

**Conservation Strategy**

Our world is dying. That sounds dramatic, but alas, it is true. Technological breakthroughs may give us convenience and new experiences, but they often create a need for material resources that generate an economic race to destroy natural habitats to find and supply this resource. They often also necessitate an increase in our use of energy. Our population is growing exponentially, and the resultant demand on natural resources is unsustainable. Our diets rely on the conversion of vast tracts of land for agriculture, destroying vital habitats for wildlife and plants.

Many regions of the world also remain poverty-stricken and subject to extreme climates and/or weather events – droughts and floods especially. Poverty limits the livelihood options for people in these regions, and they will often do whatever they need to feed their families. This can easily lead to activities that are harmful or destructive to environments, water courses, and to regional wildlife.

Other global activities – poaching of wildlife for “traditional” medicines, intentional killing for skins, fins, tusks and horns – are well-established, well-known and internationally condemned.

Most zoos in the world are concerned about the environment and educate the public about the loss of biodiversity via the animals within their collection. The particular animals they exhibit become the focal points for their conservation efforts. With our taxonomic focus of crocodilians, this is the guidepost for our conservation plan: the crocodilians.

**Mission**

Our Mission is to inspire in our visitors a respect and understanding for the crocodile. The aim is to stimulate public awareness about crocodiles, alligators, caimans and gharials, and open people’s eyes to the incredible nature of crocodiles, and spark curiosity and awareness for the future.

We encourage people of all ages, nationalities, and walks of life to get involved and learn about these amazing animals. By dispelling the myth that crocodiles are vermin, or a dangerous nuisance, we can make the world a more compassionate place for crocodiles.

**We pursue this mission by:**

* Increasing public understanding of crocodiles and their welfare
* Enabling our visitors to experience a stimulating and enjoyable day out for the whole family
* Ensuring animals are healthy and well-kept in naturalistic habitat-like enclosures
* Increasing understanding of the issues involved in conservation and the breeding of endangered species
* Participating in co-ordinated breeding programmes and working closely with other zoos, wildlife parks and conservation bodies to maximise their conservation involvement
* Playing a significant role nationally and internationally in crocodile research and conservation
* Promoting care for the environment through education
* Developing our role as a centre for scientific study and research
* Providing an education programme for all ages and abilities
* Planning and running outreach programs
* Supporting crocodile conservation programmes in the wild

**The ultimate aim**

The ultimate aim of Crocodiles of the World, and all those working for the conservation of crocodiles, is to see wild populations of all crocodilian species recover to unthreatened numbers and to promote well-managed and sustainable use of resources in crocodile habitats.

This includes: restoring populations in the wild, where possible; establishing assurance colonies in captivity; and building capacity within the range states.

In order for us to achieve this aim, we need to:

1. Partner with other institutions, organisations and individuals
2. Recognise that managing biodiversity is key to the future of wildlife. Educating our visitors about biodiversity and the consequences for us of its loss is one of our primary goals
3. Continually monitor the status of target species and liaise with other projects – both *in situ* and *ex situ*
4. Broaden our focus to include other key reptile species that feature in our collection plan.

**Specific Projects**

We have identified some key species and projects that we’ll focus our initial efforts on:

* Philippine Crocodile – *Crocodylus mindorensis*
* Siamese Crocodile – *Crocodylus siamensis*
* Tomistoma – *Tomistoma schlegelii*
* Chinese Alligator – *Alligator sinensis*
* West African Slender-snouted Crocodile – *Mecistops cataphractus*
* Komodo Dragon – *Varanus komodoensis*
* Giant Galapagos Tortoise – *Chelonoidis nigra sp.*
* Clouded Leopard – Neofilis nebulosa
* Binturong – *Arctictis binturong*

**Native Species**

Along with most UK zoos, we also subscribe to the notion that if we’re committed to protecting the world’s biodiversity, then we need to be working on projects in our immediate area. Native species have recently become a focus for our work as well, including:

North Leigh – a local common has been the focus of reptile surveys by COTW staff. Although staff will continue to carry out surveys and write up the results as part of their own interests, COTW has engaged with the local college staff, and will use this common to help train students in survey techniques and engage local communities to make them aware of the wildlife on their own door-step. Outcomes of these projects will inform local government on issues that are affecting wildlife on the common, and help to shape council maintenance approaches and schedules.

KLCP – a country park nearby to us is also subject to council maintenance, COTW staff assist a volunteer group in carrying out maintenance work on the park each month, encouraging native wildlife onto the site, and providing the animals with habitat, and maintaining the health of the flora of the area.

Spotted On Site – This citizen science project is being used widely, and COTW has established its site for App users to note any species they observe on our site. Once enough data is collected, we’ll be able to document the extent of the species that live in and around our zoo. Seasonal variations in the presence of species can inform maintenance of the site, and give us the data we need to develop the site into a more wildlife-friendly place.

Biodiversity – further site and nearby surveys, construction of habitats for invertebrates such as a bug hotel, and bird boxes, gardens and plantings for bees, butterflies etc also feature in our plans to boost biodiversity.

All of these things will allow us to also explain biodiversity to school students, and further plans to expand our work into school sites will see us providing materials and assistance for students to create bird boxes and use trail cameras on their school premises. By involving students and enabling them to see first hand how we can encourage insects and discover what animals may be ‘visiting’ their school site after the school day has ended will (hopefully) be of interest to students and teachers but will also make it clear why we need to do better at protecting habitats.

**Education**

Our Education Policy details our approach to Conservation Education. What follows are some specific actions that will strengthen the message and align with our mission and that of all zoos.

1. Create signboards and information panels that simply and clearly explain biodiversity and the critical threats it is facing (CBD Aichi target for 2020)
2. Create new schemes of work/curriculum-based lessons for school visits.

There are 3 strands to our conservation education strategy:

1. Visitors – via our signs, talks, experiences and staff interaction with visitors
2. Published materials – this can include our website, guidebook, information sheets, articles and papers
3. Targeted – we can provide materials, resources and assistance to *in situ* projects to strengthen their education projects for local communities.

**Visitors:**

One of our key responsibilities is to the education of our visitors. We achieve this through our signboards, talks and feeding demonstrations, experiences, guided tours and presentations. This strategy is guided by our Education Policy and the responsibility is with our Education Department (although talks and experiences are currently taken by Animal Staff).

The following have been identified to strengthen our conservation education impact on visitors:

1. Education Department will be involved in the design and generation of new educational signboards and materials. (2020)
2. Education and Marketing Departments will work closely to generate increased visitor numbers and visitor satisfaction. (from July 2020)
3. Education Department will establish a regular evaluation of the impact we are having on our visitors so that we can tweak the approach and message as needed. (2020)
4. Eventually, talks and experiences can be partially led by Education Department to free up keeper time. This would depend on a larger Education Department, the timeline for which would not be until 2021-22.

**Published Material:**

We need to provide the information to people not just on general conservation issues, but also on what they can do to help out. Along with educating visitors, we can write articles for posting online and in print, information sheets available in the zoo, and eventually some papers on our conservation education projects. Action points include:

1. Website – update the conservation section with information and links to current conservation concerns and issues – generally and specific to crocodilians
2. Guidebook – get the guidebook printed so that our education message spreads further, generating interest and hopefully funds for our projects.
3. Information sheets –develop these sheets so that they can be made available to visitors (cost to be determined).
4. Articles – create articles for posting online (FB, website etc). These can include links to conservation issues from other sources.

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**Targeted:**

Education is a vital component to conservation projects, and our involvement in field projects can include this element. We can develop materials for specific projects, provide resources (financial or personnel) to education projects that benefit crocodile conservation.

**Sustainability**

As a zoo that promotes the conservation of wildlife and their habitats, we need to be advertising the areas where we are working on reducing our reliance on unsustainable sources of energy and other resources. There is a very practical financial aspect to this, as many new sustainable technologies are not financially feasible for us right now. However, some may be subject to government incentives and/or grants that will lower installation costs as well as reducing the ongoing energy costs.

We don’t need to rush into some of this, as some technologies still need to be proven that they will be reliable, sustainable sources of energy.

All indications are that in future, the following areas are crucial for sustainability:

**Recycling**

We have implemented our Recycling scheme in 2018, and we ensure that bins are maintained properly, with signage intact to help visitors make the right choice of bins with their rubbish.

The animal kitchen also recycles waste into relevant bins to minimise the amount heading to landfill, along with sustainable cooking oil schemes.

**Campaigns**

BIAZA regularly run campaigns for sustainability (such as the ‘Grab That Gap’ where wild flower seeds are provided free of charge for us to grow native flowers that will benefit native insect species, their ‘Love Your Zoo’ campaign, and Palm Oil initiatives).

We are looking to expand this to EAZA Campaigns in the coming years.

**Palm Oil**

BIAZA and other zoo organisations have policies on how we should use palm oil. Palm oil is cheap and effective so is used in a vast number of products. Unfortunately, large tracts of tropical forest are being destroyed palm oil plantations. For us, the main victim is *Tomistoma schlegelii*, since peat swamp forest in Malaysia and Indonesia is being burned to prepare the land for palm oil plantations. This is detrimental to the prime habitat of Tomistoma.

We need to align ourselves with the BIAZA Palm Oil Policy and verify that the products we use and sell (including chocolates, biscuits, ice-creams etc) are either free of palm oil, or are sourcing their oils from recognised sustainable programs.

Our Palm Oil Policy can be viewed here.

 **Energy Use**

Heating our buildings and maintaining them at tropical temperatures year-round creates a hefty demand for energy. To do this efficiently, we use a biomass boiler. This boiler burns discarded wood and cardboard products that would otherwise be burned elsewhere or dumped in landfill. It reduces the amount of packaging waste from our café and souvenir shop deliveries.

During 2023, we introduced the first 2 banks of solar panels on the roofs of our tortoise area buildings. Further banks of panels will be installed over the coming 12 months.

Energy-saving lighting, timers, and check-lists that ensure equipment is turned off when not in use or at the end of the work day are employed to reduce costs, save energy and reduce potential of electrical problems at night.

Future builds can make use of energy-saving technologies to reduce our on-going costs as well as being better for the environment.

**Other Sustainable Practices**

*Rainwater Systems* – Rainwater collection tanks are installed onsite already. These reduce our water-use, and future systems will hopefully reduce this even more significantly.

*Printing* - Our printer, Fine Print, uses FSC-certified paper (Forest Stewardship Council). We should have the FSC logo printed on brochures and other printed materials, as well as adding this fact to the Environmental Policy page of the website to promote our ‘green’ credentials.

*On-site Biodiversity* – We want to encourage native wildlife onto our site via gardens, ponds and other areas not being used for visitors, animals, staff or facilities. These areas will expand as we grow, and natural ponds and green areas can be developed with signage to explain the value of biodiversity, highlighting what we are doing and how it can be implemented by visitors in their local areas. BIAZA initiatives such as ‘Grab That Gap’ support this.