



Annual Report 2013
Zoological Society of Ireland





LETTER FROM THE PRESIDENT

Dear Member,

The Council of the Zoological Society of Ireland presents the 19th Annual Report, together with the consolidated audited statements of Dublin Zoo and Fota Wildlife Park, for the year ended 31 December 2013.

As I enter the final year of my 3 year term as Zoological Society of Ireland President I look back on 3 exceptional years in Dublin Zoo where visitor numbers exceeded 1 million in each of those 3 years. It has become the Number One Family Visitor attraction in the country. A unique achievement. At the same time Fota Wildlife Park recorded a significant number of visitors as can be seen in the accounts.

Along with the many other attractions 2013 saw the introduction of a new species of animal to Dublin Zoo, the okapi, a beautiful and timid animal on the endangered list in the wild. The opening of a covered play area for children, the Play Forest, has proved hugely popular with children and adults alike, providing a bright, sheltered play area.

'The Zoo' the Moondance TV series, continued its marvellous recording of events in Dublin Zoo. The staff and animals have become celebrities, and a huge number of followers on Twitter and Facebook reflect its popularity.

While Dublin Zoo has been open to the public for over 170 years, this year Fota Wildlife Park celebrated its 30th anniversary, marked with summer carnival events. It also

opened the new Animal Care and Conservation Centre, which includes 40 new species of animals in a climate controlled indoor area. Work is well under way in Phase 1 of the Asian Sanctuary development. Archaeological surveys have revealed many interesting ancient sites in this area, some of which will be preserved.

As President of the Society I would like to sincerely thank the members of the Council of the Zoological Society of Ireland who give freely of their time and considerable expertise. Attendance at board meetings has been remarkably high during my time of office and I have benefited from their expertise in a number of disciplines, all of which has contributed to the smooth and successful running of the Zoo. As well as serving on the Council of the Zoological Society of Ireland several members are also Governors on the board of Fota Wildlife Park.

Together with the members of the Zoo Council I acknowledge with thanks the enormous contribution made by Leo Oosterweghel, Director of Dublin Zoo, Sean McKeown, Director of Fota Wildlife Park, and their entire teams, including Volunteers. We look forward to the continued success of both Dublin Zoo and Fota Wildlife Park.

Margaret Sinanan
President

(Opposite) Gorillas at the Gorilla Rainforest



NOTICE OF ANNUAL GENERAL MEETING

Notice is hereby given that an Annual General Meeting of the Zoological Society of Ireland will be held at 6pm on Thursday, 11th September 2014 in Haughton House at Dublin Zoo, Phoenix Park, Dublin 8, for the following purposes:-

Agenda

1. Adoption of minutes of the Annual General Meeting of the Zoological Society of Ireland held on Thursday 19th September 2013
2. Receiving the Annual Report of Council
3. Receiving the Annual Report of the Honorary Treasurer and the Consolidated Audited Financial Statements of the Zoological Society of Ireland
4. Appointment of auditors
5. Declarations of elections to Council
6. Declaration of Council President

Notice of Election

Pursuant of Article 41 of the Articles of Association of the Society, notice is given that the following persons have been duly nominated to fill vacancies on the Council:

Richard Collins
Nigel Bell
Michael Daly

Under the Articles of Association of the Society, the following members are retiring from the Council at the forthcoming AGM:

Derek McCleane
Richard Collins

Tony Kearney
Company Secretary
Zoological Society of Ireland
Registered Office: Phoenix Park, Dublin 8



DUBLIN ZOO: DIRECTOR'S REPORT

For the third consecutive year, Dublin Zoo welcomed more than a million visitors. When looking at the size of Ireland's population of approximately 4,500,000, attracting 1,026,613 visitors in 2013 was no mean feat.

Continuous positive PR throughout the year, strategic and excellent marketing initiatives, and the programme 'The Zoo' on National Television for the fourth year in a row all ensured that Dublin Zoo stayed very much in the front of the minds of the people of Ireland.

The commitment and pride of the entire Dublin Zoo team, including our volunteers, is tangible and reflected in an increasing tidiness and cleanliness at the Zoo.

The animal collection was expanded with the important importation of two female western chimpanzees from Leipzig and Copenhagen Zoo and the importation of a breeding male western chimpanzee has been planned. The forward plan for Dublin Zoo is to slowly phase out through natural attrition the hybrid chimpanzees in the collection and hold a breeding group of pure western chimpanzees that have conservation value.

A male Asian lion was imported from Rotterdam Zoo and successfully introduced to two females of breeding age. Hopefully, breeding this endangered species is only a matter of time.



A male bongo was imported from Berlin Zoo as part of the studbook keepers recommendations.

A male snow leopard from Wuppertal Zoo and a female from Jihlava Zoo in the Czech Republic were imported to form a breeding pair as per a recommendation of the studbook keeper.

Two male common zebra were imported from Belfast Zoo to join the growing herd at the Dublin Zoo African Savanna.

Two male okapi were imported from Rotterdam Zoo. This was a major undertaking for Dublin Zoo, being a first-time holder of the species. Dublin Zoo keepers spent time at Rotterdam Zoo learning as much as possible about okapi husbandry. The animals were successfully transferred to Dublin accompanied by their Rotterdam keeper, Rob van Loon. Unfortunately, the oldest of the two okapi died after a few months. The post mortem indicated a case of vagus indigestis. It was a huge loss, leaving the animal care team very distraught.

(Top) Male Asian lion

Another major loss was the death of a female chimpanzee 'Wendy'. She reached a very respectable age of 51 years.

There were numerous significant births during the year: a male white-naped mangabey, a white-faced saki, no less than three litters of meerkat (ten cubs in total), a male Brazilian tapir and a male Victoria crowned pigeon. A highlight was the birth of a male and a female red panda. Three Humboldt penguins hatched and were hand raised. The biggest news of the year was the confirmation that three of the four female elephants at Dublin Zoo are pregnant. The male Asian elephant Upali, imported from Chester Zoo in 2012, did not waste much time. Elephant births are expected in mid and late 2014. Early in 2013, a male southern white rhinoceros was born and is growing up well.



Male southern white rhinoceros



*(Top) Young meerkats
(Bottom) Red panda cubs*

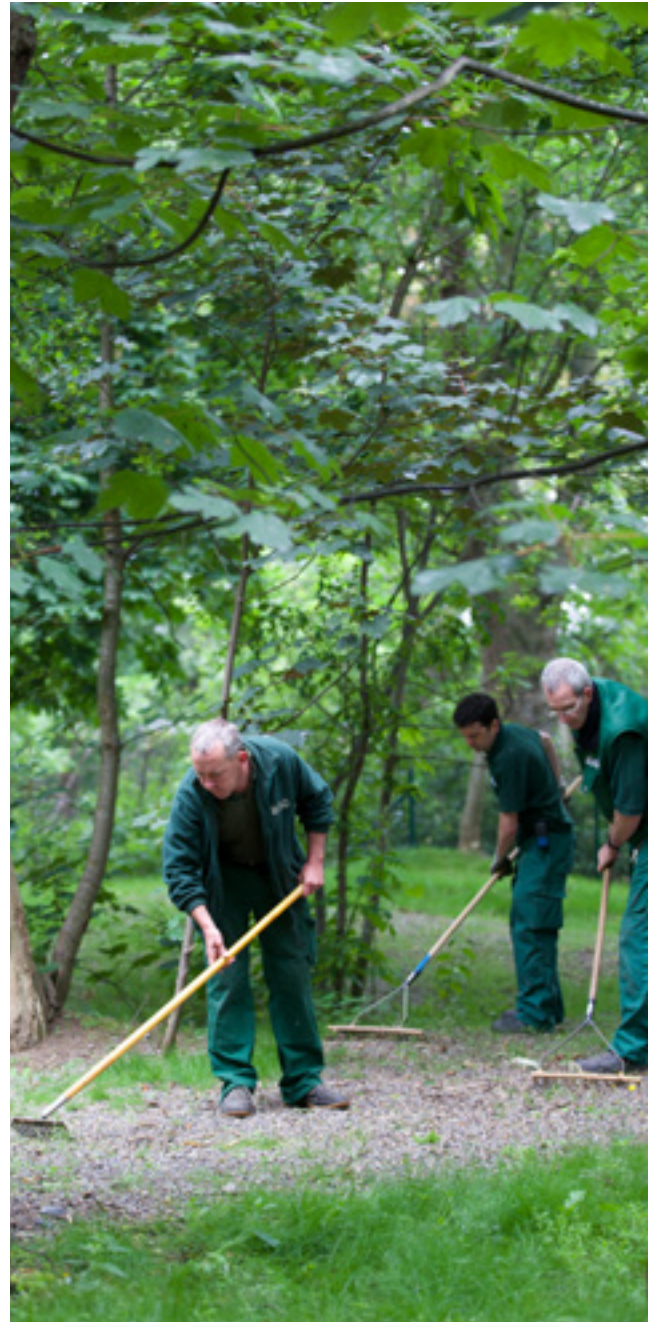
Horticulture

The horticultural team spent much time preparing the new okapi habitat, removing loads of ivy as well as felling and digging out all potentially hazardous elderberries and blackberry. The end result was a safe and beautifully landscaped habitat.

Probably the largest single tree planting event took place in the Play Forest where two large *Tachycarpus* palms, the largest being 4 meters tall, were introduced.

A huge amount of pruning was carried out, addressing areas planted around ten years ago by thinning out and reducing the faster growers.

Preparation for the planned Pacific Coast project (California sea lions and Chilean flamingos) has started with the removal and salvage of plants. The sourcing of geographically correct plants for this major development has also started.



The horticulture team working at the Okapi Forest

Development – Gift Shop

The Dublin Zoo gift shop was redesigned and simplified. Serious attention was given to improving the quality of merchandise. Strong Dublin Zoo branding was implemented with the assistance of consultant Sorintha Brady and the support of the entire retail team, resulting in increased sales and a better work environment. As a result of an improved layout, shrinkage was also reduced.



(Top) Improved layout of the gift shop
(Bottom) Orla Lyons, member of the retail team

Catering

BaxterStorey, the catering company that manages the Dublin Zoo food outlets, initiated a refurbishment of the Meerkat Restaurant. Inspired by the small colony of

meerkats on display, restaurant decor now reflects the natural habitat of the meerkat in colour and with added grasses. The outdoor patio area was also improved greatly with picnic benches and umbrellas.



DEVELOPMENT

The Play Forest

Dublin Zoo has many small playgrounds for children. These playgrounds always tie in with the geographic zones of Dublin Zoo and have the appropriate models of animals that are found in these zones, ensuring that children, no matter how small, always learn something about animals.

A need was identified for at least one playground that is covered so that children can play during inclement weather.

An existing and unused structure of suitable dimensions was identified and an Asian forest-themed playground was designed and installed. A cheerful colour scheme and living palm trees completed this project.





South American House

With the assistance of sponsors Kellogg's, the South American House was painted and the animal habitats refurbished. A large quantity of bamboo was used to create a forest of climbing opportunities for the primates.

Health and Safety

On 8th August, during a supervised visit of visitors to the Brazilian tapirs, a mother and her small child were bitten. The Dublin Zoo first aid team was on the scene immediately to attend to the injured. Despite the severe injuries sustained, both visitors recovered well. An investigation by the Health and Safety Authority took place and has not been concluded at the time of this report. A thorough review of Dublin Zoo practices took place and adjustments were made where deemed necessary.



Southern white rhinoceros with male calf

EDUCATION

In 2013, a total of 40,634 young people took part in our Education Programmes (31,000 in 2012, an increase of 31%). The most significant growth continues in Dublin Zoo's secondary schools programmes, particularly at Junior and Leaving Certificate levels. From this, students can choose from a range of topics, including Practical Fieldwork Ecology, Biodiversity, Environmental Awareness, Animal Adaptations, Genetics, Agricultural Science or Art. A number of resources have been produced to support teachers, including information on the conservation and research work that the Zoo undertakes. These resources are available to download on Dublin Zoo's website.



Camp Congo and Camp Kaziranga

For a number of years, the Dublin Zoo education team has been running very successful 'Summer Camps' for children. The camps were in such demand that they quickly sold out, leaving parents and children disappointed. To increase capacity, two new camps were designed and built. 'Camp Congo' is located near the Gorilla Rainforest and 'Camp Kaziranga' is near the Kaziranga Forest trail and the herd of Asian elephants. Both camps have an expedition tent large enough to accommodate a large group of children. Large expedition boxes serve as seats but also hold interesting bio-facts, such as an elephant tusk, a gorilla skull or ostrich eggs. The camps also function as a place for all kinds of other events, such as children's birthday parties.



Member of the Zoo's Education Team Claire Doyle

Online Booking Facility for Dublin Zoo Camps & Workshops

With increasing demand for places on our ever-popular zoo camps and workshops, the online booking facility gives all visitors an equal chance of booking a place. An allocation of 350 places was offered for Dublin Zoo camps in 2013 and, due to popular demand, all places sold out within 1 hour and 25 minutes!

Other educational and fun activities that continued through 2013 included:

- Workshops for Trainee Childcare Students studying Applied Social Care
- Bird Watching (children & adults)
- Spring & Winter Workshops (children)
- Zoo kids club
- Celebrating the Harvest (adults & children)
- Photography Workshops (adults)
- Heritage Week (children & adults)
- Parent & Toddler Mornings
- **NEW** - Nature in your Garden workshop for children
- Outreach programme to Dublin City libraries
- **NEW** - Developed link with Kanchi Network to work with people with disabilities
- **NEW** - Designed new brochure to highlight education programmes available at Dublin Zoo for toddlers through to senior citizens



MARKETING

2013 proved to be yet another busy year for the marketing, public relations and events departments of Dublin Zoo.



The fourth edition of 'The Zoo' TV series aired on RTÉ 1, featuring ten episodes. The series was extensively

promoted across all RTÉ platforms, including a live broadcast of the John Murray show, three outdoor radio broadcasts from the Zoo, a ten-week sponsorship of a programme on 2FM and numerous advertising spots across all RTÉ radio. There was also extensive press coverage of the show across all other media, resulting in an average viewership of 350,000 and a market share of 25 per cent. The TV series was nominated for an award with the Irish Film and Television Academy under the factual programme category, which was a great accolade to receive.



Kellogg's Coco Pops came on board as partner of the South American House for the next five years. A media event was held to announce

the partnership and to celebrate the birth of a Goeldi's monkey in the house. A week-long promotion ran on the 98FM breakfast show to name the Goeldi's monkey and it also ran on the 98FM Facebook page, where they have more than 80,000 fans. Inca was the chosen name!

Several other strong promotions ran, including a nationwide promotion through An Post, which featured Dublin Zoo on every post box and in every post office in Ireland; a 'child goes free' promotion with Freddy Fyffes; and an 'Adult goes free' promotion, which was featured on every box of Kellogg's cereal.

Another milestone was attained when Dublin Zoo reached 100,000 fans on Facebook. To celebrate, Dublin Zoo offered €5 tickets to all Facebook fans in November. More than 14,000 fans availed of the offer!



(Above) Facebook promotions

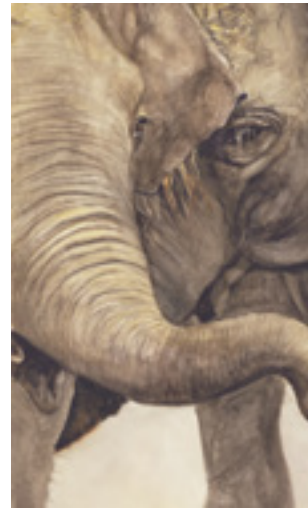
(Top) The Zoo TV Series (Bottom) Bernadette Grant, Kellogg Company Ireland with Leo Oosterweghel at the opening of the refurbished South America house

Elephant Book

A beautiful children's book was produced about the Dublin Zoo elephant herd and how the animals are cared for in a respectful, protected-contact manner. Brilliantly illustrated by Cathy Callan and equally brilliantly written by Catherine de Courcy, the book is based on the intimate knowledge the elephant care team provided.



Dublin Zoo Elephants' was really well received by the public with 600 sales in the month of December and it was voted 'Book of the Month' in the Bord Gáis Energy Book Club.



Events

Dublin Zoo continues to be a very popular venue for events. More than 60 corporate events were hosted in 2013 with companies such as LinkedIn, Grant Thornton, Allianz UK, Dell and State Street Bank. Ten wedding ceremonies were hosted in Dublin Zoo and almost 100 children's birthday parties.

New calendar events during 2013 were the extremely popular 'date morning' event to celebrate Valentine's Day and a Midsummer BBQ, which took place after hours on June 21st. Both events were extremely well attended and received glowing feedback, ensuring that these events and more will feature in 2014.

CONSERVATION

Throughout 2013, Dublin Zoo supported international breeding programmes and conservation projects in the wild, both abroad and in Ireland.

EAZA – breeding programmes and conservation campaigns

Dublin Zoo is a member of BIAZA (British and Irish Association of Zoos and Aquariums), EAZA (European Association of Zoos and Aquariums) and WAZA (World Association of Zoos and Aquariums).

EAZA – breeding programmes

As part of Dublin Zoo's membership of EAZA, Dublin Zoo had 31 species involved in EEPs (European Endangered species Programmes) and a further nine included in ESBs (European studbooks) in 2013. By running these EEPs and ESBs, EAZA can monitor the demographics and genetics of animal populations in almost 300 zoos in approximately 30 countries.

The success of many of these programmes has meant that most animals in zoos were born in zoos and some of these zoo-bred animals have been part of reintroduction programmes into the wild, e.g., golden lion tamarin and scimitar-horned oryx. These zoo populations have also yielded a great deal of valuable information on diet, reproduction and behaviour through zoo-based research.

Dublin Zoo currently coordinates three EEPs:

- Keeper Susan O'Brien coordinates the Goeldi's monkey EEP.
- Registrar/Research and Conservation Coordinator Sandra Molloy coordinates the Moluccan cockatoo

EEP and the citron-crested cockatoo EEP.

In addition, seven members of the Dublin Zoo team serve on the species committee for nine breeding programmes:

- Keeper Aisleen Green sits on the siamang gibbon EEP species committee.
- Keeper Yvonne McCann sits on the Waldrapp ibis EEP species committee.
- Keeper Louise McDermott sits on the Humboldt penguin EEP species committee.
- Keeper Bernie McDonnell sits on the great hornbill EEP species committee.
- Operations manager Gerry Creighton sits on the snow leopard EEP species committee.
- Team leader Helen Clarke sits on the chimpanzee EEP and red river hog EEP species committees.
- Team leader Ciaran McMahon sits on the red-ruffed lemur EEP and Sulawesi-crested macaque EEP species committees.

EAZA Ape Campaign (2011 - 2013)

Dublin Zoo is delighted to have raised more than €33,500 for the EAZA Ape Campaign! This campaign was initiated in 2011 to make a significant and lasting contribution to the conservation of apes (chimpanzees, bonobos, gorillas, orangutans and gibbons) and their habitats. Dublin Zoo decided to run the EAZA Ape Campaign from 2011 until 2013. Throughout this period, a number of fund-raising and awareness-raising activities were instigated. Overall, the Dublin Zoo team were very proud to have contributed such a significant amount of money to this crucial campaign.

Global Conservation Activities

Dublin Zoo helps fund a number of in situ (in the wild) conservation programmes. While breeding populations in zoos is beneficial, it is of paramount importance that wild populations and their habitats be understood and conserved.



Mbeli Bai Study – western lowland gorillas

In 2013, Dublin Zoo continued supporting the Mbeli Bai Study in the Republic of Congo. This project has been collecting valuable long-term data on western lowland gorillas in Mbeli Bai in Nouabalé-Ndoki National Park. To date, there have been observations of more than 440 western gorillas over 18.5 years, collecting data on their social behaviour and group dynamics in the bai (forest clearing). Western lowland gorillas are listed as Critically

Endangered, as their numbers are likely to fall by more than 80 per cent between 1980 and 2046. Their ecology and population dynamics are still not fully understood and this project seeks to address this situation.

The Mbeli Bai Study is also involved in environmental education and local capacity building. The project's presence in the area has also meant that no illegal environmental activities have occurred in almost 20 years.

The Orangutan Project (TOP)

In 2013, Dublin Zoo provided financial support to The Orangutan Project (TOP). TOP is involved in conservation activities on Sumatra and Borneo to protect both endangered orangutan species. TOP provides funding for orangutan research, wildlife protection units and care for orphaned orangutans. These conservation activities also provide an alternative source of income for local people, making them less reliant on activities that compromise the environment.

Golden Lion Tamarin Association

Golden lion tamarins are listed as Endangered in the wild. Since 2000, Dublin Zoo has contributed funds to the Golden Lion Tamarin Association via the Lion Tamarins of Brazil Fund. Over the years, the money has been used for various conservation initiatives such as tracking family groups using radio collars, conducting studies on diet and habitat use, translocating isolated groups into larger reserves and habitat restoration. The Golden Lion Tamarin Association is also involved with environmental education programmes to increase local people's understanding and support for the Atlantic rainforest, where the golden lion tamarins are found.

(Above) Western lowland gorillas at Mbeli Bai in the Republic of Congo



Golden lion tamarin

West African Primate Conservation Action (WAPCA)

The white-naped mangabey is listed as Endangered in the wild. Dublin Zoo has been supporting in situ conservation of this monkey since 2001 via WAPCA. WAPCA was established with the aim of conserving the endangered primate species found in the upper Guinean rainforest of Western Africa and protecting their habitats.

WAPCA regularly conducts research projects in forests to identify areas that need a concentrated conservation effort. For example, WAPCA is currently working to create the first trans-border, community-managed wildlife corridor between Ghana and Côte d'Ivoire. WAPCA also helps rural communities develop sustainable rainforest practices to eliminate damaging activities such as mining, logging and bushmeat trade.

Selamatkan Yaki - Sulawesi crested macaques

In 2013, Dublin Zoo continued support for Selamatkan Yaki. This organisation is located on Sulawesi and is involved with the conservation, research and education on the Critically Endangered Sulawesi crested macaque.

Snow Leopard Trust

The Snow Leopard Trust is the leading authority on the study and protection of snow leopards, which are classified as Endangered by the IUCN (International Union for the Conservation of Nature). Dublin Zoo continued supporting this organisation in 2013 and the funding went towards five on-going, sustainable and community-driven projects and a long-term ecological study in Mongolia as well as implementing snow leopard

enterprises, a livestock vaccination and husbandry programme in Pakistan, and conservation education and livestock insurance programmes in India.

Painted Dog Conservation

African hunting dogs (or painted dogs) have disappeared from much of their range and are classified as Endangered. It is estimated that only 3,000 remain, making them one of Africa's most endangered species.

In 2013, Dublin Zoo provided financial support for in situ conservation of this species via 'Painted Dog Conservation' in Zimbabwe. This organisation aims to protect and increase the range and numbers of painted dogs through hands-on conservation, education, community involvement and international support. The funding that Dublin Zoo provided was earmarked for the rehabilitation unit, which is used to help injured dogs recover, to raise orphaned pups, to create packs and to temporarily house packs in need of translocation.

Red panda research in Nepal

The red panda is listed as Vulnerable with wild populations continuing to decline. In 2013, Dublin Zoo provided funding for a research project on red pandas in western Nepal. Very little is known about red pandas in this region and this research sought to address this by mapping red panda distribution and habitat composition in addition to investigating threats and raising awareness among local people about the red panda.

Elephant Family – Asian Elephants in India

Dublin Zoo continued supporting in situ conservation of Asian elephants through Elephant Family in 2013. Asian elephants are classified as Endangered by the IUCN. With Elephant Family and its Indian partner, the Wildlife Trust of India, Dublin Zoo has been supporting the development of wildlife corridors in Assam, where one-third of India's wild elephants are found.

Since 2009, four wildlife corridors have been focused on – one of the corridors has been secured, there has been improved connectivity in another, and plans are being made for securing the other two.

Lowveld Rhino Trust – African rhinoceros

The southern white rhino is listed as Near Threatened because of the rise in poaching of rhinos to supply the illegal trade in rhino horn. It is estimated that there are approximately 20,000 southern white rhinos in the wild, while the northern white rhinoceros population currently numbers four.

In 2013, Dublin Zoo continued supporting the Lowveld Rhino Trust in Zimbabwe. The Lowveld conservancies are home to approximately 50 per cent of Zimbabwe's white rhinos and 88 per cent of the country's black rhinos. Funding from Dublin Zoo has been used to pay for ongoing rhino monitoring work, translocations of rhinos to more secure areas, treating wounded rhinos, anti-poaching units, facilitating prosecution of apprehended poachers, and community outreach and education programmes.

Bongo Surveillance Project – Mountain bongos

The eastern or mountain bongo is Critically Endangered, with possibly less than 100 left in the wild. For the previous four years, Dublin Zoo has been supporting the Bongo Surveillance Project (BSP). This project is involved with monitoring the remaining wild populations of bongos, gaining a greater understanding of their ecology and working with local communities to ensure their survival.

In 2013, a video camera trap was acquired to augment the 10 standard camera traps. These camera traps monitor bongo groups and record any illegal activity. Also in 2013, a tracking team in one of the national parks was fortunate to have located an unknown group numbering up to 20 bongos; this discovery is a welcome boost to the estimated population size.

Scimitar-horned oryx reintroduction programme in Tunisia

Since 2007, Dublin Zoo has financially contributed to the reintroduction programme of scimitar-horned oryx, which are extinct in the wild. Tunisia, a former range country for this species, is committed to the re-establishment of scimitar-horned oryx. Reintroduction began in 1985 and since then there have been several additions to the Tunisian population with oryx from zoo breeding programmes. The project to date appears to be successful but continuation of monitoring is essential to ensure long-term survival of the reintroduced population.

Okapi Conservation Project

The okapi was reclassified as Endangered in 2013, meaning the threats to okapi populations are more severe than previously believed. These threats include poaching, habitat loss and the presence of illegal armed groups in and around key protected areas for okapi.

In 2013, Dublin Zoo continued support for okapi conservation through the Okapi Conservation Project, which is based in the Democratic Republic of Congo. The objectives of this organisation are to protect the Okapi Wildlife Reserve forests and its wildlife and work with local communities in developing sustainable food production which does not impact negatively on the forests.

Rothschild's Giraffe Project – Giraffe Conservation Foundation

In 2013, Dublin Zoo continued supporting the Rothschild's Giraffe Project. Rothschild's giraffes are classified as Endangered. This project was established to provide the first-ever scientific survey of Rothschild's giraffe behaviour, ecology and social structure. The project works collaboratively with the Kenya Wildlife Service and others to develop a suitable conservation strategy for the Rothschild's giraffe in East Africa.



Okapi

Citron-crested cockatoo research in Indonesia

The citron-crested cockatoo is Critically Endangered and found only on Sumba Island in Indonesia. The main threats are illegal trade and loss of habitat. However, in addition to this, the reproductive output of citron-crested cockatoos is abnormally low. Dublin Zoo, in collaboration with ZGAP (Zoologische Gesellschaft für Arten-und Populationsschutz, a German conservation organisation) and Burung Indonesia (Birdlife Indonesia), is supporting research into the factors influencing this low reproduction rate. It is hoped that if these factors are identified, provisions can be made to increase productivity and thus increase numbers in the wild.

Sphenisco – Humboldt Penguins

Humboldt penguin numbers are declining and they are classified as Vulnerable. Dublin Zoo supports in situ conservation of this species through Sphenisco, which works with Chilean and Peruvian scientists and activists. They are involved with researching, monitoring and protecting breeding islands, campaigning for the creation of marine protection areas, and environmental education.

Thailand Hornbill Project

Great hornbills are listed as Near Threatened but numbers are decreasing across its range due to logging, forest clearance and hunting. Each year, Dublin Zoo sponsors a family of great hornbills in Thailand as part of the Thailand Hornbill Project. This project is run by the Hornbill Research Foundation in Mahidol University in Bangkok. The money donated goes towards supporting local villagers who protect the birds and collect scientific data in the Budo-Sungai Padi National Park. This national park supports six species of hornbills, four of which are Endangered.

Satellite tagging of Waldrapp ibis

The Waldrapp ibis is one of the most endangered birds in the world. Morocco holds 95 per cent of the wild population, which is concentrated around the Souss-Massa National Park in Morocco and surrounding areas. A National Species Plan was drawn up for this species and it identified as a priority the satellite tagging and colour ringing of some birds to discover more about this species' seasonal movements and area use outside of the national park. Dublin Zoo initially provided funding for a satellite tag in 2011 which is still emitting data and, in 2013, provided additional funding for another satellite tag.

Frozen Ark

Throughout 2013, Dublin Zoo continued collecting samples for the Frozen Ark Project. This is an international project aimed at the long-term storage of genetic material from endangered animals. During routine veterinary procedures, blood containing genetic material is collected and stored at 80 degrees Celsius in Dublin Zoo and with our Frozen Ark partner institution, University College Dublin.

Conservation Breeding Specialist Group (CBSG)

In 2013, Dublin Zoo continued sponsoring the Conservation Breeding Specialist Group. The CBSG falls under the IUCN Species Survival Commission. The CBSG began as a link between zoos and the IUCN and its mission is to increase the effectiveness of conservation efforts worldwide by promoting global partnerships and developing interdisciplinary methodologies.

Irish Conservation Activities

All around the world, species are in danger of becoming extinct and Ireland is no exception. To help address this, Dublin Zoo also supports conservation initiatives on this island.

Irish Grey Partridge Conservation Trust (IGPCT) – Grey partridge reintroduction to north Dublin

Grey partridge are of conservation concern in Ireland and have an extremely limited distribution. Their demise has been strongly linked to changing farming practices in recent decades. In 2013, Dublin Zoo provided funding to reintroduce grey partridge to farmland in north Dublin. This project is being coordinated by the IGPCT with the additional aim of demonstrating best practices in agri-environmental measures on working farms without impacting negatively on the profitability of the farmland.



The Irish Grey Partridge (Francolinus pondicerianus).

Irish Grey Partridge Conservation Trust (IGPCT) – creation of suitable habitat for lapwing

The Irish population of lapwing is believed to have decreased by 88 per cent since 1993 and continues to decline. However, at Boora, Co. Offaly, on farmland managed for wildlife, breeding lapwing numbers have increased substantially. In 2013, Dublin Zoo committed support for three years to create additional suitable habitat for breeding lapwing.

BirdWatch Ireland – Barn Owl Conservation

Barn owl populations in Ireland have decreased by 50 per cent in the past 25 years. In 2012, Dublin Zoo began supporting a BirdWatch Ireland project on barn owl conservation. This project will address three key areas - monitoring natural breeding sites, monitoring nest-boxes and raising awareness.

Louth Nature Trust – Little Tern Conservation

Dublin Zoo provides financial support for the little tern colony at Baltray, Co. Louth. This project is run by the Louth Nature Trust and began in 2007. The colony almost became extinct, but work by the Louth Nature Trust has meant that this colony has survived. In 2013, 193 chicks fledged, which was the highest number since the project began.

Golden Eagle Trust – White-tailed Sea Eagle nest monitoring and public awareness project

White-tailed sea eagles became extinct in Ireland in 1901. In 2007, the Golden Eagle Trust coordinated the reintroduction of this species in Ireland with the first breeding attempts in 2012 on an island in Lough Derg, Co. Clare. This breeding attempt attracted huge public

interest. In 2013, Dublin Zoo provided funding to enable full-time monitoring of the nest site and support a public awareness campaign in the vicinity of the nest-site.

Irish Wildlife Trust – National Smooth Newt Survey

Dublin Zoo and Fota Wildlife Park have provided funding for the National Smooth Newt Survey run by the Irish Wildlife Trust since the survey began in 2010. The smooth newt is Ireland's only species of newt and a native amphibian. This species has not been surveyed since the mid-90s and this survey seeks to gather current data on distribution and habitat use. The survey also aims to raise awareness of this species and to build capacity among the public for wildlife surveying.

Irish Peatland Conservation Council – Peatland Conservation at Girley Bog

In 2013, Dublin Zoo provided funding to assist with the purchase of Girley Bog, Co. Meath. This bog contains raised bog habitat, which is the most threatened type in Ireland. The Irish Peatland Conservation Council will ensure that this bog is protected.

Native Species Weekend at Dublin Zoo

In 2013, Dublin Zoo, in partnership with a variety of wildlife experts and organisations, held its seventh Native Species Weekend on the 25th and 26th May. The aim of this weekend is to acknowledge the richness of our native flora and fauna and highlight how everyone can play a role in conserving it. In 2013, 15 organisations helped host the event, providing Dublin Zoo visitors with a great opportunity to learn about local wildlife. Don Conroy was also present, showing children how to draw wildlife.

Native Birds in Dublin Zoo

Currently, there are more than 50 nest-boxes around Dublin Zoo for native birds. These nest-boxes were monitored throughout the breeding season in 2013 and data collected was sent to the British Trust of Ornithology, which records breeding successes of birds across Ireland and Britain.

Rothamsted light-trap network – monitoring moths in Dublin Zoo

Dublin Zoo has been running a Rothamsted light-trap since 2008. To date, 85 species of moths have been recorded in Dublin Zoo using this trap. This trap monitors moths in the area and the information collected is inputted into a larger database of moths for Ireland and the U.K. The Rothamsted light-trap network has been running since 1968 and has produced one of the longest-running data-sets on insect population in the world.



The female Saturnia pavoniella, a southern cousin of the Emperor Moth

Research

Dublin Zoo focuses on research which has a direct benefit to the animals in the Zoo (e.g., improves husbandry), to the species in general (e.g., has a conservation value) or to the operations of Dublin Zoo (e.g., visitor studies). Research is conducted in various guises, from Dublin Zoo team studies and Dublin Zoo volunteer studies to third-level student projects and multi-zoo studies. Dublin Zoo is also engaged in horticultural research through its own horticultural team.

Animal research by the Zoo team

The animal care team is ideally placed to conduct research projects as it understands the needs of animals in its care. In 2013, a wide variety of topics were researched by the Dublin Zoo team:

- Keepers Louise McDermott and Peter Philips continued collecting data for their research into factors affecting flamingo feet.
- Keeper Yvonne McCann examined the breeding behaviour of the Waldrapp ibis colony. Yvonne has been studying the Waldrapp ibis breeding season since 2009.
- Keeper Brendan Walsh continued collecting data on the elephants' sleep patterns using infrared recordings taken at night.
- Dublin Zoo volunteers continued taking observational data on the behaviour of the gorilla group in the gorilla rainforest and house. Behavioural observations of the gorilla group have been ongoing since 2010.
- Team leader Helen Clarke and keeper Alan Dufy are leading a multi-zoo study investigating unexpected

collapsing in giraffes at European zoos.

Horticulture research by the Zoo team

- Dublin Zoo is the collection holder for the genus *Libertia* for Ireland and Britain and, as such, holds the most species. Stephen Butler (Curator of Horticulture) has identified some naming and identification issues with this genus and is working with the Royal Horticultural Society in England in investigating this further.
- Horticulture team members continued their investigations into maintaining mud-free grass areas in some of the animal habitats. Regular use of certain areas cause the ground to become poached, meaning water cannot drain through, and this results in very wet, muddy areas.

Student research

- Effects of inbreeding depression on the life history traits of the eastern bongo in zoos – Rebecca Doyle and Barry McMahon, University College Dublin (Master's). This research was supported by the eastern bongo EEP coordinator and involved detailed examination of data within the studbook.
- An investigation into the breeding behaviour of the scimitar-horned oryx herd at Dublin Zoo using behavioural observations and endocrine analysis – Mandy Siegel, University of Chester, U.K. (BSc)

The aim of this research was to gain a greater understanding of the dynamics within the herd by collecting observational data and using faecal hormone analysis.

Multi-zoo research

Many research projects require data collection from more than one zoo. Where possible, Dublin Zoo is happy to assist especially if endorsed by an EEP or ESB coordinator. In 2013, Dublin Zoo contributed to the following:

- Flamingo social network analysis (PhD) – University of Exeter, U.K.
- Investigation into diets fed to giraffes in zoos (PhD) – University of Bonn, Germany, and endorsed by the giraffe EEP.
- Personality and well-being in squirrel monkeys (PhD) – University of Edinburgh, U.K.
- Contribution of collection planning in zoos to nature conservation (Master's) – research endorsed by five bird TAGs (Taxon Advisory Groups).
- Carcass feeding of carnivores in Irish and British Zoos (Diploma) – Sparsholt College, U.K.
- Research on flamingo feet condition across several zoos (Diploma) – Sparsholt College, U.K.
- Survey on diets fed to great hornbills in zoos to establish best practices – Vogelpark Avifauna, the Netherlands, and endorsed by the great hornbill EEP.
- Survey on the husbandry and breeding success of scimitar-horned oryx – University of York, U.K., and endorsed by the scimitar-horned oryx EEP.
- Questionnaire into best practices in managing Sulawesi-crested macaques in zoo – Paignton Zoo, U.K., and endorsed by the Sulawesi-crested macaque EEP.
- White-faced sakis in mixed species habitats in zoos – Cotswold Wildlife Park, U.K., and endorsed by the white-faced saki EEP.
- Research into the breeding results and housing

of Nicobar pigeons – Natura Artis Magistra, the Netherlands.

- Survey into possible toxic plants to avoid when housing callitrichids – Madrid Zoo, Spain and endorsed by the Callitrichid TAG.

In addition to the above, Dublin Zoo regularly contributes data to the European Group on Zoo Animal Contraception to help create best practices when using contraception.



Scimitar-horned oryx



Male Asian lion

Spreading the word...

It is important that zoo knowledge and research is shared among zoo professionals so that zoos worldwide can work together in advancing the care they provide for animals. It is also important that knowledge on in situ conservation is shared with zoo professionals so that we all can work together for conservation.

Therefore, Dublin Zoo not only sends team members to attend conferences and workshops but it also hosts conferences and workshops. The Dublin Zoo team members are given the opportunity to present their knowledge and learn from other professionals and, where possible, research findings are also published in zoo publications and journals.

January

A primate training - operant conditioning workshop was hosted in Dublin Zoo and training was provided by Cara Buckley and Kate Diver of Monkey World in the U.K.

February

Curator of Horticulture Stephen Butler gave a talk to the Waterford Garden Society on the creation of zoo habitats in Dublin Zoo for animals and visitors.

Curator of Horticulture Stephen Butler gave a talk to the Blessington Garden Society (Wicklow) on the creation of zoo habitats in Dublin Zoo for animals and visitors.

Education Officer Una Smyth attended training on general disability awareness run by the Kanchi Network.

Keeper Susan O'Brien gave a presentation on 'A History of Dublin Zoo' to Clondalkin Active retirement group (Dublin).

Operations Manager Gerry Creighton gave a presentation in Maynooth University titled, 'The elephant in the room; designing and creating habitats for Asian elephants'.

March

Dublin Zoo volunteer Aoife McQuinn analysed data collected by the volunteers on the gorilla behaviour and presented it to the animal care team.

Keeper Brendan Walsh gave two presentations at an animal management college in Sweden:

- Asian elephant protected-contact training
- Western lowland gorilla habitat design at Dublin Zoo

Catherine McGuinness, Natural History Museum, presented a talk to the Dublin Zoo team on the threats to wildlife posed by invasive species in Ireland.

April

Dublin Zoo hosted a meeting of the Conservation and Research Committee during which representatives from Belfast Zoo, Dublin Zoo and Fota Wildlife Park discussed conservation and research interests and potential projects on which to collaborate. During the meeting, there were three presentations to the committee and the Dublin zoo team:

- Keeper Peter Philips gave a presentation on a conservation project he volunteers with titled 'Little Terns Breeding at Baltray, Co. Louth'.
- Sean Meehan, Irish Wildlife Trust, provided an

overview on the progress of the National Smooth Newt Survey, for which Dublin Zoo and Fota Wildlife Park provided support.

- John Lusby, BirdWatch Ireland, gave an update on the barn owl research and monitoring project, which is supported by Belfast Zoo, Dublin Zoo and Fota Wildlife Park.

Education officer Una Smyth attended the Age Action Conference in Dublin which was organised to celebrate Positive Ageing Week.

Education officer Una Smyth attended the SEAI (Sustainable Energy Authority of Ireland) awards ceremony to tackle climate change and promote energy efficiency. The ceremony was held in the Mansion House, Dublin.

Keeper Susan O'Brien gave a presentation on 'A History of Dublin Zoo' to DSPCA (Dublin Society for the Prevention of Cruelty to Animals) King of Paws dog training team and interns.

Operations Manager Gerry Creighton gave a presentation in Trinity College Dublin on snow leopard breeding in Dublin Zoo.

May

Curator of Horticulture Stephen Butler gave a talk to the Cameron Horticultural Society (Raheny, Dublin) on the creation of zoo habitats in Dublin Zoo for animals and visitors.

Keeper Brendan Walsh was a judge at the ECO UNESCO environmental awards at the Mansion House.

Registrar/Research and Conservation Coordinator Sandra Molloy and teacher Orlagh Reddington attended a seminar in Trinity College Dublin on the IUCN Red List of Ecosystems: 'An evolving tool for risk assessment, priority setting and landscape action'.

Zoo veterinarian John Bainbridge attended the European Association of Zoo and Wildlife Veterinarians Conference in Vienna.

July

Curator of Horticulture Stephen Butler gave an evening tour around Dublin Zoo's habitats to the Irish Garden Plant Society.

Director Leo Oosterweghel and Registrar/Research and Conservation Coordinator Sandra Molloy attended the Conservation and Research Committee meeting in Belfast Zoo.

Keeper Susan O'Brien gave a presentation on 'A History of Dublin Zoo' to Peata (pet therapy group for hospitals and care centres).

Leif Cocks from The Orangutan Project came to Dublin Zoo and gave a presentation on the threats to orangutans in the wild and how The Orangutan Project is working to protect orangutans.

Registrar/Research and Conservation Coordinator Sandra Molloy attended the Joint BIAZA Research Symposium and Native Species Working Group Conference at the Wildwood Trust, U.K.

September

Curator of Horticulture Stephen Butler gave a talk to the Wexford Garden Club on the creation of zoo habitats in Dublin Zoo for animals and visitors.

Curator of Horticulture Stephen Butler gave a guided tour of Dublin Zoo to the Irish branch of the International Plant Propagators Society, focusing on horticulture within the zoo.

Director Leo Oosterweghel, Assistant to the Director Paul O'Donoghue, Operations Manager Gerry Creighton, Registrar/Research and Conservation Coordinator Sandra Molloy and keeper Susan O'Brien attended the EAZA (European Association of Zoos and Aquaria) annual conference in Edinburgh.

Registrar/Research and Conservation Coordinator Sandra Molloy presented four presentations at the EAZA Conference in Edinburgh:

- Citron-crested cockatoo EEP overview.
- Moluccan cockatoo EEP overview.
- Investigation into the prevalence of avian-borne virus in the citron-crested cockatoo EEP and the Moluccan cockatoo EEP.
- Zoo Animal Popularity – Factors that influence it.

Operations Manager Gerry Creighton gave a presentation in Trinity College Dublin on elephant and gorilla breeding programmes in Dublin Zoo.

October

Curator of Horticulture Stephen Butler attended the Regional Meeting of Plant Heritage held at Glasgow Botanic Gardens, Scotland, in his capacity as Collections Coordinator for Ireland (South).

Education officer Una Smyth represented Dublin Zoo at the transition-year art exhibition held in Collins Barracks, Dublin.

Education officer Una Smyth attended the Global Gathering for Early Childhood conference in Aviva Stadium, Dublin.

Operations Manager Gerry Creighton attended the Elephant Managers Association meeting in Dallas, Texas, USA, and presented a talk titled, 'Giant Footsteps: Future of Asian elephants'. Gerry also presented this talk in Dallas Zoo for the zoo team.

Registrar/Research and Conservation Coordinator Sandra Molloy conducted a training recap day for the volunteers involved with the gorilla behaviour study.

November

Dublin Zoo hosted a Bird and Small Mammal Welfare Seminar conducted by Barbara Heidenreich and Sabrina Brando of Animal Concepts. The following talks were given by the Dublin Zoo team at this seminar:

- Team leader Eddie O'Brien presented a talk titled, 'From Russia with Love: successful parent-rearing of great hornbills in Dublin Zoo'.

- Team leader Eddie O'Brien also presented a talk on the hand-rearing of two Abyssinian ground hornbill chicks.

Dublin Zoo hosted the BIAZA Elephant Focus Group meeting. At this meeting, two talks were given by the Dublin Zoo team:

- Keeper Brendan Walsh presented a talk titled 'Asian Elephant Sleep Study'.
- Operations Manager Gerry Creighton gave a talk providing an update on the Asian elephant training programme in Dublin Zoo.

Curator of Horticulture Stephen Butler gave a talk to the Limerick Garden Club on the creation of zoo habitats in Dublin Zoo for animals and visitors.

Curator of Horticulture Stephen Butler gave a tour around Dublin Zoo to four managers from Nanjin Zoo in China, focusing on landscaping.

Dublin Zoo's education and events departments welcomed key tourism stakeholders to Dublin Zoo to highlight the accessibility features we have in place at Dublin Zoo. This was run in conjunction with the Kanchi Network.

Keeper Brendan Walsh gave a talk titled 'The life of a Zookeeper' at The Kings Hospital School, Dublin for their career's day.

Keeper Louise McDermott gave two presentations at the BIAZA Flamingo Focus Group meeting in Chessington – one on flamingo foot issues and another on flock management during procedures involving restraint.

Registrar/Research and Conservation Coordinator Sandra Molloy attended the Conservation and Research Committee meeting in Fota Wildlife Park.

Senior Marketing Executive Suzanne O'Donovan attended the BIAZA ACE (Awards, Communication and Education) conference in London Zoo.

December

Keeper Susan O'Brien attended the EAZA Basic Breeding Programme Management course in Amsterdam.

Publications:

Butler, S. (2013) **Zoo habitats for animals and visitors: An introduction to Dublin Zoo**. International Zoo News Vol. 60/6 (No. 403), pp 403 – 417.

Molloy, S (2013) **Citron-crested cockatoo (*Cacatua sulphurea citrinocristata*) - EEP Annual Report 2012**. Available on www.eaza.net.

Molloy, S (2013) **Moluccan cockatoo (*Cacatua moluccensis*) - EEP Annual Report 2012**. Available on www.eaza.net.

CENSUS OF ANIMALS IN DUBLIN ZOO DURING 2013

Summary of Census of Animals in Dublin Zoo on 1st January 2014

Taxon	Total Species	Total Specimens
Mammals	43	211
Birds	22	210
Reptiles	19	64
Amphibians	1	1
Total vertebrates	86	486
Invertebrates	9	114*

*Approximate numbers

Summary of Births and Hatchings of Animals in Dublin Zoo during 2013

Taxon	Total Species	Total Specimens
Mammals	16	46
Birds	6	66
Reptiles	1	8
Amphibians	0	0
Total vertebrates	23	120
Invertebrates	8	X

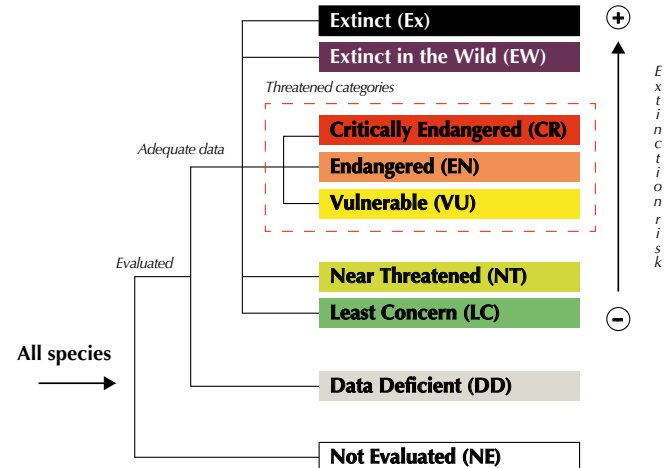
X: Exact numbers not recorded

Summary of European Endangered species Programmes & European Studbooks which Dublin Zoo participated in throughout 2013

Number of European Endangered species Programmes (EEP)	31
Number of European studbooks (ESB)	9

Summary of Animal Species on the IUCN Red List of Threatened Species in Dublin Zoo during 2013

IUCN status	Number of species/ subspecies
Extinct in the wild – EW	1
Critically endangered – CR	7
Endangered – EN	14
Vulnerable – VU	9
Near threatened – NT	9
Least Concern - LC	35
Not Evaluated - NE	16



Source: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.2

Available at: <http://www.iucnredlist.org>.

Downloaded on 01/07/2014.

Key to Census Tables Overleaf



Part of a European Endangered Species Breeding Programme (EEP)

ESB

Recorded in a European studbook

- Column 1:** The number of animals in the collection at 1st January 2013.
- Column 2:** The number of animals received in 2013 through presentation, exchange, deposit or purchase.
- Column 3:** The number of animals born or hatched during 2013.
- Column 4:** The number of animals dying within 30 days of birth or hatching, in 2013.
- Column 5:** The number of animals dying having survived more than 30 days, in 2013.
- Column 6:** The number of animals leaving the collection through presentation, exchange, deposit, sale, theft etc. during 2013.
- Column 7:** The number of animals in the collection at 1st January 2013.

The first figure indicates the male numbers; the second female numbers and the third unsexed numbers e.g. 1.2.4 reads 1 male, 2 females and 4 unsexed specimens.

Male	Female	Unknown
♂	♀	?

This census does not include animals which have been sent on deposit to other collections, nor does it include several species, which generally breed well in the gardens, i.e. Coot, Moorhen, Grey Heron etc.

	IUCN Status	SPECIES		Total at 01.01.13	Arrivals	Births	Dead within 30 Days	Dead	Departed	Total at 01.01.14
		VERTEBRATES	VERTEBRATA							
		CLASS: MAMMALS	MAMMALIA							
		BATS	CHIROPTERA							
	CR	Rodrigues flying fox	<i>Pteropus rodricensis</i>	2.14.0				0.1.0		2.13.0
		PRIMATES	PRIMATES							
ESB	NT	Ring-tailed lemur	<i>Lemur catta</i>	5.4.0				0.1.0		5.3.0
	EN	Red ruffed lemur	<i>Varecia rubra</i>	1.3.0	0.1.0	1.1.0			0.3.0	2.2.0
	VU	Goeldi's monkey	<i>Callimico goeldii</i>	1.1.0		1.0.1	1.0.1			1.1.0
	LC	Eastern pygmy marmosets	<i>Callithrix pygmaea niveiventris</i>	1.3.0	2.0.0			1.0.0	0.1.0	2.2.0
	EN	Golden lion tamarin	<i>Leontopithecus rosalia</i>	1.0.0						1.0.0
		Spider monkey	<i>Ateles sp.</i>	1.2.0						1.2.0
	LC	Bolivian squirrel monkey	<i>Saimiri boliviensis boliviensis</i>	7.0.0						7.0.0
	LC	White-faced saki	<i>Pithecia pithecia</i>	1.1.0		1.0.0				2.1.0
	EN	White-naped mangabey	<i>Cercocebus atys lunulatus</i>	2.6.0		1.2.0		0.1.0	0.2.0	3.5.0
	CR	Sulawesi crested macaque	<i>Macaca nigra</i>	5.8.0	1.0.0	0.0.1				6.8.1
	EN	Siamang	<i>Symphalangus syndactylus</i>	1.1.0		1.0.0	1.0.0	0.1.0		1.0.0
	CR	Western lowland gorilla	<i>Gorilla gorilla gorilla</i>	2.4.0						2.4.0
ESB	EN	Chimpanzee	<i>Pan troglodytes</i>	2.2.0						2.2.0
	EN	Western chimpanzee	<i>Pan troglodytes verus</i>	0.3.0				0.1.0		0.2.0
	EN	Bornean orangutan	<i>Pongo pygmaeus pygmaeus</i>	1.3.0						1.3.0
		XENARTHANS	XENARTHRA							
ESB	LC	Linne's two-toed sloth	<i>Choloepus didactylus</i>	1.1.0						1.1.0
		RODENTS	RODENTIA							
	NT	Patagonian mara	<i>Dolichotis patagonum</i>	3.1.0				2.1.0		1.0.0
		INSECTIVORES	INSECTIVORA							
	LC	African pygmy hedgehog	<i>Atelerix albiventris</i>	1.0.0						1.0.0
		CARNIVORES	CARNIVORA							
	LC	Grey wolf	<i>Canis lupus</i>	4.4.0				1.0.0		3.4.0
	EN	Painted dogs	<i>Lycaon pictus</i>	2.0.0	0.2.0					2.2.0
	VU	Red panda	<i>Ailurus fulgens fulgens</i>	1.3.0		1.1.0			0.2.0	2.2.0
	VU	Oriental small-clawed otter	<i>Aonyx cinerea</i>	0.1.0	1.0.0			0.1.0		1.0.0
	LC	Slender-tailed meerkat	<i>Suricata suricatta</i>	3.5.0		3.1.6	0.0.3	0.3.0		6.3.3
	EN	Asiatic lion	<i>Panthera leo persica</i>	0.2.0	1.0.0					1.2.0
	EN	Amur tiger	<i>Panthera tigris altaica</i>	1.2.0						1.2.0
	CR	Sumatran tiger	<i>Panthera tigris sumatrae</i>	1.1.0						1.1.0
	EN	Snow leopard	<i>Uncia uncia</i>	1.1.0	1.1.0				1.0.0	1.2.0
ESB	LC	California sealion	<i>Zalophus californianus</i>	2.3.0						2.3.0
		ELEPHANTS	PROBOSCIDAE							
	EN	Asiatic elephant	<i>Elephas maximus</i>	1.4.0						1.4.0

	IUCN Status	SPECIES		Total at 01.01.13	Arrivals	Births	Dead within 30 Days	Dead	Departed	Total at 01.01.14
		ODD-TOED UNGULATES	PERISSODACTYLA							
	LC	Common/Grant's zebra	<i>Equus burchelli boehmi</i>	1.1.0	2.3.0					3.4.0
	VU	South American tapir	<i>Tapirus terrestris</i>	2.1.0		1.0.0				3.1.0
	NT	Southern white rhinoceros	<i>Ceratotherium simum simum</i>	3.4.0		1.0.0			1.0.0	3.4.0
		EVEN-TOED UNGULATES	ARTIODACTYLA							
	LC	Red river hog	<i>Potamochoerus porcus pictus</i>	3.6.0						3.6.0
ESB	VU	Hippopotamus	<i>Hippopotamus amphibius</i>	1.2.0						1.2.0
	LC	Giraffe	<i>Giraffa camelopardalis</i>	2.2.0						2.2.0
	EN	Baringo/Rothschild giraffe	<i>Giraffa camelopardalis rothschildi</i>	1.3.0		0.1.0	0.1.0			1.3.0
	EN	Okapi	<i>Okapia johnstoni</i>	0.0.0	2.0.0			1.0.0		1.0.0
	NT	Blackbuck	<i>Antelope cervicapra</i>	1.5.0						1.5.0
	CR	Eastern bongo	<i>Tragelaphus eurycerus isaaci</i>	0.3.0	1.0.0	1.0.0	1.0.0			1.3.0
	EW	Scimitar-horned oryx	<i>Oryx dammah</i>	1.3.0						1.3.0
		DOMESTIC								
		Rabbit	<i>Oryctolagus cuniculus domestic</i>	1.0.0						1.0.0
		Flemmish Giant rabbit	<i>Oryctolagus cuniculus domestic flemish_giant</i>	0.0.0	2.0.0					2.0.0
		Tamworth pig	<i>Sus scrofa scrofa tamworth</i>	1.1.0		6.3.0	1.0.0		5.3.0	1.1.0
		Friesian cow	<i>Bos taurus taurus british_friesian</i>	0.1.0		0.1.0				0.2.0
		Simmental cow	<i>Bos taurus taurus simmental</i>	0.1.0	0.1.0				0.1.0	0.1.0
		Small East African goat	<i>Capra hircus hircus small_east_african</i>	1.4.0		3.2.2	1.0.2		2.1.0	1.5.0
		Texel x Suffolk sheep	<i>Ovis aries aries texel x suffolk</i>	1.1.0	0.4.0	2.1.0			3.4.0	0.2.0
		Labrador dog	<i>Canis lupus familiaris labrador</i>	0.1.0						0.1.0
		CLASS: BIRDS	AVES							
		OSTRICHES	STRUTHIONIFORMES							
	LC	Ostrich	<i>Struthio camelus</i>	1.3.0	0.4.0					1.7.0
		PENGUINS	SPHENISCIFORMES							
	VU	Humboldt penguin	<i>Spheniscus humboldti</i>	7.6.1		0.0.10	0.0.7	0.0.1		7.6.3
		HERONS/STORKS	CICONIIFORMES							
	LC	Little egret	<i>Egretta garzetta</i>	2.0.0						2.0.0
	CR	Waldrapp ibis	<i>Geronticus eremita</i>	9.10.0	1.2.0	0.0.5	0.0.4	0.0.1		10.12.0
		FLAMINGOS								
	NT	Chilean flamingo	<i>Phoenicopterus chilensis</i>	41.35.0				1.0.0		40.35.0
		GALLINACEOUS BIRDS	GALLIFORMES							
	LC	Common peafowl	<i>Pavo cristatus</i>	2.3.0		0.0.4	0.0.4			2.3.0
	NT	Crested wood partridge	<i>Rollulus rouloul</i>	6.3.0		3.3.5	0.0.5	3.1.0		6.5.0
	LC	Red junglefowl	<i>Gallus gallus</i>	1.0.0						1.0.0
		PIGEONS/DOVES	COLUMBIFORMES							
	NT	Nicobar pigeon	<i>Caloenas nicobarica nicobarica</i>	1.1.0						1.1.0
	EN	Mauritius Pink pigeon	<i>Columba mayeri</i>	1.1.0						1.1.0
	LC	Green imperial pigeon	<i>Ducula aenea aenea</i>	0.1.0						0.1.0

	IUCN Status	SPECIES		Total at 01.01.13	Arrivals	Births	Dead within 30 Days	Dead	Departed	Total at 01.01.14
	LC	Pied imperial pigeon	<i>Ducula bicolor</i>	2.0.4						2.0.4
ESB	NT	Victoria crowned pigeon	<i>Goura victoria</i>	4.1.0		0.0.1		1.0.0		3.1.1
		PARROTS	PSITTACIFORMES							
ESB	VU	Yellow-backed chattering lory	<i>Lorius garrulus flavopalliatu</i> s	1.1.0				1.1.0		0.0.0
	LC	Scarlet macaw	<i>Ara macao</i>	1.0.0						1.0.0
	VU	Military macaw	<i>Ara militaris</i>	1.1.0						1.1.0
ESB	VU	Mexican military macaw	<i>Ara militaris mexicana</i>	5.2.0						5.2.0
		TURACOS/CUCKOOS	CUCULIFORMES							
ESB	LC	Red-crested turaco	<i>Tauraco erythrolophus</i>	1.1.0						1.1.0
		OWLS	STRIGIFORMES							
	LC	Snowy owl	<i>Bubo scandiacus</i>	1.2.0				1.2.0		0.0.0
		HORNBILLS ETC.	CORACIIFORMES							
	NT	Great hornbill	<i>Buceros bicornis</i>	1.1.0						1.1.0
ESB	LC	Abyssinian ground hornbill	<i>Bucorvus abyssinicus</i>	2.1.0					1.0.0	1.1.0
		PERCHING BIRDS	PASSERIFORMES							
	LC	Black-throated laughing thrush	<i>Dryonastes chinensis</i>	0.1.0						0.1.0
		DUCKS	ANSERIFORMES							
	LC	Mandarin duck	<i>Aix galericulata</i>	1.1.0						1.1.0
	LC	Wood duck	<i>Aix sponsa</i>	2.0.0						2.0.0
		DOMESTIC FOWL								
		Australorp chicken	<i>Gallus gallus domestic australorp</i>	1.2.0		8.5.1	0.0.1	0.1.0	0.3.0	9.3.0
		Sussex chicken (light)	<i>Gallus gallus domestic sussex light</i>	1.1.0		3.7.3	0.0.3			4.8.0
		Brahma bantem	<i>Gallus gallus domestic brahma</i>	1.1.0		1.5.2	0.0.2	1.1.0		1.5.0
		Call duck	<i>Anas platyrhynchos domestic call</i>	2.0.0						2.0.0
		Indian runner duck	<i>Anas platyrhynchos domestic indian_</i> <i>runner</i>	1.1.0				0.1.0		1.0.0
		Domestic turkey	<i>Meleagris gallopavo domestic</i>	1.0.0					1.0.0	0.0.0
		CLASS: REPTILES	REPTILIA							
		CHELONES	TESTUDINES							
	CR	Annam leaf turtle	<i>Mauremys annamensis</i>	2.1.0						2.1.0
	NE	Central America wood turtle	<i>Rhinoclemmys pulcherrima manni</i>	0.2.0						0.2.0
	LC	Yellow-bellied slider	<i>Trachemys scripta scripta</i>	0.1.2						0.1.2
	LC	Red-eared slider	<i>Trachemys scripta elegans</i>	0.0.18				0.0.1		0.0.17
	NE	Red-footed tortoise	<i>Chelonoidis carbonaria</i>	1.4.0						1.4.0
	LC	Star tortoise	<i>Geochelone elegans</i>	3.4.0				1.0.0		2.4.0
	VU	African spurred tortoise	<i>Geochelone sulcata</i>	3.1.0						3.1.0
		CROCODILES	CROCODILIA							
	NE	West African Crocodile	<i>Crocodylus suchus</i>	0.2.0						0.2.0
		LIZARDS	SAURIA							
	NE	Forest dragon	<i>Hypsilurus nigrigularis</i>	0.0.0	2.0.0					2.0.0
	LC	Veiled chameleon	<i>Chamaeleo calyptrotus</i>	1.0.0						1.0.0

IUCN Status	SPECIES		Total at 01.01.13	Arrivals	Births	Dead within 30 Days	Dead	Departed	Total at 01.01.14
	Green iguana	<i>Iguana iguana</i>	1.0.0						1.0.0
LC	Leopard gecko	<i>Eublepharis macularius</i>	0.2.0						0.2.0
NE	Tokay gecko	<i>Gekko gekko</i>	1.0.0						1.0.0
LC	Mangrove monitor	<i>Varanus indicus</i>	0.0.0	0.0.1					0.0.1
	SNAKES	SERPENTES							
LC	Green tree python	<i>Morelia viridis</i>	0.0.0	1.0.0					1.0.0
VU	Burmese rock python	<i>Python molurus bivittatus</i>	2.0.0						2.0.0
LC	Royal python	<i>Python regius</i>	0.0.4						0.0.4
NE	King ratsnake	<i>Elaphe carinata</i>	0.1.2						0.1.2
LC	Cornsnake	<i>Elaphe guttata guttata</i>	2.1.0		0.0.8			0.0.8	2.1.0
LC	Common gartersnake	<i>Thamnophis sirtalis</i>	1.0.0						1.0.0
	CLASS: AMPHIBIANS	AMPHIBIA							
	FROGS/TOADS	ANURA							
	Fire-bellied toad	<i>Bombina sp.</i>	0.0.3				0.0.3		0.0.0
LC	Asiatic black-spined toad	<i>Bufo melanostictus</i>	0.0.1						0.0.1
	INVERTEBRATES	INVERTEBRATA							
	CLASS: GASTROPODS	GASTROPODA							
	SNAILS	STYLOMMATOPHORA							
NE	Giant African snail	<i>Achatina fulica</i>	0.0.1				0.0.1		0.0.0
	CLASS: ARACHNIDS	ARACHNIDA							
	SPIDERS	ARANEAE							
NE	Chilean rose tarantula	<i>Grammostola rosea</i>	0.2.0	0.1.0					0.3.0
	CLASS: INSECTS	INSECTA							
	STICK INSECTS	PHASMATOPTERA							
NE	Spiny/Thomy stick insect	<i>Trachyaretaon brueckneri</i>	0.0.0		5.0.10 [^]		0.0.10		5.0.0
NE	Indian green stick insects	<i>Cacausius morosus</i>	0.30*0		x	x	x		0.30*0
NE	Giant green stick insect	<i>Diapherodes gigantea</i>	0.0.3		0.0.100*	x	x		0.0.5
NE	Magnus stick insect	<i>Phoebaticus magnus</i>	0.0.14		x	x	x		0.0.30
NE	Goliath Stick Insect	<i>Eurycnema goliath</i>	0.0.1		0.0.1				0.0.1
NE	Macleays spectre	<i>Extatosoma tiaratum</i>	0.0.2		0.0.1		0.0.2		0.0.1
NE	Black beauty stick insect	<i>Peruphasma schultei</i>	0.0.20*		x	x	x		0.0.35*
NE	Zompro's/Thai stick insect	<i>Parapachymorpha zomproi</i>	0.0.0		1.4.10 [^]		0.1.10		1.3.0

* approximate numbers
x numbers not recorded
[^] hatched from eggs received

FOTA WILDLIFE PARK: DIRECTOR'S REPORT

Fota Wildlife Park had another successful year despite the experiencing the coldest and wettest spring since the Wildlife Park open in 1983. In mid May 2013 visitors were 35% down on the same period in 2012, however the bad weather of spring was soon forgotten with the arrival of the warmest summer in also 100 years. During July and August the Wildlife Park has its highest ever attendance figures during these summer months. Nonetheless when temperature rose over 26°C the public preferred to cool off at the beach and so on some of the very hot days visitors numbers were reduced.

The main changes in visitor numbers and revenue during 2013

- Total attendance for 2013 was 365,396 which was 3.2% (12,085) down on the total for the year 2012.
- Sales of Memberships were down 7% on 2012. This decrease in memberships may be partly attributed bad weather in spring when most members renew their subscription and the decrease of discretionary spend amongst visiting families.
- Gift Shop sales decreased by 5% on 2012 which was due to the introduction of a HB Swirl machine in the shop and increase margins on goods imported directly from China.
- The Wildlife Park produced a surplus of €333,531 for the year 2013, only slightly down on budgeted figure despite the weaker economic environment.

Animals Husbandry:

At the 2012 AGM I reported on the arrival of Corncrakes to Fota and our plans to initiate a captive breeding programme for species which is critically endangered in Ireland. I am pleased to inform you that Corncrakes have bred during 2013 at Fota less than a year since the first adults arrived here from Germany. The Corncrake bred late due to the cold wet spring and the first males only started calling at the beginning of June and the hens commenced laying on the 17th June. A total of 4 hens have produced clutches varying in size from 4 to 8 eggs. There have been a total 13 Corncrakes chicks hatched during the summer and all have survived to date. It is hoped to collect corncrake eggs from the wild in Ireland during 2014 or 2015 with the assistance of the National Parks and Wildlife Service. Then second generation Irish origin corncrakes bred in captivity at Fota would eventually be released back in suitable habitat in the wild by 2018.

On a negative note we lost 3 female Scimitar horned oryx and a male calf from heavy Haemonchus worm burdens which built up in the grass paddock over the dry summer months. The egg of this intestine blood sucking parasite hatched in mass during the moist warm conditions in September and infected the oryx and other ungulates. However the desert living oryx seemed to be very susceptible to this parasite and the heavy burdens caused rapid loss of condition and death. None of the fecal sampling collecting in the summer and September



(Top) First Corncrake chick to hatch at Fota
(Bottom) Two clutches of Corncrakes under heat lamp

displayed any indication of worm infestation and all the Oryx were prophylactically treated for intestinal parasites in September along with the Giraffe and Bison.



A number of amphibian and reptile species arrived during the last 3 months of 2013 and they soon took up residence in their new habitats in the new Tropical House which

is part of the Animal Care and Conservation Building. Most of the 19 new species are under threat in the wild and some such as the Golden saw-finned goodeid fish, *Skiffia francesae*, and Kaiser's spotted newt, *Neurergus kaiseri*, are extinct in the wild while others are critically endangered, like the Black-eyed tree frog opposite. Over 700 frog species are threatened with extinction and many of them are totally dependent on captive breeding programme to ensure their future survival. One of the largest and most unusual species of frogs on display in the Tropical House is the large Mountain Chicken or Giant Ditch Frog, *Leptodactylus fallax*, which is native to the Caribbean island of Montserrat. It is critically endangered and may already be extinct in the wild but a captive breeding programme has been set up to facilitate the re-introduction of this species.

The most notable birth during the year was that of the male Cheetah 'Rog' who had to be bottle fed after its mother abandoned him at just 3 days old. This is usual behaviour with a cheetah that gives birth to a single cub. Cheetahs normally have large litters on average of 4 to 5 cubs and when there is only a single cub born the cub's suckling cannot stimulate the dam to produce enough milk and she stops lactating after 3 to 4 days. In the wild

the cubs will die and the dam will be mated with 2 to 3 weeks and produce another litter in just over 3 months. Other births during 2013 include a Lion-tailed macaque, a Lar gibbon, a Black howler monkey and 2 European Bison.

A female European Bison had to be euthanized after she slipped and fell on the concrete yard braking her scapula or shoulder blade. The old male Grant's Zebra, Barney had to be euthanized after collapsing in the main paddock. He had been treated for a number of illnesses over the past 18 months and was 25 years old. The normal lifespan for a Grant's zebra is 20 years. The 21 year old female giraffe Róisín was anaesthetised to perform a medical procedure to examine vaginal polyps and to trim hooves for persistent lameness. Unfortunately she was unable to stand after the anaesthesia due to her weak condition and was euthanized later that day.

Park Developments

Animal Care and Conservation Centre:



Construction of the Animal Care and Conservation Centre commenced at the end of February 2013 after contract signing with SECAD to provide €200,000 in funding for its construction. MMD were awarded the contract to build this development after due process and in accordance with the conditions set out by SECAD. Work on the main structure was completed in mid-September with a total floor area of 630m² consisting of the following rooms and structures;

1. Veterinary Care Building comprising the following elements (180m²)
2. Tropical House (280m²) to house numerous tropical plants, reptiles, amphibians, fish and butterflies (approx. 40 new animal species to Fota)
3. Incubation/ Rearing unit and an Off-show Seahorse and invertebrate food breeding unit.(150m²)
4. Cinema

The entire complex is heated by a hydrothermal heat exchange system using water from the main lake which is pumped into a large tank at the back of the waterfall in the penguin enclosure. Heat is extracted from the water in this tank and then the water flows down through the waterfall into the penguin pond thus cooling the penguin pond. This system heats the tropical house to 27°C and during this past winter no oil was used to heat this entire complex.

The Tropical House open to the public on 14th February 2014 and currently holds 320 tropical plants, 7 reptile, 9 amphibian, 32 fish, and 14 butterfly species, all of which are new species on public display at Fota. Four fish tanks demonstrate the ecology of a stream from mountain to deep sea and feature the following; a fresh water habitat, a brackish water habitat, a healthy coral reef and a lower reef with predator fish. Tropical butterflies roam free-range throughout the house and amongst the public pathways.



The back of the house will have an outdoor wildlife garden with native flora for butterflies and two ponds with frogs and newts and will be planted in 2014.

Veterinary Care Building(180m²) comprising the following elements; Entrance lobby, Vet Office, Toilets with shower, Examination –Prep Room, Operating theatre with secure drugs storage unit and an Animal Holding-Recovery area. The animal holding area includes two large animal pens indoors and two outdoor that are capable of housing large carnivores such as tigers. There are also two small animal (monkey) indoor pens and two outdoors, 3 indoor bird pens and a food kitchen. This will enable Fota to isolate and hold its first tiger. In September 2010 the Zoo License Inspection report recommended the development of a new veterinary complex by 2013 as a condition in the Zoo Licence. This condition has now been met with the above development.

The Asian Sanctuary Development:

On the 15th October 2013 Fota Wildlife Park received planning permission for the revised 'Asian Sanctuary Development' to be developed in a number of phases. Cork County Council made a number of conditions to this planning including that the archaeology dig should commence before the development of the tiger enclosure so as to ascertain the full of the extent of the archaeological enclosure in relation to the tiger habitat. A geophysical survey of the Fulacht Fiadh completed in September had successfully identified the location of the burnt spreads underground and the outline of this Fulacht Fiadh site. The archaeological dig began in the second week of December 2013. Following discussions within the Project Team and Finance Committee, the Board of

Governors decided to engage MMD Construction Cork Ltd. to construct Phase 1 of the Asian Sanctuary at Fota for the agreed figure of €1,814,429.08 and includes the elements set out in the table below.

MAIN ELEMENTS OF PHASE ONE OF ASIAN SANCTUARY
Tiger house and habitat including restoration of lime kiln
Lion-tailed macaque house and habitat
Visayan warty pig and Visayan spotted deer house and habitat
Main lake
Two primate islands including houses
Walkway around lake
Red panda habitat

It is anticipated to have the Tiger habitat completed before the AGM and also to have the tigers on display to the public. The remainder the Asian Sanctuary phase 1 will be completed by the end of June 2014 in time for the busy summer season.

Research and Field Conservation Projects Support Conservation Research

During the year, Fota Wildlife Park continued its long term collaboration with the School of Biological, Earth and Environmental Sciences (BEES), University College Cork, in the fields of animal behaviour, environmental enrichment, population biology and ecology. The following list of research projects carried out by students under the supervision of Dr. Ruth Ramsey and other members of the BEES Dept.

Fourth Year Undergraduate Projects:

- Leon Harris- Bison behaviour, with a comparison of past studies on the Fota herd
- Aileen Russell- Giraffe behaviour over the winter months and effects of enrichment
- Anna Bracken: Siamang behaviour and reducing stereotypic behaviour
- Rebecca Newman: Lion-tailed macaque behaviour and effects of enrichment on juvenile activity

Post Graduate Project:

MSc Student Project

Ashley Markewinski: The behaviour and environmental enrichment of selected captive vertebrates at Fota Wildlife Park.

PhD student Project

Courtney Keane. The potential effect of zoo-based education programmes on children's learning.

Post-doc. 20 12-2014: Dr Amy Haigh,

Dr Amy Haigh (2012-2014) Post-doctoral project which is funded by IRCSET EMBARK Partnership Scheme with Fota Wildlife Park, to carry out research on native red squirrels. The project's title is 'Population dynamics, habitat use, philopatry and feeding behaviour of the red squirrel in Fota'. This project is supervised by Dr. Fidelma Butler of UCC and is co-funded by the Irish Research Council for Science, Engineering and Technology with Fota Wildlife Park being the Enterprise Partner under their postgraduate scholarship scheme.

Field Conservation Projects:

Fota Wildlife Park continued to make direct funding available to conservation programmes that have a direct conservation benefit to both native and exotic species. The largest conservation project which we have been involved within over the last 3 years has been efforts to save the critically endangered Madagascar Pochard whose wild population in May 2013 was only 21 birds a decrease of 2 on the previous year. However the intensification of conservation efforts and site protection is now starting to show benefits as was recorded on the co-ordinated monthly count undertaken on 16th December 2013. This count confirmed an increase of wild Madagascar Pochard to 25 at three sites of Matsaborimena, Andriakanala and Matsaborimaitso. The most welcoming development was the sighting of three ducklings and three juveniles on Matsaborimena Lake.

The captive population also continues to grow and there are now 54 captive Madagascar pochard (29 males and 25 females), which an increase of 12 birds from last year. Our commitment to the Madagascar Pochard conservation and breeding project continues with the provision of €20,000 to the running costs of the Madagascar Pochard Captive Breeding Centre. This project is run in conjunction with the Durrell Wildlife Conservation Trust and the Wildfowl and Wetlands Trust.

Fota Wildlife Park continued to fund the training, equipment and salaries of two Community Patrol Teams to protect the critically Endangered Western Black Crested Gibbon and Tonkin snub-nosed monkey in Mun Cang Chai and Quan Ba District respectively in Vietnam. These two Community Patrol Teams are under the guidance of

Flora & Fauna International and they work to protect the habitat these primates and prevent any hunting within the protected areas.

Other conservation organisations and projects funded in 2013 included the CBSG Conservation Breeding Specialist Group of IUCN, The EAZA South East Asia Campaign, the IUCN Antelope SSC /EAZA Saola Rehabilitation Centre in Vietnam, the World Parrot Trust for Parrot conservation, the expansion of the newt survey to more counties in Ireland by the Irish Wildlife Trust, Cork Otter Survey to produce educational posters and the Cork Bat Group to monitor bats in County Cork.

Education

Fota Wildlife Park operates an excellent education programme and in 2013 once again received the coveted Sandford Award for Heritage and Conservation Education. We are one of only two organisations in Ireland to receive this prestigious award.

Meetings

In 2013 the Director, Sean Mc Keown, with Tony O'Dwyer (Operations Manager) and John McLaughlin (Asst. Head Warden), attended the EAZA annual conference in Edinburgh.

Sean Mc Keown, Lynda McSweeney Walsh and Stephen Ryan attend the BIAZA ACE Conference in London Zoo in November 2013. The next ACE Conference will be held at Fota Wildlife Park in November 2014.



Zoo Licence Inspection

The Zoo Licence Inspection by the Dept. of Environment, Heritage & Local Government took place in September 2013 and it recommended the continued licensing of Fota Wildlife Park.

30th Year Celebrations

To celebrate the 30th anniversary a summer carnival was hosted in Fota Wildlife Park with the majority of the events taking place in a specially erected marquee. This began with a vintage car display at the park which consisted of over 50 cars and commemorated the Fota Rally which took place in the early 80s to raise funds for the park. The 30th birthday party that took place on the 23rd of June was a great success despite very mixed weather conditions on the day. 3,500 people came out to

the park to enjoy entertainers from Cork Circus on stilts, doing acrobats, puppet shows and aerial performances throughout the day. The Birthday party also had cake making demonstrations for kids, face painting and the unveiling of a very special cake for the day by local cake creators a touch of magic. The feedback through social media after the day was phenomenal with people saying it was the best day ever at the park.

The celebrations continued throughout the summer with daytime events including daily shows with Bosco. Weekends were also a great success with an Asian Weekend, Magic Weekend, Fair-trade Weekend, Native Species and Green Weekend all proving to be popular with the different age profiles visiting the park. All these events were complimented with Arts & crafts, face painting, mascot Larry the lemur, talks and feeding times throughout the day.

Fota 2013 Animal Inventory

TAXONOMIC	COMMON NAME	Beginning	Births	Acquisitions	Deaths	Dispositions	Ending
<i>Ameca splendens</i> *	Butterfly splitfin	0.0.0	0.0.0	0.0.110	0.0.0	0.0.0	0.0.110
<i>Skiffia francesae</i> *	Golden sawfin	0.0.0	0.0.0	0.0.100	0.0.0	0.0.0	0.0.100
<i>Ambystoma mexicanum</i> *	Axolotl	0.0.0	0.0.0	8.6.0	0.0.0	0.0.0	8.6.0
<i>Neuregerus kaiseri</i> *	Emperor spotted newt	0.0.0	0.0.0	0.0.10	0.0.0	0.0.0	0.0.10
<i>Epipedobates tricolor</i> *	Phantasmal poison dart frog	0.0.0	0.0.0	0.0.10	0.0.0	0.0.0	0.0.10
<i>Trachycephalus venulosus</i> *	Veined tree frog	0.0.0	0.0.0	0.0.1	0.0.0	0.0.0	0.0.1
<i>Agalychnis callidryas</i> *	Red-eyed tree frog	0.0.0	0.0.0	0.0.10	0.0.0	0.0.0	0.0.10
<i>Agalychnis moreletii</i>	Morelet's tree frog	0.0.0	0.0.0	3.1.1	0.0.0	0.0.0	3.1.1
<i>Phyllomedusa bicolor</i> *	Giant waxy tree frog	0.0.0	0.0.0	0.0.1	0.0.0	0.0.0	0.0.1
<i>Leptodactylus fallax</i>	Mountain chicken frog	0.0.0	0.0.0	1.2.6	0.0.0	0.0.0	1.2.6
<i>Mantella aurantiaca</i> *	Golden mantella	0.0.0	0.0.0	0.0.10	0.0.0	0.0.0	0.0.10
<i>Mantella viridis</i> *	Green mantella	0.0.0	0.0.0	0.0.10	0.0.0	0.0.0	0.0.10
<i>Polypedates otilophus</i> *	Bornean eared frog	0.0.0	0.0.0	0.0.10	0.0.0	0.0.0	0.0.10
<i>Indotestudo elongata</i> *	Elongated tortoise	0.0.0	0.0.0	0.0.4	0.0.0	0.0.0	0.0.4
<i>Ctenonotus</i>	Iguana	0.0.0	0.0.0	0.0.1	0.0.0	0.0.0	0.0.1
<i>Acrantophis dumerili</i> *	Dumeril's ground boa	0.0.0	0.0.0	0.0.3	0.0.0	0.0.0	0.0.3
<i>Epicrates subflavus</i>	Jamaican boa	0.0.0	0.0.0	1.0.0	0.0.0	0.0.0	1.0.0
<i>Python regius</i> *	Royal/ball python	0.0.0	0.0.0	0.0.2	0.0.0	0.0.0	0.0.2
<i>Struthio camelus</i>	Common ostrich	2.4.0	1.0.7	0.0.0	0.0.6	0.0.0	3.4.1
<i>Dromaius novaehollandiae</i>	Emu	1.1.0	0.0.0	0.0.0	0.0.0	0.0.0	1.1.0
<i>Numida meleagris</i>	Helmeted guineafowl	4.4.23	0.0.0	0.0.0	1.2.1	0.0.0	3.2.22
<i>Guttera pucherani</i>	Kenya crested guineafowl	0.0.1	0.0.0	0.0.0	0.0.0	0.0.0	0.0.1
<i>Pavo cristatus</i>	Common peafowl	4.9.0	0.0.0	0.0.0	0.0.0	0.0.0	4.9.0
<i>Anser anser</i>	Greylag goose	9.7.14	0.0.0	0.0.0	0.0.0	0.0.0	9.7.14
<i>Anser caerulescens</i>	Snow goose	2.7.8	0.0.4	0.0.0	1.0.1	0.0.0	1.7.11
<i>Anser canagicus</i>	Emperor goose	2.3.0	0.0.0	0.0.0	0.1.0	0.0.0	2.2.0
<i>Anser cygnoides</i>	Swan goose	2.4.0	0.0.0	0.0.0	0.1.0	0.0.0	2.3.0
<i>Anser indicus</i>	Bar-headed goose	8.7.9	0.0.0	0.0.0	0.0.0	0.0.0	8.7.9
<i>Branta leucopsis</i>	Barnacle goose	14.7.9	0.0.6	0.0.0	0.1.1	0.0.0	14.6.14
<i>Branta sandvicensis</i>	Ne-ne	3.1.1	0.0.0	0.0.0	0.0.0	0.0.0	3.1.1
<i>Cereopsis novaehollandiae</i>	Cereopsis goose	2.2.1	0.3.1	0.0.0	0.1.1	0.0.0	2.4.1
<i>Coscoroba coscoroba</i>	Coscoroba swan	1.5.0	0.0.0	0.0.0	1.0.0	0.0.0	0.5.0
<i>Cygnus atratus</i>	Black swan	1.1.1	0.0.0	0.0.0	1.0.0	0.0.0	0.1.1
<i>Aix galericulata</i>	Mandarin duck	13.8.0	0.0.1	0.0.0	0.0.1	0.0.0	13.8.0
<i>Aix sponsa</i>	North American wood duck	8.3.4	0.0.0	0.0.0	1.1.0	0.0.0	7.2.4
<i>Aythya fuligula</i>	Tufted duck	4.2.11	0.0.0	0.0.0	0.0.0	0.0.0	4.2.11
<i>Aythya nyroca</i>	Common white-eye	2.1.2	0.0.0	0.0.0	0.0.0	0.0.0	2.1.2
<i>Netta rufina</i>	Red-crested pochard	7.7.2	0.0.1	0.0.0	0.0.1	0.0.0	7.7.2
<i>Somateria mollissima</i>	Eider	3.2.0	0.0.0	0.0.0	0.0.0	0.0.0	3.2.0
<i>Tadorna ferruginea</i>	Ruddy shelduck	1.0.8	0.0.0	0.0.0	0.0.0	0.0.0	1.0.8
<i>Spheniscus humboldti</i>	Humboldt penguin	14.14.4	0.0.3	0.0.0	0.0.3	0.0.0	14.14.4

TAXONOMIC	COMMON NAME	Beginning	Births	Acquisitions	Deaths	Dispositions	Ending
<i>Phoenicopterus chilensis</i>	Chilean flamingo	1.3.2	0.0.0	0.0.0	0.0.0	0.0.0	1.3.2
<i>Pelecanus onocrotalus</i>	Eastern white pelican	3.2.0	0.0.0	0.0.0	0.0.0	0.0.0	3.2.0
<i>Accipiter gentilis</i>	Northern goshawk	0.1.0	0.0.0	0.0.0	0.0.0	0.0.0	0.1.0
<i>Haliaeetus albicilla</i>	White-tailed sea eagle	0.2.0	0.0.0	0.0.0	0.0.0	0.0.0	0.2.0
<i>Crex crex</i>	Corncrake	7.8.1	4.9.0	0.0.0	0.1.1	3.2.0	8.14.0
<i>Ara ararauna</i>	Blue-and-yellow macaw	3.1.1	1.0.1	0.0.0	0.0.2	0.0.0	4.1.0
<i>Ara chloroptera</i>	Green-winged macaw	1.0.0	0.0.0	0.0.0	0.0.0	0.0.0	1.0.0
<i>Ara macao</i>	Scarlet macaw	1.1.0	0.0.0	0.0.0	0.0.0	0.0.0	1.1.0
<i>Macropus giganteus</i>	Eastern grey kangaroo	2.10.1	0.1.3	0.0.0	1.1.2	0.0.0	1.10.2
<i>Macropus rufogriseus</i> *	Red-necked wallaby	0.0.38	0.0.0	0.0.0	0.0.12	0.0.0	0.0.26
<i>Lemur catta</i>	Ring-tailed lemur	4.8.0	0.0.0	0.0.0	0.0.0	0.0.0	4.8.0
<i>Varecia rubra</i>	Red ruffed lemur	1.1.0	0.0.0	0.0.0	1.0.0	0.0.0	0.1.0
<i>Varecia variegata</i>	Black-and-white ruffed lemur	2.1.0	0.0.0	0.0.0	0.0.0	0.0.0	2.1.0
<i>Pithecia pithecia</i>	White-faced saki	3.4.1	0.0.0	0.0.0	0.0.0	0.0.0	3.4.1
<i>Alouatta caraya</i>	Black howler	2.2.0	0.0.1	0.0.0	0.0.0	0.0.0	2.2.1
<i>Ateles fusciceps</i>	Black-headed spider monkey	1.5.0	0.0.0	0.0.0	0.0.0	0.0.0	1.5.0
<i>Lophocebus albigena</i>	Grey-cheeked mangabey	2.5.0	0.0.0	0.0.0	1.0.0	0.0.0	1.5.0
<i>Macaca silenus</i>	Lion-tailed macaque	9.11.0	1.0.4	0.0.0	0.1.2	0.0.0	10.10.2
<i>Colobus guereza</i>	Eastern black-and-white colobus	5.0.0	0.0.0	0.0.0	0.0.0	0.0.0	5.0.0
<i>Hylobates agilis</i>	Agile gibbon	2.2.0	0.0.0	0.0.0	1.0.0	0.0.0	1.2.0
<i>Hylobates lar</i>	Lar gibbon	1.3.0	1.0.0	0.0.0	0.0.0	0.0.0	2.3.0
<i>Symphalangus syndactylus</i>	Siamang	4.2.0	0.0.0	0.0.0	0.0.0	0.0.0	4.2.0
<i>Cynomys ludovicianus</i>	Black-tailed prairie dog	2.4.0	0.0.0	0.0.0	0.1.0	0.0.0	2.3.0
<i>Dolichotis patagonum</i> *	Patagonian mara	0.0.32	0.0.0	0.0.0	0.0.8	0.0.0	0.0.24
<i>Hydrochaeris hydrochaeris</i>	Capybara	1.1.0	0.0.1	0.0.0	0.0.1	0.0.0	1.1.0
<i>Acinonyx jubatus</i>	Cheetah	5.5.0	1.0.0	0.0.0	0.0.0	0.0.0	6.5.0
<i>Suricata suricatta</i>	Slender-tailed meerkat	4.5.9	0.0.3	0.0.0	1.0.3	0.0.0	3.5.9
<i>Phoca</i>	Harbor seal	0.0.0	0.0.0	0.1.0	0.0.0	0.0.0	0.1.0
<i>Phoca vitulina</i>	Harbor seal	1.1.0	0.0.0	0.0.0	1.0.0	0.0.0	0.1.0
<i>Ailurus fulgens</i>	Red panda	1.1.0	0.0.1	0.0.0	0.0.1	0.0.0	1.1.0
<i>Equus burchellii</i>	Common zebra	3.2.2	0.0.0	0.0.0	1.0.0	0.0.0	2.2.2
<i>Tapirus terrestris</i>	South American tapir	1.1.0	0.0.0	0.0.0	0.0.0	0.0.0	1.1.0
<i>Sus cebifrons</i>	Visayan warty pig	1.1.0	0.0.0	0.0.0	0.0.0	0.0.0	1.1.0
<i>Giraffa camelopardalis</i>	Giraffe	4.7.0	0.0.0	0.0.0	0.2.0	0.0.0	4.5.0
<i>Bison bonasus</i>	European wisent	9.8.0	4.1.0	0.0.0	3.2.0	0.0.0	10.7.0
<i>Oryx dammah</i>	Scimitar-horned oryx	1.9.0	2.3.0	0.0.0	1.8.0	0.0.0	2.4.0
<i>Kobus lechwe</i>	Southern lechwe	8.9.1	0.4.0	0.0.0	1.7.0	0.0.0	7.6.1
TOTAL		202.225.186	15.21.37	13.10.289	17.30.47	3.2.0	210.224.465

* = Group inventory counts included in row

** = Colony counts included in row

THE ZOOLOGICAL SOCIETY OF IRELAND

**(A company limited by guarantee and
not having a share capital)**

**Reports and Consolidated
Financial Statements
for the year ended
31 December 2013**

Registered number: 207824

	PAGE
CONTENTS	
MEMBERS OF COUNCIL AND OTHER INFORMATION	50 - 51
COUNCIL'S REPORT	52 - 54
STATEMENT OF COUNCIL'S RESPONSIBILITIES	55
INDEPENDENT AUDITOR'S REPORT	56 - 57
STATEMENT OF ACCOUNTING POLICIES	58 - 60
CONSOLIDATED INCOME AND EXPENDITURE ACCOUNT	61
CONSOLIDATED STATEMENT OF TOTAL RECOGNISED GAINS AND LOSSES	62
CONSOLIDATED BALANCE SHEET	63
COMPANY BALANCE SHEET	64
CONSOLIDATED CASH FLOW STATEMENT	65
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS	66 - 83

THE ZOOLOGICAL SOCIETY OF IRELAND

MEMBERS OF COUNCIL AND OTHER INFORMATION

Members of Council:

President	Margaret Sinanan
Immediate past president	Derek McCleane
Ordinary Council members	Dorothy Kilroy Thomas Dunphy FCA Christopher Kane, FCIS Paul Burke Kennedy Richard Collins Martin O'Grady Conor Quinn

Other information:

Past presidents	Michael O'Grady FCIPD Seán Cromien BA, MRIA, FNCI, F (Mgt), IMI, FZSI Joseph McCullough BE, C Eng, FZSI Michael MacNulty MBA (Harvard)
Vice president	Thomas Dunphy FCA
Honorary secretary	Dorothy Kilroy
Honorary treasurer	Thomas Dunphy FCA
Secretary and registered office	Tony Kearney FCCA, ACIS The Zoological Gardens, Phoenix Park, Dublin 8

(A company limited by guarantee and not having a share capital)

MEMBERS OF COUNCIL AND OTHER INFORMATION *(Continued)*

Auditors

Deloitte & Touche
Chartered Accountants and Statutory Audit Firm
Deloitte & Touche House
Earlsfort Terrace
Dublin 2

Bankers

Ulster Bank Limited, 33 College Green, Dublin 2

Bank of Ireland, 2 College Green, Dublin 2

AIB, 37 Upper O'Connell Street, Dublin 1

Rabo Bank, Charlemont Place, Dublin 2

AIB, 66 South Mall, Cork

Solicitors

Mason Hayes & Curran,
South Bank House, Barrow Street, Dublin 4

Ronan Daly Jermyn & Company, 12 South Mall, Cork

Kilroy Solicitors, 66 Leeson Street Lower, Dublin 2

Charity Number

CHY2964

Company Number

207824

THE ZOOLOGICAL SOCIETY OF IRELAND

COUNCIL'S REPORT

The Council presents its annual report together with the audited consolidated financial statements for the year ended 31 December 2013.

Consolidation

These accounts form the Consolidated Accounts of the Zoological Society of Ireland which includes the results of both Dublin Zoo and Fota Wildlife Park for the year ended 31 December 2013.

Principal Activities, Business Review And Future Developments

The principal activities of The Zoological Society of Ireland ("the Society") are:

- a. The operation of a Zoo in the Phoenix Park, Dublin.
- b. To maintain the Fota Wildlife Park.
- c. To promote the conservation of wildlife generally worldwide by advancing the study of environmental sciences and knowledge of zoology through science and scientific education.

The attendance for the year ended 31 December 2013 at Dublin Zoo was 1,026,613. This was the third year in a row that Dublin Zoo has had visitation surpassing the one million mark. Fota Wildlife Park also experienced a great year in terms of visitor numbers with 365,396 visitors during the year ended 31 December 2013.

Principal Risks and Uncertainties

The Council considers that the principal risk and uncertainties to the Society relate to weather conditions affecting visitor numbers, uncertainty impacting on the Society relating to an outbreak of animal disease and the economic environment.

Results for the year

The results for the year are set out on page 61 of the financial statements.

Council

The present members of Council are listed on page 50. On 22 February 2013, Dermot MacDonald resigned from the Council. On 19 September 2013, at the Society's AGM, Conor Quinn was appointed to the Council.

Legal Status

The Society is limited by guarantee and has no share capital.

Subsidiaries

The information required by Section 158(4) of the Companies Act, 1963 is provided in Note 7 to the financial statements.

GOVERNANCE

The Society is governed by a Council of directors, who under the Society's Articles of Association, are not entitled to remuneration for their services. The members of Council bring their varied experience in their respective fields to bear on guiding the Society. The members of Council are legally responsible for the overall control and management of the Society.

The Council delegates the management of the day to day operation of the Society, the implementation of policy and strategy to the Director (Chief Executive). The executive management team, chaired by the Director and consisting of key senior executives, is the main day to day decision making forum of the Society.

The Council believe that committing to a high level of corporate governance is essential to achieving the optimal standard of operation of the Society's activities. To accomplish this, the Society has a competent executive team. There is clear division of responsibility with the Council retaining control of major decisions, with the Director responsible for devising strategy and policy within authority delegated to him by the Council. The Council is responsible for providing leadership, setting strategy and ensuring control.

The Society has a clear and detailed process for reporting management information to the Council. The Council is provided with regular information, which includes key performance and risk indicators for all aspects of the

organisation. The Council meets regularly as required and met 11 times during 2013.

The Council recognise their overall responsibility for the company's systems of internal control and for reviewing their effectiveness. They have delegated responsibility for the implementation of this system to the executive team. This system includes financial controls, which enable the Council to meet it's responsibilities for the integrity and accuracy of the Society's accounting records.

The Council is supported by a number of sub-committees (not confined to Council members) established for good governance, as follows:

Audit & Remuneration Committee

The function of the Audit and Remuneration Committee is to review internal financial controls, treasury, and risk management processes. The Committee liaises with the external auditors and reports directly to the Council. It also monitors and reviews the financial performance, including remuneration issues of the Society.

Nominations Committee

The function of the Nominations Committee is to ensure that the composition of the Council and its Committees have the appropriate skills, knowledge and experience. It also ensures that there is effective succession planning.

THE ZOOLOGICAL SOCIETY OF IRELAND

Conservation & Research Committee

The responsibility of this Committee is to oversee conservation and research projects undertaken and supported by the Society.

Ethics Committee

The Ethics Committee was established to provide guidance and advice on ethical matters.

Catering Committee

This Committee was established to oversee and manage the Society's relationship with the third party caterers who operate at the Zoo.

Books of Account

The Council members believe that they have complied with the requirements of Section 202 of the Companies Act, 1990 with regard to books of account by employing personnel with appropriate expertise and by providing adequate resources to the financial function. The books of account are maintained at the Society's registered office in The Zoological Gardens, Phoenix Park, Dublin 8.

Post Balance Sheet Events

No significant events have taken place since the year end that would result in adjustment to the financial statements or inclusion of a note thereto.

Health and Safety Policy

The Society has prepared a health and safety policy which is being complied with and satisfactorily operated.

Political Donations

The Society did not make any political donations during the year, which require disclosure in accordance with the Electoral Act, 1997.

Auditors

The auditors, Deloitte & Touche, Chartered Accountants, continue in office in accordance with Section 160(2) of the Companies Act, 1963.

On behalf of the Council

Margaret Sinanan
President

Thomas Dunphy
Honorary Treasurer

22 May 2014

STATEMENT OF COUNCIL'S RESPONSIBILITIES

Irish company law requires the members of Council to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the group and the Society and of the surplus or deficit of the group. In preparing these financial statements, the members of Council are required to:

- select suitable accounting policies for the group and Society's financial statements and apply them consistently;
- make judgements and estimates that are reasonable and prudent; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the group and the Society will continue in business.

The members of Council are responsible for keeping proper books of account that disclose with reasonable

accuracy at any time the financial position of the group and of the Society and enable them to ensure that the financial statements are prepared in accordance with accounting standards generally accepted in Ireland and comply with Irish statute comprising the Companies Acts, 1963 to 2013. They are also responsible for taking such steps for safeguarding the assets of the group and the Society and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The members of Council are also responsible for preparing a Council's report that complies with the requirements of the Companies Acts, 1963 to 2013.

On behalf of the Council

Margaret Sinanan
President

Thomas Dunphy
Honorary Treasurer

22 May 2014

INDEPENDENT AUDITORS' REPORT

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF THE ZOOLOGICAL SOCIETY OF IRELAND

We have audited the financial statements of The Zoological Society of Ireland for the year ended 31 December 2013, which comprise the Statement of Accounting Policies, the Consolidated Income and Expenditure Account, the Consolidated Statement of Total Recognised Gains and Losses, the Consolidated Balance Sheet, the Company Balance Sheet, the Consolidated Cash Flow Statement and the related notes 1 to 19. The financial reporting framework that has been applied in their preparation is applicable Irish law and accounting standards issued by the Financial Reporting Council and promulgated by the Institute of Chartered Accountants in Ireland (Generally Accepted Accounting Practice in Ireland).

This report is made solely to the company's members, as a body, in accordance with Section 193 of the Companies Act, 1990. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Respective responsibilities of Members of Council and auditors

As explained more fully in the Statement of Council's Responsibilities, the members of Council are responsible for the preparation of the financial statements giving a true and fair view. Our responsibility is to audit and express an opinion on the financial statements in accordance with Irish law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

Scope of the audit of the financial statements

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the group's and parent company's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the council; and the overall presentation of the financial statements. In addition, we read all the financial and non-financial information in the Reports and Consolidated Financial Statements for the year ended 31 December 2013 to identify material inconsistencies with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

Opinion

In our opinion the financial statements:

- give a true and fair view, in accordance with Generally Accepted Accounting Practice in Ireland, of the state of the group's and of the parent company's affairs as at 31 December 2013 and of the group's surplus for the year then ended; and
- have been properly prepared in accordance with the Companies Acts, 1963 to 2013.

Matters on which we are required to report by the Companies Acts, 1963 to 2013

- We have obtained all the information and explanations which we consider necessary for the purposes of our audit.
- In our opinion proper books of account have been kept by the parent company.
- The parent company's financial statements are in agreement with the books of account.
- In our opinion the information given in the directors' report is consistent with the financial statements.

Matters on which we are required to report by exception

We have nothing to report in respect of the provisions in the Companies Acts, 1963 to 2013 which require us to report to you if, in our opinion the disclosures of directors' remuneration and transactions specified by law are not made.

Thomas Cassin
For and on behalf of Deloitte & Touche
Chartered Accountants and Statutory Audit Firm
Dublin

22 May 2014

THE ZOOLOGICAL SOCIETY OF IRELAND

STATEMENT OF ACCOUNTING POLICIES

The significant accounting policies adopted by the Society are:

Basis of Accounting

The financial statements are prepared under the historical cost convention in accordance with accounting standards generally accepted in Ireland and Irish statute comprising the Companies Acts 1963 to 2013. Accounting standards generally accepted in Ireland in preparing financial statements giving a true and fair view are those issued by the Financial Reporting Council and published by the Institute of Chartered Accountants in Ireland.

Basis of Consolidation

The consolidated financial statements incorporate the financial statements of the company and its subsidiary undertaking for the year ended 31 December 2013.

Income

Income comprises annual pass and membership subscriptions relating to the current period. Where subscriptions are received in advance, they are included in deferred income in creditors and released to the income and expenditure account in the relevant period.

Life membership subscriptions are amortised to the income and expenditure account based on the estimated useful life of membership which is considered ten years.

Other income comprises the value of sales, excluding VAT, to third parties and is recognised once the related goods or services are provided to customers.

Tangible Fixed Assets And Depreciation

Tangible fixed assets are stated at cost less accumulated depreciation and any provision for impairment.

The charge for depreciation is calculated to write down the cost of tangible fixed assets to their estimated residual values by equal annual instalments over their expected useful lives as follows:

Plant, machinery and equipment	20%
Computer equipment and software	33⅓%
Motor vehicles	20%
Buildings and habitats	10%

Land and assets under construction are not depreciated.

Financial Assets

Financial assets are stated at cost less provision for impairment.

Government Support

The land in the Phoenix Park occupied by the Zoo ("the Society") is used under a licence from the State, the Society being a tenant at will. No value is reflected in these financial statements in respect of this licence or this land.

The Government Capital Investment Programme in the Society is provided and accounted for by the Office of Public Works (OPW) and any related assets are therefore excluded in these financial statements. The accounts of the Society reflect only its disbursements for the OPW under this programme. The facilities provided under this Programme are used by the Society under licence from the State.

Other Government grants in respect of capital expenditure are credited to a deferred grant account and are amortised to the income and expenditure account by equal annual instalments over the expected useful lives of the related assets.

Leases

Expenditure on operating leases is charged to the income and expenditure account on a basis representative of the benefit derived from the asset, normally on a straight line basis over the lease period.

Animals

No value is placed on the animals belonging to the Society.

Stocks

Stocks, other than animals, are stated at the lower of cost and net realisable value.

Foreign Currencies

Transactions in foreign currencies are recorded at the rate ruling at the date of the transactions or at a contracted rate. The resulting monetary assets and liabilities are translated at the balance sheet rate or the contracted rate and the exchange differences are dealt with in the income and expenditure account.

Pensions

The group operates both defined benefit and defined contribution schemes.

Defined contribution scheme

Pension contributions in respect of defined contribution schemes are charged to income and expenditure as they become payable in accordance with the rules of the scheme. The assets are held separately from those of the group in an independently administered fund. Differences between the amounts charged in the profit and loss account and payments made to pension funds are treated as assets or liabilities.

Defined benefit scheme

The pension costs in respect of defined benefit schemes are charged to the income and expenditure account on a systematic basis, based on the actuary's calculations. Amounts charged are calculated using the following rates:

Current service cost – discount rate at the start of the year
Interest cost – discount rate at the start of the year
Expected return on assets – Expected rate of return at the start of the year.

THE ZOOLOGICAL SOCIETY OF IRELAND

Past service costs are recognised in the income and expenditure account on a straight line basis over the period in which increases in benefit vest.

Differences between the amounts charged in the income and expenditure account and payments made to pension funds are treated as assets or liabilities.

Assets in the scheme are measured at their fair value at the balance sheet date. Defined benefit liabilities are measured on an actuarial basis using the projected unit method. The assets and liabilities of the scheme are subject to a full actuarial valuation by an external professionally qualified actuary triennially and are reviewed annually by the actuary and updated to reflect current conditions.

The excess or shortfall in the value of the assets in the scheme over or below the present value of the scheme liabilities is recognised as an asset or liability when the amounts can be recovered through reduced contributions or refunds from the scheme.

Actuarial gains and losses arise on the valuation of the scheme's assets and liabilities and are released to the statement of total recognised gains and losses.

Taxation

The group is regarded by the Revenue Commissioners as established for charitable purposes and, accordingly, is exempt from corporation tax.

(A company limited by guarantee and not having a share capital)

CONSOLIDATED INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31 DECEMBER 2013

	Notes	2013 €'000	2012 €'000
INCOME	1	16,109	15,734
EXPENDITURE			
Operating costs		(13,356)	(12,951)
Administration expenses		<u>(576)</u>	<u>(662)</u>
TOTAL EXPENDITURE		<u>(13,932)</u>	<u>(13,613)</u>
OPERATING SURPLUS	3	2,177	2,121
Interest payable		(73)	(72)
Interest income	4	140	98
Amortisation of government grants	12	<u>25</u>	<u>25</u>
SURPLUS FOR THE YEAR	14	<u><u>2,269</u></u>	<u><u>2,172</u></u>

Results in the current and previous year arose solely from continuing operations.

The financial statements were approved by the Council on 22 May 2014 and signed on its behalf by:

Margaret Sinanan
Council President

Thomas Dunphy
Honorary Treasurer

THE ZOOLOGICAL SOCIETY OF IRELAND

CONSOLIDATED STATEMENT OF TOTAL RECOGNISED GAINS AND LOSSES FOR THE YEAR ENDED 31 DECEMBER 2013

	Notes	2013 €'000	2012 €'000
SURPLUS FOR THE YEAR		2,269	2,172
Actuarial gain/(loss) recognised on defined benefit scheme	13	<u>208</u>	<u>(455)</u>
TOTAL RECOGNISED GAINS RELATING TO THE YEAR		<u>2,477</u>	<u>1,717</u>

(A company limited by guarantee and not having a share capital)

CONSOLIDATED BALANCE SHEET AS AT 31 DECEMBER 2013		2013	2012
		€'000	€'000
FIXED ASSETS	Notes		
Tangible assets	6	<u>12,639</u>	<u>11,971</u>
CURRENT ASSETS			
Stocks	8	242	270
Debtors	9	447	474
Cash at bank and in hand			
– OPW grant	10	30	54
– Other		<u>8,731</u>	<u>7,488</u>
		9,450	8,286
CREDITORS: (Amounts falling due within one year)	10	<u>(3,068)</u>	<u>(3,303)</u>
NET CURRENT ASSETS		<u>6,382</u>	<u>4,983</u>
TOTAL ASSETS LESS CURRENT LIABILITIES		19,021	16,954
CREDITORS: (Amounts falling due after more than one year)	11	(250)	(500)
OTHER DEFERRED GRANTS	12	<u>(471)</u>	<u>(301)</u>
NET ASSETS EXCLUDING PENSION		18,300	16,153
Pension asset/(liability)	13	<u>100</u>	<u>(230)</u>
NET ASSETS INCLUDING PENSION ASSET/(LIABILITY)		<u>18,400</u>	<u>15,923</u>
Accumulated surplus	14	11,645	9,191
Development reserve	14	5,000	5,000
Emergency reserve	14	<u>1,755</u>	<u>1,732</u>
The financial statements were approved by the Council on 22 May 2014 and signed on its behalf by:		<u>18,400</u>	<u>15,923</u>

Margaret Sinanan
President

Thomas Dunphy
Honorary Treasurer

THE ZOOLOGICAL SOCIETY OF IRELAND

COMPANY BALANCE SHEET AS AT 31 DECEMBER 2013

	Notes	2013 €'000	2012 €'000
FIXED ASSETS			
Tangible assets	6	6,447	6,374
Financial assets	7	500	500
		<u>6,947</u>	<u>6,874</u>
CURRENT ASSETS			
Stocks	8	99	106
Debtors	9	341	328
Cash at bank and in hand:			
– OPW grant	10	30	54
– other		6,873	5,324
		<u>7,343</u>	<u>5,812</u>
CREDITORS: (Amounts falling due within one year)	10	<u>(2,127)</u>	<u>(2,353)</u>
NET CURRENT ASSETS		<u>5,216</u>	<u>3,459</u>
NET ASSETS		<u>12,163</u>	<u>10,333</u>
Represented by:			
Accumulated surplus	14	5,408	3,601
Development reserve	14	5,000	5,000
Emergency reserve	14	1,755	1,732
		<u>12,163</u>	<u>10,333</u>

The financial statements were approved by the Council on 22 May 2014 and signed on its behalf by:

Margaret Sinanan

President

Thomas Dunphy

Honorary Treasurer

(A company limited by guarantee and not having a share capital)

CONSOLIDATED CASH FLOW STATEMENT FOR THE YEAR ENDED 31 DECEMBER 2013

	Notes	2013 €'000	2012 €'000
NET CASH INFLOW FROM OPERATING ACTIVITIES	16	<u>3,269</u>	<u>3,911</u>
RETURNS ON INVESTMENTS AND SERVICING OF FINANCE			
Interest received		97	89
Interest & charges paid		(73)	(72)
		<u>24</u>	<u>17</u>
CAPITAL EXPENDITURE AND FINANCIAL INVESTMENT			
Payments to acquire tangible fixed assets		(1,995)	(1,494)
Development funds received from OPW/SECAD		195	400
OPW development expenditure		(24)	(1,278)
Proceeds on disposal of fixed asset		-	1
		<u>(1,824)</u>	<u>(2,371)</u>
INCREASE IN CASH AND CASH EQUIVALENTS	17	<u>1,469</u>	<u>1,557</u>

THE ZOOLOGICAL SOCIETY OF IRELAND

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2013

1. INCOME	2013	2012
Income arises from the following activities undertaken wholly within Ireland.	€'000	€'000
Gate receipt income	10,334	9,896
Annual pass and membership income	2,237	2,317
Shop income	2,203	2,208
Other income	1,335	1,313
	16,109	15,734
2. EMPLOYEE INFORMATION		
Staff numbers and costs		
Average number of employees:		
Management	10	10
Administration	14	15
General staff		
- full time	94	94
- part time	15	14
Shop	10	10
	143	143
The aggregate payroll costs of these persons were as follows		
	€'000	€'000
Wages and salaries	4,927	4,885
Social welfare costs	507	499
Defined benefit pension costs (Note 13)	40	28
Defined contribution pension costs	164	137
	5,638	5,549

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2013 *(Continued)*

3. OPERATING SURPLUS	2013	2012
The operating surplus is stated after charging:	€'000	€'000
Remuneration of Members of Council		
- Fees	-	-
- Other emoluments	-	-
Auditor's remuneration in respect of the entity	18	18
Auditor's remuneration in respect of the group accounts (including the entity)	25	25
Depreciation	1,326	1,378
Operating lease charges	11	13
Loss on disposal of fixed asset	-	3
	<u><u> </u></u>	<u><u> </u></u>

Under the Society's Articles of Association, Members of Council are not entitled to remuneration. Auditor's remuneration is disclosed net of VAT.

4. INTEREST INCOME	€'000	€'000
Deposit interest	97	89
Other finance income on defined benefit pension scheme (Note 13)	43	9
	<u><u> </u></u>	<u><u> </u></u>
	140	98
	<u><u> </u></u>	<u><u> </u></u>

5. TAXATION

No liability to taxation arose during the year as the Society is exempt from corporation tax.

THE ZOOLOGICAL SOCIETY OF IRELAND

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2013 *(Continued)*

6. Tangible Fixed Assets

Group	Land €'000	Plant Machinery & Equipment €'000	Computer Equipment & Software €'000	Motor Vehicles €'000	Buildings & Habitats €'000	Total €'000
Cost:						
At 1 January 2013	191	3,799	1,338	404	14,031	19,763
Additions	-	231	50	19	1,695	1,995
At 31 December 2013	191	4,030	1,388	423	15,726	21,758
Depreciation:						
At 1 January 2013	-	2,978	1,162	300	3,353	7,793
Charge for year	-	246	97	33	950	1,326
At 31 December 2013	-	3,224	1,259	333	4,303	9,119
Net Book Value:						
At 31 December 2013	191	806	129	90	11,423	12,639
At 31 December 2012	191	821	176	104	10,679	11,971

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2013 *(Continued)*

6. Tangible Fixed Assets *(Continued)*

Company	Land €'000	Plant Machinery & Equipment €'000	Computer Equipment & Software €'000	Motor Vehicles €'000	Habitats €'000	Total €'000
Cost:						
At 1 January 2013	191	2,095	1,338	227	7,059	10,910
Additions	-	126	50	18	851	1,045
At 31 December 2013	191	2,221	1,388	245	7,910	11,955
Depreciation:						
At 1 January 2013	-	1,768	1,162	204	1,402	4,536
Charge for year	-	124	97	19	732	972
At 31 December 2013	-	1,892	1,259	223	2,134	5,508
Net Book Value:						
At 31 December 2013	191	329	129	22	5,776	6,447
At 31 December 2012	191	327	176	23	5,657	6,374

THE ZOOLOGICAL SOCIETY OF IRELAND

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2013 *(Continued)*

7. Financial Assets

Company

The Society's financial asset comprises its investment in Fota Wildlife Park Limited ("Fota"), a company limited by guarantee. Fota is accounted for as a subsidiary undertaking as the Society is a member of Fota Wildlife Park Limited and has the power to appoint a majority of the Governors of the Fota Board.

Details in respect of Fota are set out below:

Name and registered office	Country of Incorporation	Principal activity
Fota Wildlife Park Limited	Ireland	Operation of a wildlife park

8. Stocks

	Group		Company	
	2013	2012	2013	2012
	€'000	€'000	€'000	€'000
Shops	220	242	77	78
Consumables	22	28	22	28
	<u>242</u>	<u>270</u>	<u>99</u>	<u>106</u>

The replacement cost of stocks does not differ materially from the amounts shown above.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2013 *(Continued)*

9. Debtors: (Amounts falling due within one year)

	Group		Company	
	2013	2012	2013	2012
	€'000	€'000	€'000	€'000
Trade debtors	172	190	126	127
Prepayments and other debtors	268	256	215	201
VAT	7	28	-	-
	<u>447</u>	<u>474</u>	<u>341</u>	<u>328</u>

THE ZOOLOGICAL SOCIETY OF IRELAND

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2013 *(Continued)*

10. Creditors: (Amounts falling due within one year)

	Group		Company	
	2013 €'000	2012 €'000	2013 €'000	2012 €'000
Bank loan (Note 11)	250	250	-	-
Trade creditors	875	994	528	606
Accruals and deferred income	1,570	1,676	1,290	1,398
PAYE/PRSI	302	276	238	242
VAT	41	53	41	53
	<u>3,038</u>	<u>3,249</u>	<u>2,097</u>	<u>2,299</u>
OPW grant	30	54	30	54
	<u>3,068</u>	<u>3,303</u>	<u>2,127</u>	<u>2,353</u>

During 2013, the OPW issued a grant of €Nil (2012: €400,000) to the Society. These funds are to be used solely for purposes of development projects authorised by the OPW. All expenditure on such projects is approved by the OPW prior to payment. At 31 December 2013, €30,000 (2012: €54,000) remained unspent from the grant received and has been included in creditors and cash.

	2013 €'000	2012 €'000
At beginning of year	54	932
Received during the year	-	400
Expended during the year	<u>(24)</u>	<u>(1,278)</u>
At end of year	<u>30</u>	<u>54</u>

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2013 *(Continued)*

11. Creditors (Amounts falling due after more than one year)

	Group	
	2013	2012
	€'000	€'000
Bank loan	<u>250</u>	<u>500</u>
Loan maturity analysis:		
	2013	2012
	€'000	€'000
In one year or less, or on demand	250	250
Between one and two years	250	500
Between two and five years	-	-
After more than five years	<u>-</u>	<u>-</u>
	<u>500</u>	<u>750</u>

THE ZOOLOGICAL SOCIETY OF IRELAND

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2013 *(Continued)*

12. Other Deferred Grants

	Group	
	2013	2012
	€'000	€'000
Government grants		
Received and receivable:		
At beginning of year	635	635
Received during the year	195	-
At end of year	<u>830</u>	<u>635</u>
Amortisation:		
At beginning of year	334	309
Amortised to income and expenditure	25	25
At end of year	<u>359</u>	<u>334</u>
Net book amount	<u>471</u>	<u>301</u>

The receipt of funding of €195,434 from SECAD is subject to terms and conditions and if these are not adhered to, SECAD reserves the right to deem the contract to be invalid and all grant aid shall be immediately repayable.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2013 *(Continued)*

13. Pension Asset/(Liability)

Defined benefit pension scheme

The group operates a defined benefit pension scheme. Pension costs for the defined benefit pension scheme members are assessed in accordance with the advice of independent qualified actuaries using the projected unit method. The most recent actuarial valuation of the group's pension scheme was carried out as at 1 April 2013. The best estimate of pension contributions for the year ended 31 December 2014 is €180,000. The financial assumptions used to calculate the value of the defined benefit pension scheme's liabilities under FRS 17 are:

	2013	2012	2011
	%	%	%
Rate of general increase in salaries	3.00	3.00	3.00
Rate of increase in pensions in payment	0.00	0.00	0.00
Discount rate of scheme liabilities	3.40	3.20	4.90
Inflation	2.00	2.00	2.00

Amounts recognised in the income and expenditure account in respect of the defined benefit pension scheme is as follows:

	2013	2012
	€'000	€'000
Current service cost	40	28
Expected return on pension scheme assets	(129)	(108)
Interest on pension scheme liabilities	86	99
	(3)	19

THE ZOOLOGICAL SOCIETY OF IRELAND

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2013 *(Continued)*

13. Pension Liability *(Continued)*

The amount included in the balance sheet arising from the group's obligations in respect of its defined benefit retirement scheme is as follows:

	2013	2012
	€'000	€'000
Total market value of assets	2,709	2,476
Present value of the scheme's liabilities	(2,609)	(2,706)
Net asset/(liability) recognised in the balance sheet	100	(230)

Movements in the deficit in the scheme during the year arose as follows:

	2013	2012
	€'000	€'000
At 1 January	(230)	(83)
Current services cost	(40)	(28)
Contributions	119	327
Other financial income	43	9
Actuarial gain/(loss)	208	(455)
At 31 December	100	(230)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2013 *(Continued)*

13. Pension Liability *(Continued)*

Movement in Scheme Assets and Liabilities

	Pension Assets €'000	Pension Liabilities €'000	Pension Deficit €'000
At 1 January 2013	2,476	(2,706)	(230)
Current service cost	-	(40)	(40)
Interest on scheme liabilities	-	(86)	(86)
Expected return on scheme assets	129	-	129
Contributions by plan participants	119	-	119
Benefits paid	(100)	100	-
Actuarial gain	<u>85</u>	<u>123</u>	<u>208</u>
At 31 December 2013	<u>2,709</u>	<u>(2,609)</u>	<u>100</u>

THE ZOOLOGICAL SOCIETY OF IRELAND

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2013 *(Continued)*

13. Pension Liability *(Continued)*

Basis of expected rate of return on scheme assets

As at 31 December 2013 based on the yield on the Merrill Lynch Eurozone bond index we have assumed an expected long-term return on bonds equal to 3.0%. The expected long-term return on equities is equal to the bond return plus an assumed equity premium of 3.5% per annum. This gives an assumed equity return of 6.5% per annum. The assumed return on property is assumed to be 2% below the rate of return on equities. The return on cash ("other") is assumed to be 3.2% per annum. The analysis of the scheme's assets and the expected rate of return at the balance sheet date were as follows:

	Expected return 31 December 2013 %	Fair value at 31 December 2013 €'000	Expected return 31 December 2012 %	Fair value at 31 December 2012 €'000
Equities	6.50	1,447	7.30	1,181
Bonds	3.00	984	3.30	984
Property	4.50	48	5.30	52
Other	3.20	230	2.70	259
Total market value of assets		<u>2,709</u>		<u>2,476</u>

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2013 *(Continued)*

13. Pension Liability *(Continued)*

Analysis of amount recognised in the statement of total recognised gains and losses:	2013 €'000	2012 €'000
Gain on assets	85	159
Experience gain on liabilities	41	33
Gain/(loss) on change in assumptions	82	(647)
	<hr/>	<hr/>
Actuarial gain/(loss) to be recognised in statement of total realised gains and losses	208	(455)
	<hr/> <hr/>	<hr/> <hr/>

The experience gains and losses are as follows:	2013	2012	2011
Difference between the expected and actual return on scheme assets			
- amount (€'000)	85	159	(130)
- percentage of scheme's assets	3.1%	6.4%	(6.6%)
Experience gains and losses on scheme's liabilities			
- amount (€'000)	41	33	16
- percentage of the present value of the scheme's liabilities	1.5%	1.2%	0.8%
Change in actuarial assumptions to value liabilities			
- amount (€'000)	82	(647)	(178)
- percentage of the present value of the scheme's liabilities	3.1%	(23.9%)	(8.6%)
Total amount included in statement of total recognised gains and losses			
- amount (€'000)	208	(455)	(292)
- percentage of the present value of the scheme's liabilities	8.0%	(16.8%)	(14.1%)

THE ZOOLOGICAL SOCIETY OF IRELAND

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2013 *(Continued)*

13. Pension Liability *(Continued)*

Mortality

No mortality table used pre-retirement (all members assumed to survive to NRA).

Post-retirement tables used are 62% PNML 00 (Males) and 70% PNFL 00 (females) plus allowance for future mortality improvements.

Expected Lifetime

The expected lifetime of a participant who is aged 65 and the expected lifetime (from the age 65) of a participant who will be aged 65 in the 25 years are shown in years below based on the above mortality tables

Age	Males	Females
65	21.5	23.0
65 in 25 years	<u>24.5</u>	<u>25.4</u>

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2013 *(Continued)*

14. Reserves	Accumulated surplus €'000	Development reserve €'000	Emergency reserve €'000	Total €'000
Group				
At beginning of year	9,191	5,000	1,732	15,923
Surplus for year	2,269	-	-	2,269
Actuarial gain recognised on defined benefit pension scheme	208	-	-	208
Transfer	(23)	-	23	-
At end of year	11,645	5,000	1,755	18,400
Company				
	Accumulated surplus €'000	Development reserve €'000	Emergency reserve €'000	Total €'000
At beginning of year	3,601	5,000	1,732	10,333
Surplus for year	1,830	-	-	1,830
Transfer	(23)	-	23	-
At end of year	5,408	5,000	1,755	12,163

THE ZOOLOGICAL SOCIETY OF IRELAND

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2013 *(Continued)*

15. Transfer to Development and Emergency Reserves

The Members of Council have decided to transfer €23,000 (2012: €31,000) from the accumulated surplus to the emergency reserve. The Members of Council have also decided to transfer €Nil (2012: €2,000,000) from the accumulated surplus to the development reserve. The Members of Council continue to monitor the strategic development of Dublin Zoo and have set aside funds to finance future capital investment projects.

16. Reconciliation of Surplus Before Interest to

Net Cash Inflow from Operating Activities	2013 €'000	2012 €'000
Operating surplus	2,177	2,121
Depreciation of tangible fixed assets	1,326	1,378
Loss on disposal of fixed asset	-	3
Effect of defined benefit pension scheme	(78)	(299)
Decrease in stocks	28	90
Decrease in debtors	27	340
(Decrease)/increase in non OPW creditors	(211)	278
Net Cash Inflow from Operating Activities	3,269	3,911

17. Analysis of Movement in Net Funds

	At beginning of year €'000	Cashflow €'000	At end of year €'000
Cash at bank and in hand	7,542	1,219	8,761
Bank loan	(750)	250	(500)
Net funds	6,792	1,469	8,261

(A company limited by guarantee and not having a share capital)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2013

(Continued)

18. Commitments and Contingencies

At 31 December 2013, the Society had authorised capital expenditure amounting to €5,600,000 (2012: €686,178) but this had not yet been contracted.

19. Approval of Financial Statements

The consolidated financial statements were approved by the Council on 22 May 2014.



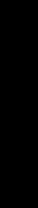
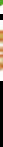
Dublin Zoo, Phoenix Park, Dublin 8.

T: (01) 474 8900 F: (01) 677 1660 E: info@dublinzoo.ie W: www.dublinzoo.ie

Fota Wildlife Park, Carrigtwohill, Co. Cork, Ireland

T: (021) 481 2678 F: (021) 4812744 E: info@fotawildlife.ie W: www.fotawildlife.ie

REPORT



Annual Report 2013/14 Social Impact