

BIAZA* United Kingdom approach to Legislation & Conservation

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Legislation

Law is a series of rules which govern society. Legislation is effective only if there is a means of implementation – laws that can't be implemented are 'bad legislation'.

Zoo Legislation is legislation particular to zoos. In Europe, which the UK is part of, this is an European Union Directive which covers animal welfare, education, conservation and research as well as safety, public amenities. The ZLA -- Zoo Licensing Act (1981) -- is the law which lays down the criteria for becoming licensed. Zoos must be licensed under this act to open to the public and operate.

Inspections are carried out on a regular basis by government appointed inspectors – using Standards, i.e., The Secretary of States Standards for Modern Zoo Practice. Enforcement is by the Local Authority. The zoo must pass inspection to be licensed and cannot operate unless licensed – it also can be closed if fails to earn its license.

ZOOS FORUM HANDBOOK lays out the various criteria and standard for review on the following topics:

- Ethical review process
- Conservation Education and Research
- Sustainability initiatives in UK Zoos
- Animal Welfare and its assessment in zoos
- Diving in zoos and aquariums
- Veterinary standards

Details can be found on: <http://www.defra.gov.uk/wildlife-countryside/protection/zoo/zf-handbook.htm>

The inspection process includes a pre-inspection audit. The zoo fills in a form which gives information on all aspects of the collection.

The inspections are carried out by approved Secretary of States Inspectors who cover the following :

Pre-inspection audit

- Details of institution
- Animal records
- Animal husbandry and care
- Health and safety, security
- *Ex situ* conservation
- *In situ* conservation
- Studbooks
- Education
- Research

Inspection covers

- Five freedoms - environment
- Animal public safety
- Education
- Conservation
- Research
- Animal records
- managed programmes

Inspection

The inspection process is what makes the legislation effective. In the UK we have an inspection every 3 years resulting in a written report available to the public containing conditions which must be carried out within specified time limits and recommendations which should be carried out.

Local authorities, the enforcers, check that the conditions and recommendation have been carried out. Recommendations tend to be upgraded to conditions in a subsequent inspection

Inspectors

Inspectors in UK are listed and include vets and zoo professionals. There need to be two per inspection. Inspectors undergo training every 3 odd years.

Zoo Closure

The Local Authority has the power to close zoos that do not comply with conditions within the time limits. Effective legislation should be clear and implementable. Those individuals who implement the legislation should be responsible and accountable with no vested interest in the institution.

Conservation and Welfare

What is important in considering the welfare of animals? They are :

- inputs from the environment
- outcomes in what the animal does
- the Five Freedoms are a good guide

Inputs that affect welfare may be negative or positive, such as Hazards which prevent achievement of an outcome; Opportunities of enriched and more spacious environment, and representations of an outcome in the animal due to avoidance of threats or positive aspects in design.

How to measure?

We measure by examining categories ... external categories are

- Physical environment -- enclosure, environment, noise, housing, shade
- External influence -- government standards, animal rights groups, visitor perception
- Knowledge base -- scientifically based info as opposed to 'we've always done it that way', records & their analysis –evidence based
- Animal Use -- research, animal shows
- Zoo management -- professional standards, organizational requirements, participation in managed programmes, contact with visitors, visitors feeding, etc.
- Animal management -- husbandry methods, contraception, part of managed programme, training, cage mates, adjacent enclosure occupants
- Animal -- behaviour, time budgets, breeding, stereotypy, control of breeding (or no breeding)

* **British and Irish Association of Zoos and Aquariums**

- Animal health -- coat condition, longevity, parasite burden, disease
- Animal physiology -- corticosteroids- measurements

Refined animal aspects for measurement

Animal Condition: physical

- Coat
- Condition (weight) & how do you measure this
- Psychological health
- Health and health checks & the benefit of training as a tool
- Annual review of health
- Stress levels
- Faecal measures of corticosteroids establish how often to collect & in establishing baselines

Animal behaviour

- Need to monitor stereotypies identify possible problems and then measure
- Posture, gait, abnormal behaviour, vocalisations
- What is normal,
- Time budgets – what do you take as norm - wild activity can vary with conditions
- Effect of public on behaviour and activity
- Ask what do you have in place to monitor behaviour

Measurement – the way forward

- Data needed on physical environment, external influences, knowledge base
- Remember also that animals are affected by aspects more difficult to measure
- Audit tick box questions: do you record weights, gait, condition? do you carry out annual health checks? do you record behaviour?
- Need to know species-specific behaviour, what is abnormal, & to what do you compare it
- Finally, measure

Process

- Zoos need to cooperate-regions work together on husbandry guidelines and audit processes, etc
- Framework to promote good welfare – i.e. the boxes to tick i.e. check list of what you do
- Need a process that can identify potential problem areas and then collect quantitative data on those species / individuals

Five Freedoms of Animal Welfare

Good zoo managers want to be “CARERS” ... looking after :

Conservation
Animal Welfare
Recreation
Education and
Research

and are constantly on the lookout for

Factors that affect animal welfare

- Inputs that affect welfare may be negative or positive -- Hazards/ restrictions which prevent achievement of an outcome, -- Opportunities of enriched more spacious environment
- Each represents an outcome in the animal due to avoidance of threats and positive aspects in design
- How to measure?

Five Freedoms

- Food and water
- Suitable environment
- Animal health care
- Expression of normal behaviour
- Protection from fear and distress

Animal Welfare

Animal Healthcare

- Health checked at least twice a day
- Problems assessed asp
- Health records must be kept & reviewed on a regular basis

Enclosure design should minimise the risk of injury, entry of predators etc – domination

- Isolation facilities for sanitation and control of disease
- Barriers not cause injury

Veterinary care

- Frequency of visits
- Facilities
- CPD of veterinary surgeon
- Training of zoo staff in health and hygiene
- Post mortems

Opportunity to express normal behaviour

Expression of normal behaviour

- Look at what is known from wild
- Enclosure design incorporate this needs to be large and complex enough
- Keep up to date with biology and husbandry of the species
- Needs of animals -- Bedding, branchwork, burrows, nesting boxes, branches, pools
- Provide enrichment to compensate and remember time budgets
- DO NOT BREED HYBRIDS!

Time budgets - examples

Dik-dik 30% of time feeding

Giraffe 50% feeding

Lion 4 hours a day active

Muntjac 50% feeding

Primates foraging time

Elephants feeding and travelling time

Elephant time budgets

Protection from fear and distress

- Group composition, sex ratios, number of animals in the enclosure
- Captive breeding & control of
- Allow for normal behaviour and allow for place to get away from other animals
- Avoid stress from conspecifics or other species
- Stress from contact with the public and must not be provoked by members of the public

Protection from the Public

Natural protection

Transport and movement

- Ethical acquisition and deposition
- Correct means of transport -- Catching and transportation techniques

- Measure what found for an effective inspection process

Significant work -- the World Zoo and Aquarium Conservation Strategy : WZACS as a benchmark

What is zoo conservation?

Is it only field work and support, or work in zoo grounds? Where do the living collections fit in? Is it only if breeding is part of an active reintroduction ? or does it include *ex situ* management, research, funding, fundraising, education and awareness ... all expectations for conservation.

ZLA – Directive defines it as having all these components...

- Research – with benefits for the wild
- Training
- Information exchange
- Appropriate captive breeding
- Appropriate Repopulation and reintroduction – where appropriate

WZACS - World Zoo and Aquarium Conservation Strategy ...

WZACS focus is on native species, and enhancing sites with native species conservation. WZACS emphasizes partnerships with other organizations, training, fundraising for the projects, Raising funds, with National / Regional associations implementing assessments of the conservation contribution of members.

Native species work

Members carry out significant native species work, both on site and in other parts of British Isles and Ireland. In 2007 there were 84 projects.

Training

Assam *Haathi* is an example of a project taken up by a UK zoo which provided training and capacity building in communities, and a schools awareness program with the Biodiversity and Elephant Conservation Trust BECT.

Partnerships and fundraising

BIAZA/WLT project in Brazil contributed £50K first year. BIAZA members are at the forefront of EAZA (European Association) campaigns (both EAZA and non-EAZA members) – 40 for Year of the Frog with BIAZA itself raising funds – promotions and raffle. There has been some brilliant work by members in the field and with native species.

Do we do enough? Or...are we just not good at measuring it?

How do you measure conservation input?

You can quantify

- Direct project expenditure -- Funds,
- In-kind spending and gifts directly on project -- Conservation breeding, - Equipment and facilities, - Direct staff support
- Overheads -- management and infrastructure costs, - Benefits of captive programmes

Are managed programmes really conservation?

- Only if the species is either -- Extinct in wild, - Critically threatened, - Rescue species, - Supplementation, - Conservation research
- Or, does conservation include -- Flagship species, - Fundraising for conservation, - Education about habitats and ecosystems, - And the fact that species go extinct in captive programmes unless managed

Conservation education and research Education

- Zoos must promote public education and awareness on -- Conservation of biodiversity, - Information about the species,
- Must have a written education strategy
- Suitable facilities should be available

How to do it ?

- Interpretation and animal information, • Should be up to date, • Check the written policy, • Check the facilities (proportionate to size and type of zoo)
- Trained staff (proportionate to size and type of zoo) • How do you check the quality of teaching and aids? • Is active-learning education taking place, • Can be presentations, -Use of websites

Other ways

- Outreach, • Links to local community, • Adult education activates, • Teacher training, • Support for off-site education activities e.g. links with field projects, • Conservation

Other ways ... participating in:

- Research from which conservation benefits accrue to the species, • Training in relevant conservation skills, • Exchange of information relating to species conservation, Where appropriate captive breeding, repopulation or reintroduction of species in the wild

So Conservation can be done in different ways ...

- Habitat & species conservation within the zoo grounds
- Conservation support to native habitat and species
- Financial contribution to conservation projects in proportion to the size of the organization
- Managed breeding of conservation sensitive species
- Provide data to the relevant studbook for the national/regional programme
- Provision of staff time for this

Conservation can be achieved also by

- Exchange of information, - Publishing in popular and peer reviewed, - Management and husbandry guidelines, - Reports on conservation projects
- Conservation/sustainability -- Make the zoo as sustainable as possible and, operated an environmental policy
- Walk the talk -- Communicate this to visitors.

Research which has conservation benefits

What is research?

Some of the work carried out by students in zoos is training

What happens to the research?

Is it disseminated?