Giraffes’ greater good?

This series gives readers the opportunity to consider and contribute to discussion of some of the ethical dilemmas that can arise in veterinary practice. Each month, a case scenario is presented, followed by discussion of some of the issues involved.

In addition, a possible way forward is suggested; however, there is rarely a cut-and-dried answer in such cases, and readers may wish to suggest an alternative approach. This month’s dilemma, ‘Giraffes’ greater good?’, was submitted and is discussed by Ian Sayers. Readers with comments to contribute are invited to send them as soon as possible, so that they can be considered for publication in the next issue. Discussion of the dilemma ’Looking a store horse in the mouth’, which was published in the March issue of In Practice, appears on page 215.

The series is being coordinated by Siobhan Mullan, of the University of Bristol. It is hoped it will provide a framework that will help practices find solutions when facing similar dilemmas.

Giraffes’ greater good?

You are on the board of trustees for a zoo that has a young healthy giraffe; however, it is genetically similar to many other giraffes in zoos across Europe. Would you advise the board that it is ethically acceptable to kill the giraffe to make room for another more genetically distinct animal?

Issues to consider

Sadly, we live in a world where the existence of zoos is a necessity in order to try and preserve the diversity of species on the planet; because of increasing encroachment on natural habitat and human population pressures. Responsible zoos are involved in managed breeding programmes at a European level (European Endangered Species Programme [EEP]) or worldwide level, via international studbooks and emerging global species management plans, to maintain a sustainable and genetically diverse animal population that can hopefully one day be reintroduced into a natural habitat, free from current pressures.

Breeding programmes consider a number of factors. These factors include, among others:

- Maintaining a diverse genetic population;
- Ability of group members to exhibit natural family behaviours, enabling positive enrichment and maintaining normal age and sex ratios for a particular species;
- Allowing normal function of the reproductive tract, which could otherwise stop being functional in the long term (as has been reported in a number of taxa);
- Educational aspects for the public, when animals are displayed in natural groups;
- Maintaining keeper experience that can be vital for a given species, but might also be extrapolated to less familiar/more endangered species.

While there are benefits to breeding, there is also the potential that ‘surplus’ animals can result. They might be considered ‘surplus’ in relation to genetics, sex or a combination of both. Hoof-stock often live as a harem; therefore, ‘surplus’ males are more common than females. In certain pairings, female offspring might be genetically beneficial to the overall population, whereas male offspring may be less desirable to breed from. In the absence of natural selection pressures, a decision has to be made in the best interest of the population as a whole, based on known genetics, as to which males should breed.

That fact that most zoos have limited finances, frequently funded by public contributions/fees, is something that must also be considered. Maintaining ‘surplus’ animals that are not going to contribute to the greater population for many years (in some cases, over decades) is not sustainable. While this might sound harsh, it is no different to the limited resources that many cat and dog rescue/rehoming centres face, where many ‘surplus’ animals are sadly euthanased due to a lack of homes, and funds have to be targeted judiciously. In the zoo context, this judicious use of funds might encompass maintaining a more genetically important individual, improving the welfare of a group of animals, or in-situ conservation.

Possible way forward

Contraceptives are widely considered by breeding programmes, but they are not necessarily without problems. Detailed reproductive endocrinology is frequently unknown for a number of species; therefore, their use is often experimental and their effects
and side effects are unknown and might not be reversible after a few years. They could also potentially impact upon group dynamics (eg, by altering sexual behaviours).

Euthanasing animals at birth is another option that could be considered, but it might be important for females to have the experience of raising young and being familiar with other natural behaviours (eg, crèche systems). Another factor to consider is natural survivability (ie, not all animals born in the natural environment will survive to maturity). Indeed survivability can be below 25 per cent. Even for some ‘top carnivore’ species, survivability to independence might be as low as 5 per cent, so euthanasing an animal at an age when it would naturally disperse from the group might be more appropriate.

Relocating an individual could be considered an option; indeed, in some parts of the world ‘surplus’ stock is frequently sold on to dealers; however, ultimately they could end up in collections where welfare levels are significantly below that of the British and Irish Association of Zoos and Aquariums or of the European Association of Zoos and Aquaria (EAZA). While this option might generate income, the Eaza’s EEP does not allow the selling of animals as it considers them to be priceless.

Perhaps the ideal way forward is, ultimately, to stop encroachment on natural habitat, by changing the products we consume, which have such catastrophic effects, and for monies instead to be spent on advocacy to change governmental policies worldwide. Until that time, it will continue to be necessary to advise euthanasia of individual or, indeed, groups of animals to the zoo board. What remains is how publicising these decisions is dealt with. I wonder if the recent decision by Copenhagen Zoo to euthanase their giraffe, Marius, would have attracted so much media attention if the same decision had been made for a less emotive species. Indeed, there is a fair degree of bewilderment across the Scandinavian countries that it got as much attention as it did.