Risk management in zoos
Lycetts has 25 years' experience in the leisure insurance industry and offers expert, impartial insurance broking services for zoos and other animal-focused businesses.

An experienced and active adviser to a diverse leisure market, Lycetts is a member of a number of trade associations, including BIAZA, The British and Irish Association of Zoos and Aquariums.

In addition to comprehensive public liability insurance cover, it offers a wealth of specialist cover for aspects such as loss of attractions, worldwide transit of animals, worldwide cover for employees and business interruption.

Here, Lycetts uses its industry experience to offer risk management advice to zoo owners*.

A myriad of factors need to be considered when providing zoos with the necessary insurance protection.

But health and safety of animals, the public and staff is paramount, above all other considerations.

It should be noted that most of the accidents at zoos result from slips and trips, manual handling and vehicle movements and a third of these accidents are to visiting members of the public**.

Please contact us at your convenience to discuss your requirements
So, the potential of public liability claims arising from such incidents should not be overlooked and must be taken into consideration when assessing risk and arranging insurance cover.

By law, zoo operators must have insurance which covers them and every other person under a contract of service or acting on their behalf, against liability for any damage or injury which may be caused by any of the animals or by other factors, whether inside or outside the zoo, including during transportation to other premises ***.

**Health and Safety**

As well as a health and safety policy, zoos with five or more employees must have a written statement that includes safe operating procedures and an action plan to deal with emergencies, for example fire or the escape of animals**.

It is of upmost importance that employees and insurance brokers are kept up-to-date of any changes to the running of the zoo, such as the arrival of new animals and any amendments to schedules or operations.

As the work of zoo staff is extremely varied and requires specialist knowledge, the zoo operator must make sure that adequate training is provided, as well as ensuring that staff have the right qualifications for the role they undertake. In-house training should be continuous.

Zoo workers should have had all the necessary background checks, including a check for any convictions under the Zoo Licensing Act 1981 or under any other animal welfare legislation***.

**Trips and falls**

As previously stated, trips and falls account for a significant proportion of incidents and measures should be taken to lessen the risk posed to staff and visitors.

All public areas should be properly maintained, with a dedicated team carrying out all necessary checks on a regular basis. A good communications network (eg radio contact) should be in place so that employees can report problems they or visitors encounter, such as a hole in the ground or a broken fence.

This ensures rapid response, which lowers risk of a public liability claim – promptness is of particular importance, as zoos can cover a vast expanse of land and can have uneven terrain.

Zoos present a higher risk of falls to the public and members of staff than the ordinary workplace, for example from observation posts at the giraffe enclosure or during cage maintenance. Serious injury or even death can result from a fall from height.

In public areas, high and impregnable fences should be erected and climbing should be discouraged with appropriate signage.
If work is being carried out on enclosures or cages, ensure that risk assessments have been carried out and that the person conducting the work is competent and has received the necessary safety training. Safety precautions should be followed and all necessary safety equipment used, as well as ensuring there is a plan in place in for emergencies and rescues.

If contractors are employed to carry out jobs onsite, they must have their own insurance, with the appropriate cover, which should be checked each time they come on to zoo premises.

**Health and safety adviser**

Employers are required by law to “appoint one or more competent persons to assist with health and safety”. This can be someone within the organisation who possesses the necessary skills, knowledge and experience to manage health and safety or a competent adviser from outside the organisation.

The Occupational Safety and Health Consultants Register provides an up-to-date list of general health and safety advisers who have a qualification recognised by the professional bodies participating in the scheme.

To be eligible to join the register, candidates must have a degree level qualification, at least two years’ experience and active engagement in a continuing professional development scheme.

Consultants can help with general health and safety management or deal with specific issues, such as legal questions and challenges, policies and procedures, or designing a safe workplace.

**Asbestos**

Asbestos can be found in buildings built before the year 2000. It contributes to the death of thousands of people every year.

Zoos are responsible for the maintenance or repair of buildings on the premises and have a duty to manage any asbestos in their buildings.

Zoos need to find out if asbestos is present in their properties, make a record of the location, type and condition of the asbestos, assess the risk of anyone being exposed to the asbestos, prepare a plan on how to manage these risks, put the plan into action, monitor it and keep it up to date, and provide this information to anyone who might work on or disturb the asbestos.

**Animal, Public and Staff Safety**

When it comes to animal safety, zoo operators should follow the “Five Freedoms”, drawn up for livestock by the Farm Animal Welfare Committee, to maintain standards as dictated by the EC Zoos Directive.

These are as follows: provision of food and water, a suitable environment, animal healthcare, the opportunity to express most
normal behaviour, and protection from fear and distress***.

These should not only be species-specific but be tailored to suit individual animals’ needs.

Where it is necessary, every care must be taken to maintain the separation of animals and the public.

Some measures for outside areas include building high and secure fences, which are deeply rooted in the ground and overhang into the enclosure. This will help lower the risk of an unauthorised person entering the enclosure and the animals from escaping.

There should be regular checks of the perimeters of the enclosures and the facility and any weaknesses identified must be rectified as soon as possible.

Viewing platforms should be at an appropriate distance from the animals, be reinforced (ballistic glass etc) and be subject to close monitoring.

Ensure that clear contingency plans are in place in the event of an emergency or unsafe behaviour amongst visitors.

All gates and doors into enclosures should be secure and clearly marked as prohibited to the public.

In recent years, there has been a shift towards more interaction between animals and the public and a move away from conventional caged environment.

Facilities have seen the introduction of walk-through enclosures, drive-through exhibits, touch pools, educational contact sessions and children’s animal contact areas**.*

Stringent risk assessments must be carried out with each individual animal to assess suitability and ensure minimum risk to the visitors and the animals’ health and wellbeing. These should be reviewed regularly.

Denial of Access

The zoo should make sure that it takes measures to enable visitors to arrive and leave the premises safely.

Sometimes, a circumstance out of the zoo’s control occurs where visitors can not access the zoo due to fire, flood or damage to nearby structures or access roads.

Zoos should be aware that cover is available under their insurance policy, which would enable them to be compensated should an incident such as this occur.
Again, clear contingency plans should be in place, with a dedicated person present at all times to lead on emergency situations and ensure protocol is followed. The members of the public participating in such activity should have the risks made clear to them before the activity commences.

Adequate signage should be on display across the site, with particular attention given to areas containing dangerous animals or places where the public should take additional care.

Feeding and health checks involve close contact between staff and animals and lapses can lead to serious injury or death.

The staff areas of enclosures should be secure and built in a way that staff can be isolated from the animals at any given moment.

Again, appropriate training, communication and monitoring is a must.

For handlers, adequate training for the type of animal they are dealing with is of upmost importance. Training should be ongoing and documented to ensure that each handler is provided with the knowledge and equipment required to safely engage with the animals.

Failure to do so may cause issues, such as a handler being injured whilst looking after an animal.

**Permit to work systems**

A permit-to-work system is a formal written system used to control certain types of potentially hazardous work.

A permit-to-work is a document which specifies the work to be done and the precautions to be taken. They allow work to start only after safe procedures have been defined and they provide a clear record that all foreseeable hazards have been considered.

A permit is needed when maintenance work can only be carried out if normal safeguards are dropped or when new hazards are introduced by the work*****.

**Zoonotic diseases**

Keepers and the visitors who interact with the animals are at risk of contracting zoonotic diseases. Conversely, animals are vulnerable to infections present in human beings.

To lower the risk of public liability claims, visitors should be urged to wash thoroughly using soap and water after handling animals and before eating or drinking.

Adequate signage should be placed at key contact areas on the site, such as feeding areas and cafes.

Staff should also verbally remind groups to wash their hands, not just after contact with animals but after contact with fences or other surfaces exposed to the animals.
It should also be made clear that responsible adults, such as parents/guardians of children visiting the zoo, should take every care to ensure their dependant has been sufficiently protected against infection and disease and practised good hygiene.

**Legionella**

Any water system could be a source for legionella bacteria growth, with the right environmental factors.

The most common sources of legionella are in man-made water systems.

Employers have a duty to understand and manage legionella risks and risk assessments must be carried out regularly.

The Control of Substances Hazardous to Health Regulations 2002 (COSHH) provide a framework of actions designed to assess, prevent or control the risk from bacteria like legionella and take suitable precautions.

**Noise and vibration**

The Control of Noise at Work Regulations 2005 (Noise Regulations 2005) requires employers to prevent or reduce risks to health and safety from exposure to noise at work.

The regulations require employers to assess the risks to employees from noise at work.

Zoos must take action to reduce the noise exposure that produces risks; provide employees with hearing protection where needed; ensure legal limits on noise exposure are not exceeded; provide employees with information, instruction and training; and carry out health surveillance where there is a risk to health.

Zoos should be conscious of processes which require loud machinery, such as tree management, and ensure they are complying with the law.

**Construction**

Zoos must ensure that any construction work or alterations onsite is in accordance with the Construction (Design and Management) Regulations 2015.

This is a relatively new law, with specific responsibilities for clients, as well as contractors.

As well as appointing contractors and designers, zoos are responsible for ensuring workers have the appropriate skills, knowledge and experience; that they allow sufficient time and resources for the project; and to oversee the principal designer and principal contractor’s project.

A construction phase plan and health and safety file should be compiled before commencement of any works.
**Environmental pollution**

Every care must be taken to prevent pollution. Failure to provide proper care can result in varying degrees of damage on the environment, hence the hefty fines that can be incurred.

Contaminated water must be disposed of correctly and fuel/oil stored properly.

Businesses are responsible for assessing and minimising pollution risk and a contingency plan in place should there be an incident.

**Special Events**

For any special events, such as weddings and parties, the zoo operator should make sure adequate insurance cover is in place for a wide range of eventualities.

The broker should be informed about the event, with details such as its date and numbers expected. The major consideration is public liability and all reasonable measures must be taken to prevent accidents to others.

Organisers and contractors should have their own insurance cover for the event, and should be asked to produce a copy of their own schedule showing that their liability cover is in place.

There are many factors to consider when hosting special events and the zoo management team, as well as the insurance broker, must be kept informed throughout the planning process. Trained staff should be on site to monitor and ensure no stress or disruption is caused to the animals.

The external company and guests should be made fully aware of any dangers or risks in attending/hosting the event and the organisers should work with the owners to ensure contingency plans are in place for any emergency.

Some zoo operators offer overnight stays for visitors onsite. Insurance usually extends to this, as long as operators take the appropriate measures to safeguard visitors and staff from any additional hazards and assess risk accordingly.

**Transportation of Animals**

Transportation of animals is a hazardous activity and rigorous planning must take place prior to any movement.

Factors to consider include the condition, size and type of animal; its potential behaviour if conscious or if it wakes up during handling; how it is to be moved and the route to be taken; and the availability of appropriate equipment, including capture equipment, nets, firearms, lifting/handling aids**.

Those involved with the transportation should be specialists and experienced. Every eventually should be explored. Manual handling should be kept to a minimum and avoided if possible. The path should be cleared of any obstructions immediately before transportation**.
The health and wellbeing of the staff and the animals should take precedence in risk assessments around animal transportation.

There should be protocols in place in the event of an escape, so that the appropriate bodies, such as police, are informed immediately. There should be highly-specialised trained staff on site or on call, whose responsibility it is to make a judgement call on tranquilising or putting to sleep an out of control or escaped animal.

Regular emergency training should be carried out with all staff.

Worldwide transit of animals cover protects animals whilst in transit by any road or vehicle from any zoo to another animal park, vet or zoo. Generally, animals insurance covers ‘damage’ to animals as a result of fire, lightning, explosion impact or theft.

Normally, there is a limit of cover for any one animal of around £2,000.

Checklist

Health and safety

☐ Written statement of safe operating procedures and action plan for emergencies in place
☐ Insurance broker up-to-date with operations of the zoo
☐ Adequate training provided for all zoo staff and reviews/further in-house training planned
☐ Necessary background checks conducted for all staff members
☐ Maintenance team record duties carried out in public areas
☐ A robust accident plan and reporting structure in place for trips and falls
☐ Communications network in good working order, including two-way radios
☐ Boundaries continually checked for weaknesses
☐ Risk assessments carried out before any maintenance work takes place in animal enclosures
☐ Contractors working on site have their own insurance
☐ A health and safety adviser is appointed
☐ Manage any asbestos that may be present in zoo buildings
☐ The ‘Five Freedoms’ for animal safety are being followed
☐ All gates and doors into enclosures are secure and clearly marked as prohibited
☐ Risk assessments carried out for all human-animal interaction
Adequate signage displayed across site, particularly in places that the public need to take additional care

☐ Permit-to-work obtained for hazardous work

☐ Encourage hand washing after contact with animals

☐ Continually monitor water systems for legionella bacteria growth

☐ Abide by The Control of Noise at Work Regulations 2005

☐ Ensure Construction (Design and Management) Regulations 2015 are followed

☐ Assess pollution risk and ensure a contingency plan is place for any incidents

**Transportation**

☐ Risk assessments are carried out, taking factors into account such as condition, size, type, and behaviour of animal, if it is to be conscious or unconscious, what equipment is needed, and the route to be taken

☐ Specialist handlers are used and manual handling is kept to a minimum

☐ Plan is in place in case an animal wakes up or an incident occurs during transport

☐ Protocols are in place in event of escape

☐ Regular emergency training is carried out with staff

**Denial of access**

☐ Take measures to enable visitors to arrive and leave the premises safely

☐ Ensure denial of access is covered under your insurance policy

**Special events**

☐ Inform insurance broker of each event, including dates and numbers

☐ Check organisers and contractors have their own insurance and can produce their own schedule, showing liability cover is in place

☐ Trained staff are on site throughout the event

☐ Organisers and zoo operators to work together on contingency plans in case of an incident
*This is not an exhaustive list and is intended for guidance only.

**Health and Safety Executive “Managing health and safety in zoos”. See hse.gov.uk.

***Source: The Department of Environment, Food and Rural: “Secretary of State’s Standards of Modern Zoo Practice”. See gov.uk

**** Health and Safety Executive “Asbestos health and safety”. See hse.gov.uk

***** Health and Safety Executive “Permits to work systems”. See hse.gov.uk
For more help and advice on how to manage risk at your zoo, please contact David Still at Lycetts.

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