

Zoos and Emergency Response

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Twenty-first Century Crisis Management in South Asian Zoos -- The need for Plans, Protocols, Practice, Prevention, Preparation and Performance (This presentation was first given at the South East Asian Zoo Association (SEAZA) meeting in Seoul, South Korea, on 06 August 2009)

21st century crises and Emergency Response / Crisis Response

In the coming decades a whole new breed of crises loom over us which need

- long range strategic planning.
- practice with frequent drills and
- Preventative protocols which should be mandatory

Most zoos of South Asia (and even all Asia) do not have Emergency Response protocols even for ordinary emergencies.

2010 SAZARC Conference theme 21st Century Crises proposes training in ER Emergency Response protocols for every zoo should be added in zoo legislation

Central Zoo Authority has added it very recently in their requirements for acceptance of Management Plans, and even published a Manual.

In addition to "ordinary" crises that have always been a potential threat to zoos, there are now three (3) major new crises, e.g., Climate change, Emerging diseases and Terrorism

Climate change impacts on species in the wild and in the zoo

Impact on captive species:

- Animal comfort, health, reproductive behaviour
- Collection plans of the future will have to focus on species with tolerance to new climatic scenarios

Impact on wild species

- IUCN SSC study on "Species Susceptibility" to Climate Change
- Many new documents available – corals, birds
- New funding for studies on mammals - PI interested in collaboration with zoos
- Scientific articles recommending movement of *in situ* spp to more appropriate climatic areas – AC ass col – assisted colonisation
- SSC Reintroduction Specialist Group tasked with revising IUCN Guidelines to address this

Climate change impacts on zoos

Impact on humans

- Zoo visitors may need more shade, water, transport vehicles, rest areas, etc.
- Possibility of more extreme reactions – fainting, heat stroke ... require on

site first aid or serious emergency treatment

- Possibility of reduction in visitors and consequently, zoo income
- Zoo staff also vulnerable to severe weather
- Other potential impacts are related extreme weather events: heavy, long rains, ice storms, floods, drought, cyclones and other wind events, etc.
- enhanced susceptibility to fires due to dryness, etc.

Emerging diseases

- SARS, H1N1, etc.
- Deadly dozen pathogens – WCS website
- Zoos and 3 mile radius "rule" for containment
- Up-side : clear example of how monitoring wildlife can help human health
- Diseases show up first in wild animals
- Studying them in wildlife vaccines, knowledge that will help human beings

WCS website -- http://archive.wcs.org/deadly-dozen/wcs_deadly_dozen.html

"WCS calls for a wider network of monitors. Wildlife can be our early warning system."

The coming contagion – the Deadly Dozen

- Avian influenza
- Babesiosis
- Malaria
- Cholera
- Ebola
- Intestinal and external parasites
- Lyme disease
- Red tides
- Rift Valley
- Sleeping sickness
- Tuberculosis
- Yellow fever

Workshop entitled Global Climate Change and Extreme Weather Events: Understanding the Contributions to Infectious Disease Emergence. You can access a summary or download the whole book free from National Academies Press NAP

<http://search.nap.edu/nap/cgi/de.cgi?term=EXTREME+WEATHER+EVENTS>

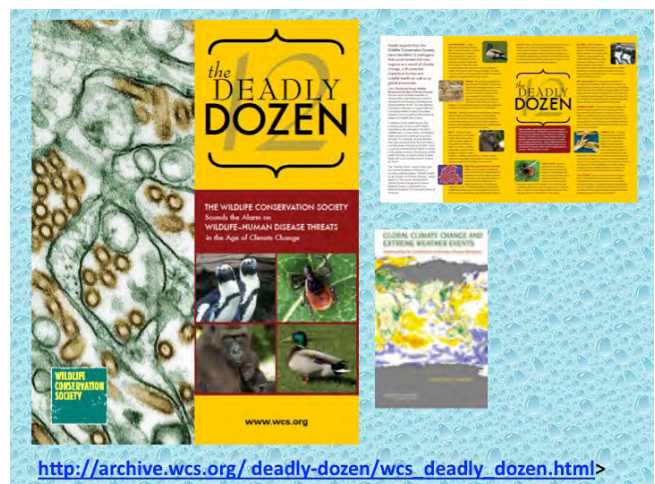
Terrorism

Zoos may be next – zoos provide a perfect terrorist target

- People are emotionally attached to zoos – a city zoo is like its child
- The innocence of the animals makes the terrorist act more monstrous
- Bombing a zoo would make people feel they are nowhere safe
- Two or more kinds of terrorism in zoos
 - Personal or Emotional terrorism – visitor comes to the zoo to commit suicide, or get attention, or act out some emotion
- Political terrorism is already a threat to zoos!
 - Make a statement about religion, rights, etc.
 - Labor unions killing animals
- A well-designed and well-practised Emergency Response procedure must be in place
- Professional negotiators are badly needed. Not common in South Asia but badly needed.

What to do? Every zoo must

- Create an Emergency Response Plan that covers the 21st Century Crises
- The ordinary crises also need to be addressed and few Asian Zoos have done
- Include Emergency Response Plan in zoo policy and zoo legislation.



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