

# Benthic Habitat Mapping on the Irish Atlantic Margin

Adrian Patterson

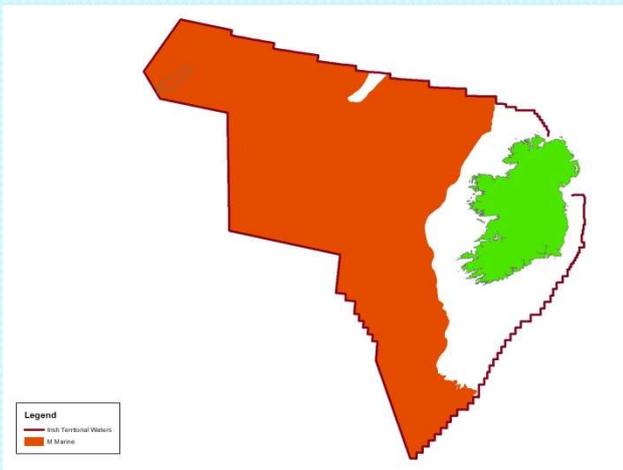
School of Natural Sciences, Ryan Institute, NUI Galway.

## INTRODUCTION

The European Nature Information System (EUNIS) is a comprehensive system for determining habitat types. The system consists of levels which describe where the habitat is found (depth), what the bottom type is (sand, mud, rock etc.) and the characterising species present. Prior to 2015, this classification system stopped at the 200m water depth. Parry *et. al.* (2015) extended EUNIS beyond the 200m water depth into the deep sea. The new classification consists of 5 levels. Environment (1), Biological Zone (2), Substratum (3), Broad Community (4) and Biological Assemblage (5) Here we present a preliminary broadscale habitat classification for the Irish Atlantic Margin to level 4.

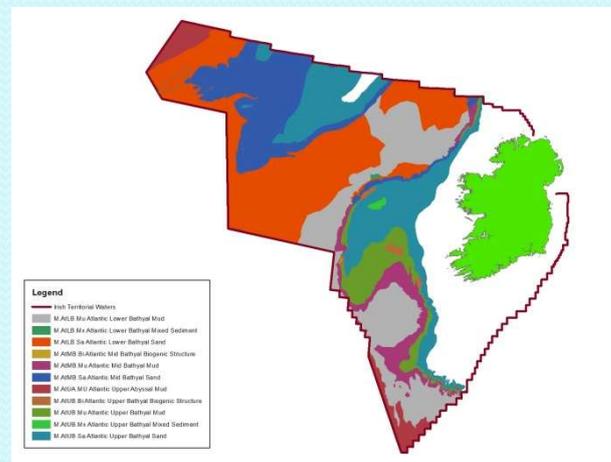
## EUNIS Classification Level 1 Marine Environment.

Level 1 of the classification describes the habitat environment. In the new classification there is only one environment M (Marine)



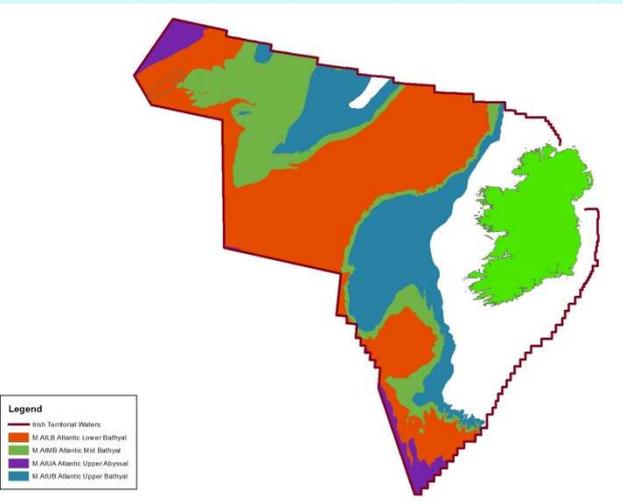
## EUNIS Classification Level 3: Substratum

The bottom substrate is an important factor in describing marine habitats. Broadly it can be broken into six distinct categories; Rock, Coarse sediment, Sand, Mud, Mixed Sediment and Biogenic structures. They type of bottom substrate provides information such as particle mobility, ability to retain contaminants and ultimately the type of faunal community which can be supported.



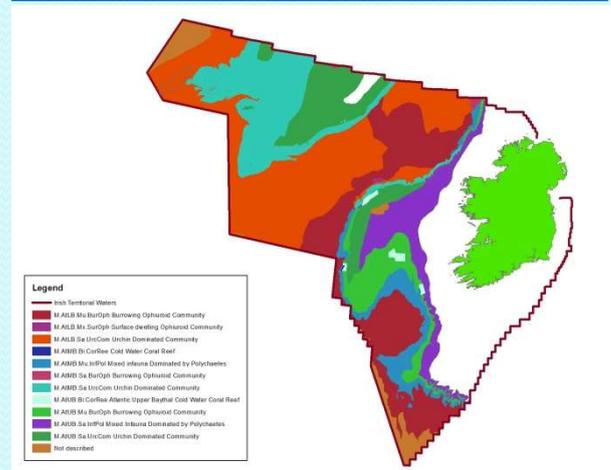
## EUNIS Classification Level 2 Biological Zone

This level describes the biogeographic region and the vertical zone being described. For Irish territorial waters the biogeographic region is the Atlantic. Four vertical zones are described from deep waters (>200m).



## EUNIS Classification Level 4: Broad Community

Broad community description provides biological information about the types of flora/fauna which could be expected in a habitat. The communities are described in terms of the dominant organisms observed



This project is funded by the Irish Shelf Petroleum Studies Group (ISPSG) of the Petroleum Infrastructure Programme (PIP). The ISPSG comprises: Atlantic Petroleum (Ireland) Ltd, Cairn Energy Plc, Chrysaor E&P Ireland Ltd, Chevron North Sea Limited, ENI Ireland BV, Europa Oil & Gas (Holdings) plc, ExxonMobil E&P Ireland (Offshore) Ltd., Kosmos Energy LLC, Maersk Oil North Sea UK Ltd, Petroleum Affairs Division of the Department of Communications, Energy and Natural Resources, Providence Resources plc, Repsol Exploración SA, San Leon Energy Plc, Serica Energy Plc, Shell E&P Ireland Ltd, Sosina Exploration Ltd, Statoil (UK) Ltd, Tullow Oil Plc and Woodside Energy (Ireland) Pty Ltd.



NUI Galway  
OÉ Gaillimh

PIP

Petroleum  
Infrastructure  
Programme



Ryan  
Institute