Research Projects MGET

Project Name	Description
Proof of concept: e-DNA and salmon monitoring.	Proof of concept - Environmental DNA to monitor fish fauna
An investigation into the effects of cattle grazing on salt marsh sediment contamination	The aim of the investigation is to highlight the effect cattle grazing may have on the sediment contamination of the Widnes Warth salt marsh.
Proof of concept: bioacoustics	Initial work (MSC at Salford) was successful, with completed MSC by Laura
Virtual Reality Model	Development of a virtual reality of the UME, including various data from the MGET. The project includes a complete .exe version and demo videos
Ecosystem Approach and ecosystem services analysis of the UME	PhD project investigating an ecosystem approach of the UME and scenario analysis of ecosystem service provision under a changing estuary.
Hide and seek : a multidisciplinary study on the ecological success of an estuarine dweller	The present study focuses on two key traits of the brown shrimp Crangon crangon L. (Decapoda: Caridea), a key component of European sandy shores, namely i) its ability to conceal from predators and ii) its trophic flexibility.
Artistic representation of environmental data	Design of environmental aspects of the estuary in sculpture.
Soil Carbon Dynamic under Different Land Uses in Contaminated Estuarine Floodplain: Implications for Soil Carbon Sequestration	To assess key biogeochemical processes that control the input and loss of organic matter in the soils that are contaminated by inorganic and organic pollutants.
Title unknown	The aim of the research was to analyse the raw data to identify population trends of 3 years of breeding bird survey data in the Mersey estuary.
Ecosystem Services of Urban Amenity Greenspace and the Impact of Future Climate and Socio-Economic Change	The aims of the research were to measure ecosystem services delivered by urban amenity greenspaces and project responses to future challenges. Data were collected from areas of amenity greenspace known in Runcorn.
Investigating the invertebrate biomass potential of the Widnes Warth salt marsh in particular the available invertebrate biomass for lapwing (Vanellus vanellus) chicks.	The research aimed to investigate the invertebrate biomass on the salt marsh, 200m either side of the proposed Mersey Gateway. The research has a particular interest in the suitability of the land for breeding lapwing.
Changes in Perspectives of the Values and Benefits of Nature	The research used a case study to examine the efficacy of integrating environmental management and ecosystem services within an urban greenspace social-ecological system.
Title unknown	The purpose of this study is to determine whether the cattle grazing on the salt marsh is having any effect upon the distribution of the heavy metals on this site, both on the surface and below ground
Mersey Gateway Project: An assessment of heavy metal contamination of sediments in St Helen's Canal, UK	The aim of this study was to assess the nature and extent of heavy metal distribution in the sediments of the St. Helens Canal and determine the environmental risk of these pollutants to the study area.
Are there differing prey species of the Barn Owl (Typo alba) during sumer and during winter months?	The study was carried out to examine the difference in prey species of barn owl and if any differences occurred, to find out why these differences occurred.
Spatial analysis of the Upper Mersey Estuary: land cover, land use and biodiversity monitoring	The first aim of this study is to produce a land cover map for the Upper Mersey Estuary by interpreting aerial in order to identify areas which face strong environmental challenges. The second aim is to map land use and to set up a method for spatial analysis of ecosystem services. Finally, citizen science data (biodiversity recorded by professional or amateur naturalist) is used to analyse species distribution related to land cover types.
Bird assemblages and behaviour in the Upper Mersey Estuary	The overall objective of the study is to focus on the bird communities residing with the UME, and establish what factors contribute to their presence and distribution.
Modelling Spatial Distribution of Outdoor Recreation Trips to Green Spaces: An in-depth study of North West England	This dissertation aims to inform the planning of outdoor recreational spaces by building a new travel choice model.