN**

**2017** (in review): Principal Investigator. Assessing the effects of fire on periphyton, vegetation, and prey availability for the Cape Sable seaside sparrow (CSSS) in the Everglades marl prairie. US National Park Service - Everglades Ecosystem Restoration and Management

**REVIEW ACTIVITY****Proposals:**

**2016:** National Science Foundation / Division of Environmental Biology

**2016:** University of Antwerp, University Research Fund, Concerted Research Project

**Scientific papers:**

Freshwater Biology (2), Journal of Ecology (1), Diatom Research (1), Water (1), Journal of Great Lakes (1), Algologie Cryptogamie (1)

**UNIVERSITY SERVICE**

- At Florida International University, I played a key role in the creation of the Postdoctoral Scholar Group and led a survey of postdoctoral scholars' needs, suggestions, and ideas for successful career development.

- At the University of Milano Bicocca, I served as Student Representative, wrote in a student magazine, and presented at and/or co-organized well-attended seminars on climate change and hydrogeological risk.

**SCIENTIFIC SOCIETY SERVICE**

As a member of the Society of Wetland Scientists, I contributed to writing the [Changshu Declaration on Wetlands](#). 10<sup>th</sup> INTECOL Wetlands conference, Changshu (China), Sep. 2016.

**SUMMER SCHOOLS ATTENDED**

**2008:** "Biodiversity and Ecosystem Services" ALTERNET – A Long Term Biodiversity, Ecosystems and Awareness Research Network, EU FP6<sup>th</sup>. Peyresq, France

**2007:** "Pathways to Environmental Sustainability". Istituto Veneto di Scienze, Lettere e Arti, Venice, Italy

**OUTREACH ACTIVITIES**

**2017:** [Researching Algae, the Unsung Heroes of Aquatic Food Webs](#). Blog post on my research. Wading Through Research blog of the Florida Coastal Everglades LTER program

**2016-ongoing:** Creating, writing, and editing the "[Diatom of the Month](#)" blog series, since Sep 2017 on the Young Diatomists blog (<http://youngisdri.blogspot.co.uk>)

**2016:** Climate Reality Leader presentation. South Miami community meeting

**2014:** Show'n' Tell "Okavango" Grant Museum of Zoology. Introduction of my PhD project to the public and selection of a hippopotamus skull specimen from the Museum's 68,000 objects

**2013.** [Ecology at the Heart of the 21<sup>st</sup> Century](#). Blog post on the 11<sup>th</sup> International Ecology Association Congress and the Centenary of the British Ecological Society. UCL Geography blog

**2010:** Audio slideshow on Ph.D. on algae in the Okavango Delta - Royal Geographical Society

**2007:** Co-organization and seminar presentation of the public conference "Kyoto calls Milan: climate is changing, what about you?". University of Milan Bicocca (in Italian)

**AWARDS AND MEMBERSHIPS**

**2013:** UCL Union Colours Award for my activities as Postgraduate Student Representative in the Faculty of Social and Historical Sciences in support of students' welfare and rights

**2011:** UCL Research poster competition; runner-up prize in the Faculty of Social and Historical Sciences (poster title: "Algae in the Okavango Delta: investigating the 'invisible' life")

**Current member of:** Ecological Society of America; Society of Wetland Scientists. **Past member of:** British Ecological Society; Royal Geographical Society