

Further & Higher Education

ENCLOSURE DESIGN



General points about this talk:

Talks generally last 30-40 minutes and take place out in the Park in all weathers; please ensure that your pupils wear suitable clothes for the conditions.

Talks are generally led by the keepers and may vary between different staff members. We will adapt this talk according to the age of students.

We endeavour to keep group sizes fairly small as some of this talk may take place in our Tropical House. To this end most groups will be kept below 20 students.

What we will cover in the talk:

When designing an enclosure many different aspects need to be considered. These range from how much space does the animal require, to is an area to separate animal if social conflict occurs or for breeding animals needed as well as considering what animals the enclosure is next to and could this cause stress to either animal. These are just a few examples of what may need to be considered when designing an enclosure.

In our enclosure design talk we will take a look at a variety of animals and their enclosures. We will discuss the key design features of the enclosure and how these aids both the animals, keepers and the visitors. We will explain the routine maintenance and hygiene procedures for the enclosures and the daily tasks this involves for the keepers. We will also discuss how depending on the risk level of the animal, different types of barriers are required.

Animals we may include:

We cannot guarantee which animals you will see during your talk but you will visit at least three animals which may include some of the following:

Humboldt penguin	Linne's two-toed sloth	Bird walkthrough
Slender-tailed meerkat	Wolverine	Lemurs
Clouded leopard	Snowy owl	Brazilian tapir
Common squirrel monkey	Asiatic lion	Anteater
Azara's agouti	Bactrian camel	Capybara
Giraffe	White rhino	Naked mole rat



Areas of the City and Guilds Animal Care Specification that this talk addresses:

Level 2

Unit 213 – Introduction to Caring for Zoo Animals

Outcome 2 – Know the housing requirements and handling equipment necessary for zoo animal species:

- Accommodation – Features of housing for animals from within the following taxa: invertebrates, fish, amphibians, reptiles, birds, primates, aquatic mammals, carnivorous mammals, ungulates and pachyderms, indoor and outdoor areas, suitable substrates and animal's environmental requirements
- Routine maintenance and hygiene procedures – Daily, weekly, monthly maintenance routines of enclosures (cleaning, addition of substrates and disposal of waste material) Suitable equipment: cleaning tools (brushes, shovels and disinfectants)
- Enclosure barriers – Fences, moats, netting, glass or acrylic, posts and illusion barriers
- Enrichment features – Tongue puzzles (giraffe), food concealment in substrate or sacking, use of meat poles, inclusion of browse, natural processes

Level 3

Unit 318 – Understand the Principles of Zoological Animal Health and Husbandry

Outcome 1 – Understand the housing and accommodation requirements of zoo animals:

- Appropriate features - Dimensions, shape, balance between indoor and outdoor areas, landscaping, use of materials and substrates, mix of species, age profile of species, proximity of enclosure to other species and allowance for nocturnal and diurnal behaviours and hibernation, inclusion of natural habitat features into enclosures
- Barriers to enclosures - Fences, moats, posts and bars, glass, netting, wire or water
- Effectiveness of the environment - Size, height, use of substrates, incorporation of inside/outside exhibit areas and regulation of the atmosphere (temperature, humidity and light), animals able to demonstrate a repertoire of normal behaviours (territorial, hierarchical and social interaction and reproductive), use of sustainable resources (low energy light bulbs, biodegradable substrates and bio fuels)



- Features of the natural environment and enrichment - Use of plants, trees (plus browse), water features (ponds and running water), shelter (rocks, caves, canopies, tunnels), platforms, raised areas, ropes, frames, swings, enrichment provided through nutrition

