



The Whitley Wildlife Conservation Trust,
Paignton Zoo Environmental Park,
Living Coasts & Newquay Zoo

Annual Review & Accounts 2012-13

Executive Director's report

2013 was a year to celebrate, for many different reasons. Paignton Zoo was 90 years old. Living Coasts reached its 10th birthday. Visitor numbers at Newquay Zoo finally stabilised after several years of gentle decline. The organisation as a whole made the largest annual financial surplus in its history. The south west had its first proper summer for seven years. The first orang-utan for 16 years was born at Paignton Zoo.

In fact, it was such a successful year for so many reasons that it will be a very hard act to follow and yet, certainly for the first third of the year, it would have been very hard to predict how things would turn out. The weather was awful, the cold spring that just went on and on made a mess of visitor numbers and predictions. Many of our animals gave up and didn't even try to breed. If there is a lesson in all of this it is the age old one of prepare for the worst and hope for the best, which is exactly what we did.

In March, Keith Mitchell took over the Chairman's role, vacant for nine months following the death of Dr David Stradling. Two new trustees joined the Board, Sarah Barr and Anya Calcott, bringing us briefly to a full complement of trustees, before work commitments caused Andrew Williams to have to step down shortly afterwards.

Eighteen months before, we had made the decision to mark Paignton Zoo's anniversary with The Great Gorillas Project, a joint venture with Torbay Council and Exeter City Council to place life size sculptures of gorillas around Torbay and Exeter, to form a trail for residents and visitors to explore. The spectacularly painted gorillas were a feature of the summer and when they were all auctioned off in November they generated a significant amount of money to put towards gorilla conservation in the wild. The consensus, certainly in Torbay, was that this was the best publicity project the Zoo has ever carried out and, more importantly, it really did form a cohesive action, linking lots of disparate parts of our community. Great credit is due to Director of Marketing and Development, Pippa Craddock, for pushing the idea through initially sceptical colleagues and trustees, and to her and many colleagues, both inside and outside our organisation, for making it all happen.

Another spectacular PR success over the years has been the Verticrop exhibit at Paignton Zoo, which once achieved the distinction of gracing the cover of Time magazine. However, all good things come to an end, and we took the decision to wind down the project as the infrastructure had come to the end of its natural life and would have cost more than we were prepared to invest to restore it. Our project was always just an experimental one and it now must fall to others to take it on and achieve the economies of scale necessary to make it truly viable.

Marking the tenth anniversary of the opening of Living Coasts with a Royal visit was a great privilege. HRH The Earl of Wessex, Prince Edward, was a well informed and enthusiastic guest and Living Coasts looked wonderful in the sunshine. Of all our zoo sites Living Coasts achieved the greatest percentage increase in visitors, such that it came the closest it has ever done to breaking even.

Physical developments were few and far between as we had decided to try to restore our cash balances following the lean years of 2010-11. However, refurbishments to the otter exhibit and the bar area at Living Coasts; a new 'Tippy's' café at Newquay; and rebuilt aviaries at the Chusan paddocks in Paignton were exceptions necessitated by deteriorating infrastructure. As usual all that work, and much other important, but hidden, maintenance was carried out by our own in-house teams and their professionalism and broad skills are the envy of many of our colleague zoos.

Our core strategic aims of advocacy, education and *in-situ* and *ex-situ* conservation were the drivers for all of our activities during the year and are detailed elsewhere in this annual review. However, it is worth noting the continued success of our 'holistic' work with Sulawesi black macaques, where we not only run the captive breeding programme for the species, but have a comprehensive field conservation programme based in northern Sulawesi. Project staff carried out a field expedition to neighbouring Bacan Island and discovered a new, healthy, population of macaques, originating from a translocation that took place more than twenty years ago. The survival prospects for this charismatic monkey suddenly took a turn for the better; and the metaphor can perhaps be extended to our whole organisation.

We look forward to 2014 with optimism and enthusiasm.

Introducing the Whitley Wildlife Conservation Trust

Our vision

A world rich in wildlife and wild places

Our mission

The WWCT is an education, scientific and conservation charity dedicated to protecting our global wildlife heritage and inspiring in people a respect for animals, plants and the environment

Our strategic aims

- Education and engagement of the public on the conservation of the natural world
- *In situ* conservation of species and habitats
- *Ex situ* conservation of threatened species
- Conservation advocacy: shaping behaviour-change for the benefit of biodiversity

Whitley Wildlife Conservation Trust

The Whitley Wildlife Conservation Trust is the charity founded in Herbert Whitley's name after his death in the 1950s. It continues his ideals of conservation and education through high quality visitor attractions, scientific study and field projects at home and abroad.

The Trust is the umbrella organisation for the three zoos, two Local Nature Reserves and one National Nature Reserve, Slapton Ley.

Paignton Zoo Environmental Park

Paignton Zoo was founded in 1923 by an eccentric millionaire and pioneering conservationist, Herbert Whitley.

Over the years Paignton Zoo has grown to become one of the leading British zoos and a popular family day out. It has a well-earned reputation for science and research and supports conservation projects at home and abroad.

Paignton Zoo's unique system of habitat zones makes the most of its well-wooded valley home. The collection is diverse, ranging from large mammals to tiny amphibians and from flocks of exotic birds to rare and unusual invertebrates. Paignton Zoo is also a botanic garden, with rare and special plants helping to set the scene in and around the animal enclosures.

Living Coasts

Living Coasts, Torquay's Coastal Zoo and Aquarium is dedicated to protecting marine and coastal wildlife. It holds an excellent collection of rare and unusual marine and coastal species including penguins, auks and wading birds. It is home to a lively group of South American fur seals and the aquarium contains stingrays, mudskippers, seahorses and octopuses.

Naturalistic habitats are used to give its animals the best environment in which to live and breed. Visitors are encouraged to look at protecting not only species but also the habitats in which they live.

Newquay Zoo

Opened in 1969, the Zoo has become one of the country's most well-respected zoos, with ground breaking and innovative conservation programmes. Winning many major environmental and sustainability awards and set in 13 acres of lush tropical gardens, it has proved itself to be one of the best attractions in the South West.

Specialising in breeding many endangered species, Newquay Zoo is at the forefront of conservation and education, leading the way in exciting innovative enclosure design, enrichment projects and overseas conservation.



Education and engagement

2012/13 has been a year of celebration for all of our education teams. At Newquay Zoo, activity trails were produced to celebrate the work of Alfred Russel Wallace, on the centenary of his death; Living Coasts celebrated its 10th year, which ended with Torbay being declared a Marine Conservation Zone, giving new relevance to its education programme of engaging schools with coastal conservation and biodiversity education; and Paignton Zoo's education team led The Great Gorillas Project celebrations for schools, with more than twenty schools decorating their own juvenile gorilla sculptures before they joined The Great Gorilla Trail.

We have seen a mix of results regarding the number of students accessing our formal education programmes. At Newquay Zoo, student numbers have grown by over 30%, a huge increase in spite of a slight decline in students from Cornwall College due to increased tuition fees, although the teaching and engagement partnership with Cornwall College remains strong. Living Coasts maintained onsite student numbers but experienced a 40% drop in the number of children accessing their outreach programme. At Paignton Zoo, however, school visits increased by 30% while student numbers reduced by 13% and consultation with teachers has begun to determine why schools are bringing smaller groups.

A number of our education staff members have undertaken outreach and careers work for schools, colleges and community groups, as STEM ambassadors and participants in events such as the Big Bang! and, our links with the FE and HE community continue to develop. For example, Living Coasts has assisted South Devon College with development of its Foundation Degree in Marine Science.

Paignton Zoo

In autumn 2012, we successfully secured £35,000 from Alcoa Howmett for a new education project – 'Making Sense of Global Environmental Change'. Running from November 2012 until May 2014, the project communicates how resource use and carbon emissions impact upon biodiversity and how we can minimise our effect on the environment, thereby aiding wildlife conservation. Over the course of 2013, we have been looking to encourage schools, colleges and zoo visitors to take action to reduce their environmental impact. The funding has also enabled us to install video conferencing facilities to assist roll out of an outreach programme for schools from 2013/14 onwards. As part of this programme, we will run live link ups with scientists and staff working on *in-situ* conservation projects.

We have also begun to host BTEC Advanced Forest School Leaders Award (Level 3) courses, in partnership with Bridgwater College, with some trainees visiting from as far away as Oxford and all of our Education Officers undertaking the training too. The course is led by John Blaney, one of the original team from Bridgwater College who established Forest School in the UK. John's fun and informal teaching style has made the training very popular with everyone gaining a real sense of achievement and an inspired outlook on their teaching practice.



Newquay Zoo

This year, our outreach provision remained healthy and we continued to provide animal encounters at holiday parks over the summer months as well as assisting the zoo's events team with activities including the Royal Cornwall Show.

We have also enjoyed providing a range of activity trails, including those commemorating Wallace, and have run our very first Summer School, learning from our own experience of providing holiday activities, as well as that of Living Coasts and Paignton Zoo.

Junior Keeper experiences have remained popular and are now accredited with our activity trails as part of the Children's University partnership. While our junior clubs continue to have steady attendance and have been renamed – Meerkat Mob and Zoo Cadets!

Living Coasts

Our events programme focussed on Living Coasts' 10th birthday celebrations, with trails and activities around the site linked to this. Waddles and Toddles, our toddler group, has many new attendees and we ran a very enjoyable and successful Coast Club Summer School during the holidays.

New interpretation has been added to the site to refresh information on the range of species we hold and Plymouth University students have created new video footage to show on site. In addition, the revamped Living Coasts website includes new pages for education and new promotional leaflets have been designed and produced.

The worth of our presentation programme continues to be highlighted. The number of visitors attending talks on site has risen to 51%. Eighty percent of these rate the presentations as good or excellent, compared with 73% last year – the most popular being penguins and seals, with our new otters close behind. These results mirror those of our school groups, which rate satisfaction levels as 4.6/5 (with 4 being good and 5 being excellent).



In situ conservation



Our conservation projects in seven regional programmes around the world emerged as a very high priority in the new WWCT strategy which was finalised this year. As a result we have been able to renew our commitment to these regions: South West UK, Sulawesi, Vietnam, Western Zimbabwe, Highland East Africa, Coastal East Africa and South Western Nigeria, and plan for greatly increased project funding in the future.

South West UK Regional Programme

In November we were delighted to win the BIAZA Award for Best Conservation Project for the reintroduction of the cirl bunting to Cornwall. No further supplementation of young birds took place in 2013 but monitoring data from our partners the RSPB indicate that the Cornish population is still doing well, naturally increasing in numbers and range.

At Slapton Ley National Nature Reserve the annual count of strapwort plants around the lower ley indicated that the reintroduced populations are also growing and possibly naturally colonising additional areas of the shore. However, with Slapton Ley still being the only place where this species occurs in the UK it is still vulnerable to chance events in the locality. Therefore we need to establish populations at other sites in the south west and towards the end of the year we were awarded a grant from Natural England to conduct an assessment of other potential reintroduction sites.

Closer to home, at Primley Park in Paignton we developed a Forest Schools site to provide a venue for groups of all ages to experience outdoor play and learning. The site is being well used by primary, secondary and language schools as well as by Bridgwater College for training forest schools teachers and has substantially enhanced the value of Primley to the local community.

Sulawesi (Indonesia) Regional Programme

Thanks to the large grants received in 2012 the Selamatkan Yaki team in Sulawesi have had an extremely busy year. Most importantly they facilitated a workshop in which all the relevant stakeholders concerned with the conservation of the yaki (Sulawesi crested black macaque) and its last major stronghold, Tangkoko Nature Reserve came together and agreed conservation action plans for them. The team will continue to work with the other stakeholders to improve the management of Tangkoko, provide training for the rangers and tourist guides and develop sustainable livelihoods for the local communities. Elsewhere they have launched the Yaki Pride Campaign to raise awareness of this endemic species and the reasons why it is now a critically endangered species, especially hunting. A large number of well-known and eminent local people have become ambassadors for Yaki Pride, including Indonesia's top rock band Slank who are really helping to spread the word to audiences that would not normally be interested in wildlife issues.



Other programmes

We received news from Vietnam about confiscations of illegal shipments of wildlife on a depressingly regular basis through the year, in particular massive numbers of pangolins on their way to China. Unfortunately, even if animals are found alive they usually end up back in the trade due to legal loopholes. Our team at the Carnivore and Pangolin Conservation Project are working with law enforcement officials to prevent this happening and ensuring the animals go to sanctuaries. In addition, the field team have been able to conduct some trial pangolin releases this year to start developing care and release protocols so confiscated animals can be safely released back into the wild. In East Africa we have joined up with the Manchester Metropolitan University to continue our surveys for hyper-endemic amphibians in the Uzungwa Scarp forest, Tanzania. Our new field project leader and PhD student Elena Tonelli led her first expeditions into the forest as soon as the rainy season started in November and at last managed to find the second of our three target species the Kihanga reed frog. The frogs were in an area where the species has not been recorded before but were still not found in the previously known site. Unfortunately the third species, Poynton's forest toad, still eludes us despite increasing survey effort.

Ex-situ conservation

Paignton Zoo

Unquestionably the highlight of 2013 was the birth of no less than two Bornean orang-utans, the first at the zoo since March 1997. To our great relief both mothers reared their babies without any difficulty. Another primate resuming breeding after a long hiatus was the Zoo's group of mandrills which also produced two offspring. A notable first breeding was a small litter of giant tenrecs, an obscure insectivorous mammal from Madagascar. Breeding for reintroduction is one role of the animal collection and, once again, 18 hazel dormice were bred at the zoo and supplied for reintroduction to various sites across southern England. We also heard that the offspring of Paignton Zoo-hatched Socorro doves have been returned to their island home in the Pacific, almost 40 years after the species became extinct there.



The bird department continued to work with increasingly challenging species, building on husbandry skills developed over the last few years. As at Newquay Zoo blue-crowned laughing-thrushes, a critically-endangered Chinese species, bred very successfully with seven chicks being raised. Black crowned cranes, northern hawk owl and yellow-streaked lory were three other species that bred successfully in 2013 after near-misses in earlier years. Overall the long cold spring did not encourage breeding attempts by some species and other important taxa like Darwin's rhea and crested quail dove continue to prove difficult. Hand-rearing protocols for the tiny chicks of small passerines such as cut-throat finch and Java sparrow have been developed for wider application in the future.

Some species have naturally protracted reproductive cycles and long inter-birth intervals but they do live a long time in compensation. The Zoo's group of the endangered Indochinese box turtle produced two hatchlings, the first in Europe for a decade, and more than 25 years after the parents first came into captivity! Amphibian husbandry continues to be a major focus for the Zoo and a PhD study on environmental parameters for Madagascar Mantella frogs was started during the year. Mantella frogs continue to breed well and another UK first was achieved, this time with Ebenau's mantella.

New species are not often added to the collection these days as the available space is usually required for important breeding programmes. A notable exception was the transfer of 4 West Caucasian tur, a spectacular and highly endangered mountain goat from the Caucasus mountains, from other European zoos. They now reside in the old quarry exhibit where they will gradually replace the Barbary sheep that have lived there for the last ten years.

Living Coasts

Having brought in otters to Living Coasts for the first time in 2013 we decided, in 2014, to replace the Eurasian otters with Asian small-clawed otters, all of which were born at Newquay Zoo. The Eurasian otters went to breeding situations on the continent. The small-clawed otters proved even more popular with visitors than their predecessors and the bachelor group is useful to the breeding programme. Also as a result of breeding programme recommendations a new male South American fur seal arrived from Germany. As is the way of these things one of his new 'wives' was instantly smitten, the other couldn't stand the sight of him.

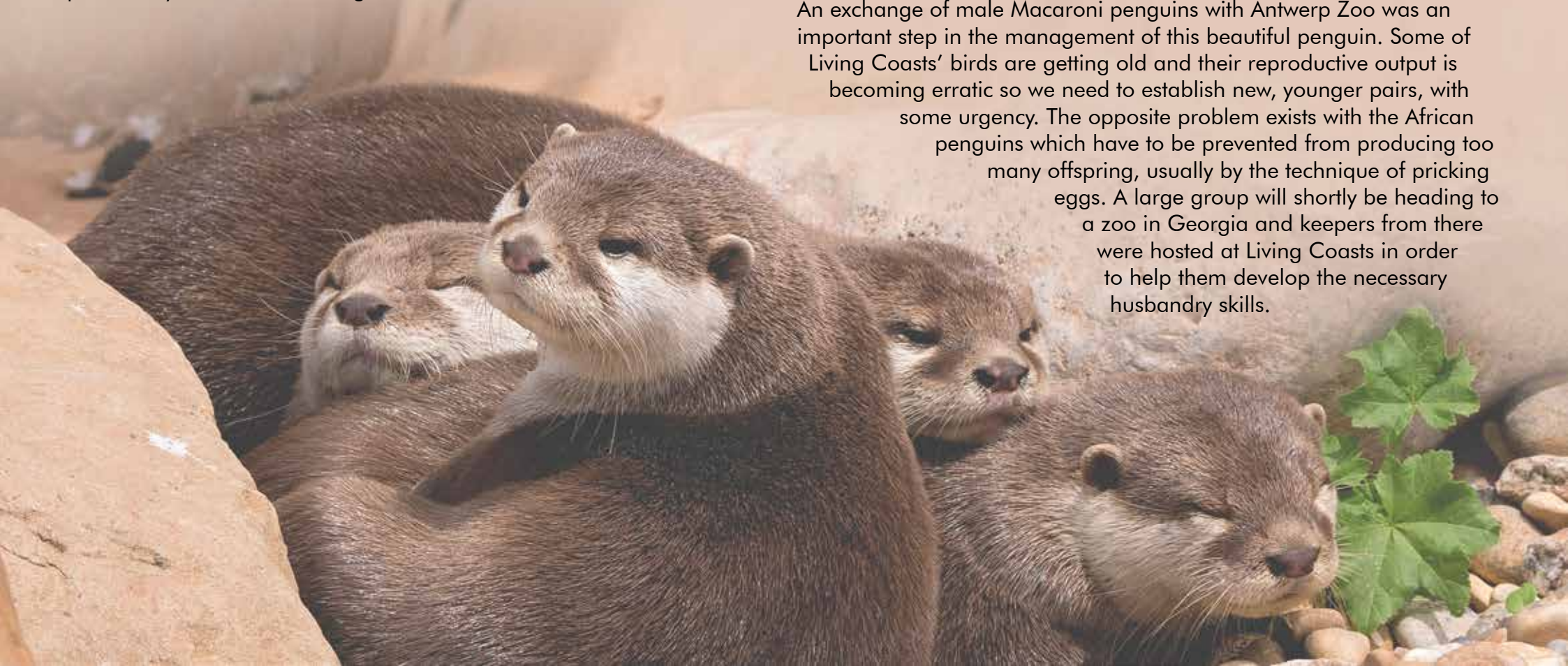
Further improvements were made to the otter exhibit during the year, particularly the indoor housing, and extensive work was carried out on

the waders' estuary to reduce the silt load, thin the vegetation and re-instate the circulation pumps to improve water quality.

Breeding results were generally good although, once again, the ruffs failed to rear any offspring. Redshanks and avocets bred well and, as ever, the Inca terns were spectacularly successful, with another 18 being sent to other zoos during the year. Four common guillemots were reared and four, older, birds were sent to Lisbon aquarium, the first time we have been able to make this species available to another collection.

Both species of blue-spotted rays (ribbon-tailed and sting) bred well again and we are starting to be able to supply animals regularly to other aquaria. There are studbooks for both these species.

An exchange of male Macaroni penguins with Antwerp Zoo was an important step in the management of this beautiful penguin. Some of Living Coasts' birds are getting old and their reproductive output is becoming erratic so we need to establish new, younger pairs, with some urgency. The opposite problem exists with the African penguins which have to be prevented from producing too many offspring, usually by the technique of pricking eggs. A large group will shortly be heading to a zoo in Georgia and keepers from there were hosted at Living Coasts in order to help them develop the necessary husbandry skills.



Newquay Zoo

Probably the most important event during the year was the transfer of two UK born male Owston's civets back to Vietnam, their country of origin. The move was arranged as part of a co-operative breeding programme agreed with the Government of Vietnam. During 2014 it is planned that an unrelated male will be transferred to the UK to ensure that the genetic diversity of the whole captive population is adequate to ensure its long term survival.

Other important breeding programme transfers included those for a crowned lemur, slender-tailed cloud rats, Diana monkeys and a golden lion tamarin. The latter two species are no longer held at the Zoo. Having held two Chapman's zebra mares for a while we decided to take the plunge and bring in a stallion. By the year end we hoped that at least one of the mares was pregnant. A lesser mouse deer fawn was the first reared for several years. This is a rare ungulate that is neither mouse nor deer and not closely related to anything else.

Having three zoos under our control means that we can easily move animals between them in order to provide the best facilities for individuals. The transfer of small-clawed otters from Newquay to Living Coasts was one such example; another was the transfer of a fine pair of Blyth's hornbills from Paignton to Newquay to occupy a tall and high aviary ideal for such large birds. Work with other challenging species continued and, like at Paignton, success with blue-crowned laughing thrushes was particularly notable, with nine chicks being reared. Red-billed blue magpies, grosbeak starling, ultramarine grosbeak and red-cheeked cordon bleus were other species for which success came based on intensive work in previous years.

Finally, we should note the continued importance of the work by the amphibian keepers who continue to broaden their skills and expertise such that the number of species breeding has now reached double figures, including, for the first time, the rare and beautiful Kaiser's newt.



Conservation advocacy

A woman with blonde hair, wearing a dark blue beanie and a blue jacket, is smiling and holding a white electrical plug. In the foreground, the head and neck of a penguin are visible. The background is a light, textured surface, possibly snow or ice.

Fostering human behaviour change has become a buzz phrase in the global zoo community in the last year or two. The WWCT zoos made it a strategic aim in 2012 and we are certainly not the only ones to have recognised that encouraging behaviour or policy change to benefit the conservation of wildlife is a major role of zoos. However, the global zoo community still has a lot to learn about how to do it effectively and understanding how to do it and how to measure its impact has been a hot topic on the conference circuit this year. The use of social media to raise awareness and encourage behaviour change is also a rapidly developing field. The new EAZA campaign, Pole to Pole, launched in September, has a large social media element. The campaign is attempting to raise awareness of the problems of climate change, especially for polar habitats and species, and to encourage people to “unplug”. Devices left on standby use almost as much energy as when they are switched on, to join the campaign and save money visit <https://www.facebook.com/poletopolecampaign> and make an Unplug Pledge. You can follow campaign news on Facebook. It will be interesting to see how this campaign does and how big a part social media will play in it.

Marine Conservation Zones

Marine environments are extremely important for biodiversity and for human livelihoods but are much underrepresented and neglected in terms of conservation and protection. Since opening in 2003 Living Coasts has highlighted the issues of marine conservation and supported the campaign for Marine Conservation Zones (MCZs), a proposed network of protected areas around the UK coastline which would effectively conserve our marine wildlife and help support sustainable fisheries and other coastal livelihoods. In 2013 DEFRA made its final decision on which proposed MCZs would be designated in the first tranche. Torbay MCZ was included in the list of potential zones to be designated but there was local opposition due to misconceptions about potential restrictions on commercial and leisure activities in the Bay. In addition to providing information to our visitors, Living Coasts staff took part in numerous local forums such as the English Riviera Tourism Company, the Harbour Committee and the Harbour Business Forum to promote the positive benefits of the MCZ and distribute accurate information about what it would mean for local people. Thankfully DEFRA did designate Torbay in the first round of MCZs and Living Coasts will now work to ensure its success for wildlife and people by promoting awareness, encourage all sea users to comply with its management rules and encouraging businesses to use the MCZ in a positive way to promote the bay.

Resource efficiency and environmental management

The BIAZA Annual Meeting in 2013 was all about sustainability and it was pleasing to see that the WWCT zoos are still leading the way in environmental management and make significant contributions to the BIAZA Environmental Sustainability and Climate Change Group. Once again all three zoo sites successfully retained their ISO14001 accreditation for Environmental Management Systems (EMS) and continued to set an example to visitors, other zoos and other organisations in responsible resource management and energy use.

Responsible purchasing

Palm oil has been another hot topic in the zoo world this year with ever more depressing news about deforestation in south east Asia due to the expansion of palm oil plantations. In the continued absence of full traceability and transparency and the lack of credibility of RSPO certified sustainable palm oil the zoos' trading company, SWZEL, has continued its commitment to palm-oil free products in the shops and restaurants. Our suppliers are continually challenged about the use of palm oil and encouraged to develop alternative orang utan-friendly products. SWZEL has also turned its attention to coffee and chocolate this year. Coffee from Kilimanjaro and cacao from Madagascar are shade grown within the natural forests and harvested without harming them, they also provide a reliable and fair income to the local growers. In the case of Madacasse chocolate the chocolate is actually made in Madagascar providing four times the positive social impact of normal fair trade chocolate. As we have done for many years with palm oil, by supporting these innovative, small suppliers we can help them develop their markets for these wildlife friendly products and encourage our visitors to make good consumer choices.



Finance report

The financial performance of the group in 2012/13 was significantly improved, despite the fact that trading conditions continued to be tough. Total visitor numbers across the group were up slightly on the previous year at 740,569, mainly due to the spell of good weather in August. We continued to keep a tight control on costs and as a result the group generated a surplus of £1,326,683.

Whitley Wildlife Conservation Trust (WWCT) increased the funds available to its charitable activities with a surplus for the year of £292,589. The Field Conservation and Research department achieved an income of £34,446 and the Trust received a donation of £50,000 from the Binks Trust which it is using to construct new exhibits at its three zoos. The Trust continued to provide financial support to several conservation projects in Africa and elsewhere and assisted the Field Studies Council by contributing to the running of Slapton Ley National Nature Reserve. The Net Assets of the Trust on 31st October 2012 stood at £10,997,675.

South West Environmental Parks Ltd (SWEPL) continued to operate Paignton and Newquay Zoos. It provided financial support to Living Coasts totalling £200,000 and to conservation projects in Africa and elsewhere of £58,747.

Paignton Zoo's visitor numbers rose from 451,473 in 2011/12 to 462,660 in 2012/13. Visitors to Newquay however were down slightly from 157,914 to 156,573. The fall in visitors is attributed to the economic conditions and the fact that the weather at the start of the year was particularly poor. Income was up by nearly £750,000 and the increase in costs was restricted to £170,000. As a result, SWEPL showed a surplus for the year of £923,972.

Visitors to Living Coasts continued to increase, rising 9% to 121,336. Gate income was up by 21% and the Company required significantly less support from SWEPL as a result. The loss before SWEPL's donation was £89,878 which is substantially reduced from previous years. Living Coasts continues to require support from SWEPL however the prospect of achieving breakeven is looking increasingly achievable.

South West Zoo Enterprises Limited, the group's trading company, again performed well given the difficult economic conditions and the number of visitors. Turnover of just over £3.66 million was very slightly up on the previous year and the company increased its donation to SWEPL to £625,407. It was also able to donate £8,112 to Living Coasts following an improvement in the trading at Living Coasts.

After a number of difficult years the performance of the group in 2012/13 reflects the work that has been done to control costs. The group is now well positioned to continue its charitable activities, despite an operating environment which continues to prove challenging.



