

DRAFT - Potential Research Projects 2010-11

Note: This draft list will be reviewed at the next NE Kent Scientific Coastal Advisory Group in April 2010.

This project list is aimed at interested individuals and natural science & related students looking to identify research projects – such as for dissertations as part of their course. The list has been produced through the North East Kent Scientific Coastal Advisory Group ('NEKSCAG'), 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 (NEKEMS).

NEKSCAG members submit proposed research projects, many based upon the Management Scheme and Action Plan for the NEKEMS. 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 Kent & Medway Biological Records Centre's websites – www.thanetcoast.org.uk & www.kmbrc.org.uk/research.htm.

Research information pack proposal for 2010/11:

An information pack is available for people 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 to thanet.coast@thanet.gov.uk for reporting to NEKSCAG & NEKEMS Management Group.

Research Partner / Supervisor	Research Species or Subject (& level it is suitable for; <i>priorities in red</i>)	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	A Review of Marine and Coastal Species that are targeted by the Foraging Industry. ² [Graduate or Post-Graduate]	Ingrid Chudleigh	Ingrid.Chudleigh@naturalengland.org.uk 0300 060 4770 a)Brief-Uni of Kent -11/08 b)LClayton@FulstonManor.kent.sch.uk
3. North East Kent Coastal Advisory Group	Recreational issues and beach management around the shoreline of Thanet Coast's beaches and bays. ³ [Graduate or Post-Graduate]	(Thanet Coast Project / Thanet District Council)	tony.child@thanet.gov.uk 01843 577672
4. North East Kent Coastal Advisory Group (Action Plan 2007-12)	The implications of creating a 'No Take Zone' within part of the Thanet Coast chalk reef of the NE Kent European marine site. ⁴ [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
5. North East Kent Coastal Advisory Group (Action Plan 2007-12)	New Projects and Areas of Research a) <i>Determine the predicted changes to the shoreline within the European marine sites resulting from climate change.</i> ⁵ [Graduate or Post-Graduate] New Projects and Areas of Research b) <i>Analyse the impacts of possible climate induced changes to tourism and other human uses of the shore.</i> [Graduate or Post-Graduate]	Contact reqd. (NEKSCAG)	tony.child@thanet.gov.uk for initial information a) potentially-SeanDarkes11/08 & Catherine Harvey – see 1. b)?Tourism-Rachel Leagus10/08

6. 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
7. NE Kent Scientific Coastal Advisory Group	Biotope survey of Pegwell Bay	Ian Humpheryes	tony.child@thanet.gov.uk for initial information
8. 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
9. 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
10. 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)			
11. 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
12. 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 /GEFAS/NE?)	tony.child@thanet.gov.uk for initial information
13. 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
14. NE Kent Scientific Coastal Advisory Group (Action Plan 2007-12)	<u>Monitoring of Additional Features</u> - NEKSCAG to identify on a yearly basis any features that they think require monitoring within the European marine sites. (e.g. seals) <u>Species/features need to be identified (NEKSCAG)?</u>	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} :

Outline Research Project details

1. Aerial and photographic studies of the changes in the North East Kent coast 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 other sources (postcards; internet etc).

2. 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.

3. Recreational issues and beach management around the shoreline of Thanet Coast's beaches and bays.

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

4. The implications of creating a 'No Take Zone' within part of the Thanet Coast chalk reef of the NE Kent European marine site.

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]

5. a - Determine the predicted changes to the shoreline within the European marine sites resulting from climate change.

A desktop study looking at the implications of predicted sea level rise and natural processes on the shoreline (or in particular reference to the species and habitats of European importance) over the next 100 years around the North East Kent European marine site. This could take into account current coastal management – and in particular the coastal squeeze of chalk reef habitats - and look into future predictions and possible options for alleviating pressure and enhancing habitats.

Current or Completed Coastal or Marine Research Projects in the NEKEMS area: details

Research Partners	Research Species or Subject (& level it is suitable for)	Contact details
TCP/TDC/NE/Uni of Kent (DICE student) (NEKSCAG)	GIS Project – NEKEMS & Thanet Coast Activities. ²	Tony Child /Nicola Abrams (TCP/TDC/NE/Uni of Kent) tony.child@thanet.gov.uk 01843 577672
NNR Steering Group Partnership	<i>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.</i> Pegwell Bay sustainable activities Study	Ingrid Chudleigh (NE) & TonySwandale (KWT)
NE Kent Scientific Coastal Advisory Group (Action Plan 2007-12)	Species Management & Control (Non-native) - Explore the feasibility of encouraging harvesting of non-native species e.g. the Oysters. ACTION POINT – Discussion by NEKSCAG & NEKEMS Management Group about possible controls before deletion!	NEKSCAG & NEKEMS MG
Other Current Research Projects (Title & very brief outline)		Contact name & contact details

NEW PROJECT SUGGESTIONS & OUTLINE DETAILS:

Research Partner / Supervisor	Research Species or Subject (& level it is suitable for)	Contact Name	Comment/ Recommendation
14. NE Kent Scientific Coastal Advisory Group <i>(Action Plan 2007-12)</i>	<u>Monitoring of Additional Features</u> - NEKSCAG to identify on a yearly basis any features that they think require monitoring within the European marine sites. (e.g. seals)	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} Species/features need to be identified:
15. NE Kent Scientific Coastal Advisory Group			
16. NE Kent Scientific Coastal Advisory Group			

Outline Research Project details:

Ref No: .

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

01/2010