

Committing to Conservation - The World Zoo and Aquarium Conservation Strategy

Engagement - Influencing behaviour change for conservation

Vision: Zoos and aquariums are trusted voices for conservation, and are able to engage and empower visitors, communities and staff measurably to save wildlife

Editors' Note

Zoos and Aquarium have tremendous potential to engage the general public in wildlife conservation. These facilities also contribute for conservation research which is fundamental for conservation of threatened species. Since the extinction rate has been accelerated many folds due to anthropogenic activities, modern zoos are contributing for species conservation in the wild as well. This document by WAZA - Committing to Conservation: The World Zoo and Aquarium Conservation Strategy, outlines the key role zoos and aquariums can play in supporting conservation in the wild. We have permission from WAZA to serialize this publication. This is much needed and timely milepost. Happy reading!

What do zoological facilities do to save animals in the wild? It is not enough to respond that zoos and aquariums inspire people to care more about animals. In most cases, compassion and awareness building do not lead to action unless a continuous process of engagement and incentive is implemented. However, long-term conservation success will be linked to how zoos and aquariums engage with their visitors and change behaviour.

Zoos and aquariums are in an excellent position to influence their visitors to support (directly and indirectly) the Aichi Biodiversity Targets, through education and public programmes, marketing and public relations. Zoological facilities are able to leverage the special emotional connections between animals and visitors to provide formal and informal learning opportunities in conservation education and the broader environmental-education sciences that reinforce the missions of zoos and aquariums. WAZA and many regional zoo and aquarium associations now mandate that each facility should have dedicated education staff who provide conservation-education experiences relevant to visitors in their daily lives.

Zoological facilities are able to open the hearts and minds of their visitors, providing a relevant venue to convey the threats to wildlife, and to inspire, engage and guide positive environmental action. Visits to zoos and aquariums can deepen understanding and enable people to act in new, positive ways to save biodiversity and protect the environment. The remit for educators in zoological facilities is not only to inform visitors about species in the institution, and to raise awareness about threats in the wild and the issues causing the rapid loss of biodiversity, but also to promote conservation-based behaviour action and

field conservation. Proven social-science tools and techniques can be used to stimulate pro-environmental behaviours that reduce the impact humans have on wild populations.

In order to accomplish their full potential to save wildlife, zoological facilities are learning from the social marketing and psychology disciplines that underpin health-and-safety campaigns. Community-based social marketing (CBSM) and other communication tools reach, influence and engage wider audiences by employing social-science methodology. Psychology studies have shown that by understanding human attitudes and values towards the natural environment educational programmes can be developed to empower staff, visitors and communities to change behaviours in ways that can potentially reduce humandriven pressures on the world's limited resources, threats to wildlife and rate of biodiversity loss.

Extinction is not inevitable or natural at its current rate. Habitat fragmentation, alteration or destruction, over-exploitation, pollution, invasive species, conflict and climate change are all human-induced threats. Society can reduce these threats through conscious changes in daily activities that support a sustainable lifestyle, meaning each individual can make a difference. Advocacy with manufacturers and industry can lead to positive changes in business practice, while lobbying governments acts as a catalyst to increase pro-environmental legislation and enforcement.

USING SOCIAL SCIENCES TO UNDERSTAND BEHAVIOUR CHANGE

Zoological facilities have been utilising principles from the social sciences, including conservation and environmental psychology, to understand what motivates people to act for and against the conservation of biodiversity. Conservation psychology has been defined as:

'the scientific study of the reciprocal relationships between humans and the rest of nature, with a particular focus on how to encourage conservation of the natural world ... [using] psychological principles, theories, or methods to understand and solve issues related to human aspects of conservation.'

Implied in this multi-disciplined field is the need for cultural relevance and socio-economic understanding in order to save biodiversity and use our natural resources and ecosystems sustainably.

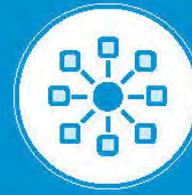
Conservation psychology takes into consideration the information presented, and how people identify with their peers, family and friends, the degree of trust in the institutions providing the information and recommendations, as well as what barriers to action there are and what motivates people to act. The more that is learned about

visitors and how to influence them, the more effective zoological facilities will be at saving wildlife and wild places; especially if positive messages are used to link conservation to what people can do themselves to make a difference.

ASPIRATIONS

In order to effect social change, the commitment of a zoological facility to conservation education and advocacy should be incorporated into a policy for engagement and integrated throughout the institution, from the director to staff in every department (see *Creating a Culture of Conservation*). Furthermore, it is possible to advance conservation advocacy by supporting and training students who may go on to work in biodiversity conservation.

The policy for engagement, particularly the need for conservation-sensitive behaviour, should be incorporated into the design process at the planning stage. Interpretive stories, graphics, learning spaces, as well as formal and informal learning experiences, should all be considered when planning the functionality of a new development, both front and back of house. Technology should also be considered at the design stage and integrated in ways that make the experience more impactful for visitors, and the outreach wider; for example, through social media and earned media.



Methodology

There are many different ways for modern zoos and aquariums to engage visitors, students, staff and communities.

ANIMALS

Well-designed environments for healthy animals are strong vehicles by which to engage visitors (see *Modern Conservation Organisations and Animal Welfare*).

SIGNS

Clear information about the animals, their home range and their IUCN Red List status. While fewer than 25% of visitors will read a sign in its entirety, the information is still essential but should be reinforced through personal interpretation and interactive elements.

PRESENTATIONS

Engaging and informative presentations that deliver a strong conservation message can be the most effective means to raise the 'intent to conserve' of a visitor because of the length of time staff interact with them.

INTERACTIVE GRAPHICS

Involving the visitor in the learning process reinforces their memory.

TECHNOLOGY

Linking to the Internet through bar and QR codes, use of social media and other technological means, appeals to today's audiences and can be a powerful tool to showcase animals and behaviours that cannot be easily seen, thus reinforcing the conservation message of zoos and aquariums about saving wild species and habitats.

CAMPAIGNS

WAZA has established the 'Biodiversity is Us' outreach project to raise awareness of the importance of biodiversity to humans and promote simple individual actions for its preservation. Special events involving visitors and the local community are a good way of encouraging engagement in conservation.

RESEARCH & EVALUATION

All education and interpretation interventions must be studied and evaluated for efficacy

LEARNING PROGRAMMES

There are educational opportunities at each experience, in restaurants, retail shops and gardens in all zoological institutions. Engaging and meaningful experiences (either structured lessons or chance encounters) that facilitate behaviour change can encourage ongoing conservation action after a visit to a zoo or aquarium. Formal and informal programmes should include the possibility for visitors to showcase their actions and keep connected through social media, to encourage long-term behaviour change.

When developing a community-engagement experience designed to influence conservation action, zoos and aquariums should clearly articulate what defines success, prior to offering the experience publicly. Campaigns should be based on environmental and conservation issues that each institution believes they can best impact through access to relevant target audiences, desired outreach and capacity to influence. Working in partnership with local government, wildlife trusts, supermarkets and water boards would strengthen the environmental and conservation messaging and potential for behaviour change.

ACTIONS

For human-caused threats, zoological facilities need to develop a clear understanding of what they can do to influence behaviour change and inspire

ENVIRONMENTAL ACTIONS

Six steps to achieve behaviour change.

Reduce, reuse and recycle

- Take a pledge to reduce a human threat
- Support conservation through volunteering or donations
- Advocate with politicians and industries to make changes that support a sustainable future
- Make wise consumer choices that have a direct impact on wild animals and wild places
- Change your own behaviour, and that of your friends and contacts



MONTEREY BAY AQUARIUM, CA, USA
Programmes such as Seafood Watch guide zoos, aquariums, and other mission-aligned organisations to help them empower consumers and businesses to purchase seafood caught or farmed in ways that support a healthy ocean and diverse marine ecosystems.



WILDLIFE CONSERVATION SOCIETY, NY, USA
Visitors to zoological institutions can participate in simple advocacy activities, such as this petition to end the trade in ivory and the death of African elephants.

new behaviours to reduce the impact people have on the environment. For example, identify and reframe community behaviours; understand the influences on audiences for such behaviour; identify barriers and benefits for the requested behaviour; develop a new model of influences for positive behaviour change; build a marketing strategy to trigger the desired behaviour; develop a communication-strategy campaign.

TRAINING

All zoological facilities should have appropriate training programmes for staff who communicate with visitors and the wider community. These staff should be trained in the skills necessary to develop programmes and engage audiences, including communication-skills training. Underpinning this, they also need to understand the basic biology, ecology and conservation status of the animals within the institution, and what is being done to help save wild populations of these species. Training in drama and storytelling can also be useful when engaging visitors and the wider community.

Job shadowing in the animal-care, marketing and public-relations departments would provide all staff with a deeper understanding of the needs and constraints of the animals, as well as the institution's interface with the visitors. Providing similar opportunities for the marketing and public-relations departments would increase the understanding and ability of how best to reach the wider communities. Staff should be supported to travel to other institutions, to regional and international conferences, and to attend training events, where ideas can be exchanged, and new approaches and techniques learned. When and where possible, education staff should visit conservation projects to gain first-hand experience of the conservation and environmental challenges many communities face in adopting sustainable lifestyles while coping with issues such as habitat degradation and human-wildlife conflict. This gives credibility to staff with the responsibility for communicating with visitors and allows them to speak from first-hand experience.

EDUCATION RESEARCH AND EVALUATION

A recent WAZA-led global evaluation of the educational impacts of visits to zoos and aquariums, part of the 'Biodiversity is Us' outreach project, found that a significant number of people end their visit with higher biodiversity understanding and a greater knowledge of actions to help protect biodiversity. These results are the most compelling evidence to date that visits to zoos and aquariums contribute to increasing the number of people who understand biodiversity and know actions they can take to help protect



ZOOS VICTORIA, AUSTRALIA
Connecting visitors to animals is one of our biggest assets in the fight to save species from extinction.

biodiversity, thereby making a positive contribution to Aichi Biodiversity Target 1.

This type of evaluation provides critical information both at the global level and for each zoo and aquarium. Each institution should evaluate the effectiveness of their programmes in influencing pro-conservation and consumer behaviours.

Salient behaviours, misconceptions, what visitors expect and which messages

WAZA, SWITZERLAND
WAZA's 'Biodiversity is Us' outreach project is timed to support the United Nations Decade on Biodiversity 2011–2020, by providing tools for raising awareness about biodiversity.

Biodiversity is **US**



We are all connected

You are part of the exciting web of life that includes millions of species of plants and animals.

We call this 'biodiversity'.

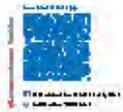
But it is shrinking fast, putting our planet – its people and animals – at risk.

You can help stop this. Through your daily actions, you can make the world a better place.

What will you do today?

Biodiversity is Us.

Download the 'Biodiversity is Us' app and discover what you can do today.





best resonate with the desired target audience can all be obtained via market research or pre-assessments. Evaluation materials include surveys, focus groups, interviews, and pre- and post-tests, and make it possible to measure the effectiveness of the guest experience, learning objectives and intent for behaviour change for conservation. Summative evaluations are a beneficial tool and can help guide future enhancements.

Post-visit evaluations allow people to reflect on their visit and report on any behaviour change they have undertaken subsequent to their visit. This is now easier than ever before because data can be harvested, and social media, text messaging and email used to contact visitors when they leave the institution, although the inherent weakness of self-reporting should be acknowledged. The next challenge will be to find ways to evaluate the long-term behaviour change



WAZA, SWITZERLAND

Cheetah as part of a special collection of plush toys in support of WAZA's 'Biodiversity is Us' outreach project.



HOUSTON ZOO, TX, USA

Zoos and aquariums can educate their guests about environmentally sustainable choices, such as using reusable shopping bags, while providing them with the capacity to make long-term behavioural changes.



SNOW LEOPARD CONSERVANCY, RUSSIA

Influencing behaviour change for conservation takes place both within zoological institutions and around the world with the partner conservation projects; for example, the Snow Leopard Festival in Russia.

of visitors unobtrusively and in as non-biased a way as possible (e.g. to minimise the impact of guests wanting to please the person conducting the survey).

MATCHING CONSERVATION STRATEGY AND ACTIONS

If zoos and aquariums are asking visitors to change their behaviour then these institutions also need to behave in the optimal way for conservation. Zoological facilities are significant business operations and have the ability to lead the way in sustainable business practices by setting goals to reduce their carbon footprints, and insisting on sustainable practices, sustainable products and other pro-conservation actions within supplier agreements, including becoming certified carbon neutral (see *Creating a Culture of Conservation*). 'Zoos and Aquariums for 350' provides guidance for greening portfolios and institutions (e.g. by divesting from fossil-fuel companies and reinvesting in solutions that align with conservation missions) as individuals and communities come together to combat climate change.

CONCLUSION

Zoological facilities are uniquely placed to interact with visitors, communities and society on conservation issues in an entertaining environment. Zoos and aquariums are able to influence and inspire positive conservation behaviours, and make important differences that support their core mission: to conserve biodiversity. A goal of all zoological facilities should be to engage with visitors, other zoos and aquariums and conservation organisations, and communities to encourage conservation-sensitive behaviours that support biodiversity conservation. This goal can be achieved by influencing desired attitudes and knowledge, and by drawing on conservation psychology. By laying out clear, measureable objectives, it will be possible to evaluate the impact of such interactions between zoos and aquariums and their visitors. The importance of connecting people with nature is vital to building support for conservation.

RECOMMENDATIONS

- Create a measurable institutional engagement framework at all levels (staff, volunteers, visitors and communities) for conservation education, advocacy and cultural relevancy of the issues related to loss of biodiversity.
- Utilise the latest findings in social marketing, research and conservation psychology to design programmes that engage visitors in pro-conservation behaviours, especially local issues that may affect or impact visitors.

- Invest in the education strategy and evaluation skills of staff and facilitate cross-department exposure, and interpret how the engagement programmes are related to national and local education standards.
- Define the targeted behaviours and how they will be communicated to the visiting public (e.g. young children, school groups, adults), and specify how impact will be evaluated, and establish a system of utilising information on animal welfare, the composition of zoo and aquarium species and animal behaviours to engage visitors in pro-conservation behaviours.
- Seek collaborations with universities, museums, other zoos and aquariums, and conservation organisations to contribute more research, evaluation, partnerships and data sharing in the areas of conservation education and influencing pro-environmental behaviours.



Black-footed ferret

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