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TENTSMUIR NATIONAL NATURE RESERVE

NEWSLETTER No. 18

JANUARY 2008

Welcome to the eighteenth Reserve Newsletter and another new year. Here's hoping you all had an enjoyable Christmas and New Year holiday break. Ate too much? sat around watching the telly? Well now is the time to get out there and see what's going on at the Reserve.

No need to tell you but '*What a wet winter we are having !*' I am sure we have all had the problem of dealing excessive rainwater. for example, flooded roads, surface water in the gardens and, maybe worse, some water in the house, through the roof, down the chimney and perhaps down the cellar. Enough about my house then! Consider the scale of the challenges we deal with on the Reserve particularly at Morton Lochs. Read about it in the Morton Lochs section.

In this edition, read about the dynamic coast line, management and changes which have occurred over the last six months and the fantastic developments planned for the sites in the next period.

The monitoring of species programme has once again exceeded expectations with the magnificent volunteers assisting, offering their dedication, knowledge and time. A very rare moth species has been recorded on Tentsmuir Point - find out more inside, plus, find out what else is going on in the Reserve. Read about a special rare plant on the Reserve; some local issues; flora & fauna observations and a bit of history - I first started the History section in 2000 and this has proved very popular. Eight years later I give you Part 12. No conferring please when I set the exam!



Red Squirrel at Morton Lochs – Image by Lorne Gill SNH

Tom Cunningham,
Reserve Manager

TENTSMUIR NATIONAL NATURE RESERVE

TENTSMUIR POINT

The Reserve benefits from winter high water tables with some of the slacks flooding, including the Great Slack where we actively encourage standing water over winter. A high water table encourages some of the slack flora and discourages some of the ranker weedy plants. Some of our slack specialities, such as the grass of Parnassus, northern marsh orchid, the centaury family and creeping willow all like a bit of wet feet! However, there are delicate flora that like wet conditions but too much water coupled with cold conditions can have a detrimental effect. One such plant is the coralroot orchid which has declined over the past ten years - see the article by Prof. David Read later on.

The bird and butterfly life on Tentsmuir Point have enjoyed a good season. In the summer we recorded over 3000 common tern and eight little tern which is excellent. The winter build up of eider duck has exceeded 5000 lately. What a fabulous and uplifting sight that is, large rafts of eider all bobbing around with the males calling their soft haunting coo-oo call.

The green hairstreak and orange tip butterflies had a very good season and peacock butterflies were still observed fluttering around in late November.

And of course you can read all about it in the new Reserve leaflet. The second edition, which now includes Morton Lochs as well as Tentsmuir Point, is now available and I have included one with this newsletter.

MANAGEMENT

A few of the highlights from the year:-

The herbicide management on Tentsmuir Point and Tayport Heath was particularly successful this year with contractor David Mackie and his team continuing the year-on-year advances and of course our own efforts on the target flora species. Just to remind you, the work aims to control invasive tree species, control the ravaging rosebay willow herb and limit the damaging effects of broom and gorse. Broom and gorse I hear you say? Yes, they have their benefits and they are good for many species as a food source, refuge and nesting sites, but they do quickly take over the dune flora and so we contain their encroaching habit!

We continued with hand pulling; mainly pine plants, along the Reserve boundary with the adjacent forest. Alex and I pulled up hundreds of young trees, with assistance at times from volunteer Andrew Ford.

Many of you might have seen the large green tank by the Great Slack footpath. In fact, we have had some complaints and a few queries regarding putting a diesel tank on a nature Reserve" and queries about "maybe its a herbicide store". . I would like to reassure you that no, it is neither of these. It is simply a water tank. We intend to pump water from the borehole alongside up into the tank using solar energy. The tank will feed a drinking trough. After testing the water quality over the past year, which met acceptable standards, we are now able to have a year round water supply on the Reserve. This will enable us to return cattle to graze this part of the Reserve and ensure their thirst is quenched on the Point over the summer months without having to bowser out water on a daily basis.

The Icehouse footpath, many of you will have noticed, is now established and the grass is growing well. We are pleased that it has settled down to form a good natural looking all-abilities path enjoyed by everyone (although it is a bit shorter than at first due to the erosion, more of that shortly!).

The visitor shelter? Yes, it was bit of a challenge and it did not go entirely to plan with the sail roof. However, we have additional ironmongery to install and with a prayer or two we should have it erected for late spring.

Coming up over the next few months on the Reserve: the annual sea fence maintenance, the installation of the new Reserve signage and interpretation, the ongoing herbicide management, as well as all the day-to-day reactive tasks

THE DYNAMIC COASTLINE

Yes, the Icehouse footpath is shorter now than it used to be. The erosion at this point of the Reserve continues, albeit a little slower than before. A further four metres has been eroded from the old observation tower area. The dune edge northward, no longer with high dune protection, is particularly vulnerable to the sea. With the storms and high tides, the flotsam has flowed into the Reserve and it has changed the landscape considerably. The water in the deepening channel in front of the dune edge flows apace and erodes away at the sand edge. On the plus side, the hauled up seals are easier to observe. A dynamic coastline? Without a doubt! We still have some winter high tides and storms to come as well as the spring tides. We will see what they bring. (or take as the case may be !)

In direct contrast to the erosion in this area, the southern foreshore continues to build up and grow seaward and the marram grass continues to colonise and spread towards the sea. This continues all the way southwards towards Kinshaldy, Earlsall Muir and Rere's Wood.

EDUCATIONAL PACK

The second edition of the Education Pack was completed recently and the expanded version has new activities created to meet the new Government 'Curriculum for Excellence', which covers the 3-18 age group. I have to say, although I may be a little biased, that the pack is just excellent. We put in a lot of work into developing the pack along with a few contractors. My thanks go to Latte & Melanie Goldstein of River Design, Irene Watson, Penny Martin, Iain MacGregor and to my colleagues for all their contributions and support. The pack will be sent out to all schools in Fife and the surrounding area and it will also be available again on our website, which is free to download and use. I am sure it will be well used again and we await the first arrivals on the Reserve. The pack now includes activities at Morton Lochs, so schools will be able to take advantage of the facilities there and of course enjoy the wonderful habitats and species.

The Reserve continues to be well used by schools who appear to greatly to enjoy their day out on the Point. High Schools in particular use the Reserve to assist with biology and geography studies. Even some of the schools that have been coming along for some time now find something new to see and gawp at the changing landscape!

Read the reaction of some students and other visitors in the "What do you think of it so far?" section.

TENTSMUIR INTERPRETATION PLAN

With the second interpretation plan completed last year, we are now working, in partnership with Forestry Commission, with interpretation consultants to develop new interpretation for each site around the Reserve and a specialist company is constructing the new information structures. The Reserve is going to look rather splendid by late Spring. (even more splendid than usual!)

The development of a virtual tour of the Reserve is also well underway and will be used on the NNR and SNH websites. Visitors using the internet will be able to access the short footage and see why we know the Reserve is so special. A script writer has been involved and a format to produce the short film has been completed. We now need yours truly to go into a studio and talk my way through it! This will hopefully give visitors a flavour of why this is 'Paradise.' Lorne Gill, our photographer and video expert, excelled himself with the quality of the images and film produced for this web tool. Lorne has made numerous sojourns into the Reserve capturing the features of interest throughout the changing seasons.

WILDLIFE UPDATE

The seals are back and back in good numbers too. Our concerns regarding the decline in the seal colony numbers last winter was a worry, but it does look like they were just following their prey which had moved north. Occasionally they are rather difficult to observe due to their preference for hauling up on the far side of the offshore sandbars. However, it is a joy to just listen to their calls.

After a cold and wet slow start, 2007 was another good year for the butterflies and moths with the exceptional observation of a lunar yellow underwing moth which is very rare in Scotland. Duncan Davidson, a moth expert, was rewarded for his numerous late evening visits to the Reserve by recording what may be only the second observation this century in Scotland. The first was here at the same location in 2002. Thanks to UK Moths & Butterfly Conservation for allowing me to use their image.



Lunar Yellow Underwing – Image courtesy UK Moths & Butterfly Conservation

Butterfly monitoring was very successful last year on both transects and we are preparing for this year. Once again we were a bit concerned about the south transect as the erosion of the dune edge had plucked away parts of the original transect. This year we will accommodate the transect loss by using a line parallel to the lost section.

The comma butterfly was not observed this year on the Point. However, several were observed in a garden at Fetterdale.

We analyse the data for our own records but we also share all our data with other organisations, including the Centre for Ecology & Hydrology and the Butterfly Society. Our monitoring at Tentsmuir makes an important contribution to the national monitoring of the UK's flora & fauna species.

CORALROOT ORCHID

Professor David Read from the University of Sheffield has been travelling up to Tentsmuir Point for some eleven years carrying out research and study but also bringing students along several times a year. I'm sure he just loves coming up here to see the Reserve. David has kindly provided an article about a plant he has studied at a number of locations throughout the UK. - the coralroot orchid. David is also a Sheffield United fan, so we have a bit of a good old banter as we both suffer from the stress of being a loyal fan!

"The coralroot is a fascinating plant. It has a largely Arctic and circum-polar distribution being quite common, for example, in Alaska! In Britain it finds itself towards the southern end of its range, there being a number of sites in which it grows, including Tentsmuir, in Scotland but relatively few in England. Its southern most sites in the UK are on the coasts of Cumberland and Northumberland, there being an isolated colony inland at Ribblesdale.

A feature of the biology of this plant over recent years in Britain is that at most of the sites at which it was known in the past to occur prolifically, there has been a steady decline in its numbers. Thus in some of its former strongholds in England, as at Tentsmuir, it has declined to the extent that instead of thousands of individuals at a given site, they can now be numbered only in tens. The question is – Why the decline? This is not one of those showy orchids which, like Ladies Slipper for example, has suffered directly from human depredation. There is also no evidence that the plant communities in which the species used to thrive have changed greatly. It seems most likely that the decline is attributable to indirect human influences, most notably those that are driving climate warming.

A number of other primarily arctic species are known to be under threat as a result of our increasingly warm winters and dry summers. In support of the notion that orchids are sensitive to climate change comes the observation that while species like coralroot are declining, others, previously of a southerly distribution are expanding their range in Britain. Thus, for example, hitherto small populations of lizard orchid in southern England are expanding in numbers and the plant is extending its range northward. At the same time some orchids, most notably several species of tongue orchid (*Serapias*) which were hitherto found only in Mediterranean regions are turning up in Cornwall and at other south coast locations. How long must we wait, I wonder, for the first record of such plants in Tentsmuir? Sadly, too long for some of us I fear! Suffice it to say that though the decline, or even the loss, of coralroot, may be an inevitable consequence of climate change, there may be other charismatic species waiting to take its place in our affections.”

The coralroot orchid was adopted as the county flower for Fife by members of the public in 2002. There must be a good number of people who enjoy this special plant.”



Coralroot Orchid – Image by Lorne Gill SNH

MORTON LOCHS

MANAGEMENT

With the Lead Burn, (the water supply for Morton Lochs) flowing through the entire north loch the benefits have been enormous, the water clarity is crystal clear and the quality first class. The species we find clearly indicate a very healthy loch system. The phragmites reed control, now in its eighth year, was completed and this has enhanced the loch, increasing the areas of open water.

Alex Easson has been busy managing the extensive gorse on the north plantation, cutting and burning and spraying the plants. Some plants will be kept for the invertebrates to feed on and small birds to take refuge and nest in.

The bracken control contract, now in its third year was completed over summer and the north plantation looks the better for it. However, the bracken is rampant through many areas of the Reserve and adjacent forest and this management will continue for several years to come.

The view from the new bird hide continues to be enjoyed by many visitors and the swans in particular enjoy preening and just standing in the shallow water of the old peninsula alongside. We haven't settled on a new name for the bird hide yet, but the favourite emerging is the Christie bird hide. The Christies were the landowners at the time when the lochs were created for private fishing but shortly afterwards it was evident that the lochs were a haven for bird life.

Alex and the young volunteers in the Fairbridge Project and those "not in education, employment or training" (NEET) have worked away on various projects on the site and in the forest.

Local farmer Robert Lamont and son Robert kindly provided cattle, which grazed throughout the Reserve until October. The grazing is an important part of the management of the grass heathland – a relic dune system, grazing and opening up the ranker grasses and improving the habitat for some of our flora species. Our thanks go to them for providing the cattle.

In an effort to restore the dune heath on the north plantation, we worked alongside contractors preparing the ground for a large trial plot area and completed sowing heather seed of local provenance this autumn. This is the second trial plot we have completed. Over the next few years we will monitor this large area and the other smaller trial plot on the site for heather growth and establishment.

We continue with our hydrological monitoring of Morton Lochs and surrounding area and this summer installed a new monitoring system, which was devised by the Hydrological department of the University of Stirling. This will give us a better understanding of the hydrology of the area.

WILDLIFE UPDATE

It was a good season for many species on this part of the Reserve.

The bird life on the lochs has continued on an upward trend which is very gratifying if a bit perplexing at times. For example, the mute swan pair fought off several attempts by other pairs to move in, settled down and started to raise five cygnets. They then disappeared with no trace at all. Another of nature's mysteries!

The kingfisher had a successful season and the "blue flashes" can be seen (if you are quick) from the bird hides. Be prepared to sit around a while!

You might be fortunate to see the otter as sightings are on the increase - what a graceful animal this is. Have you spotted a sea eagle yet? I haven't been lucky yet but one or two have been observed in and around the Tayport area.

Red squirrel observations continue to increase again thanks mainly to the winter-feeding stations (set up by volunteers Ron and Cath). Lorne Gill's photo sessions have been made all the easier because of this. As part of the management plan to assist the red squirrels in this part of Fife, Elmwood College conservation students are continuing the squirrel monitoring at Morton Lochs and three more transects in the forest. This project is very important if the Tentsmuir area is to be a successful red squirrel site. Observations remain good with the reds outnumbering the grey squirrels.

The orange tip butterfly numbers have again been increased from last season's good totals and they were observed out in the open as well as the dappled sunny wooded glades. Comma butterflies were not observed on the butterfly transect this year although several were seen on the south railway footpath.

IRRESPONSIBLE DOG OWNERS

If you are a dog owner, please keep your dog under close control, preferably on a lead whilst on the Reserve. The problem of dog poo left around by irresponsible dog owners is **still** showing no sign of improving. In fact, the situation is worsening. We've all seen irresponsible dog owners allow their dogs to run amok, run at other visitors and poo all over the footpaths and car park areas. The other trend is for them to leave the filled bag by the footpaths and car park. **You** are responsible for **your** dog, and its offerings. The problem is we do not appear to be reaching these individuals (other than by chance meetings) as they are probably not reading this! If you do own a dog, please lead by your good example.

BAG IT. TAKE IT HOME TO BIN IT!

WHAT'S ON

NNR EVENT – FAMILY DAY OUT DATE FOR YOUR DIARY 17th JULY 2008

The eighth annual NNR event in 2007 “**Be a nature detective**” was another success enjoyed by 120 visitors at Tentsmuir Point last July. Planning for this year's family day event is well underway with a few new activities and a slight change to the format. We will, of course, keep the “gathering”, but intend to reduce the time between the first activity session and the feature entertainment by excluding the sandwiches. We will still enjoy a thirst quenching drink of fruit juice, tea or coffee but I think too much time is wasted on eating while there is too much to do and see. We'll provide some cake but the timings didn't really work for a lunch. We will also work on some shorter activities but more of them for children, so keep your eyes peeled for news later this year for the Family Day Out.

If you have any ideas or suggestions for the Family Day Out then please do let me know – your thoughts are always welcome.

VOLUNTEERS & VISITORS CORNER: What do you think of it so far?

It's great to receive comments on visitors' experiences of the Reserve and so I keep asking people what do they think of it or what do they get out of visiting the Reserve. Here are a few views from Margo Willison's Waid Academy Geography Higher students who enjoyed a site visit recently:

'The trip made learning about sand dune vegetation fun and it showed us how much the landscape can change over time'.

'Very informative; A good day out for both Biology and Geography students'.

'Fun and educational, we could connect textbook information with the real thing'.

'The thing I remember most from our visits to Tentsmuir was learning about all the different plants and how new sand dunes are created'.

'Tentsmuir was a wonderful site, full of interesting flora and fauna. What stood out in particular was the importance of life on sand dunes and its vital role in sand dune succession - something I never knew'.

'Lets you visualise the work that we did in class, and lets us understand it more clearly'.

Tentsmuir was a great experience and one thing that stood out in my mind was learning how fascinating sand dunes can be and when my class recorded what kind of plant life was on each sand dune'

And from my colleague Heather Kinnin, our public relations officer, who just loves getting out onto the Reserve:

Visiting Tentsmuir NNR – a personal view

Until I started working for SNH six years ago I had never heard of Tentsmuir Point or Morton Lochs. Now I take every opportunity to go there. Sometimes I get to visit for work but often I hop on the train with my bike and visit at the weekend. The train service from Edinburgh, where I live, to Leuchars is quite good and then it's a short cycle from the station through the village and out to Kinshaldy.

Many people visiting the area seem to park at Kinshaldy and just stay on the beach there, and what a lot they miss. Cycle or walk north into the forest and you come to the icehouse, where we lock up the bikes, and the path onto the reserve.

It's hard to say what is my favourite part of the Reserve is. I love the beach and the seals singing in the mist from the sand bar, I love the dune slack with its flowers and butterflies but Morton Lochs are also a highlight. It is just so peaceful, and somehow welcoming, to sit in one of the hides and watch. Time slips by so easily you have to keep an eye on your watch so as not to be late for the train. We always leave it to the last minute to set back of course, luckily it's mostly downhill to the station. Then all too soon I'm back in the city, which has its own fabulous attractions, wondering when I'll get back to Tentsmuir.

HISTORY Part 12

I had a great spell researching the history of the area for this edition, and also a bit of luck when I received an old publication from Ailsa Malcolm called A History of Tayport (1927) by Sir James Scott. Here are some of the fascinating dates and things that went on:

83AD - The Roman leader Agricola arrives in Fife, sailing across Bodortra (Forth of Forth) at the same time Celtic tribes called Horesti who were a Druid people inhabited the area on Tents Moor.

446 - The Romans leave the area and Fife and the Picts come to power.

843 to 1054 - Marauding bands of Danes invade Fife especially around Tents Moor and Tayport.

1055 – Earliest mention of a ferry at Ferry-Port-on-Craig, known as the Ferry of the Loaf. Due to MacDuff the Thane of Fife, who was fleeing MacBeth and had no money only a loaf to pay his fare. The site was used up to 1846.

1543 – Henry VIII of England was determined that the Crowns of England & Scotland should unite by marriage and set a boat attacking and destroying monks and monasteries.

1547 – Henry VIII's successor, the Protector of Somerset, attacked Dundee with a fleet of ships and took Broughty Ferry castle. They turned to attack and pillage Ferry-Port-on-Craig (Tayport). The attack took place on Tents Moor, where the "gentlemen of Fife" fall upon the English suddenly, keeping between them and their boats and accounted for 160 of the soldiers and sailors. Lindsay of Pitlessie mentioned "Fra that time forth they desired not to land in Fife".

1547 - The clan Buchanan purchase Scotsraig and enlarge the estate by purchasing Garpit, Shanwell, Easter Fethers and Tents Moor and a number of salmon fishing stations for £10,000.

1644 - The whole estate passed to the Erskines.

1667 - Archbishop Sharp became the owner of the estate and was murdered in 1679 on Magus Moor.

1742 - The estate is purchased by the Rev William Dalgleish and succeeded by Dr Robert Dalgleish, who purchased the estate from Alexander Colville of Lord Colville of Culross.

1845 - The estate passes on to David Dougall, then Admiral W.M.H. Dougall and to Commander W.M Dougall who in 1918 sold the entire estate to the Town of Dundee for £52,000.

There have been fascinating and interesting times around here.

WALKS & TALKS

Want to know more of what we do, or just want to see the wonderful sights on the Reserve? If you have a few friends or a group who fancy a guided walk or talk about the Reserves, please contact me. If you would like to see how effective the management of the Reserve is, or observe a little more of the hidden secrets and gems, then give me a ring and I will arrange a guided walk or talk.

See you on the Reserve sometime.

SAD NEWS

Sadly, Donald Stewart passed away on Christmas Eve. Donald, along with his wife Jean contributed a wealth of expertise and knowledge to many students and visitors to the Reserve. We all enjoyed our walks and talks especially about the bird life at Morton Lochs. Our thoughts are with Jean and their family.

FINALLY

Many thanks to all those who contributed articles for this Newsletter. Also, we send a BIG grateful **thank you** to all the volunteers and honorary wardens who put in a lot of time and effort, which produces great results.

Enjoy your visits to all the sites in the Reserve. Take away only memories and leave behind only footprints.

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PS The ups and downs in the life of a Raith Rovers fan continues, top of the league playing silky football one minute and the next floundering about like a seal out of water!Expectations are still high though and promotion is within our grasp ...well almost.

Know the Code Before You Go, its well worth getting a copy of this useful guide from SNH and now there are activity guides you can use for your children. For more information have a look at: www.outdooraccess-scotland.com/educationresources