SPACE INVADERS

A NEW VOLUNTARY CODE FOR ZOOS AND AQUARIUMS HAS BEEN DRAWN UP TO ADDRESS THE ISSUE OF INVASIVE ALIEN SPECIES

Lesley Dickie, Executive Director, EAZA

Invasive alien species (IAS) have long been known to be a significant threat to species conservation. The IUCN Invasive Species Specialist Group, for example, has noted that, of 680 known animal extinctions, 20% have been due to IAS. This threat has been highlighted in the recent Convention on Biodiversity Aichi Targets, specifically under strategic goal B (Reduce the direct pressures on biodiversity and promote sustainable use), and Target 9 (see box).

We tend to consider IAS to be most threatening to island species and this is indeed true, as island species have characteristics that make them particularly vulnerable to the impacts of alien invaders. But even our large continent of Europe is not immune, and a recent report – The impacts of invasive alien species in Europe – by the European Environment Agency estimates that there may be up to 10,000 alien

WHAT IS TARGET 9?

This states that, by 2020, invasive alien species and pathways are identified and prioritised, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.

species present in Europe today. Whilst the majority do not cause any significant effects it is estimated that 15% of these species will negatively impact the European environment, in a number of focal areas; species, economy, ecosystems and human health. The same report noted that the economic impact on Europe due to IAS totals at least 12 billion euro each year.

The EU has adopted Target 9 of the Aichi targets in its new Biodiversity strategy and is seeking to implement a legislative framework regarding IAS to fill existing policy gaps. EAZA is paying close attention to such developments as any such legislation must ensure that it does not hinder the role of zoos and aquariums in the EU in nature conservation, as mandated under the EU Zoos Directive (1999/22/EC). However, zoos and aquariums must also bear in mind that they have a moral and legal responsibility (under Article 3 of the Zoos Directive) to ensure that they do not allow escapes from their facilities and if escapes do happen that all available options are explored and thereafter implemented to negate the escapes and prevent the species becoming invasive.

Zoos and aquariums are noted as low risk in this regard in comparison to other sectors (pet industry, farming, notably fur farming, horticulture etc), however, low risk still denotes some risk and we must as an EAZA community remain vigilant about this issue as there are examples where zoos and aquariums MAIN PIC: EUROPEAN MINK (MUSTELA LUTREOLA), © TIIT MARAN, TALLINN ZOO INSET: RUDDY DUCK (OXYURA JAMAICENSIS) © YVES THONNÉRIEUX is the European Code of Conduct on Zoological Gardens and Aquaria and Invasive Species. The new code was presented at the recent standing committee meeting of the Bern Convention on 30 November 2012 and was formally approved, meaning that this voluntary code is applicable to all countries of the Council of Europe. The meeting adopted recommendation No 161 (2012) that asks, amongst other things, all contracting parties of the Bern Convention to:

• draw up national codes of conduct for zoological gardens and aquariums on invasive alien species taking into account the European Code of Conduct;

have let animals and other organisms escape into the environment, where they have become invasive. Our own policies and standards require strict control of the risk of escapes but our rules apply only to EAZA members, not facilities outside of our membership. Given that we are committed to helping the EU and beyond implement the Aichi targets for 2020 how can we assist in delivering Target 9?

In 2012 EAZA was approached by the IUCN SSC Invasive Species Specialist Group (ISSG), which was drafting a number of voluntary sector codes of practice in relation to the threat of IAS and was asked to participate in their drafting and endorse them. This effort was led by Piero Genovesi (Chair of the ISSG) and his colleague Riccardo Scalera and we thank them for their efforts to highlight this issue. EAZA agreed to collaborate and the result

- collaborate as appropriate with the zoological gardens and aquariums in implementing and helping disseminate good practices and codes of conduct aimed at preventing release and spread of invasive alien species;
- consult, when possible, the zoological gardens and aquariums in the identification of priority invasive alien species and in the preparation and implementation of mandatory measures to tackle priority invasive alien species.

In addition, at the recent conference of the parties of the Convention on Biological Diversity in Hyderbad in October 2012, this new code was formally acknowledged. With the framework in place what does this new Code of Conduct ask of zoos and aquariums? Five recommendations have been identified:

- adopt effective preventative measures to avoid unintentional introduction and spread of IAS;
- take into account the risks of IAS introductions in all wildlife and habitat management projects;
- proactively engage in awareness raising and outreach activities focusing on IAS and their impacts;
- adopt best practices for supporting early warning and rapid response system for IAS;
- be aware of all relevant regulations concerning zoological gardens and aquaria and IAS.

For each of these recommendations further detail is given in the full text of the Code which is available on the EAZA website and I would urge all members to take time to read the code and see how it can be applied in their zoos, aquariums and regions.

In addition we should also as zoos and aquariums highlight where we have helped in the fight against invasive species. A notable case is the work of zoos in breeding European mink (*Mustela lutreola*) for release as part of a coordinated programme that has benefited from EU LIFE+ funding. European mink have declined by up to 70% in a just a few decades and it now occupies less than 10% of the area it once

covered. Although habitat loss and degradation has played a role in its decline the main driver has been the invasive American mink (Neovison vison), which were extensively used in fur farming and either escaped or were deliberately released by animal rights activists. European mink, bred at Tallin Zoo, an EAZA member in Estonia, were part of a release aiming to support an island sub-population on Hiiumaa Island in western Estonia. Much has been learned from this pilot project which can be applied to future projects and this is an excellent example of where conservation breeding efforts in zoos can assist as part of the recovery of a European species threatened in the wild by an invasive species.

EAZA would like to work further with the IUCN SSC Invasive Species Specialist Group in continuing to 'build bridges' between the zoos and aquarium community and specialist groups in an effort to enhance conservation outcomes for species in Europe and beyond.