

## Eden Estuary Annual Report 2012-2013

The Eden Estuary LNR continues to be a great site for wildlife, people and projects. A major visitor attraction in Fife whilst being a great laboratory for St Andrews University, a local community asset and a vital site for wildlife. Another busy and successful year passes by.

This final year reporting on the management plan of 2008-2013 has seen some very positive gains especially on the coastal management elements. The ongoing issues of the transferring of RAF Leuchars to the Army, the development of the papermill and the current economic climate leading to changes in the service provision on and around the reserve have all had an influence and will continue to do so however the progress made on objectives this year once again demonstrates the strength of the reserve to weather storms both metaphorically and physically.

The West Sands Dune Restoration project completed its 2<sup>nd</sup> phase with a further 1km of fencing placed over the dunes. There is only a 400m stretch of poor state dune left to enclose. This fencing is vital in stabilising and accreting the sand deposits and preventing access that would undermine the newly planted areas. This year saw an agreement from Marine Scotland to allow the Links Trust to harvest a larger quantity of sand for the purpose of recharging the large blow out holes in the dune system. This is a major input in the restoration process and when these new dunes are planted with dune grasses they will be a vital addition to the systems resilience. It is with great thanks and appreciation to Fife Council local members of St Andrews, Links Trust, SNH and FCCT staff and volunteers whom have all been primary drivers in this project with funds, consents, machinery and manpower. A special thanks to Gavin from SNH for the work on the Marine Scotland consents and Gordon Moir and his fantastic staff for the major effort and works involved with turning concept into reality. Thank you.

The new grassland at Outhead continues to be a success and was placed under a management regime that will see it cut in thirds on rotation to allow for breeding birds, wildflowers and public recreation. An early project outline is being discussed to look at the potential to place the area under sheep grazing.

Nature has been at work on the reserve this year with another major storm surge blowing through in December 2012. Only minor damage to the reserve this time however the West sands lost a fair amount of sand and some dune fencing was damaged, thanks to the Links Trust this was put right immediately. The Coble Pools have been full all year with a lot of interest from the local bird life. This area is now a crucial freshwater wetland support for the reserve and plans are underway to augment the wetland and improve its biodiversity capacity.

The Eden Centre continues to attract and the rolling lease agreement continues.

The information coming from the MoD on the future of RAF Leuchars is looking more certain that the base will transfer from RAF to Army. This will have many impacts on the reserve and local members and the ranger will monitor and assist to guide as best as possible.

The re-development of the papermill continues and there have been some positive meetings with St Andrews University Estates. Good news that the part of the site has been taken up by Eden Brewery, a company specialising in real ales. This is a great step forward and hopefully hints at 'green shoots of recovery'. Along similar lines the Guardbridge Inn re-opened. This is good news for both Guardbridge and the reserve, increasing the attraction of the area and providing a welcome refreshment to reserve visitors.

## **Fife Coast and Countryside Trust Restructure**

In response to central funding cuts FCCT undertook a restructure in early 2012, this involved staff reductions and a shift in emphasis. FCCT and Fife Council have been in discussion over the new Service Level Agreement and at present this process is virtually complete. The detail for the EELNR will be outlined in the forthcoming management plan 2013-2018.

There will be less staff time dedicated to the reserve and there will have to be a review of management procedures and how the aims and objectives can be achieved using what staff time is available. This may involve different approaches to achieve the objectives and some projects may need to be re-prioritised and some may be reduced or dropped. The detail will be set out in the new plan. There is a commitment that the integrity of the site is maintained and a confidence the present objectives can be achieved under the new plan.

As part of the restructuring of Fife Council services, Robbie Blyth the Beaches and Coastal Officer has been transferred over to FCCT. This should allow a more fluent and efficient working arrangement for Robbie and the FCCT Coastal Team.

## **Volunteer Input**

The reserve is committed to sustaining a strong voluntary input and the ranger greatly appreciates the dedicated effort and meticulous input of our volunteers to the function of the reserve. The ranger would especially like to thank our volunteers George Adams, Gordon Maxwell, Ian Cumming, Tom Ross and Vron Wootton. A great big thanks to all volunteers whom have laboured many hours in all weathers on the dunes of West Sands.....again Well Done!

## **Sincere Thanks**

The ranger would like to thank all of the LNR network members and landowners whom have greatly assisted another busy year and allowed us to achieve our objectives again. The ranger is very grateful of your time, effort and consideration...*Thank you.*

*Ranald Strachan*



# Ranger Report 2012-2013

## Objective 1: Maintain and Enhance the Integrity of the Reserve to Support Viable Populations of Wildfowl and Waders (SPA, Bird Populations)

### National Bird Surveys: SPA1/01

- Heronry Census 2012 (Reres Wood) was carried out in March, April and May by ground survey: 16 confirmed nests.
- Wetland Bird Surveys (BTO) carried out each month (including sea duck counts)
- Icelandic Goose Counts (WWT): Carried out October, November and December. Results passed to Allan Brown (Fife Swan Group) and entered on BTO website.
- Beached Bird Survey 2013 (RSPB): February. 7 dead birds found.

### Non-Breeding Birds Monitoring: SPA1/02

- Monthly counts of Goosepools area. Included in monthly newsletter and bird report.
- Monthly counts of selected species (SSSI and Grey geese) are included as appendices.
- All bird records forwarded to Fife Nature (FCCT)

## Objective 2: Protect, Maintain and Improve Key Habitats and Related Species within the Reserve (SAC, Habitats)

### Monitor Harbour Seal Population: SAC2/01

- Monthly low tide counts at the main outhaul areas. The main outhaul is now the Balgove site. All records are passed to SMRU, St Andrews for their data.

**Highest Count: 42** (Mar)

**Lowest Count: 3** (Nov and Dec)

**Average: 18**

### Control Spartina: SAC2/02

- This salt grass is prevalent in 2 areas, Shelly Spit and Balgove Bay. The ranger service hand dug pioneer plants in Balgove and the mudflats west of Shelly Spit. The species is mainly contained within Shelly Spit.

### Monitor Saltmarsh: SAC2/03

- Ranger made regular visits to the various saltmarsh areas through the reserve, primarily Edenside to monitor erosion, grazing and sward height.
- Ranger trimmed edge of Edenside saltmarsh to lower sward height which had become difficult for (high water) roosting birds to use. This should be remedied by new grazing support.
- SNH and ranger made site visits to Edenside to discuss future management of Fife's largest saltmarsh remnant. Thankfully subsequent review of the grant situation and the good work of SNH Cupar office have resulted in some financial aid being given to Edenside stables for the grazing management of the marsh.

- Removal of over waste by volunteers from the RAF Conservation Group along the northern saltmarsh plantings took place, this allowed for a better planting area and to remove debris pressure on the new plantings.

#### **Create New Saltmarsh: SAC2/04**

- Phase 3 of the Saltmarsh Regeneration Project was completed in April 2012 with approximately 300m of the north shore (RAF) planted and 200m of shoreline on south shore in Balgove. This is to strengthen the plantings placed in 2011. Clare Maynard co-ordinated plantings and early signs are favourable.
- Saltmarsh is an LBAP priority habitat and as such support for this project should be encouraged at all levels.

#### **Survey Human Impact on Reserve: SAC2/05**

- As part of West Sands management plan for the Swilcan recharge monthly visitor surveys were conducted on West Sands-Outhead through 2012. Results are archived.
- Ranger has been consulting with Kate Wade from St Andrews University on early planning for a large PHD project looking at economic value and value in monetary terms the reserve and other local natural features have to the local community. This could be an interesting project.

#### **Monitor Tipping and Tip Sites: SAC2/07**

- The West Sands Partnership was re-convened after the dissolving of Fife Council groups from the local elections. Thanks to SNH for this action. The partnership has a new chair and hopefully can get back into the role of delivering the West Sands management plan and dealing continuing the progress made on the Outhead tip site.
- Marine waste, especially plastics continues to be a problem throughout the reserve. Volunteers have made significant inroads into removing much of the waste with nearly 20% recycled. 4 clean ups were conducted, 2 on West Sands, 1 on north shore and 1 on River Eden.

#### **Manage Coble Pools: SAC2/08**

- The pools have been full throughout most of this year with very high water levels due to high rain fall. The pools have been used for breeding by Mallard and Snipe.
- Plans are underway to upgrade and repair the Coble access track. This will have an impact on visitors and will require monitoring and likely access management.

#### **Control of Invasive Non Native Species (INNS): SAC2/09**

- INNS survey July 2012 recorded
  - Japanese Knotweed at Nydie Mills on River Eden.
  - Himalayan Balsam on River Eden by Nydie Mills.
  - Giant Hogweed on Motray Water.
- Glyphosate spraying of Giant Hogweed took place on Motray Water in July/August 2012. .
- Removal of INNS from West Sands dune system continues in 2012/2013.

### **Objective 3: Maintain and Improve the Value of the Reserve as a Breeding Area for Birds (Breeding Birds)**

#### **Breeding Bird Monitoring: BB3/01**

- Breeding Bird Surveys on 7 Key Sites within LNR. Breeding Bird Surveys conducted March-June. Breeding notes included in Bird Report.

#### **Protect Ground Nesting Birds: BB3/02**

- Breeding bird signs placed out at Goosepools and Shelley Spit for April-August.
- Additional BB signage placed at Coble Pools with a monitoring watch.
- Outhead Grassland has been put under a management regime of rotational single cut and removal of arisings annually to encourage dune grassland vegetation and promote the take up of ground nesting species such as Skylark and Meadow pipit. The area has seen an increase in bird activity.
- Welcome return of Ringed Plover again at Outhead in 2012, 3 young fledged.

### **Objective 4: Protect, Maintain and Enhance the Structure and Function of the Estuary (Estuarine Function and Coastal Management)**

#### **Survey Effects of Coastal Erosion: ECM4/01**

- A watching brief has been placed on the erosion on north shore by radar tower.
- Long term monitoring by St Andrews University of the Outhead Dune Recharge area continues on behalf of Links Trust, this has been extended and integrated into the West Sands monitoring for actions related to coastal management work, dune restoration and sand harvesting as well as beach heights.
- Monitoring of the West Sands dune system continues. This includes sediment monitoring by St Andrews University and regular site condition surveys by ranger.
- Storm surge of December 2012 had a damaging effect on the West Sands although not as bad as other east coast areas. Around 2m of dune facing was damaged on long lengths of the system. Fencing was damaged and some sand loss took place over the newly recharged blow outs. Work began the following week to repair and much of the lost ground has been recovered.
- Beach and coastline changes at Edenmouth are very notable along north shore.
- Erosion to the substrate of the Kincapple path at Guardbridge is becoming an issue and threatens the future use of the path.

#### **Implement and Support Coastal Management: ECM4/04**

- Fife Shoreline Management Plan has now been ratified and adopted. The FSMP recommend 'Hold the Line' options for the West Sands and EELNR coast and this is in keeping and supportive of the current conclusion for coastal management of this area.
- Sands Group pledged on-going financial support for dune fencing (£5000) as recommended under the West Sands Dune Action Plan, this allowed for a further 1km of dune fencing including internal catch fencing to be placed, this work is now underway. This has provided

sand build up since, despite December's storm surge. This support is vital and greatly appreciated.

- West Sands dune restoration project continues with 10 volunteer days providing 105 volunteers to plant dune stabilising grasses and remove non native invasives. This project continues and will begin planting newly fenced area once complete in 2013.
- Gabion repairs carried out to south shore during 2012 went smoothly.
- Danish government coastal environmental managers (3) received a guided visit of the Dune restoration project and local coastal area and were impressed by the projects outcomes. They also gave some good information on their experience with dune systems.

#### **Sustainable Coastal Development in Practice: ECM4/07**

- The FCCT managed EU Sustainable Coastal Development in Practice project continues although it has been a quiet period for Fife's involvement.

#### **Encourage Research and Surveying Geomorphology: ECM4/03**

- St Andrews University continue to monitor sediment movements at Edenmouth and within the EELNR. Updates and milestones have been passed to the ranger for information and comment. A new project has started on the inner mudflats and River Eden with many sensors placed along the banks of the Eden.

### **Objective 5: To Maintain and Increase our Knowledge and Understanding of the Physical, Biological and Human Features of the Estuary (Research)**

#### **Research Project Records: RS5/03**

Research permits operational in 12/13 reporting year.

- Prof. David Paterson. SERG, St Andrews: *Sediment Ecology Monitoring*.
- Dr Jeff Graves. Scottish Oceans Institute, St Andrews: *Behavioural Studies on Feeding Waders and Diving Ducks*.
- Claire Maynard. Scottish Oceans Institute, St Andrews: *Saltmarsh Regeneration Project*.
- Dr Clare Gollety, St Andrews University: *Saltmarsh Analysis (including invasive techniques)*
- Mel Chocolek. St Andrews University: *Estuarine Structure and Function and the Effects of Climate Change. Monitoring Estuarine Function*.
- Tay Ringing Group (Robertson/Hatton): *Ringing selected species as Identified in Project Outline*.
- Sea Mammal Research Unit, St Andrews: *Harbour Seal catching and telemetry*.
- SEPA: Annual Entomorpha Monitoring July/August 2011.
- Dr Richard Bates. Geosciences, St Andrews: *Bathymetry and studies on sediment movements Edenmouth. Including placement of measuring devices*.
- Julie Hope. SERG St Andrews: *Sediment sampling*.

### **Biological Recording Data (Fauna): RS5/01**

- All records were passed to ranger for collation by George Adams, Gordon Maxwell and casual voluntary observation. Dates and locations forwarded to Fife Nature.

Species noted this year:

**Butterfly:** Peacock/ Green Veined White/ Small White/ Small Tortoiseshell/ Small Copper/ Orange Tip/ Small Heath/ Common Blue/ Ringlet/ Meadow Brown/ Large White/ Dark-Green Fritillary/ Red Admiral/ Comma.

**Caterpillar:** Cinnabar/ Large Yellow Underwing.

**Insect:** Large Red Damselfly/ Common Darter.

**Invertebrates:** Common Frog, Common Toad.

**Mammal:** Roe deer. Fox. Otter. Mink. Stoat. Weasel

**Cetaceans:** Bottlenose dolphin/ Harbour Porpoise/Sei Whale

### **Vegetation Recording Data (Flora): RS5/02**

- Vegetation Survey carried out over Outhead Grassland. This grassland has been placed under a rotational annual cut regime to encourage wildflower and dune grassland elements. This will be done in September each year removing all arisings.

### **Research Liaison: RS5/04**

- Regular liaison with St Andrews University Geosciences department as part of the West Sands Partnership.
- Ranger held regular meetings and discussions with departments of St Andrews University with regards current research being carried out or pending on the reserve. This provided open communication and improves understanding for all concerned. This includes access, legislation, timings and schedules.
- Meeting with Sea Mammal Research Unit to discuss Harbour Seal issues, review tracking data.
- Liaison with SERG staff over Saltmarsh monitoring and regeneration Project works.
- Ranger gave talks to various groups and individual students to assist in estuary based or LNR elements of their projects. These included film making, animal welfare and sustainable development.

## **Objective 6: Provide, Promote and Facilitate Responsible Public Access (Access)**

### **Eden Estuary Centre: AC6/01**

- Discussion with St Andrews University Estates (SAUE) and papermill development staff have given reassurance that the Eden Centre remains part of the redevelopment plan and the lease for the centre's site and the park has been agreed to continue for another year into 2013.

- The centre continues its main function of providing a visitor focus for the reserve and acting as a source of recording information. The centre contains a log book of all bird recordings made from there and a visitor record log, **2105** entries for 2012.
- Donations continue to be accepted at the centre and this year they have been used to provide peanuts and bird seed (bought from the Tay Ringing Group), tea, coffee and some paint. All donations are spent within the reserve itself.

**Information and Interpretation: AC6/05**

- Monthly newsletter circulated by email list and on site.
- Monthly article placed in Bird Watching magazine, a UK wide publication.
- New Eden Estuary Visitors Handbook 2012. Produced by FCCT this holds site visitor information, bird statistics, bird checklist for ticking off sightings and tide times. Priced at £2 and available from Eden Centre and other outlets, this raised £120 for the reserve.
- EELNR inclusion in the British Birdwatchers Yearbook 2012, a national publication given site information for bird watching.
- Ranger featured in large article in Scottish Daily Mail in May highlighting marine waste issues.
- Ranger featured on BBC Radio Scotland Out of Doors programme in an article on the West Sands dune restoration work.
- New Fife Coastal Path orientation panels have been placed at nodal car parks in local area and EELNR features well in these panels.
- Ranger authored a section of the new Fife Coastal Path Official Guide which features the reserve. This is available for purchase locally and from Amazon.

**Maintain Infrastructure: AC6/04**

- Maintenance programme took place on all access points with monthly maintenance visits May-Sep.
- Kincaple Den LNR footpath received some remedial drainage works with Elmwood students

**Works Permits: AC6/09**

- Links Trust: Gabion repairs, Balgove area.
- RAF Leuchars: Gabion repairs, north shore.
- St Andrews University Estates: Vegetation removal along Motray/GB reservoir embankment (required as part of the Reservoirs Act).
- Clare Maynard St Andrews University: Saltmarsh Planting Work.

**Guided Walks/ Visits: AC6/06**

- FCCT staff for familiarisation visit.
- Wildfowling group from England for access and sanctuary zone familiarisation.



- Coastal management site visit by SUSCOD partner organisations, the ranger gave guided site tour demonstrating issues and project outputs.

#### **Eden Estuary 2012 Events: AC6/08**

- Ranger took part in 'Big Bird Day Out' in August at St Andrews Castle (Historic Scotland) highlighting seabirds off St Andrews.

#### **Monitoring Angling and Bait Collection: AC6/03**

- Bait digging is prohibited under the Byelaws 2008. However the reserve allows a small amount of mussel collection for personal use. 4 permits are available per year for this activity, 3 permits were taken up this year.

### **Objective 7: Encourage Educational Use of the Reserve at all levels from Primary Schools to Universities. (Education)**

#### **Educational Visits to Reserve: ED7/01**

All educational visits are ranger led activity based visits.

- Elmwood College HNC Countryside Management students (11) visited reserve April 2012 studying 'Designated Sites and Management Planning'. Ranger provided guided visit and information.
- Greyfriars PS (P7) 40 pupils made 2 visits to look at Dunes and coastal habitats in April 2012.
- Canongate PS worked with St Andrews Botanic staff on Blue Fleabane Project on West Sands throughout the year.
- Elmwood College Countryside Management (7) visited the reserve in September to look at Conservation, Designation and Biodiversity. Ranger provided guided visit and information.
- Elmwood College CM NC visited reserve in December to learn about nature conservation. (12 students)
- St Andrews University Sustainable Development Degree Course: Ranger facilitated the delivery of field studies programme at Outhead in October. This entailed 2 field trips involving the students in practical and theoretical management activities to demonstrate sustainable management principles at play in the coastal management of the reserve and the local area. (44 students).
- Elmwood College HNC CM students visited reserve to hear about site visitor management as part of their graded unit. (7 students)
- Elmwood College NC students studying countryside infrastructure and volunteering assisted ranger in delivering a CSV Action Earth funded project to build a new boardwalk on the Earlsall coastal path, this path assists the LNR by diverting coastal path traffic away from wader breeding sites.

#### **Illustrated Talks and Presentations: ED7/02**

- *'Eden Estuary A Dynamic Reserve'* Presentation given to 30 members of RSPB Dundee branch in September 2012. This presentation gave details of EELNR history and current issues and management.

### **Facilitate Volunteer Input LNR: ED7/03**

- New Volunteer Programme for EELNR developed in 2012. This will be a running programme to focus volunteer effort and includes 'volunteer days'. The volunteer programme ran over 10 day long sessions and covered projects such as dune restoration, removal of pine trees from Goosepools, countryside woodwork, path drainage and nest box building.
- West Sands Dune Restoration Project: Significant volunteer effort and hours has gone into this project, co-ordinated by ranger service staff. Volunteers have carried out 10 days work including survey work, dune grass planting, fencing, litter removal and signage. Volunteer groups include FCCT/Elmwood College/Royal and Ancient GC/Scottish Golf Environment Group/Links Trust/St Andrews University and many private individuals. Thank you All!!
- RAF Conservation Group Beach Clean June 2012: Personnel assisted the ranger in removing marine waste from the north shore. 1 tonne of waste removed with 10% recycled. This group also carried out voluntary effort to assist in the saltmarsh regeneration project with some great results.
- Stratheden Conservation Therapy Unit: Staff and clients carried out habitat work on Guardbridge Community Garden over 2 visits in August and September 2012.
- Elmwood College CM students assisted in the dune restoration works on West Sands on several occasions through 2012.
- Work Placements on EELNR: 2 students did 1 week placements in April 2012 assisting the ranger in reserve duties.

### **Objective 8: Promote and Ensure Efficient Management and Administration.**

#### **Site Protection, Patrols: MA8/03**

- Regular patrols carried out for wildfowling and site monitoring.
- Issues confronted include:
  - Motor bike tracks on beach at Goosepools, a persistent issue.
  - Injured and stranded wildlife
  - Lost dogs.
  - Litter and dog fouling.

#### **Liaise with MoD: MA8/04**

- Regular consultations were held with the SEPO at RAF Leuchars over all matters that influence the LNR including access.
- The Ranger sits on the RAF Environmental Group at RAF Leuchars, this is a group set up to co-ordinate all environmental management of the airbase.
- Ranger continues to work with the RAF Conservation Group on a range of projects. Members of the group have assisted with Beach cleaning, red squirrel monitoring and the bird surveys over the Goosepools.

- Liaison with SEPO, SHSA and OC BSF as regards the RAF (MoD) involvement in the Saltmarsh Restoration Project. Some good gains this year with RAFCG volunteers planting up new areas of marsh along the north shore.
- RAF Leuchars receive a copy of the LNR newsletter each month for circulation on base.
- **RAF Leuchars Future:** Announced in July 2011. This will have significant impacts on the EELNR. No further information has come to light in 2012.
- Katrina Campbell left her post as SEPO RAF Leuchars in late 2012, she was instrumental in the structure and function of the conservation group and will be missed. At present her duties are covered by SHSA Gordon Johnston who is an experienced environmental protection officer and held SEPO post prior to KC.

**Liaise with Local Communities (and Police): MA8/06**

- Ranger held discussions with local police constabulary regarding relevant issues through the Sands Group.
- Ranger responded to many requests from members of the public on the EELNR and West Sands during routine patrols, issues such as bird rescue, litter, dune use and dog waste.
- Guardbridge Inn has now re-opened and is a welcome addition to the local amenity. Ranger has been introduced to new owners who are keen to look for ways to promote the reserve.

**Liaise with Forestry Enterprise/Commission: MA8/07**

- Day to day management issues were assisted greatly from co-operation from all FCS staff. These included coastal path works, pine tree removal at Reres Wood, information sharing and access assistance.
- Ranger took part in Fife Red Squirrel Project 'Red Squirrel Fun Day' at Tentsmuir giving guided walks to 21 folk.
- Ranger carried out site visit with Robin Lofthouse (FCS planner) to discuss signage for coastal path and forest planning matters.
- Access to the barrier system and wider forest is necessary and greatly appreciated by the ranger service. Access has been granted to the EELNR volunteers for bird surveys over the Goosepools and this is greatly appreciated.

**Liaise with St Andrews University Estates: MA8/08**

- St Andrews University bought the former papermill site in 2010. Since that time much survey and exploratory research and works have been carried out. StAUE development staff are working on the sites potential and have updated the ranger as and when required on the development. The primary plan involves a power plant and green energy centre. StAUE envisage a close partnership with the EELNR and centre in the redevelopment. Eden Brewery recently took possession of a part of the site for local ale brewing, this is a great development and will hopefully kick start the redevelopment of Guardbridge.
- StAUE continue to use Ken Tindall to assist in the management of the site and this is very useful to the EELNR as Mr Tindall has great experience with issues that concern the LNR. Ranger and Mr Tindall update each other on issues and developments.

- Liaison between the ranger and StAUE staff over the maintenance of Tip Point Trail and community garden have been very positive. This is a much appreciated development to look after a local public natural facility.

**Liaise with SEPA: MA8/10**

- SEPA continued their excellent annual algae monitoring programme of the estuary in July and August 2012.
- Liaison with SEPA representatives were an ongoing part of the West Sands Partnership and management plan proposals.

**Liaise with SNH: MA8/11**

- SNH were consulted and consent given for use various management operations including Spartina control.
- Consent was requested and obtained for invasive non native plants (INN) removal along the West Sands dune system.
- SNH were consulted on aspects of the West Sands Dune Restoration Project. Joining the ranger on a site visit to look at the restoration project and process in action. SNH staff have been very helpful and informative on this project. Their efforts in discussing with Marine Scotland and securing further sand budgets for the Links Trust to carry out blow out repairs are greatly appreciated.
- SNH staff met ranger at Edenside stables and saltmarsh to look at the current issues of grazing and management. After initial disappointment that the assistance would be lost SNH subsequently informed Mr Gatherum of Edenside stables that the grant system supporting his management would continue. This is very helpful in supporting sound management of the grazing regime on the marsh.
- Thank you to SNH staff at Cupar whom have been very helpful and supportive as well as offering good and sound advice on many matters this year including assisting re-instating the West Sands Partnership SRDP process, grant applications, consents and dune management issues.

**Liaise with Fife Council: MA8/12**

- Ranger attended regular meetings of the St Andrews Sands Group to discuss relevant issues affecting the beaches and coastline of St Andrews. Key issues dealt with have been re-instating the West Sands Partnership, defining the management plan, the Dune Restoration Project, appropriate usage of the beaches, beach management and environmental advice.
- Ranger has responded to enquiries and given advice to elected members for Tay bridgehead and St Andrews wards on issues concerning LNR and wider countryside matters.
- Ranger met regularly with Beaches and Coastal Officer Robbie Blyth to discuss beach access, fencing and dune management on West Sands. Robbie and the beaches remit is now transferred to FCCT from Fife Council as of January 2013.
- Updates on LBAP related issues pertaining to the reserve were held with Fife Council Natural Heritage staff throughout year.

- May elections slowed down many Fife Council functions around the reserve area, some new elected members were introduced.
- West Sands Partnership re-convened in Nov 2012.

**Liaise with Links Trust: MA8/09**

- The Links Trust are a key partner in the Dune Restoration Project and are a member of the EELNRAG, West Sands Partnership and the Saltmarsh Restoration Project, they have been highly supportive and have input much time and resources. This is greatly appreciated as they bring highly effective and efficient approaches to these projects. The ranger is in constant contact with Links Trust discussing updates and future planning for the West Sands and Outhead projects.
- The ranger met up with Gordon Moir and Jack Jarvis to look at dune blow out repairs and build a strategy for the works. This was very informative and gave a great result, Jack and Gordon's effort in securing this project and making it happen is appreciated.
- Gordon Moir joined the ranger on the BBC Scotland Out of Doors broadcast to give the perspective of the golfing community to the project.
- The ranger appreciates the contact with the Links Trust, in particular, Gordon Moir, and a free and open two way communication has dealt with many matters such as dune restoration, volunteering and volunteer provision, coastal management, course management, access, biodiversity and drainage. Thank you once again.

**Fife Biodiversity Partnership (LBAP): MA8/24**

- The ranger sits on the Fife Biodiversity Partnership Coastal Group. This aims to act as a communication pathway for delivery of the Local Biodiversity Action Plans.
- Ranger gave guided informational site visit to West sands dune restoration project for a group of Scottish Biodiversity Officers interested in the projects aims and outcomes.
- EELNR in 2011/2012 has delivered on certain LBAP targets including Strandline Communities, Saltmarsh and Sand Dunes. The EELNR is a significant site for Fife Council LBAP delivery on habitats, species and public engagement.

**Liaise Fife Nature Records Centre: MA8/25**

- All records are in the process of transfer to Fife Nature for recording and digitising records.

**Revise 5 Year Management Plan: MA8/21**

- The EELNR Management Plan is due for presentation in May and ratification in September 2013. (2013-2018).

## Wildfowling Season Report 2012/2013

The Ranger has compiled this report for the Advisory Group of the Eden Estuary LNR in accordance with the requirements of the Management Plan 2008-2013.

### The Permit System

Permits for 2012/2013 Wildfowl Season (1<sup>st</sup> Sep-20<sup>th</sup> Feb) were available on application to the council. Advertisements were placed in the national shooting press and local papers advising wildfowlers of the procedure for obtaining such permits.

The permit shows the LNR boundary, shooting and sanctuary zones. Information for wildfowlers including how to complete the permit and the return policy.

It is stated on the permit that it must be returned within 21 days of expiry date (11<sup>th</sup> March 2012).

An information letter, a copy of the Byelaws, guidance notes and a copy of the wildfowlers newsletter accompanied each permit. The visiting wildfowler was thus informed of access, parking, permit system, general behaviour and legal aspects of shooting.

The permit system is administered by Fife Council Law and Administration and is co-ordinated by Fife Coast and Countryside Trust Ranger Service on behalf of the Eden Estuary LNR Advisory Group.

### 2012/2013 Season Weather Conditions

Month	Rain (mm)	Temperature (Celsius)		Days with Airfrost
		Max	Min	
<b>Sep 2012</b>	46	16.2	8	1
<b>Oct 2012</b>	107.8	11.1	3.8	5
<b>Nov 2012</b>	44.6	9.0	1.5	10
<b>Dec 2012</b>	129.8	6.6	1	11
<b>Jan 2013</b>	79.2	6.2	1.8	8
<b>Feb 2013</b>	26.8	6.8	0.1	12

This data was kindly supplied by Norman Elkins.

The theme of milder winters has continued this season with a notable increase in minimum temperatures to last year, however the real notable increase was in rainfall with Oct, Dec and Jan seeing double the rainfall of the previous year. Curiously days with airfrost increased too, indicating an overall increase in humid, wet weather. Daytime temperatures were stable from December onwards and so no negative influence on bird activity and no weather related restrictions again this season. The figures support the experience that there was no dominant or prolonged cold period during the winter and snow was light and intermittent with few days of ground frost.

## Permit Returns

Permit Issue Area	Issued	Returned	%Returned	No. Used	Visits
Local*	10	9	90%	1	18
Fife	38	34	89%	19	158
Tayside	10	10	100%	7	54
Scotland (Other)	23	21	91%	11	32
England/Wales	27	27	100%	10	66
<b>Total</b>	<b>108</b>	<b>101</b>	<b>94%</b>	<b>48</b>	<b>328</b>
2011/12	124	104	84%	54	414

\* within 5km of reserve.

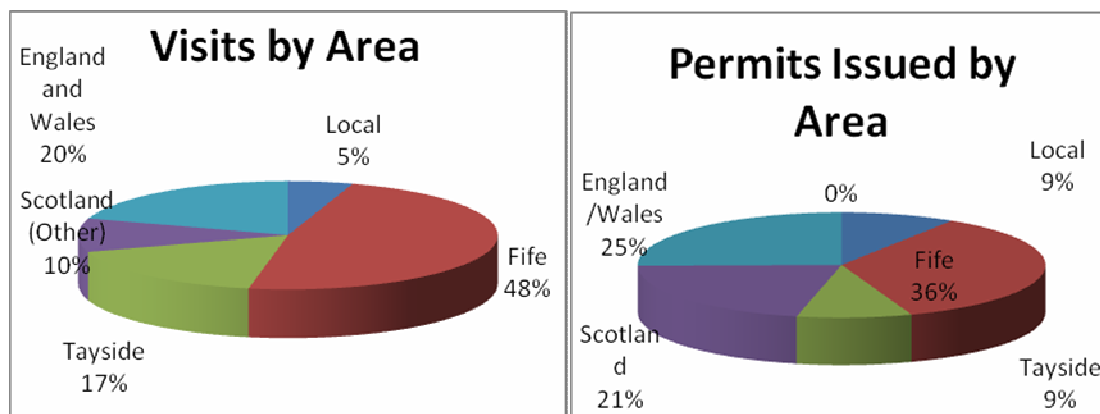
In the 2012/2013 season a total of 108 permits were issued constituting a 9% drop in issued permits from last season, this continues the trend downwards in permit issues. In recent years permit issues are dropping at just under 10% per year.

The number of used permits dropped as did the overall visits made, this fitted the patrols where there were a number of flights were no fowlers were present and the general perception of a 'quieter' season. The weather was very mild and wet and this may have had an effect as no doubt the general economic climate and fuel prices may have done.

The number of permits returned overall has increased to 94%, which is very welcome. Permits returned from Fife and England wildfowlers are at 100%.

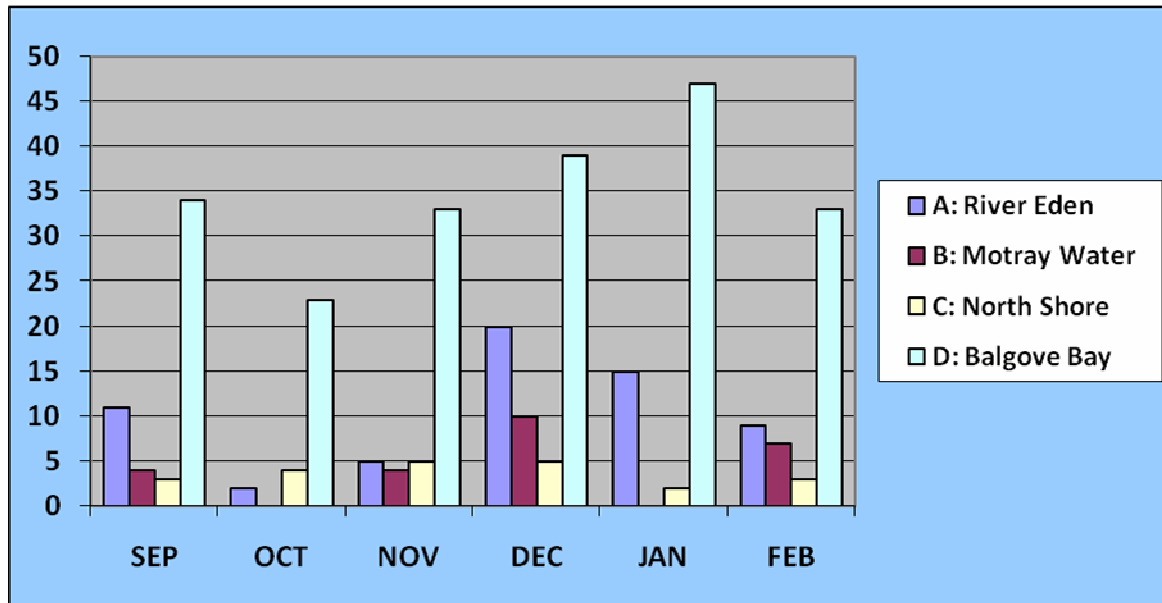
The highest numbers of used permits were from Fife area and the highest number of visits made by Fife wildfowlers. Once again showing that although the EELNR is still well visited by wildfowlers from further locations the reserve is mainly of interest to local wildfowlers.

## Permit Issue Geography



The spread of issues remain broadly similar to recent years with the reserve receiving most interest and visits from Fife wildfowlers, with Fife fowlers forming almost 50% of the total visits. Tayside fowlers put in a good visit to issue ratio. Visits from further afield have dropped although interest is still shown from wider Scotland and England however given the nature of the Eden and that it is quite a small shooting area this isn't surprising.

### Distribution of Wildfowlers Within the Reserve: Shooting Areas ABCD



As expected the Balgove Bay area with Coble Shore access is the most popular area with sustained use through the season, the river the next best option. The north shore dropped off in popularity. This seems to fit with a local fowling interest looking for quick access for shorter flights and the knowledge of more regular flight routes in and out of the roost site.

### Permit Use, Birds Shot and Bag Rates

2012/2013	Days Available	Total visits	Birds Shot	Average Bag
September	25	50	63	1.3
October	27	31	18	0.6
November	26	45	32	0.7
December	26	76	73	0.9
January	27	69	41	0.6
February	17	57	26	0.5
<b>Total</b>	<b>148</b>	<b>328</b>	<b>253</b>	<b>0.8</b>
Last season	148	414	318	0.8



The season's bag rate for 12/13 remains at 0.8 hidden in the statistics are many factors that could influence this. The busiest and most successful month was December, September gave a good bag rate however many of these were woodpigeon and once again Mallard made up a large part of the bag for September.

The mild, wet weather did allow for shooting all season however this milder weather did provide some poor days for fowling and some erratic weather influences.

### Numbers and Species of Birds Shot

Month	Sep	Oct	Nov	Dec	Jan	Feb	Total
<b>Visits</b>	50	31	45	76	69	57	<b>328</b>
<b>Species</b>							
Pink Footed Goose		1	4	21	16	8	<b>50</b>
Greylag Goose			3	2	5	1	<b>11</b>
Canada Goose	3		1	1	1	1	<b>7</b>
Wigeon		2	2	4	7	3	<b>18</b>
Mallard	21	3	7	14	2	5	<b>52</b>
Teal	9	9	7	12	1	1	<b>39</b>
Goldeneye		1	6	4	8	4	<b>23</b>
Pintail				1		1	<b>2</b>
Gadwall							<b>0</b>
Tufted Duck							<b>0</b>
Snipe		1					<b>1</b>
Golden Plover							<b>0</b>
Shoveller				1			<b>1</b>
Woodpigeon	30	1	2	13	1	2	<b>49</b>
<b>Totals</b>	<b>63</b>	<b>18</b>	<b>32</b>	<b>73</b>	<b>41</b>	<b>26</b>	<b>253</b>

This season has seen a drop in permit issues, visits made and hence birds shot. Some notable stats are the increase in woodpigeon, linked with shooting the river and the absence of better quarry. The high number of Mallard shot in September again is noted. The statistical mis-match on Canada geese, counts did not pick up this species, that doesn't mean they were absent. The shooting stats tell us otherwise, provided these are accurate returns.

December was the most productive month in line with the arrival of good geese numbers.

## Monthly Counts of Key Quarry Species: Sep 12-Feb 13

Species	Sep	Oct	Nov	Dec	Jan	Feb
Pink Footed Goose	320	1100	2750	4750	7450	6300
Greylag Goose	4	200	305	72	77	240
Canada Goose	29	0	0	0	30	0
Wigeon	70	124	100	484	222	250
Mallard	38	30	33	101	61	44
Teal	100	50	400	225	127	105
Goldeneye	2	4	12	13	18	29
Pintail	5	7	9	29	28	54
Tufted Duck	5	4	1	4	0	0
Snipe	9	2	14	4	0	0
Golden Plover	15	316	200	0	9	1
Shoveller	2	2	0	1	0	0
Gadwall	0	0	0	0	0	0

## Rangers Wildfowling Season Report

### Patrols

The wildfowling commitment and patrols were covered by the ranger.

Out of 296 flights, 100 (34%) were covered by the ranger service this season.

### Byelaw Related Incidents

EELNR Byelaws (2008) Byelaws 2.8(a) and 2.8(b)

7<sup>th</sup> December 2012: An incident occurred which involved a visiting wildfowler from England shooting at and killing a feral Chinese Swan goose. This bird was a feral goose left after the local hotel closed down and is not a quarry species.

As such the wildfowler contravened the EELNR Byelaws 2008 Byelaws 2.8(a) and 2.8(b)

- *2.8(a) Take, harm or kill any living creature.*
- *2.8(b) Shoot any bird.*

The wildfowler immediately recognised his mistake which was believed to be genuine, he believed he was shooting at a Greylag the birds are similar in size and call. The light had deteriorated and he believed it would be his 'final shot' before returning to England. The ranger was on patrol and the wildfowler presented the goose, an explanation and an apology.

The ranger confiscated the bird and sought to contact the hotel owner.

No further action was taken, the bird was a feral domestic bird and should not have been on the reserve. Arguably the wildfowler did the reserve a favour in removing this bird however it is noted here due to the issues raised with species identification and shooting in poor light conditions.

### **Notable Occurrences**

- Complaints were made by wildfowlers about a specific wildfowler coming in position late and not allowing enough distance for good practice, sport and safety. This is primarily concerned with Coble Shore Area D. This area is popular especially for a quick evenings shoot. The wildfowler was approached and the issue discussed. The wildfowler denied any poor practice although recognised the concern.
- A small rise in birds shot but not retrieved.<sup>10</sup> this year. It is fully understood how this can happen and it is a regrettable outcome for all concerned, often the main factor can be shooting in the dark well after dusk.

### **Thank You**

The above notes on conduct are not representative of the majority of wildfowlers using the reserve and the ranger would like to compliment and thank all wildfowlers for their exemplary conduct and high standards of shooting This is greatly appreciated and all information passed to the ranger is gratefully received.

### **Permit Returns**

The permit paperwork was returned in relatively good order with a few late returns. Many wildfowlers took the time to inform us of lost and late permits and that was appreciated.

### **Administration**

The support given to the ranger service in the management of the permit system from Kathryn Bell and Beth Flynn from Fife Council has been superb once again and is very much appreciated. Thank you.



## Eden Estuary Bird Report 2012

**Red-throated Diver:** Recorded Feb, Mar and Sep-Dec. Peak of 5 on 9<sup>th</sup> Feb.

**Little Grebe:** Present Jan-Mar, Aug and Oct-Dec. Peak count of 7 on 28<sup>th</sup> Nov.

**Great Crested Grebe:** Present Jan-Mar, June, Oct and Nov in singles or pairs.

**Slavonian Grebe:** Present Jan-Mar and Oct-Dec. Peak of 4 on 9<sup>th</sup> Feb.

**Fulmar:** Single birds recorded regularly Apr and May.

- ✓ Nesting locally on St Andrews sea cliffs.

**Gannet** Present March-Sep. First record of 10 on 9<sup>th</sup> Mar and last record of 40 on 20<sup>th</sup> Sep. Peak count of 1350 off Outhead on 15<sup>th</sup> Sep.

**Cormorant** Present throughout the year and across the reserve. Peak count of 60 on 10<sup>th</sup> Sep.

**Shag:** Single bird on 4<sup>th</sup> June.

**Little Egret** Single birds recorded on 25<sup>th</sup> Apr, 5<sup>th</sup> Aug and 14<sup>th</sup>-17<sup>th</sup> Sep.

**Grey Heron** Present throughout year and across reserve. Peak count of 40 6<sup>th</sup> Sep.

- ✓ *Breeding: Heronry census Mar-May. Overall visits noted max of 21 possible nests, peak of 3 young present on 17<sup>th</sup> Apr. Final census visit 14<sup>th</sup> May noted **16 estimated pairs**.*

**Mute swan** Present throughout year across reserve. Peak count 16 at Eden Centre on 13<sup>th</sup> May.

- ✓ *Breeding: Pair on Goosepools on 2<sup>nd</sup> May, no further record. Pair on Motray 18<sup>th</sup> May, no further record and pair on Coble Pools from 23<sup>rd</sup> May until 13<sup>th</sup> June. No cygnets recorded this year.*

**Whooper swan** Present Jan-Apr and June-Dec. Peak count of 44 on 3<sup>rd</sup> Mar.

**Pink footed Goose** Present Jan-Apr and Sep-Dec. Peak count of 7500 at Edenside on 3<sup>rd</sup> Feb. First birds noted were 35 on 5<sup>th</sup> Sep.

**Whitefronted Goose** (*Eurasian race*) 9 present on 11<sup>th</sup> Jan at Edenside.

**Greylag Goose** Present every month except July. Peak count of 320 on 3<sup>rd</sup> Jan.

**Canada Goose** Present Apr-Sep. Peak count of 110 on 29<sup>th</sup> Aug.

**Barnacle Goose** Recorded Feb, Mar, June and Oct. Peak count of 13 on 24<sup>th</sup> Oct.

**Brent Goose** (LB) Present Jan-Apr and Sep-Dec. Peak count of 42 on 15<sup>th</sup> Mar.

**Brent Goose** (Dark Bellied) Single bird recorded 14<sup>th</sup>-21<sup>st</sup> Jan.

**Chinese Water Goose:** Single bird left feral after GB Hotel closure. Present throughout the year.

**Shelduck** Present throughout year. Peak count of 337 on 15<sup>th</sup> Oct.

- ✓ *Breeding: First brood of 16 on 4<sup>th</sup> June from Eden Centre. **Peak Juvenile Count:** 37 on 19<sup>th</sup> June*

**Wigeon** Present all months and found across reserve. Peak count of 484 on 12<sup>th</sup>.

**Gadwall** 2 birds present on 12<sup>th</sup> Apr.

**Teal** Present throughout year. Peak count of 400 on 8<sup>th</sup> Nov.

**Mallard** Present throughout year and across reserve. Peak count of 101 on 12<sup>th</sup> Dec.

- ✓ *Breeding: 1 pair at Goosepools from 17<sup>th</sup> Apr-2 May, no further breeding. 2 pairs at Motray with 3 juveniles by 12<sup>th</sup> June. 4 pairs on River Eden on 19<sup>th</sup> April and 2 pairs at Coble Pools on 3<sup>rd</sup> May down to 1 pair with single large juvenile on 13<sup>th</sup> June.*

**Pintail** Present Jan- May and Sep-Dec. Peak count of 29 on 12<sup>th</sup> Dec.

**Shoveller** Recorded Jan, Mar, April and Aug-Oct. Peak of 3 on 20<sup>th</sup> Apr.

**Pochard:** Single birds on 27<sup>th</sup> July and 18<sup>th</sup> Oct.

**Tufted** Present Feb, April, May and July-Dec. Peak count of 12 on 27<sup>th</sup> July.

- ✓ Single female with 7 juveniles at Coble Pools on 12<sup>th</sup> Aug.

**Scaup** Recorded Mar-May and Sep. Peak of 8 on 25<sup>th</sup> Apr.

**Eider** Present throughout year. Peak count of 210 on 15<sup>th</sup> Feb.

- ✓ *Breeding: First broods of 9 young out on 29th May. Many juveniles noted in Balgove bay in late July.*

**Long-tailed Duck** Present Jan-May and Sep-Dec. Peak count of 21 off Goosepools on 17<sup>th</sup> Apr.

**Common Scoter** Recorded Jan-Apr and Sep-Dec. Mainly outer estuary and St Andrews Bay. Peak count of 96 off Goosepools on 17<sup>th</sup> Apr.

**Velvet Scoter** Recorded Apr and Dec. 7 off Goosepools on 17<sup>th</sup> Apr and single bird on 12<sup>th</sup> Dec.

**Goldeneye** Present Jan-May and Aug-Dec. Peak count of 69 on 4<sup>th</sup> Mar.

**Smew** (Red Head) Single bird recorded 5<sup>th</sup> 6<sup>th</sup> and 25<sup>th</sup> Mar.

**Red-breasted merganser** Present all months except July. Peak count 18 on 6<sup>th</sup> Feb.

**Goosander** Present Jan-Mar and July-Nov. Peak count of 45 on 13<sup>th</sup> Aug.

**White-tailed Eagle** (Sea Eagle) Recorded occasionally throughout Jan-May, Aug-Oct and Dec. Peak count of 3 on 21<sup>st</sup> Apr. Significant increase in records for 2012.

**Marsh Harrier** Single birds on 3<sup>rd</sup> May, 10<sup>th</sup> Aug, 11<sup>th</sup> and 27<sup>th</sup> Sep. 2 birds present on 9<sup>th</sup> June.

**Hen Harrier** Single female at Earlsall Muir on 4<sup>th</sup> Dec.

**Sparrowhawk** Present throughout year and across reserve.

**Buzzard** Present throughout year and across reserve. Peak count of 6 on 21<sup>st</sup> Apr.

- ✓ *Breeding: 1 pair at Reres Wood on 15<sup>th</sup> May, 1 Juvenile here on 23<sup>rd</sup> June.*

**Osprey** Present across reserve from 28<sup>th</sup> Mar-29<sup>th</sup> Sep. Peak count of 6 birds fishing on 10<sup>th</sup> Sep.

**Kestrel** Present throughout year and across reserve. Lower sightings this year.

- ✓ 1 pair on Leuchars Airfield with single juvenile on 25<sup>th</sup> June and 22<sup>nd</sup> Aug.

**Merlin** Recorded occasionally Jan-Mar and 9<sup>th</sup> Nov and 11<sup>th</sup> Dec. All single birds.

**Peregrine** Recorded all months. Records wide spread across the reserve.

**Grey Partridge** Recorded all months except August. Across the reserve. Peak count of 8 at Coble Pools on 5<sup>th</sup> Feb.

- ✓ *Breeding: 4 pairs recorded on airfield, no young noted. 1 pair on River Eden on 19<sup>th</sup> Apr. 2 pairs on Coble Pools on 3<sup>rd</sup> May, down to 1 pair on 23<sup>rd</sup> May. No young recorded.*

**Water Rail** Single bird at Goosepools on 7<sup>th</sup> and 17<sup>th</sup> April.

**Moorhen** Recorded April only.

- ✓ *Breeding: 1 pair at Goosepools on 17<sup>th</sup> Apr.*

**Coot** 2 birds at Edenside on 20<sup>th</sup> Sep.

**Oystercatcher** Present throughout year and across reserve. Peak count of 2600 on 13<sup>th</sup> Dec.

- ✓ *Breeding: 6 pairs fledged 12 young by July on Airfield. 9 juveniles noted in count on Shelly Spit on 11<sup>th</sup> July.*

**Ringed Plover** Present Mar-May and July-Nov. Peak count of 43 on Shelly Spit on 17<sup>th</sup> May.

- ✓ *Breeding: 1 pair at Outhead with 3 large young fledged by 11<sup>th</sup> June.*

**Golden Plover** Present Mar, Apr and July-Dec. Peak count of 316 on 24<sup>th</sup> Oct.

**Grey Plover** Present Jan-May and July-Dec. Peak count of 795 on 9<sup>th</sup> Feb, estuary wide.

**Lapwing** Present throughout year and across reserve. Peak count of 400 on 20<sup>th</sup> Nov.

- ✓ *Breeding: Maximum of 4 pairs at Goosepools by 2<sup>nd</sup> May down to 1 pair on 21<sup>st</sup> May. No young recorded.*

**Knot** Present Jan-Apr and July-Dec. Peak count of 625 on 20<sup>th</sup> Jan, estuary wide.

**Sanderling** Recorded Jan-Apr and Sep-Dec. Peak count of 109 on 20<sup>th</sup> Jan.

**Dunlin** Present all months except June. Peak count of 3386 on 23<sup>rd</sup> Nov.

**Ruff** Present Jan, Aug and Sep. Peak of 5 on 23<sup>rd</sup> Aug.

**Jack Snipe** Single birds at Coble Pools on 5<sup>th</sup> Feb and Edenside on 30<sup>th</sup> Nov.

**Snipe** Recorded Feb-Apr and Aug-Dec. Peak count of 14 at Edenside on 30<sup>th</sup> Nov.

- ✓ *Breeding: 3 pairs at Goosepools on 17<sup>th</sup> down to 1 pair by 2<sup>nd</sup> May.*

**Black-tailed Godwit** Present all months except June. Peak count of 300 on 21<sup>st</sup> Feb.

**Bar-tailed Godwit** Present Jan-Mar and July-Dec. Peak count of 740 on 9<sup>th</sup> Feb.

**Whimbrel** Recorded Apr-Aug. Peak count of 4 on 18<sup>th</sup> Aug.

**Curlew** Present throughout year and across reserve. Peak count of 825 on 19<sup>th</sup> July.

**Spotted Redshank** Recorded Jan-Apr and Aug-Oct. Single bird present Jan-Apr and 2 birds around in Oct.

**Redshank** Present throughout year and across reserve. Peak count of 1345 on 23<sup>rd</sup> Nov.

**Greenshank** Present Feb-Apr and July-Dec. Peak count of 28 on 11<sup>th</sup> Sep.

**Wood Sandpiper** Single bird at Coble Pools on 12<sup>th</sup> Aug.

**Common Sandpiper** Recorded Apr, May, July and Aug. Peak of 6 at Eden Centre on 12<sup>th</sup> July.

**Turnstone** Present Feb, Apr, July, Aug, Oct and Dec. Peak of 4 on 9<sup>th</sup> Feb.

**Arctic Skua** Recorded Aug and Sep. Single bird on 12<sup>th</sup> Aug, 2 on 25<sup>th</sup> Aug and 5 off Outhead on 5<sup>th</sup> Sep.

**Mediterranean Gull** Single bird on 14<sup>th</sup> Jan.

**Little Gull** Recorded July and Aug with 22 present off Outhead on 12<sup>th</sup> July.

**Black Headed Gull** Present all year and across reserve. Peak count of 3000 on 9<sup>th</sup> Nov.

**Common Gull** Present all year mainly inner estuary in low numbers.

**LBB Gull** Recorded Jan and Feb-Nov. Peak count of 22 on 20<sup>th</sup> Mar.

**Herring Gull** Present all year and across reserve in good numbers.

**GBB Gull** Present all year and across reserve. Peak count of 30 on 29<sup>th</sup> Aug.

**Kittiwake** Recorded Apr, Aug and Sep. Peak count of 44 (mainly juveniles) off Edenmouth on 6<sup>th</sup> Aug.

**Sandwich Tern** First record of 4 from Eden Centre on 20<sup>th</sup> Apr. Last record of 3 on 25<sup>th</sup> Sep. Peak count of 248 at Edenmouth on 15<sup>th</sup> Sep.

**Common Tern** Recorded July and Aug. Peak count of 22 off Goosepools on 6<sup>th</sup> Aug.

**Arctic Tern** Recorded July-Sep. Peak count of 21 on 17<sup>th</sup> Aug.

**Guillemot** Recorded Aug-Dec. Peak count of 278 at Edenmouth on 15<sup>th</sup> Sep.

**Razorbill** Recorded Sep only with peak count off Edenmouth on 10<sup>th</sup> Sep.

**Stock Dove** Recorded Feb, Mar, May-Sep. Peak count of 10 on 12<sup>th</sup> July.

**Woodpigeon** Present throughout year. Widespread.

✓ *Breeding: River Eden, Guardbridge and Motray burn.*

**Collared Dove** Recorded Feb-Sep.

✓ *Breeding: 1 pair on Motray Water through to 12<sup>th</sup> June.*

**Barn Owl** 1 dead on St Andrews road on 5<sup>th</sup> Jan.

**Short eared Owl** Recorded Jan, June and Nov. Up to 8 birds present at Outhead grassland between 15<sup>th</sup> Jan and 1<sup>st</sup> Feb. Single bird on Leuchars airfield on 12<sup>th</sup> June and single bird at Coble Pools on 27<sup>th</sup> Nov.

**Swift** First record of 1 on airfield on 12<sup>th</sup> May. Recorded May-Sep. Peak count of 100+ at Leuchars Airfield/Comerton on 10<sup>th</sup> June. Last record of 5 at Eden Centre on 2<sup>nd</sup> Sep.

**Kingfisher** Recorded Jan and July-Nov. Low records for first half of the year.

**Great Spotted Woodpecker** Recorded Jan-Mar and Aug-Dec.

**Skylark** Recorded Feb-Oct and wide spread across reserve.

- ✓ *Breeding: Goosepools/River Eden/Coble Shore/Tip Point/Links Courses/Southern fields. 10 singing at Goosepools on 21<sup>st</sup> down to 4 by 19<sup>th</sup> July. 5 pairs at Coble Pools on 13<sup>th</sup> June. 2 singing at Motray on 12<sup>th</sup> June. 5 pairs on River Eden on 16<sup>th</sup> June. 2 pairs with 3 young at Outhead on 16<sup>th</sup> June.*

**Sand Martin** recorded Apr, Aug and Sep only. First record of 1 on 18<sup>th</sup> Apr, then no records until 5 on Leuchars airfield on 12<sup>th</sup> Aug. Notable drop in records.

**Swallow** First return record of 1 at Edenside on 15<sup>th</sup> Apr. Recorded 15<sup>th</sup> Apr-16<sup>th</sup> Oct. Peak count of 100 at Leuchars airfield on 5<sup>th</sup> Sep.

**House Martin** First record of 2 on 13<sup>th</sup> Apr. Recorded 13<sup>th</sup> April-23<sup>rd</sup> Sep. Peak count of 20 on airfield on 5<sup>th</sup> Sep.

- ✓ *Breeding: 10 active nests with several young present on houses at Motray Water.*

**Meadow Pipit** Recorded Apr-Nov.

- ✓ *Breeding: Goosepools: Max of 14 family parties on 19<sup>th</sup> July. Coble Pools: 2 pairs by 13<sup>th</sup> June. Outhead: 11 pairs on 18<sup>th</sup> Apr. River Eden: 1 pair by 16<sup>th</sup> June.*

**Rock Pipit** 2 birds present on 21<sup>st</sup> Jan at Edenside.

**Water Pipit** Single bird recorded at Outhead on 9<sup>th</sup> Feb.

**Grey wagtail** Recorded Feb-Apr, Sep and Oct. Occasional sighting on River Eden usually up to 2 birds.

**Pied wagtail** Recorded Mar-Sep. Peak count of 50 at airfield on 28<sup>th</sup> Aug.

**Wren** Present throughout year.

- ✓ *Breeding: Motray / River Eden / Tip Point/Goosepools. 4 pairs on Motray on 12<sup>th</sup> June. 2 pairs on River Eden on 19<sup>th</sup> Apr. 2 pairs at Tip Point on 12<sup>th</sup> June. 1 pair at Goosepools on 2<sup>nd</sup> May.*

**Duncock** Present throughout year.

- ✓ *Breeding: Motray / Tip Point: Max of 4 pairs by 12<sup>th</sup> June at Motray. 2 pairs at Tip Point on 18<sup>th</sup> May.*

**Robin** Present throughout year.

- ✓ *Breeding: Tip Point/Motray. 1 pair at Tip Point with nest on 18<sup>th</sup> May. 2 pairs on Motray with 2 young present on 12<sup>th</sup> June.*



**Stonechat** Recorded March, Aug, Sep and Dec. Mostly single birds with 2 at Outhead through Dec.

**Wheatear** Recorded Mar-Oct. Peak count of 10 at airfield on 5<sup>th</sup> Sep.

- ✓ *Breeding: 1 adult with 1 juvenile on airfield on 13<sup>th</sup> Aug and family with 2 juveniles on airfield on 29<sup>th</sup> Aug.*

**Blackbird** Present throughout year.

- ✓ *Breeding: River Eden/Tip Point/Motray. 8 pairs on Motray by 12<sup>th</sup> June. 3 pairs with 4 juveniles at Tip Point by 12<sup>th</sup> June. 4 pairs with 4 juveniles on River Eden by 16<sup>th</sup> June.*

**Song Thrush** Recorded Feb, Apr-July and Sep.

- ✓ *Breeding: Single birds singing at Motray on 18<sup>th</sup> May. Tip Point on 12<sup>th</sup> June and River Eden on 16<sup>th</sup> June.*

**Redwing** Recorded occasionally Feb, April, Oct and Dec in low numbers up to 4.

**Mistle Thrush** Recorded Jan, Aug-Oct and Dec.

**Sedge warbler** Present May-Aug.

- ✓ *Breeding: River Eden: 7 territories by 16<sup>th</sup> June. Motray: 9 territories by 12<sup>th</sup> June. Tip Point: 4 singing on 18<sup>th</sup> May. Goosepools: 5 singing on 21<sup>st</sup> May. Coble Pools: 6 territories by 23<sup>rd</sup> May.*

**Whitethroat** Recorded May and June only.

- ✓ *Breeding: 1 pair at Motray Guardbridge on 12<sup>th</sup> June.*

**Blackcap** Recorded April-June.

- ✓ *Breeding: River Eden: 1 territory on 16<sup>th</sup> June. Tip Point: 2 pairs on 12<sup>th</sup> June. Motray: 3 pairs on 12<sup>th</sup> June.*

**Chiffchaff** Recorded Mar-May, Sep and Oct.

- ✓ *Breeding: 1 bird singing at Goospools on 21<sup>st</sup> May.*

**Willow warbler** Recorded Apr-Aug.

- ✓ *Breeding: Goosepools: 2 singing on 2<sup>nd</sup> May. Tip point: 5 singing on 18<sup>th</sup> May with 1 carrying food on 12<sup>th</sup> June.*

**Goldcrest** Recorded Jan-March. Peak of 8 at Reres Wood on 13<sup>th</sup> Jan.

**Spotted Flycatcher** Single bird recorded at Guardbridge on 7<sup>th</sup> Sep.

**Long tailed Tit** Recorded Jan-Mar and Oct-Dec. Peak count of 8 on 24<sup>th</sup> Jan.

**Coal Tit** Present all year.

- ✓ *Breeding: 1 pair with 3 juveniles at Tip Point on 12<sup>th</sup> June.*

**Blue Tit** Present all months across the reserve.

- ✓ *Breeding: Motray: 7 pairs with 2 juveniles on 12<sup>th</sup> June. River Eden: 3 pairs on 16<sup>th</sup> June. Tip Point 4 pairs with 4 juveniles on 12<sup>th</sup> June. 8 juveniles at Eden Centre on 20<sup>th</sup> June.*

**Great Tit** Present all months.

- ✓ *Breeding: River Eden: 1 pair with 4 juveniles on 16<sup>th</sup> June. Motray: 5 pairs with 1 juvenile on 12<sup>th</sup> June. Goosepools 3 pairs on 17<sup>th</sup> Apr. Tip Point: 1 pair on 12<sup>th</sup> June.*

**Treecreeper** Recorded occasionally in Aug and Nov.

**Great Grey Shrike** Present 25<sup>th</sup>-28<sup>th</sup> Feb at Tip Point and north shore.

**Jay** Recorded in 1's and 2's occasionally Apr, Oct and Nov.

**Magpie** Present throughout year. Peak of 6 birds at Eden Centre on 24<sup>th</sup> June. Increasing record.

- ✓ *Breeding: 1 pair at Eden Centre on 21<sup>st</sup> May and juveniles present through July and Aug.*

**Jackdaw** Recorded Jan, June, July and Dec. Peak of 28 on airfield on 2<sup>nd</sup> June.

**Rook** Recorded all months.

- ✓ *Breeding 10 nests at Reres Wood on 17<sup>th</sup> May.*

**Carrion Crow** Present throughout year and across reserve.

- ✓ *Breeding: 3 nests on River Eden on 14<sup>th</sup> May.*

**Raven** 2 on north shore on 20<sup>th</sup> Feb. Single bird present on 1<sup>st</sup> Nov and 24<sup>th</sup>-26<sup>th</sup> Nov.

**Starling** Present throughout year and across reserve. Peak count 21 on 12<sup>th</sup> Dec.

**House Sparrow** Present all months mainly Guardbridge.

- ✓ *Breeding: 2 pairs with 11 juveniles present at Motray, Guardbridge on 12<sup>th</sup> June.*

**Tree Sparrow** Recorded Feb-June and Oct-Dec. Peak count of 5 at Eden centre on 27<sup>th</sup> Nov.

- ✓ *Breeding: 1 pair on Motray on 12<sup>th</sup> June.*

**Chaffinch** Present throughout year.

- ✓ *Breeding: 7 pairs with 2 juveniles at Motray on 12<sup>th</sup> June. 5 pairs and 1 juvenile at Tip Point on 12<sup>th</sup> June. 7 pairs on River Eden on 19<sup>th</sup> April. 1 singing at Goosepools on 21<sup>st</sup> May. 1 singing at Coble Pools on 23<sup>d</sup> May.*

**Greenfinch** Present throughout year.

- ✓ *Breeding: Tip Point: 2 pairs with 3 juveniles by 12<sup>th</sup> June. River Eden: 1 pair with 2 juveniles by 16<sup>th</sup> June. Motray: 1 pair by 12<sup>th</sup> June.*

**Goldfinch** Present all months except March and Nov. Peak count of 40 on airfield on 3<sup>rd</sup> Dec.

- ✓ *Breeding: Motray: 2 pairs by 18<sup>th</sup> May. Goosepools: 1 pair on 2<sup>nd</sup> May. Tip Point 2 pairs with 2 juveniles on 12<sup>th</sup> June. Airfield: 8 juveniles on 22<sup>nd</sup> Sep.*

**Siskin** Present Feb-Apr, June, Oct and Dec. 1 pair recorded on BBS on Motray on 12<sup>th</sup> June.

**Linnet** Recorded Jan-Oct. Peak count of 200 at Coble Pools on 19<sup>th</sup> July.

- ✓ *Breeding: Goosepools; 3 pairs present 17<sup>th</sup> Apr-21<sup>st</sup> May. River Eden: 3 pairs with 3 juveniles on 16<sup>th</sup> June. Coble Pools: 11 pairs max with 8 pairs and several juveniles on 13<sup>th</sup> June. Airfield: 3 pairs on 6<sup>th</sup> Apr. Outhead: 20 pairs on 11<sup>th</sup> June.*

**Crossbill** Recorded Jan, Mar and Oct at Reres Wood and Airfield. 2 at Reres on 27<sup>th</sup> Jan, 3 at Reres on 5<sup>th</sup> Mar, 4 at Reres on 24<sup>th</sup> Oct and 1 at airfield on 8<sup>th</sup> Oct.

**Bullfinch** Recorded Apr, Aug and Dec. in low numbers.

**Snow Bunting** Recorded Jan and March. 6 at Outhead on 26<sup>th</sup> Jan and 1 at Outhead on 9<sup>th</sup> Mar.

**Yellowhammer** Recorded Feb-June.

- ✓ *Breeding: Motray: 4 pairs on 12<sup>th</sup> June. River Eden: 6 pairs one with nest on 16<sup>th</sup> June.*

**Reed Bunting** Recorded Apr-July and Dec.

- ✓ *Breeding: Motray: 7 pairs with 1 juvenile on 12<sup>th</sup> June. River Eden: Up to 4 pairs on 16<sup>th</sup> June. Goosepools: 5 singing on 21<sup>st</sup> May. Coble Pools: 1 pair on 13<sup>th</sup> June.*

## Monthly Peak Counts of SSSI Selected Species 2012

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Shelduck	228	234	245	145	169	96	122	29	112	337	298	292
Scaup	-	-	2	8	3	-	-	-	1	-	-	-
Common Scoter	19	41	53	96	-	-	-	-	2	1	42	63
Velvet Scoter	-	-	-	7	-	-	-	-	-	-	-	1
Red Breasted Merganser	8	18	5	18	5	13	-	5	3	18	8	11
Oystercatcher	1810	2426	680	240	156	179	373	733	1189	2582	984	2600
Ringed Plover	-	-	5	-	43	-	4	1	37	27	12	-
Grey Plover	414	795	38	67	-	-	9	19	100	633	534	62
Black tailed Godwit	182	300	290	253	3	-	12	2	100	115	72	90
Bar tailed Godwit	495	740	10	-	-	-	7	15	57	167	493	38
Redshank	521	338	309	450	-	1	300	300	350	1172	1345	239
<b>Grey Geese</b>												
Greylag goose	320	220	84	1	2	1	-	3	4	55	305	72
Pinkfooted goose	5500	7500	3100	85	-	-	-	-	320	1100	2750	4720

(- None recorded.)

<b>Objective 1: Maintain and Enhance the Integrity of the Reserve to Support Viable Populations of Wildfowl and Waders. (SPA. Bird Populations)</b>			
<b>Priority</b>	<b>Project</b>		<b>Qualifying Task</b>
1	SPA1/01		National Bird Surveys (Bird Data Collection)
1	SPA1/02		Monitor Non-Breeding birds
2	SPA1/04		Beached Bird Survey
<b>Objective 2: Protect, Maintain and Improve the Key Habitats and Related Species within the Reserve. (SAC. Habitats)</b>			
1	SAC2/01		Monitor Harbour Seal Population
3	SAC2/03		Monitor Saltmarsh
3	SAC2/04		Create New Saltmarsh
1	SAC2/05		Survey Human Impact on Reserve
2	SAC2/07		Monitor Tipping and Tip Sites
1	SAC2/08		Manage Coble Pools Wetland
1	SAC2/09		Control Invasive Non Native Species (INNS)
<b>Objective 3: Maintain and Improve the Value of the Reserve as a Breeding Area for Birds (Breeding Birds)</b>			
1	BB3/01		Monitor Breeding Birds
1	BB3/02		Protect Ground Nesting Species
3	BB3/03		Encourage Breeding Birds on and Adjacent to Reserve
<b>Objective 4: Protect, Maintain and Enhance the Structure and Function of the Estuary (Estuarine Function and Coastal Management)</b>			
1	ECM4/01		Survey Effects of Coastal Erosion
2	ECM4/02		Implement Action to Prevent Erosion
2	ECM4/04		Implement and Support Coastal Management
1	ECM4/07		Sustainable Coastal Development (SUSCOD) Project
<b>Objective 5: To Maintain and Increase our Knowledge and Understanding of the Physical, Biological and Human Features of the Estuary (Research)</b>			
2	RS5/01		Biological Recording Data (LNR Species: Fauna)
2	RS5/02		Collect Vegetation Data (LNR Species: Flora)
1	RS5/03		Research Project Permits and Records
2	RS5/04		Research Liaison
<b>Objective 6: Provide, Promote and Facilitate Responsible Public Access. (Access)</b>			
1	AC6/01		Eden Estuary Centre (Manage and Maintain)
1	AC6/04		Maintain Infrastructure and Access Points
1	AC6/05		Information and Interpretation
2	AC6/06		Guided Visits and Events
1	AC6/09		Operate Works/Access Permit System
1	AC6/10		Operate Wildfowling Permit System
2	AC6/03		Monitor Angling and Bait Collection
<b>Objective 7: Encourage Educational Use of the Reserve at all levels from Primary Schools to Universities (Education)</b>			
2	ED7/01		Educational Visits
2	ED7/02		Illustrated Talks and Presentations
1	ED7/03		Promote/Facilitate Volunteer Input LNR
<b>Objective 8: Promote and Ensure Efficient Management and Administration</b>			
1	MA8/02		General Enquiries
1	MA8/04		Liaise with Ministry of Defence (RAF)
1	MA8/05		Liaise with Riding Stables
1	MA8/06		Liaise with Local Communities
1	MA8/07		Liaise with Forestry Enterprise
1	MA8/08		Liaise with St Andrews University Estates
1	MA8/09		Liaise with Links Trust
1	MA8/10		Liaise with SEPA and Environmental Health
1	MA8/11		Liaise with SNH

1	MA8/12		Liaise with Fife Council
1	MA8/14		Sands Group Meetings
1	MA8/19		Prepare Wildfowling Report
1	MA8/20		Prepare Annual Ranger Service Report
1	MA8/22		Attend EELNR Advisory Group Meetings
1	MA8/25		Liaise Fife Nature Records Centre
2	MA8/24		Fife Biodiversity Partnership Coastal Group(LBAP)
3	MA8/01		Collect References and Reports

\*Priority 1- Carry out in reporting year.

Priority 2- Carry out if time and resources allow.

Priority 3- Occasional projects/ external lead/ guide and advice

## EELNR Advisory Group Members 2013

- Cllr Tim Brett: Fife Council; Chair
- Cllr Frances Melville: Fife Council.
- Cllr Margaret Taylor: Fife Council.
- Mr B.W Barker (Co-Opted Member); Deputising Chair.
- Mr Donald Muir: BASC; Wildfowling Sub Group Chair.
- Prof. John Harwood: Scottish Wildlife Trust.
- Station Environmental Protection Officer: RAF Leuchars MoD.
- Mr Gordon Moir: St Andrews Links Trust.
- Mr Peter Wallace, Kincaple Farm, St Andrews: Local Landowners Rep.
- Mr Roddy Yarr: Environment and Energy Manager; St Andrews University; Local Landowner Representative.
- Mr Ian Wilson: Eden Wildfowlers Association.
- Mr James McEwan: Independent Wildfowling Rep.
- Fife Council Natural Heritage Rep.
- Mr Ranald Strachan: Countryside Ranger, FCCT Tel: 07985 707593; Reserve Manager

### Governing Bodies Representatives

- Mr David Shepherd: Scottish Natural Heritage, Fife Area Office, 46 Crossgate, Cupar KY15 5HS.
- SEPA East Region, Clearwater House, Heriot Watt Park, Avenue North Riccarton, Edinburgh EH14 5AP.