



# TAY VIEWS

A PUBLICATION BY THE TAY ESTUARY FORUM: PROMOTING THE WISE AND SUSTAINABLE USE OF THE TAY ESTUARY AND ITS ADJACENT COASTLINE

ISSUE 18: Winter 2007

Welcome to the Winter edition of "Tay Views"

Even as the days get shorter (and colder!) there is still plenty going on in and around Tayside this Winter. Changes are being made to our website with postings of future events, all issues of the newsletter (past and present), Tay literature and pictures are also available. In this issue there is opportunity for you to contribute to two ongoing consultations for Directives on Shellfish Waters and Cleaner Bathing Waters. Your comments are welcomed.

As always, any news/ views gratefully received  
Wishing you all a Merry Christmas and Happy New Year!  
Laura (Project Officer)

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Tay Estuary taken from Dundee Law; LB07



## 1: TEF UPDATE

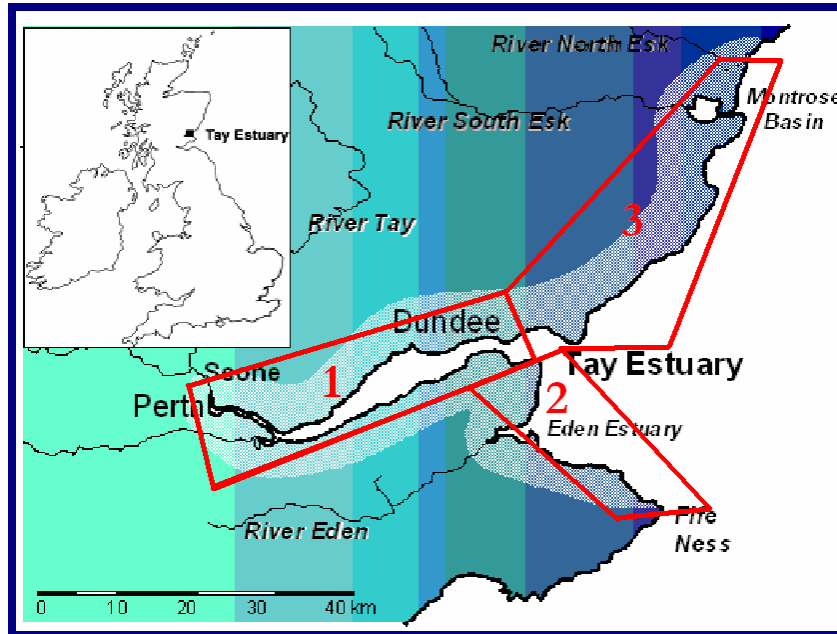
■ Steering Group meeting and Field Trip to Montrose Basin held on Friday 12<sup>th</sup> October 2007

- Thanks to Montrose Basin Scottish Wildlife Trust Centre for accommodating the forum, and to Richard Averiss for showing us around the reserve. Luckily we had excellent weather and the pictures can be seen in Section 7.
- Main item on the agenda was the TEF Management Plan and what we hope to achieve by producing one. A preliminary strategy for collecting information can be seen in Section 2.
- The Management Plan will therefore be a key topic at next year's **conference**, for which we have set a date- **Friday April 18<sup>th</sup> 2008-**  
**please put the date in your diary!**
- Next Steering Group meeting to be held at Abertay University in January

## 2.

# Steps to producing the Tay Estuary Forum Management Plan

Stage 1: Collecting information for the TEF Management Plan will be drafted in 3 “phases” according to its 3 geographical zones.



### Phase 1: Estuary

- Information collection and preliminary meetings with estuary users and stakeholders, environmental and wildlife groups-list of all groups consulted to be drafted by Feb 08.
- Assess possibility of input to Local Council Plans (Perth and Kinross and Dundee) and gauge level of interest/ support from individuals and organisations.
- Timeframe- September 2007- February 2008
- Phase 1 to be reported on at the TEF Conference April 2008

### Phase 2: TEF South

- Work with Fife Council
- Timeframe February 2008- July 2008
- Progress Report and list of all contributors due for submission to Steering Group in July 08

### Phase 3: TEF North

- Collaborate with Angus Council
- Timeframe July 2008- November 2008
- Progress Report and list of contributors due for submission to the Steering Group in Nov 08.

When all information collected, drafting the final plan should take a few months.

**AIM: By the TEF Conference April 2009, Management Plan complete.**

**December 12th:  
Wednesday Afternoon Lecture D'Arcy Thomson Lecture Theatre  
Tower Building,  
Dundee University Campus, Perth Road, Dundee  
"Tayside Wildlife" talk 2pm by Gordon Maxwell**

**in association with Dundee Naturalists' Society**

3.

## *Cleaner Bathing Waters*

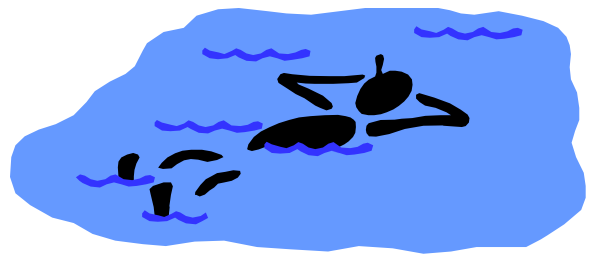
On Nov 15<sup>TH</sup> 2007, the Scottish Government launched its consultation on proposals to bring about further improvements to our bathing waters.

2006 was a record year for Scotland's 61 designated waters, but further improvements will be made in line with new European standards.

Minister for Environment Michael Russell said:

"With the unfortunate exception of this summer, when the whole country was faced with unprecedented poor weather, the quality of Scotland's bathing waters has been gradually improving. 2006 saw all of Scotland's bathing waters meeting European standards for the first time and today's consultation will take health protection and cleanliness to the next level.

The standards in terms of water quality will be raised as in other European countries. There will be new responsibilities to promote public participation in decision-making and the provision of information to allow beach goers to make informed choices on whether to bathe or not. The consultation is all about how best we meet these challenges and I would encourage all interested to get involved."



The proposals were originally outlined in the 2006 strategy paper "Better bathing waters: meeting the challenges of the revised Bathing Water Directive in Scotland" ([www.scotland.gov.uk/bathingwaterstrategy](http://www.scotland.gov.uk/bathingwaterstrategy))

The Directive came into force on 24 March 2006 and its requirements must be transferred into domestic legislation by 24 March 2008.

The consultation paper (which can be found at <http://www.scotland.gov.uk/Publications/2007/11/15101809/0>) is the next stage of the implementation of the Directive and how to meet its challenges.

The consultation period runs from 15 November until 6 February 2008.

More information on the Scottish Government's bathing water policy can be found at [www.scotland.gov.uk/bathingwaters](http://www.scotland.gov.uk/bathingwaters).

## 4. Return of Sea Eagles to East Scotland

2007 saw the return of white-tailed sea eagles to the Tay. In a partnership project between RSPB Scotland, Scottish Natural Heritage and Forestry Commission Scotland, 15-20 birds will be released each year between 2007 and 2011.

Although people have come to associate the sea eagles with the isolated, mountainous West coast of Scotland, away from human habitation, the majority of the birds' natural habitat is coastal areas, lowland wetlands and estuarine and riparian areas with shallow, productive waters. The release site near the Tay was chosen as the locality as it contains a wealth of year-round food for the birds including wildfowl, gulls, rabbits and carrion. The numerous groups of mature trees throughout Fife will also provide ideal nesting locations in 4-5 years time and in Eastern Europe the birds are also known to nest in reed beds.

The fifteen unrelated chicks were collected from nests containing twins in central western Norway by the Norwegian Ornithological Society and on the 22<sup>nd</sup> June the 9 males and 6 females were flown by the Norwegian Air Force to RAF Kinloss. After some intense media scrutiny, the birds were driven to the release site. Here the birds were kept in pairs and trios in large aviaries containing perches and artificial nests until they were big enough to fly.

Whilst in captivity they were fed fresh and frozen fish from Arbroath, venison and rabbit. All food is placed through a small hatch as it is vital that the birds do not see humans and associate them with food. The site location is kept secret for the same reason, as we do not want birds becoming accustomed to people walking past the mesh-fronted cages. This open aspect enables the birds to learn the landscape and introduces them to some native fauna- they have had lively exchanges with nearby nesting green woodpeckers, passing buzzards and ospreys!

Prior to release, each bird was fitted with white wing tags with an individual letter/number and a small radio backpack. The radios can transmit for up to five years giving us a unique insight into the birds' dispersal, use of habitats, survival and the eventual establishment of breeding territories.



copyright Andy Hay, RSPB images

The birds were released between the 10<sup>th</sup> and 14<sup>th</sup> of August aged 3-3.5 months old. For the first week all birds remained within 1km of the release site, taking practice flights on a nearby sloping pasture field. A food dump is maintained on top of the cages to mimic the supplementary feeding that parents provide for their fledglings in the wild. Like their wild counterparts in the West, the birds dispersed at different ages. Two males F and N headed north up the coast after a couple of weeks, ending up at the Montrose basin and Loch of Strathbeg. Other birds started taking exploratory trips through Fife and Tayside.

A social group of six birds remained near the release site until late October, when they too stopped using the food dump and moved off singly and in pairs. The birds' movements are monitored regularly through radio-tracking and reports from the public; with over 300 sightings recorded by November. The birds are now spread over a large area and can be seen in Flanders Moss, the Carse of Gowrie, the Montrose basin, St Fergus and along the firths of Tay and Forth. The birds are exploring their new environment often spending only a week or two in each place before moving on and will continue to wander until settling on territories when 3-5 years old. It is hoped that local communities will see the same benefit as those on Mull where eagles bring in 1.7 million pounds to the economy each year. Public response so far has been extremely positive with many people ecstatic to see eagles back on the East coast.

For more information or to report sightings (giving date, time, location and wing tag if possible) please contact us at: [eastscotlandseaeagles@rspb.org.uk](mailto:eastscotlandseaeagles@rspb.org.uk)

Thanks to Claire Smith East Scotland Sea Eagle Officer (RSPB Scotland)

## 5: OUT N' ABOUT 'N THE TAY!

This section of the newsletter is specifically dedicated to encourage public involvement in the enjoyment of the Tay estuary and coastline. It highlights various attractions, walks, events and day trips for everyone to get out and about in their local region!

### This issue; Corsiehill Quarry

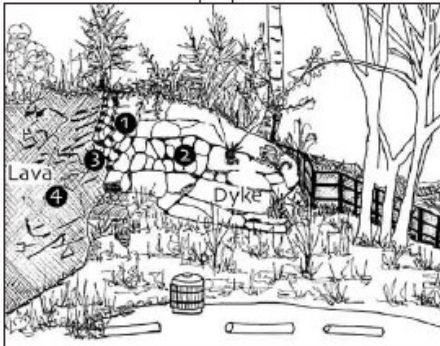
## WHAT TO FIND AT CORSEHILL QUARRY

### Feature A - Quarry Entrance

The entrance cuts through andesite lava at right angles to the line of the dyke. Note the massive appearance of the lava, with coarse layer dipping gently to the north. It looks 'slaggy' in places with vesicles (originally gas bubbles in the liquid lava), some filled with minerals (chlorite, calcite or quartz).

### Feature D - Dyke cross-section

A cross-section of the dyke is seen across the west end of the quarry below the wooden steps. The dyke is 'blockier' ① than the andesite lava and has more regular cooling cracks. See how some polygonal cooling columns have developed at right angles to the lava at the sides of the quarry. The lava solidified and cooled long before the molten magma of the dyke was injected from below. The dyke is composed of a type of rock called quartz dolerite. It is blue/grey in colour on fresh surfaces and has medium grain size due to relatively slow cooling. On close examination, the dyke rock can be seen to be crystalline, composed of the minerals augite, quartz and labradorite (plagioclase feldspar).



### Feature B - Andesite Lava

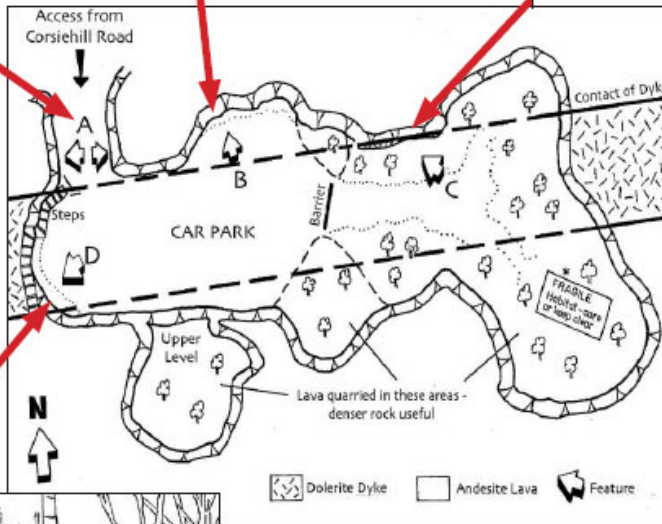
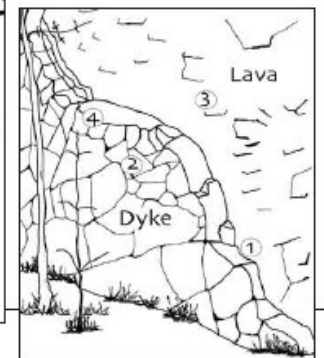
Here the Lava is seen in the north wall after the dyke material was extracted. Note the uneven pattern of cooling cracks. The rock has a purplish appearance where not weathered. It is fine grained due to rapid cooling. Look closely at it and see mineral crystals glinting in it (plagioclase feldspar, augite, hornblende and biotite mica).

### Feature C - Dyke/Lava contact

The baked contact ① between dyke magma ② and the lava ③ is exposed on the sliver of dyke rock ④ left in place after quarrying. Note the regular cracking at right angles to cooling direction ②, in places forming polygonal columns, and also the spheroidal weathering of dyke rock (dolerite).

The more massive andesite lava, with irregular cooling cracks, is seen in the main quarry face behind the dyke material.

The dyke, intruded as liquid magma, cuts across the solid layers of the much earlier andesite lava, like a vertical wall.



Plan of Corsiehill Quarry

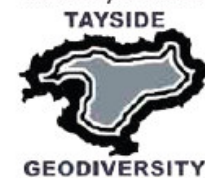
Note how some of the blocks are rounded in appearance due to spheroidal weathering ②. The weathered rock is iron-stained and crumbly on the outside, usually with a solid core remaining at its centre. The baked contact ③ between dolerite and lava ④ can be clearly seen in the southeast corner where a 'skin' of the dyke material has been left on the quarry wall.



Reproduced with kind permission from Tayside Geodiversity:  
Pdf download of complete leaflet available on the TEF website

Tayside Geodiversity is a small volunteer group that is working to make the geology of the region better known by setting up a network of Local Geodiversity Sites. Their next project will be a geology trail leaflet for the coastline between Arbroath and Auchmithie. The group is looking for new members to help with the work so if you are interested contact the current chair, Mark Simmons, Principal Officer of Natural History at Perth Museum and Art Gallery on 01738 632488 or email [museum@pkc.gov.uk](mailto:museum@pkc.gov.uk)

Tayside Geodiversity  
c/o Perth Museum, George St., Perth, PH1 5LB  
Tel: 01738 632488  
Email: [museum@pkc.gov.uk](mailto:museum@pkc.gov.uk)  
[www.taysidebiodiversity.co.uk/geodiversity](http://www.taysidebiodiversity.co.uk/geodiversity)



## 6.

# PROPOSED NEW DESIGNATED SHELLFISH WATERS

The Scottish Government recognises that shellfish need clean healthy water in which to grow in order to ensure a good quality product which is safe for consumers to eat, and current European Community legislation protects the water quality of Scotland's shellfish growing areas.

The Shellfish Waters Directive (79/923/EEC) (SWD) was recently replaced by Shellfish Waters Directive (2006/113/EC). One hundred and eight waters in Scotland are currently designated under the SWD, which sets the required water quality standards. The waters are then regularly monitored by SEPA, who apply pollution reduction programmes as necessary.

The last designation round took place in 2005, and the Scottish Government is aware that since then, shellfish production in Scotland has increased, and the industry has continued to expand. Overall production of farmed shellfish in Scotland rose by 37 % from 3,350 tonnes in 2001, to 4,594 tonnes in 2006. Mussel production in particular, has showed an increase of 41%, from 2,988 tonnes in 2001 to 4,219 tonnes in 2006. There are also some new sites which are not in designated waters.

The Scottish Government now proposes to designate eight new shellfish growing waters – six in Shetland, one in Highland, and one in Argyll, and a consultation on this is now underway. In preparing these proposals for further designation of waters, advice was sought from Fisheries Research Services, the Scottish Environment Protection Agency (SEPA), Scottish Water, the Food Standards Agency (Scotland) and shellfish growers. The consultation paper includes a consideration of the benefits and costs of designation, in particular the costs which may be borne by individuals and businesses, details of the proposed designations, and a proposed new way of handling designations in the future.

We are inviting written responses to the consultation by Friday 18 January 2008. It can be viewed online at <http://www.scotland.gov.uk/consultations>, or obtained from:

Fiona Watt

Scottish Government

Water Pollution Control Team Water, Air, soil and Flooding Division

1-H Victoria Quay

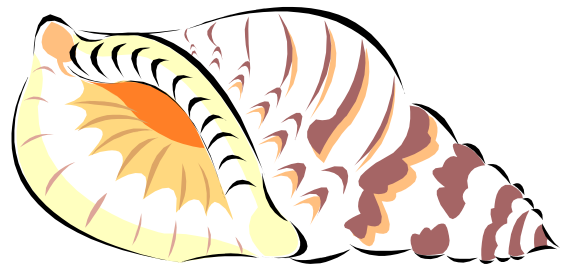
Edinburgh

EH6 6QQ

Telephone: 0131 244 0215

Fax: 0131 244 0259

e-mail: [water.division@scotland.gsi.gov.uk](mailto:water.division@scotland.gsi.gov.uk)



7.

# Montrose Basin Field Trip



Pictures from an enjoyable afternoon spent at Montrose Basin in October with Ranger, Richard Averiss, Scottish Wildlife Trust.

To join the mailing list of the TEF or to put forward your views, articles or pictures, see below for the contact details;

Tay Estuary Forum  
Project Officer Laura Booth  
Ewing Building  
University of Dundee  
Dundee  
DD1 4HN

[TayEstuaryForum@dundee.ac.uk](mailto:TayEstuaryForum@dundee.ac.uk)  
01382 384933

