Questions

1. Human encroachment in the form of pollution has a major effect on the welfare of wild animals. List four common pollutants and their potential effect on animal welfare. (4 marks)

- Uncontrolled disposal of household and industrial rubbish
  - For example: many sea birds are injured and die each year because they are either trapped in or consume household rubbish.

- Contamination of the soil by inappropriate disposal of industrial and household waste, e.g. leakage from landfill sites etc.
  - For example: animals consuming heavy metals that have been leached into the ground.

- Release of industrial and household chemicals into the water
  - For example: the damage and death caused to seabirds from oil spills in marine habitats.

- Release of industrial chemicals and particulates into the atmosphere from industrial processes, power generation, vehicle exhaust etc.
  - For example: the release of sulphur dioxide and nitrogen oxides leads to the formation of acid rain which negatively affects wild animals and their habitats across the world.

- Disruption caused by excess light noise and heat produced by human activities
  - For example: light pollution is altering the natural behaviour of many nocturnal animals, such as bats, foxes, coyote etc. in Europe and the USA.
2. List the four biggest threats to wildlife that come from agriculture. (4 marks)

- Disease transmission
- Change of land use (e.g. the conversion of bush to farmland exposes wildlife to predators)
- Pollution (e.g. the use of agrichemicals)
- ‘Pest’ control - as non-targeted species killed as well.

3. List two measures that can be employed to ensure increased animal welfare for control of pests and alien species. (2 marks)

Any two of the following:

- Government intervention
- Regulation of the available methods of killing
- Provision of economic incentives for the development of commercially viable humane methods
- Theoretical modelling – can help to provide estimates of the likely number of animals needed to be killed in a given area to control the population or the spread of disease.

4. Briefly list three benefits and three disadvantages of eco-tourism in relation to the welfare of wildlife and the local communities. (6 marks)

Benefits:

- Influx of visitors brings economic benefits to the whole community, who provide a range of services from hospitality through to wildlife guiding.
- Foreign visitors will expect that the wildlife that they have come to see is protected, therefore encouraging effective conservation measures for the species and ecosystem concerned.
- Wildlife becomes increasingly valued by local community both for economic reasons (it is worth more alive than dead), and for its intrinsic worth the more they interact with it.

Disadvantages:

- increased human presence is often disruptive e.g. more vehicles
- disease transmission e.g. from humans to primates
- increased pollution
- habitat destroyed to create tourist infrastructure.
5. List five categories of captive wild animals.  

- Zoo animals
- Animals held in rescue and rehabilitation centres
- Exotic pets
- Farmed wild animals (e.g. fish, crocodiles etc.)
- Working animals

6. After assessing the welfare of captive wild animals using the Five Freedoms and the Welfare Quality® project, list two principles you would use to try and maximise the welfare of the animals concerned?

- Appropriate social grouping
- Size of housing appropriate to behavioural needs
- Environmental enrichment.
In-class activity

Discussion

The following discussions are for small groups with a feedback session to the rest of the class towards the end. In general, discussions should last approximately 40 minutes.

1. **A large foreign tour operator wants to develop ecotourism in your area. They say they intend to respect the environment, involve local communities in decision-making, and provide lots of employment opportunities for local people.**
   - What potential repercussions might this type of initiative have on the local wildlife? Think about both positive and negative effects.
   - What are the alternatives?
   - Discuss the costs and the benefits to all the relevant stakeholders including the wildlife.

   **Key prompts:**
   - Human presence in any form is often disruptive
   - Habitat loss
   - Entertainment of tourists
   - Foreign company – reputation? History of such projects?
   - Stakeholders: Wild animals, local people, tourists, tour operator, local government.

2. **Are animal welfare concepts inherent to domestic animal welfare applicable to wild animals? Why? Discuss each of them using a practical example. Determine whether the examples should be considered as captive wild animals or wild animals in their natural habitat.**

   **Key prompts:**
   - Five Freedoms (assessment of zoo enclosure)
   - 3 Rs (pest control)
   - Cost-benefit analysis (hunting in game reserves)
   - Assessment of behavioural categories (reintroduction projects)
3. You are a vet in a city zoo, where the management is debating whether or not to relocate large species (e.g. elephants, giraffes, rhinos) to a wildlife park on the outskirts of the city where there is more space. Some of the animals are old and euthanasia has been proposed for these animals. The groups of animals are well established, any changes to the group structure will be stressful for those remaining. Transport will also be stressful. What is your opinion of this plan? Are you for or against it? Explain why. How would you advise the management?

Notes to lecturer:

Students are asked to give their opinion and justify it with good welfare ethics and science. Opposing arguments should be encouraged to demonstrate the dilemma associated with such decisions. An acceptable solution should be reached by the class as a whole.

Project

Find a recent construction project in your area (road building, electric power station, house building, etc.) that might have affected wild animals in the area and their welfare.

a. Draw a map including the possible home-range of the species affected.
b. Include water sources, feeding sources and other important resources.
c. Where are the conflict points with humans?
d. How is welfare impaired?
e. What are the potential solutions?
f. Was the welfare of the wildlife taken into consideration by the construction company? If so was this voluntary or were they following guidelines?