



THE UNIVERSITY of EDINBURGH  
The Royal (Dick) School  
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The Jeanne Marchig International Centre  
for Animal Welfare Education

# WILD ABOUT WELFARE

## ANIMAL HUSBANDRY DIGITAL EDUCATION PROGRAMME

*Online learning modules that explore how to  
optimise animal welfare for captive wild animals*

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**HELP ALL ANIMALS THRIVE IN  
CAPTIVITY**



# ABOUT & BACKGROUND



Welcome to the Wild About Welfare animal husbandry digital education programme. This programme is designed to provide accessible and engaging opportunities for animal care principles to be learned and understood. It has been designed primarily for animal care staff to help support best husbandry practice for captive wild animals.

This learning programme provides simple, easy to use, modular learning, with questions for you to consider throughout, as well as ideas for practical activities to undertake.

There are two parts to every module. The learning aspect will talk you through the concepts you need to know and the interactive quiz gives you the chance to test yourself on what you have learned.

Understanding what a good standard of animal welfare means is important, alongside species knowledge and management techniques. This information can be applied to daily care activities, enclosure design, nutrition, and behavioural observations, which can make a huge difference to an animal's well-being.

This programme focuses on how to improve animal welfare standards through husbandry practices that meet the physiological, behavioural and psychological needs of an animal. The programme does not provide a professional qualification but will introduce you to the basic concepts behind ensuring all the animals you care for can experience a good level of care and welfare. All information presented aligns to known best practice at the time of publication.

Where relevant we recommend that this learning programme is always used alongside institutional operational standards, association standards, collaborative support with training partners and the enforcement of country or regional zoo-specific animal welfare legislation.

This programme is based on Wild Welfare's 'Fundamentals in Animal Welfare' which itself takes the Five Domains of Potential Welfare Compromise as its guidance. Our goal is to provide motivational, highly participatory and relevant content on the subject of animal care which can be applied to practical animal management practices in order to improve welfare standards.



# LEARNING OBJECTIVES & OUTCOMES

## WHAT WILL YOU GAIN FROM THIS LEARNING PROGRAMME?

- It will provide relevant, relatable and accessible animal husbandry and management information for a wide range of species.
- It will help support confidence in practical animal management for a wide range of species.
- It will help support the development of implementing changes in animal management practices that support good animal welfare.
- It will help encourage further learning after completion of the course.
- It will give plenty of photographic and video examples to learn from.
- It will enable continued personal and professional development.

## LEARNING OUTCOMES INCLUDE:

- Apply your knowledge of animal needs and animal care to enhance animal welfare,
- Perform your role as an animal carer with an increased understanding of the significance of the impact you have on individual animal welfare.
- Apply your enhanced knowledge to improve animal husbandry and management practices, and improve animal welfare.
- Review and improve captive animal welfare and work towards setting institutional standards.

## ON COMPLETION OF THE PROGRAMME YOU WILL:

- Have learned about animal needs with respect to their welfare.
- Understand the significance of your role in animal care.
- Have developed skills to make changes to husbandry and management practices, which will improve animal welfare.
- Have acquired the knowledge to take independent initiative on a day-to-day basis, to enhance the health and welfare of the animals within your care.

### DID YOU KNOW?

**There is no one else that will know the animals in your care as well as you do. You can use that knowledge of their preferences and personalities to ensure they have a good standard of welfare throughout their lives. Your quality of work is their quality of life.**





# HOW DOES THIS LEARNING PROGRAMME WORK?

We have designed engaging modules that aim to support long-term change in animal management attitude, approach and action. There are eight modules and each module is in two parts. The learning aspect of the module will give you essential information whilst the interactive aspect will test your knowledge and have further examples of what you will have learnt.

Firstly, select a module, read through the learning content and then test yourself with the questions and activities at the end. Once completed, challenge yourself with the interactive online quiz activities, which complement what you have already learned.. Finally, take that knowledge and use it to improve the welfare standards that the animals you care for experience.

After completion of the programme, you should be able to identify the challenges and solutions to potential animal welfare issues. This is a useful skill when addressing the many practical problems related to captive animal management.

Throughout the programme, the terms "animal care staff" will be used to describe any zookeeper or staff member that works directly with animals. The terms "zoo, collection, institution, facility and aquarium" all encompass set-ups which involve animals and their care.

Examples of the learning document (below) and the interactive quiz activities (right).

### ACCOMMODATION & DESIGN LAYOUT

#### FURNITURE

The addition of species-specific furniture within enclosures is important for enclosure complexity and space utilisation. Platforms, climbing frames, cargo nets, ropes, branches, nest boxes, water features, substrate piles, den sites, rocks, refuges and scratching posts can be added to an enclosure if it has been confirmed that the species will benefit from the addition. Once furniture is in an enclosure, it can and should be moved around occasionally. This will encourage more investigative behaviours through environmental change without having to pay for new furniture.

**Are your animals shut indoors at night? Do they have to be?** Animals in captivity often spend more time inside their house than in the public-facing enclosure. An indoor enclosure should provide for all behavioural needs as much as the outdoor space.

#### SHELTERS AND REFUGES

A refuge is simply somewhere an animal can hide from the public or other animals. A shelter is somewhere that offers protection from the weather. Refuges should be available at all times and be suitable for the species and number of animals within the enclosure. Multiple shelters may be required if there are lots of animals, or complicated social groupings. You should provide your animal with refuge from visitors, by either a visual barrier (e.g. plants or bamboo barriers on the outside of an enclosure are excellent for this) or den/indoor space where they can retreat to.

Excessive visitor presence can be a stressor for animals in captivity so giving them the choice to be out of sight is essential. A shelter or refuge should always protect from weather extremes, giving the animal or group the option to shelter from heavy rain or wind and offer shade from the sun as well.

#### HIDING PLACES - ANIMALS LIKE PRIVACY TOO!

A refuge or shelter should be a comfortable resting space where the animal can hide if they want to. Nest boxes, hollow trees, dense vegetation planting, underground dens and inside areas are all good examples.

**Substrates:** It is important to provide suitable substrates for the floor of an enclosure. Bedding materials such as straw can be enriching and provide comfort for animals. Providing natural substrates such as deep litter can also be beneficial, particularly to certain species such as primates. Some animals like to dig, burrow, build nests or simply rest on soft bedding. Animals like to be comfortable just like us! If species that are motivated to undertake these behaviours do not have the opportunity to express them, frustration can occur.

#### Activity 2: Only three of these images are showing enrichment. Select the correct images (you have two attempts and you can deselect images)

Visitor interaction   Ice block   Pile of food

Rope bridge

#### Activity 3: Select three factors you should consider when selecting a species for your zoo?

(You have two attempts. Click the submit button to see if you selected the correct answers)

- ☒ Is there enough space for the species?
- ☐ Will the species look good in the enclosure?
- ☐ Can the species be used for activities? E.g. visitor interactions
- ☐ Will the zoo be able to access the nutrition that the species needs?
- ☐ Do zoo and vet staff know how to look after the species?
- ☐ Does the species scare visitors?

#### Activity 5: Animals Needs. Match the needs of an animal to the way in which you would satisfy it.

(Drag the boxes on the right to connect to a box on the left. You have two attempts)

Nutritional needs	Suitable living habitat
Environmental needs	Opportunities to experience positive emotions
Behavioural needs	Enrichment devices
Health needs	Veterinary care and expertise
Mental needs	Suitable food and water



# PROGRAMME STRUCTURE

Modules are based on key learning outcomes. Each learning module will include:

**AIMS** – What the module aims to cover in terms of topics and specific subjects relating to animal husbandry and welfare.

**OBJECTIVES** – Specific objectives that will be achieved through completing this programme.

**REASONING** – Why the module outline is important for you to gain appropriate understanding of animal welfare and husbandry concepts.

**CONTENT** – Main module information covering the aims and objectives.

**QUESTIONS** – Simple questions to consider throughout the learning module for critical thinking and engagement.

**ACTIVITIES** – Practical activities that can be applied in a facility to encourage further learning.

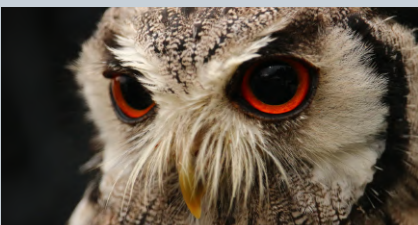
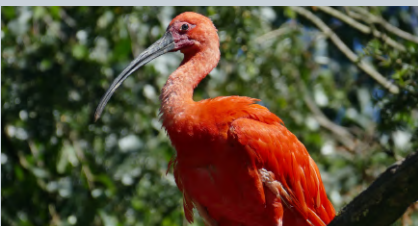
**GLOSSARY** – Terms which may require additional definitions will be underlined within the text and will link directly to a glossary.

## INTERACTIVE ACTIVITIES

Each learning module has a complementary interactive quiz. This has been designed to help test knowledge and ensure retention. There are various interactive activities to take part in within each module, as well as video examples to watch and photographic examples to learn from. These modules have been designed to be engaging and inspiring with ideas and information that you can trial within your own facilities.



# MODULE OUTLINE



## ZOOS AND AQUARIUMS IN THE 21ST CENTURY

The role zoos play in animal welfare, education and conservation.

## ANIMAL WELFARE CONCEPTS

Understanding the principles of animal welfare for best practice.

## ANIMAL BEHAVIOUR

Captive animal husbandry and welfare practice related to animal behaviour.

## ENRICHMENT PROVISION

Captive animal husbandry and welfare practice related to enrichment provision.

## THE CAPTIVE ENVIRONMENT

Enclosure design, management and maintenance for captive animal welfare.

## NUTRITION AND FEEDING

Captive animal feeding practices to promote good animal welfare.

## ANIMAL HEALTH CARE

Specifics in captive animal husbandry and welfare practice related to animal health.

## RECORDS, PLANNING AND PROTOCOLS.

Animal management and record keeping to promote good animal welfare.