Matthieu Bekaert

Nationality: Belgian | **Address:** Belgium (Home)

● WORK EXPERIENCE

15/09/2022 – 13/02/2023 Porto, Portugal
POST-MASTER'S TRAINEESHIP BIOPOLIS-CIBIO

Continuation of the work conducted for the IMBRSea Master's Thesis.

· Literature review of research on marine animals that have undertaken transatlantic and transequatorial migrations.
· A variety of vertical movement analyses conducted in R for tagged mako sharks in the North Atlantic.
· Worked on a Lomb-Scargle Periodogram analysis to detect periodic peaks in the movement behaviour of the study species, in order to confirm the presence of a day and night cyclical changes in their vertical distribution.

15/04/2021 – 10/07/2021 Ancona, Italy
BAITED REMOTE UNDERWATER VIDEO SURVEYS (BRUVS) INTERNSHIP UNIVERSITÀ POLITECNICA DELLE MARCHE (UNIVPM)

Setting a new frontier in the deployment & analysis of Baited Remote Underwater Video Surveys (BRUVS) for the Adriatic Sea. It is the first time that this technique has been used in the Adriatic.
UNIVPM's Zoology Research Group goal: Is BRUVS a viable non-destructive sampling method for data collection in the region?
 • To achieve this goal, I worked independently and within a team. I took charge of all aspects of the project, including:
 • Logistics & transport of gear to the harbour
 • Use of R packages for camera calibrations and measuring of objects
 • Practical calibration activities in and out of the water (scuba equipment employed)
 • Communication between different parties
 • Maintenance of gear (BRUVS station, cameras and accessories such as SD cards, batteries, cables,
 • housings)
 • Bait buying, selection & preparation
 • Monitoring of environmental conditions & sampling design
 • The creating of a website to present the methodology used (see link attached)
https://sites.google.com/imbrsea.eu/bruvsintheadriatic/home

14/10/2018 – 14/02/2019
RESEARCH ASSISTANT VICTORIA UNIVERSITY COASTAL ECOLOGY LABORATORY

Internship 1:
· Used microscopy to research the effects of ocean acidification on six generations of coralline algae. Each generation had been subjected to six treatments, of which the size, type (e.g. multiporate) and the number of conceptacles may be affected by changes to the pH level.
· Substantial experience has been acquired using both dissecting and compound microscopes.
· This internship resulted in a publication and is available at: https://doi.org/10.1098/rspb.2021.0130

Address Wellington, New Zealand

19/07/2019 – 19/09/2020
RESEARCH ASSISTANT VICTORIA UNIVERSITY COASTAL ECOLOGY LABORATORY

Internship 2:
· The main role for a renewed internship at VUCEL consisted of assembling a set up in the wet lab for an ocean acidification experiment for PhD students. This included tasks such as organising and labelling the electrical wiring necessary for CO_2 pumps, water pumps, solenoids, water heaters and lighting. Another aspect dealt with was tank set up, including storage tanks, header tanks, water baths and experimental units as well as ensuring the flow of seawater by use of hoses cut to specific lengths, taps, stoppers and

water pumps. The experiment consisted of a two-level set up with a total of 8 header tanks containing various pH levels controlled by the solenoids, 2 storage tanks, 2 chillers, 8 water baths, 8 heaters, 8 lights, 16 solenoids, 10 water pumps and 48 experimental units containing samples of coralline algae and bryopsidale green algae.· A secondary role was to do a write-up of the methodology used during my first internship where samples of coralline algae were analysed by use of microscopy.· A tertiary role for this internship was the filtering of seawater samples of a previous experiment so that they could be titrated and the results inputted into R for statistical analysis and subsequent modelling.

Address Wellington, New Zealand

26/07/2013 – 26/08/2013 Gansbaai, South Africa
VOLUNTEERING INTERNSHIP WHITE SHARK PROJECTS

Worked within a team to perform a variety of crew activities such as:
· identification of great white shark traits (Sex, age, scars, length)
· Concoction and distribution of chum
· preparation of wetsuits
· helping clients get into cages and answer any questions relating to sharks.

30/04/2015 – 30/06/2015 Dubai, United Arab Emirates
LOGISTICS COORDINATOR BLOOMBOX LLC

Managed a team of florists and provided the necessarily coordination to ensure the transfer of company resources from an old to a new warehouse location, so that the company could subsequently expand distribution and operations.

EDUCATION AND TRAINING

31/08/2013 – 21/06/2017 Edinburgh, United Kingdom
BACHELOR OF BUSINESS ADMINISTRATION (HONS) Heriot-Watt University

Subjects included:
1) Project Management
2) Macro and Micro Economics
3) Corporate Finance
4) Commercial Law
5) Digital Marketing
6) Human Resource Management
7) Accounting

Address Edinburgh, United Kingdom | **Level in EQF** EQF level 6

31/08/2017 – 29/09/2018 Edinburgh, United Kingdom
MASTER OF SCIENCE IN MARINE SYSTEMS AND POLICIES The University of Edinburgh

Subjects included:
1) Marine fieldwork methods - reef and fish surveys conducted whilst scuba diving as well as an independent project.2) Marine research project (dissertation) - "Conflicts and consensus of industry knowledge and scientific evidence regarding the ecological and biological impacts of the cage diving industry on great white sharks [carcharadon Carcharias (Linnaeus, 1758)]."3) Ecosystem services - The benefits derived by humans from the environment such as coastal defences and carbon storage.
4) Principles of Ecology - Terrestrial and Marine, including vegetative history, oceanography and a freshwater fieldwork component.5) Marine Infrastructure - Marine environmental assessment methods such as EIAs, SEAs, CIAs and MSP.6) Law of the Marine Environment - Analysis of policies and treaties such as UNCLOS.

Address Edinburgh, United Kingdom | **Level in EQF** EQF level 7

31/08/2020 – 16/09/2022 Ghent, Belgium

INTERNATIONAL MASTER OF SCIENCE IN MARINE BIOLOGICAL RESOURCES IMBRSea
Consortium (Headquarters Ghent University)

1. QGIS & Remote Sensing, Marine Protected Areas (MPAs), Marine Conservation, Ecology of Apex Predators, Marine Genomics, Oceanography, Sampling Design, Marine Ecology, Statistical Ecology (R Programming: incl. functions, loops, GLMs).
2. Internship with Baited Remote Underwater Video Surveys (BRUVs) deployment & analysis in the Adriatic Sea (Ancona).
3. Thesis based at CIBIO-InBIO (Porto) focusing on the horizontal and vertical movements of mako sharks in the North Atlantic. Work conducted with R (incl. working with loops, numerous packages and GLMMs) and QGIS (track creation of daily location points superimposed on bathymetry. Chl-a and SST data also brought in from Copernicus).
4. Currently working on publishing the thesis.

Address Ghent, Belgium │ **Website** imbrsea.eu │ **Final grade** Magna Cum Laude │ **Level in EQF** EQF level 7 │

Thesis "Spatial Variation in the dive behaviour of satellite-tracked shortfin mako sharks (Isurus oxyrinchus) in the North Atlantic linked to sea surface temperature"

LANGUAGE SKILLS

Mother tongue(s): **ENGLISH** │ **FRENCH**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ITALIAN	A2	A2	A2	A2	A2
SPANISH	B1	A2	A2	A2	A2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Geographic information system (QGIS) │ R programming │ Microsoft Office │ Microsoft Excel │ Google Docs │ Google Drive │ Ocean Data View (ODV) │ MEGA │ GeneBank │ R & R Studio │ Shotcut │ Remote sensing │ Mendeley │ Google Earth │ Image J │ PhotoQuad

ADDITIONAL INFORMATION

JOB-RELATED SKILLS

Job-related skills

· R programming
· QGIS
· Microsoft Office
· PADI Rescue Diver and Emergency First Response Certified (Primary and Secondary Care)
· Familiar with scientific diving (fish and coral cover surveys), fieldwork methods and academic writing.
· Knowledgeable in marine policy making, UNCLOS and marine reserves.
· Laboratory experience in three universities, with the research topics being fundamentally different.
· Adept at the collection and interpretation of large qualitative data sets, as was required for the completion of three theses.
· In possession of a manual driver's license (Belgium and UAE) and International Driving Permit.
· Strong work ethic, driven and goal-oriented. Accustomed to a variety of workplace environments, thus flexible and adaptable. · Knowledgeable of the importance of interpersonal skills and team working in the process of collaborative problem-solving.