

# Potential Research Projects 2010-11

*{Note/Update: Last reviewed/updated in July 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](mailto: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](http://www.thanetcoast.org.uk) & [www.kmbrc.org.uk/research.htm](http://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](mailto: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. <sup>1</sup> <i>{Update: Project linked with ARCH project, KCC}</i> [Graduate or Post-Graduate]	Ian Tittley (NHM) / Tony Child (TCP) /? KCC	<a href="mailto:mmit@waitrose.com">mmit@waitrose.com</a> (Ian Tittley) & ARCH Project, KCC
2. North East Kent Coastal Advisory Group	A Review of Marine and Coastal Species that are targeted by the Foraging Industry. <sup>2</sup> [Graduate or Post-Graduate]	Ingrid Chudleigh (NE)	<a href="mailto:Ingrid.Chudleigh@naturalengland.org.uk">Ingrid.Chudleigh@naturalengland.org.uk</a> 0300 060 4770
3. North East Kent Coastal Advisory Group	Recreational issues and beach management around the shoreline of Thanet Coast's beaches and bays. <sup>3</sup> [Graduate or Post-Graduate]	Tony Child (TCP)	<a href="mailto:tony.child@thanet.gov.uk">tony.child@thanet.gov.uk</a> 01843 577672
4. North East Kent Coastal Advisory Group  (Action Plan 2007-12)	The implications of creating a voluntary 'No Take Zone' within part of the Thanet Coast chalk reef of the NE Kent European marine site. <sup>4</sup> <i>{Update: Project superseded by MCZ project 'Balanced Seas' so now "voluntary" within EMS rather than just NTZ}</i> [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.	Ingrid Chudleigh (NE)	<a href="mailto:Ingrid.Chudleigh@naturalengland.org.uk">Ingrid.Chudleigh@naturalengland.org.uk</a> 0300 060 4770
5. North East Kent Coastal Advisory Group  (Action Plan 2007-12)	New Projects and Areas of Research <i>a) Determine the predicted changes to the shoreline within the European marine sites resulting from climate change.</i> <sup>5</sup> [Graduate or Post-Graduate] New Projects and Areas of Research <i>b) Analyse the impacts of possible climate induced changes to tourism and other human uses of the shore.</i> [Graduate or Post-Graduate]	Geoff Meaden (NEKSCAG)	<a href="mailto:geoff.meaden@googlemail.com">geoff.meaden@googlemail.com</a>  {possible link to ARCH project c/o KCC}

<b>6. NE Kent Scientific Coastal Advisory Group</b>	Biotope and species recording - to create a baseline for selected areas around the Thanet Coast.	<i>Ian Tittley/ Bryony Chapman (Shoresearch)</i>	<a href="mailto:mmit@waitrose.com">mmit@waitrose.com</a> (Ian Tittley) <a href="mailto:Bryony.Chapman@kentwildlife.org.uk">Bryony.Chapman@kentwildlife.org.uk</a>
<b>7. NE Kent Scientific Coastal Advisory Group</b>	Biotope classification of the sediment areas around Pegwell Bay in Kent. {Graduate or field worker}	<i>Ian Humpheryes</i>	<a href="mailto:ian.humpheryes@environment-agency.gov.uk">ian.humpheryes@environment-agency.gov.uk</a>
<b>8. NE Kent Scientific Coastal Advisory Group (Action Plan 2007-12)</b>	<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	?Martin Griffiths (DICE)	<a href="mailto:martingriffiths@ukonline.co.uk">martingriffiths@ukonline.co.uk</a>
<b>9. NE Kent Scientific Coastal Advisory Group (Action Plan 2007-12)</b>	<u>Research (Biology and ecology)</u> - <i>Develop research proposals (and seek funding) to pioneer research into ecosystem function in a coastal context.</i>	?Georges Dussart	<a href="mailto:georges.dussart@canterbury.ac.uk">georges.dussart@canterbury.ac.uk</a>
<b>10. NE Kent Scientific Coastal Advisory Group (Action Plan 2007-12)</b>	<u>Exploring the use of art to promote nature conservation around the NE Kent coast.</u> <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	<a href="mailto:tony.child@thanet.gov.uk">tony.child@thanet.gov.uk</a>
<b>11. NE Kent Scientific Coastal Advisory Group (Action Plan 2007-12)</b>	<u>New Projects and Areas of Research</u> <i>Find out more about the role the reef (SAC) in spawning or supporting fish.</i> <i>(Update: Amended July 2010)</i> <i>(Investigating the importance of Thanet Coast chalk reef as a fish nursery ground)</i>	?Will Wright (IFCA)	?wright-will@btconnect.com
<b>12. NE Kent Scientific Coastal Advisory Group (Action Plan 2007-12)</b>	<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. <u>{in addition to the statutory monitoring of features and species for which the site is designated.</u> <u>Species/features identified by NEKSCAG?</u> Examples: a- Local seal populations (Brett Lewis) b- Little Periwinkle (Bryony Chapman) c- Continued monitoring of Periwinkle populations?	NEKSCAG a- Monitoring of local seal population (Brett Lewis) b- BryonyChapman c-?Ian Humpheryes/IngridChudleigh/GeorgesDussart?	a- <a href="mailto:brettlewis@tiscali.co.uk">brettlewis@tiscali.co.uk</a> {Note: Monitoring of seal and cetacean population by wildlife operators to be set up. Jon Brambly/TCP} b- <a href="mailto:Bryony.Chapman@kentwildlife.org.uk">Bryony.Chapman@kentwildlife.org.uk</a> c- ?

? – Not confirmed

## 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 Voluntary '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 'Voluntary No Take Zone' – based upon the lessons learnt from other sites - 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; so now 'voluntary' NTZ instead]*

### 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. Also ARCH project at KCC starts 2010.

## Current or recently completed Coastal or Marine Research Projects in the NEKEMS area.

Research Partners	Research Species or Subject (& level it is suitable for)	Contact details
NE Kent Scientific Coastal Advisory Group (Action Plan 2007-12)	Species Management & Control (Non-native) - <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>	New work to be researched by Willie McKnight (c/o TCP)
* 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)		
NNR Steering Group Partnership	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. <b>Pegwell Bay sustainable activities Study</b>	Ingrid Chudleigh (NE) & TonySwandale (KentWildlifeTrust)

<b>NE Kent Scientific Coastal Advisory Group</b> (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 / Management Group about possible controls <b>RECOMMEND DELETION</b>	NEKSCAG & NEKEMS MG
<b>NE Kent Scientific Coastal Advisory Group</b> (Action Plan 2007-12)	New Projects and Areas of Research — Promote investigation into whether the total turbine footprint of the Thanet Offshore Wind Farm acts as a beneficial marine protection area. <b>RECOMMEND DELETION</b>	NEKSCAG?
<b>Other Current Research Projects (Title &amp; very brief outline)</b>		<b>Contact name &amp; contact details</b>

## NEW PROJECT SUGGESTIONS & OUTLINE DETAILS:

Research Partner / Supervisor	Research Species or Subject (& level it is suitable for)	Contact Name	Comment/ Recommendation
13. NE Kent Scientific Coastal Advisory Group {TCP/TDC/NE/Uni of Kent (DICE student)}	GIS Project for NE Kent EMS & Thanet Coast Activities.  {GIS Graduate/PostGrad}	Tony Child tony.child@thanet.gov.uk 01843 577672	
14. NE Kent Scientific Coastal Advisory Group	Identifying research required to support management themes, issues or gaps of knowledge within the NE Kent European marine sites Management Scheme 2007-12 {Post Grad}	Contact reqd. ?Ingrid Chudleigh	
15. NE Kent Scientific Coastal Advisory Group			

### Outline Research Project details:

Ref No:     .

Forward outline projects and details to: [tony.child@thanet.gov.uk](mailto:tony.child@thanet.gov.uk)