

North East Kent Scientific Coastal Advisory Group

Potential Research Projects

This is aimed at interested individuals, or natural science based students that may need to identify research for dissertations and projects as part of their course. This project list has been produced through the North East Kent Scientific Coastal Advisory Group, and is intended to identify potential projects that will contribute towards the research needed to contribute to the better understanding of the North East Kent European marine site.

North East Kent Scientific Coastal Advisory Group members can submit projects that are displayed on the Thanet Coast & the Kent & Medway Biological Records Centre websites. Any further suggestions for potential research projects can be forwarded to thanet.coast@thanet.gov.uk using the information using the standardised table, based on the details used by the Kent and Medway Biological Records Centre at Tyland Barn, Maidstone. This information is displayed within the research sections on the Thanet Coast Project's and Biological Records Centre websites – www.thanetcoast.org.uk & www.kmbrc.org.uk/research.htm.

Research information pack proposal for 2008/9:

An information pack will be produced for those carrying out research alerting them to the nature conservation importance of the NE Kent European Marine Sites, including protocols to minimise the impact of research. Researchers will be asked to discuss the research proposal in advance of carrying out the research and also to submit a copy on completion - c/o Thanet Coast Project/Natural England.

Research Partner / Supervisor	Research Species or Subject (& level it is suitable for)	Contact Name	Contact Details
1. North East Kent Coastal Advisory Group	Aerial and photographic study of the changes in the North East Kent coast chalk reef habitat. ¹ [Graduate or Post-Graduate]	Ian Tittley (Natural History Museum) & Tony Child (Thanet Coast Project)	tony.child@thanet.gov.uk 01843 577672 for initial information. a)CatherineHarvey1-09
2. North East Kent Coastal Advisory Group	GIS Research Project – Thanet Coastal Activities. ² [Graduate or Post-Graduate]	(TCP/TDC)	tony.child@thanet.gov.uk 01843 577672 for initial information
3. North East Kent Coastal Advisory Group	A Review of Marine and Coastal Species that are targeted by the Foraging Industry. ³ [Graduate or Post-Graduate]	Ingrid Chudleigh	Ingrid.Chudleigh@English-Nature.org.uk 01233 812525 a)Brief-Uni of Kent-11/08 b)LClayton@FulstonManor.kent.sch.uk
4. North East Kent Coastal Advisory Group	An assessment of the recreational issues and management of the Thanet Coast. ⁴ [Graduate or Post-Graduate]	(Thanet Coast Project / Thanet District Council)	tony.child@thanet.gov.uk 01843 577672
5. North East Kent Coastal Advisory Group (Action Plan 2007-12)	The implications of creating a 'Natural Area (or 'No Take Zone') within the Thanet Coast European marine site designations. ⁵ [Graduate or Post-Graduate] New Projects and Areas of Research: Feasibility study into the development of a natural zone within the European marine sites which can be used as a reference point where only low impact scientific monitoring takes place, people are discouraged from entering and activities are excluded.	Tony Child (Thanet Coast Project/ NEKSCAG)	tony.child@thanet.gov.uk 01843 577672 for initial information
6. North East Kent Coastal Advisory Group (Action Plan 2007-12)	a) The future impact of sea level rise on the Thanet Coast habitats and species. ⁶ [Graduate or Post-Graduate] New Projects and Areas of Research b) Analyse the impacts of possible climate induced changes to tourism and other human uses of the shore.	Contact reqd. (NEKSCAG)	tony.child@thanet.gov.uk for initial information a)potentially-SeanDarkes11/08 & Catherine Harvey – see 1. b)?Tourism-Rachel Leagus10/08
7. NE Kent Scientific Coastal Advisory Group	A study of the issues and disturbances of a multi-use site for marine nature conservation: using Sandwich and Pegwell Bay NNR as a case study site.	Contact reqd. (TCP, KWT NEKSCAG)	tony.child@thanet.gov.uk for initial information

8. NE Kent Scientific Coastal Advisory Group	Biotope and species recording - to create a baseline for selected areas around the Thanet Coast.	Ian Tittley/ Bryony Chapman (Shoresearch)	tony.child@thanet.gov.uk for initial information
9. NE Kent Scientific Coastal Advisory Group	Biotope survey of Pegwell Bay	Ian Humpheryes	tony.child@thanet.gov.uk for initial information
10. NE Kent Scientific Coastal Advisory Group (Action Plan 2007-12)	<u>Shore-based recreation (general)</u> - Research what percentage of juvenile turnstones should be expected to migrate and assess whether or not impacts of disturbance from activities are impacting upon this within the SPA	Contact reqd. (NEKSCAG/NE)	tony.child@thanet.gov.uk for initial information
11. NE Kent Scientific Coastal Advisory Group (Action Plan 2007-12)	<u>Research (Biology and ecology)</u> - <i>Develop research proposals (and seek funding) to pioneer research into ecosystem function in a coastal context.</i>	Contact reqd. (NE/ NEKSCAG)	tony.child@thanet.gov.uk for initial information
12. NE Kent Scientific Coastal Advisory Group (Action Plan 2007-12)	<u>Species Management & Control (Non-native)</u> - <i>Explore the feasibility of encouraging harvesting of non-native species e.g. the Oysters.</i>	Contact reqd. (TCP/NEKSCAG)	tony.child@thanet.gov.uk 01843 577672 for initial information
13. NE Kent Scientific Coastal Advisory Group (Action Plan 2007-12)	<u>Species Management & Control (Non-native)</u> - <i>Undertake a specific research contract to map the distribution of non-native species, the effects of these species on the natural environment, whether they arrived through natural spread or were introduced, explore management methods, and predict likely changes.*</i> - <i>Once a baseline survey of the distribution of non-native species has been undertaken it should be regularly updated and monitoring should take place.</i>	Contact reqd. (NE/ NEKSCAG)	tony.child@thanet.gov.uk 01843 577672 for initial information
* NOTE RESEARCHED/ CURRENT SPECIES LIST:			
✓Japweed(Sargassum) (2004); ✓ Pacific Oyster (Willie McKnight-2008); ✓Common Cord Grass (Grantscape-Pegwell Bay 2008-); Other possibles: - American Piddocks Potential Regional Studies: - Wakame (distribution); - Slipper Limpet; - American Oyster Drill; - Chinese Mitten Crab; - Sand Gaper; - American Razor Clams; - Leathery Sea Squirt; - Elminius modestus (barnacle) Other native species: ✓ Purple Topshell - distribution/increase (RobinShrubsole2008)			
14. NE Kent Scientific Coastal Advisory Group (Action Plan 2007-12)	Exploring the use of art to promote nature conservation around the NE Kent coast. <u>New Projects and Areas of Research</u> <i>Explore the idea of a public art project that promotes the wildlife features of the European Marine Sites.</i> <i>[Newsletter article pp12-13 Thanet Coast15; Stakeholder workshop 2008 started process]</i>	Tony Child (TCP/TDC/NE)	tony.child@thanet.gov.uk
15. NE Kent Scientific Coastal Advisory Group (Action Plan 2007-12)	<u>New Projects and Areas of Research</u> <i>Find out more about the role of fish within the natural system and the reef (SAC) feature in particular.</i> <i>(Investigating the importance of Thanet Coast chalk reef as a fish nursery ground)</i>	Contact reqd. NEKSCAG (SFC/TCP /CEFAS/NE?)	tony.child@thanet.gov.uk for initial information
16. NE Kent Scientific Coastal Advisory Group (Action Plan 2007-12)	<u>New Projects and Areas of Research</u> - <i>Determine the predicted changes to the shoreline within the European marine sites resulting from climate change.</i>	Contact reqd. (NEKSCAG)	tony.child@thanet.gov.uk for initial information
17. NE Kent Scientific Coastal Advisory Group (Action Plan 2007-12)	<u>New Projects and Areas of Research</u> - Promote investigation into whether the total turbine footprint of the Thanet Offshore Wind Farm acts as a beneficial marine protection area.	Contact reqd. (NEKSCAG)	tony.child@thanet.gov.uk for initial information

Outline Research Project details

Aerial photographic study of the North East Kent coast

1. chalk reef habitat. Desktop investigation of the changes in the extent and appearance of the chalk reef habitat over time – including seaweed and animal dominated areas - around the North East Kent coast using the series of aerial photographic records held by Kent County Council (Maidstone) and Natural History Museum and internet sources.

2. GIS Research Project – Thanet Coastal Activities

The Thanet Coast Project currently has baseline GIS data for the NE Kent Coast. Over the last couple of years it has collated records of coastal activities recorded by a few volunteers on a trial recording scheme. This trail data needs to be analyzed to seek any trends, seek ways of getting improving data capture, and recommend ways for improving future data recording. The trail survey forms have now been adapted for use by the new Thanet Coastal Warden Scheme – that was launched in 2004/5 - as part of their core recording work.

3. A Review of Marine and Coastal Species that are targeted by the Foraging Industry

Desktop investigation sustainable harvesting of marine and coastal species. Study is to focus on the pros and cons of harvesting particular species, investigating sustainable limits - including importance for associated species. The aim is to identify information gaps and list potential pilot studies designed to fill these gaps. List of species will be provided.

4. A detailed assessment of the Thanet Coast's recreational issues and current management.

An assessment of the recreational and leisure pressures and current management of activities around the Thanet Coast, with the aim of identifying future options and recommendations.

5. The implications of creating a 'Natural Area' (or 'No Take Zone') on the Thanet Coast.

A study looking at the implications for species and coastal users of introducing a designated 'No Take Zone' to allow future scientific studies between these research areas, and the rest of the designated European marine site where multi-use activities (including recreation and harvesting) can take place.

[Newsletter article pp12-13 Thanet Coast13; Stakeholder workshop 2007 started process; overtaken by Marine Bill's MCZs]

6. The future impact of sea level rise on the Thanet Coast habitats and species.

A desktop study looking at the implications of predicted sea level rises on the species and habitats over the next 100 years around the North East Kent European marine sites area. This would take into account current coastal management – and in particular the coastal squeeze of chalk reef habitats - and look into possible options for alleviating pressure, and enhancing habitats.

NEW PROJECT SUGGESTIONS & OUTLINE DETAILS:

Research Partner / Supervisor	Research Species or Subject (& level it is suitable for)	Contact Name	Comment/ Recommendation
18. NE Kent Scientific Coastal Advisory Group <i>(Action Plan 2007-12)</i>	<i>Monitoring of Additional Features - NEKSCAG to identify on a yearly basis any features that the think require monitoring within the European marine sites. (e.g. seals)</i>	Contact reqd. (NEKSCAG)	✓a) Monitoring of seal and cetacean population by wildlife operators to be set up 2008 (TCP) {Monitoring study already carried out by SMRU-2006} <u>Species/features need to be identified:</u>
19. NE Kent Scientific Coastal Advisory Group			
20. NE Kent Scientific Coastal Advisory Group			

Outline Research Project details:

Ref No: .

Forward outline projects and details to: tony.child@thanet.gov.uk

03/2009