24 November 2009
Dunnet Head Diving Expedition Grant Application
"Extremities of Scotland III —Dunnet Head/Duncansby Head" 2-6 June 2010

Dear BSAC Expeditions Officer/NDC Diving Group members,

Please find following an application to the BEGS scheme to assist with our plan to explore the around Dunnet Head and Duncansby Head, which are the most northerly and north-easterly points of the British mainland, respectively.

Aim of Expedition

To explore and document dive sites around Dunnet Head and Duncansby Head. There is considerable potential for wrecks in this area and more detailed research will be undertaken to identify potential sites. This expedition is as a knowledge transfer and confidence-builder for members of the dive group to learn and develop their expedition skills in multiple areas. Finally, this is the third in a series of expeditions to explore the extremities of Scotland. As an added bonus, this expedition will aim to 'bag' two such extremities – most northerly and north easterly.

The area

Most divers have been in this area at some point—but usually drive right past when heading to the ferry for Scapa Flow in the Orkneys, and so few divers have explored these waters. The Pentland firth is notorious for strong currents which whip around the headland, being funnelled by the Orkney isles. Tidal races, eddies and currents up to 12 knots are all features of the area. The Admiralty Pilot guide for the area is five pages long and it is widely regarded as one of the most dangerous shipping channels in the world. As an example of the 'odd' waters: a quick glance at the tide tables for 3/10/2010 shows some interesting results: high water and low water are both 2.3m!

High Tide: 5:30 AM GMTDT **2.4**
Low Tide: 11:43 AM GMTDT **2.3**
High Tide: 6:07 PM GMTDT **2.3**

The tidal atlas for this area has a specific section (with some very big arrows) just for the area which this expedition will be exploring. As a consequence, the dates for the expedition have been selected purely down to the tides – a combination of ensuring that we did not dive on springs and also that 'slack' will occur at reasonable hours of the day. This was calculated using the Tidal Atlas for the area (which has a section specifically for this location) and tide tables for the area.

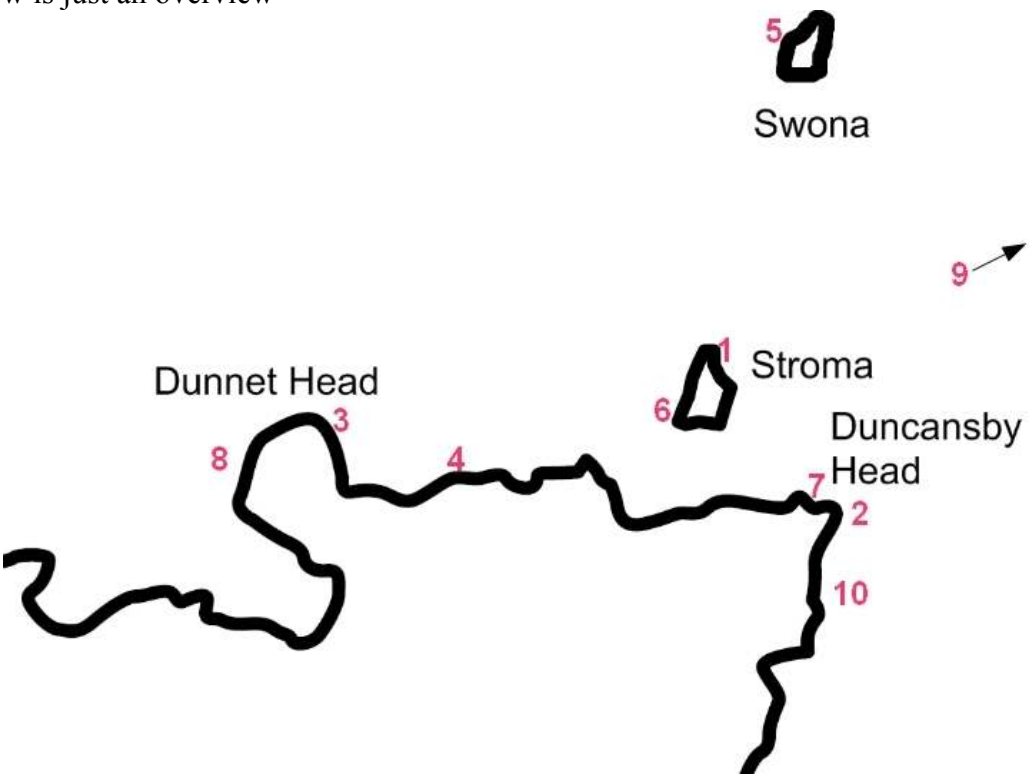
With currents this strong, the diving is expected to be of very high quality and clear waters. The topography above water consists of beaches and sheer cliffs.
Because of the currents and amount of shipping, numerous wrecks are known of in the area and it is intended that further investigation and identification of sites will be undertaken.

As the area in scope will be the most North Easterly point, we are offered some protection from various wind directions meaning we should be able to dive in most conditions. In addition to this, the cliffs of the

mainland and the Orkneys themselves will also offer some protection. There are also a number of small islands in the firth which could also provide all round diving.

Potential dive sites

Below is a map of the area and potentially interesting sites. There are potentially many interesting sites and the below is just an overview



1. **North Stroma**: here the 50m contour comes in very close to the shore line indicating a cliff. Large parts of Stroma are classed as 'unsurveyed'
2. **Duncansby Head:** one of the goals of the expedition is to dive at this most North Easterly site. As an added bonus, the chart shows this would be a worthwhile dive! There are a number of interesting sites and the Ordnance Survey map shows natural arches, caves and Geo of Sclaites which is a deep fissure cut into the headland
3. **Dunnet Head:** is another target for the expedition and once again, there'll be no complaints from divers if the charts are to be believed! The 50m contour is right next to the shore and a number of 'geos' exist in the area which appear to be fissues into the headland
4. **Scarfskerry:** some of this area is classed as unsurveyed and the contours seem to suggest a steep cliff
5. **North Swona:** again some of this is classed as unsurveyed and the contours show 50m very close to the shore so potential for a good cliff dive here
6. **South West Stroma:** A wreck is shown just north of Mell Head and large areas are classed as unsurveyed, and some natural arches are apparent
7. **North Duncansby Head:** another large fissure exists at this point as well as a number of rocks including 'hell rock'. A wreck is also marked in this unsurveyed area
8. **West Dunnet Head**: again, the contour lines are close together at this point so could be worthy of investigation

9. **Pentland Skerries**: 4nm north east of Duncansby head lies the pentland skerries. There are a number of wrecks recorded in the area and the islands are surrounded by water of 40m. The most southerly of the skerries do not break the water at all tide states and so there should be some interesting sites here
10. **Stacks of Duncansby:** a number of sea stacks are shown on the OS map here and are certainly spectacular from the surface. General depths are around 8m, falling away to 30m not far off shore

'Style' of expedition

We will be self-contained and self-sufficient, operating our own boats and running hired compressors. This will be a true exploratory expedition. The diving will be within Dive Leader qualifications and non-technical sport diving. There will be at least one rebreather diver, myself on a KISS CCR.

Divers

A detailed list can be found further on in this document. The expedition will be lead and run under the Edinburgh University Sub Aqua Club 'flag', and consequently the majority of the divers will be from EUSAC. As with most University Clubs, EUSAC has to work hard to keep members and to expand knowledge as well as it's constant training, so this expedition is aimed at developing Advanced Divers within the club in preparation for First Class. It is hoped that either some element of the First Class qualification can be undertaken on this expedition or that the NI who attends can assist in running the expedition as a First Class preparation. The final list of divers will be confirmed once deposits have been taken and so the list given is subject to change.

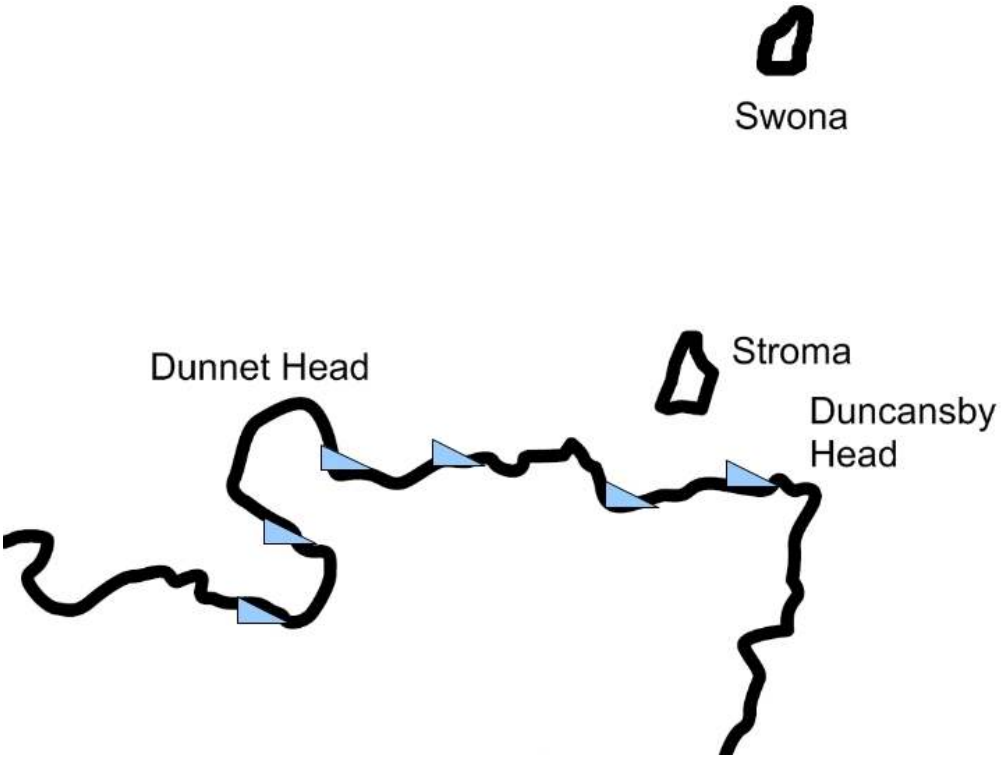
Logistics

We will have two hire vans plus a personal van to carry the kit of 12 divers as well as towing the club boats. We will be hiring portable petrol compressors to provide air fills. Self catering accommodation has been identified – there are a number of options such as youth hostels and static caravans.

As we are taking our own boats, slipways have already been identified in the area and a number of options are available to us (given most westerly first, moving easterly):

Castlehill Pier
Dwarwick
Brough
Scarfskerry Pier
Gills Pier
John O'Groats
Skirza (not shown on map below)

Below is a map of the area and slipways currently identified (this is not an exhaustive list).



Reporting

Given the exploratory nature of this expedition, we hope that other divers will be interested to hear about our findings. Assuming our findings are interesting, we intend to write an article for Diver/Dive. If our findings are *really* interesting (we hope so!), then we would be more than happy to present at the DOC.

Regardless, we intend to publish details of our expedition (specifically, logistics and challenges of the expedition, dive sites with descriptions and site charts if useful) on www.uwscotland.com as well as www.eusac.co.uk, and to get publicity at a local dive forum and also via the Edinburgh University Sports Union communication channels (e.g. student newspapers). The report produced will meet the BSAC BEGs requirement however, there will also be a more complete and self contained guide to diving the area produced which will be of use for other divers intending to dive this area.

In support of all the above communication, we will be taking plenty of photographs and have four keen photographers in the group who are happy to do this.

I hope there is sufficient information here to be considered for a BEGS grant. Please do not hesitate to contact me if you have any further questions.

Yours sincerely,

Paul Bullen
ENC