

**Overview of the role**

Cares for animals in zoos or aquariums, maintains habitats, supports health, and educates the public on conservation.

**Standard in development**

L3: Keeper and aquarist

**Version 1.1****Title of occupation**

Keeper and aquarist

**UOS reference number**

ST0789

**Core and options**

Yes

Standard options All Keeper Aquarist

**Option titles**

Keeper

Aquarist

**Level of occupation**

Level 3

**Occupational maps data**

**Route:** Agriculture, environmental and animal care

**Pathway:** Animal Care and Management

**Cluster:** Animal care and welfare assistant

**Typical duration of apprenticeship**

24 months

**Target date for approval**

01/01/2026

**Resubmission**

No

**Would your proposed apprenticeship standard replace an existing framework?**

No

**Does professional recognition exist for the occupation?**

No

**Regulated occupation****Is this a statutory regulated occupation?**

No

**Occupational summary**

This occupation is found in zoos, wildlife parks, aquariums, private animal collections, animal reserves, and farms with a zoo licence.

The employers range from large national to small independent organisations.

The broad purpose of the occupation is to care for the animals, ensuring their health, safety, and overall well-being. This includes preparing and presenting food, cleaning habitats, enrichment, monitoring behaviour, and supporting medical treatments.

They may also support population management and conservation activities. Keepers and aquarists may specialise in specific types of animals. These may also include protected and threatened species.

They Keepers provide appropriate food and enrichment to animals and focus on their well-being. The upkeep and maintenance of enclosures may involve the use of tools. Aquarists focus on the upkeep of the overall aquatic environment as well as the well-being of aquatic animals. They may need to use tools for aquatic display servicing and maintenance of life support systems.

These roles are often physical and involve both indoor and outdoor working depending on the organisation and the species needs. Working at height may be needed, as well as working in dangerous or difficult environments.

These roles may involve weekend work and unsociable hours. They will interact with stakeholders and visitors. They will complete day to day tasks using their own initiative in a safe and competent manner.

In their daily work, an employee in this occupation interacts with volunteers, management, veterinary staff, staff from other departments, and members of the public. They also interact with colleagues with various levels of experience. They will report concerns to senior staff and or management.

An employee in this occupation will be responsible for supporting and maintaining animal training and understanding species specific behaviour.

They will record daily behaviours and routines. They will also record and report any observed changes and concerns to senior animal keeping staff and or management. They will use appropriate recording systems.

Keepers and aquarists will be actively involved in public engagement with conservation education and activities. They will research and present information relating to the species in their area and promote understanding with different audiences such as visitors and other internal stakeholders.

Keepers and aquarists will need to work within legislation and frameworks.

**Typical job titles**

Animal keeper, Aquarist Conservation educator, Zoo educator, Zookeeper.

**Are there any statutory / regulatory or other typical entry requirements?**

No

## Core occupation duties

| Duty                                                                                                                                                                                                                                           | KSBs                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>Duty 1</b> Assist with the preparation of approved zoo or aquarium diets, carry out the appropriate feeding presentation according to the animal's individual or group needs and life stage, and monitor food intake and feeding behaviour. | <a href="#">K1</a><br><a href="#">S1</a><br><a href="#">B1 B2</a>                   |
| <b>Duty 2</b> Clean and maintain enclosures or aquatic displays and other designated areas, and report defects or repairs.                                                                                                                     | <a href="#">K2 K3 K10</a><br><a href="#">S2 S3</a><br><a href="#">B1 B2</a>         |
| <b>Duty 3</b> Observe the behaviour, health, welfare and security of zoo and aquarium species, and know who and when to escalate concerns and issues to.                                                                                       | <a href="#">K4 K5 K6 K7 K8</a><br><a href="#">S4 S5 S6 S7</a><br><a href="#">B1</a> |
| <b>Duty 4</b> Understand zoo or aquarium population management strategies.                                                                                                                                                                     | <a href="#">K9 K10</a>                                                              |
| <b>Duty 5</b> Maintain and update health and welfare records within the zoo or aquarium, monitoring the environment of animals and their wellbeing.                                                                                            | <a href="#">K11 K12 K13</a><br><a href="#">S8 S9 S10</a>                            |
| <b>Duty 6</b> Communicate effectively and work collaboratively with colleagues.                                                                                                                                                                | <a href="#">K14</a><br><a href="#">S11 S12</a><br><a href="#">B2</a>                |
| <b>Duty 7</b> Promote the positive role of zoos and aquariums in effective conservation and wider society.                                                                                                                                     | <a href="#">K15 K16 K17</a><br><a href="#">S13</a><br><a href="#">B6</a>            |
| <b>Duty 8</b> Complying with legislation covering both animal management and human health and safety.                                                                                                                                          | <a href="#">K18 K19</a><br><a href="#">S14 S15</a><br><a href="#">B4</a>            |
| <b>Duty 9</b> Research and present information relating to the species in their area, to promote understanding with different audiences.                                                                                                       | <a href="#">K20 K21</a><br><a href="#">S16 S17</a><br><a href="#">B3</a>            |
| <b>Duty 10</b> Present enrichment targeted to an identified species' need within the zoo or aquarium.                                                                                                                                          | <a href="#">K22</a><br><a href="#">S18</a>                                          |
| <b>Duty 11</b> Follow an animal training programme to meet a specific need of a species in the zoo or aquarium.                                                                                                                                | <a href="#">K23</a><br><a href="#">S19</a><br><a href="#">B1 B5</a>                 |

## Option occupation duties

### Keeper duties

| Duty                                                                                                                                                                                     | KSBs                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| <b>Duty 12</b> Follow biosecurity procedures for zoo animals, using appropriate personal protective equipment (PPE), to reduce the risk of transmission of disease and parasites.        | <a href="#">K24</a><br><a href="#">S20</a><br><a href="#">B4</a> |
| <b>Duty 13</b> Monitor, maintain and review environmental conditions and enclosures for zoo animals, including suitable temperature, humidity, light, ventilation and stakeholder needs. | <a href="#">K25 K26</a><br><a href="#">S21 S22 S23</a>           |

### Aquarist duties

| Duty                                                                                                                                                                                                     | KSBs                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| <b>Duty 14</b> Follow aquatic biosecurity procedures, including filtration system management to reduce the risk of disease transmission within the aquatic environment.                                  | <a href="#">K27</a><br><a href="#">S24</a><br><a href="#">B4</a> |
| <b>Duty 15</b> Monitor and maintain life support systems and aquatic displays to ensure that water chemistry parameters are at appropriate levels to provide a healthy and engaging aquatic environment. | <a href="#">K28 K29</a><br><a href="#">S25 S26 S27</a>           |

## **KSBs**

### **Knowledge**

**K1:** Nutritional requirements of a range of species across all life stages and how diets are stored safely, formulated, prepared, supplemented and delivered.

**K2:** How to service an enclosure at an appropriate standard, using suitable cleaning products, methods, and frequency to ensure the health of the animal and the integrity of the enclosure.

**K3:** Sustainable waste management, recycling procedures and disposal in line with policy or legislation.

**K4:** The animal welfare frameworks, to include the 5 needs and the 5 domains and how they are applied in day-to-day species husbandry.

**K5:** Welfare assessment using appropriate welfare assessment tools and who to escalate welfare concerns to.

**K6:** Basic healthcare procedures, for example the storage and administration of treatments and animal first aid.

**K7:** How the principles of anatomy, physiology, adaptations, ecology and behavioural ecology impact the husbandry of the species.

**K8:** The principles of animal movement and transportation legislation, including handling, restraint, capture, equipment and monitoring of animals and the challenges around these.

**K9:** The global assessment of conservation status of species or breeds, and habitats.

**K10:** Population management and its effectiveness to include the principles of studbook management and ex-situ programmes.

**K11:** How to record and retrieve zoological information securely from different sources appropriate to the organisation and the rationale for record keeping.

**K12:** Means of identifying individual animals and the importance of accurate records.

**K13:** How to correctly collect, document and store suitable samples for example hair, faeces, urine and scales, and the reasons for collection.

**K14:** How to use appropriate communication methods which meet the needs of different stakeholders and audiences.

**K15:** The significant role zoos and aquariums play globally in conserving species and their habitats, including the International Union for Conservation of Nature (IUCN) One Plan conservation approach.

**K16:** The history of zoos and aquariums, their current and future roles and the impact of public perception on the zoological sector's decision making.

**K17:** The role of key stakeholders to the sector, regional, national and international associations to include BIAZA, EAZA, WAZA and associations appropriate to their area.

**K18:** Current animal related legislation, to include Animal Welfare Act, Zoo Licencing Act, Balai Directive, Dangerous Wild Animals Act (DWA), The Animal Welfare (Licensing of Activities Involving Animals) (England) Regulations, and organisational animal management policies and procedures.

**K19:** Health and safety legislation and workplace policies and procedures, to include working safely and professionally to site standards for both standard operations and crisis management, for example animal escape, lost child or fire drills.

**K20:** The principles of basic classification of taxa.

**K21:** The importance of the role of keepers in research and the principles of research and dissemination undertaken in zoo and aquariums.

**K22:** The purpose of enrichment, the five enrichment categories, safety considerations, methods of providing enrichment and how to review the effectiveness of the enrichment.

**K23:** The principles and roles of animal training, to include classical versus operant conditioning, cuing, bridging and reinforcing.

**Keeper:**

**K24:** Factors affecting zoo biosecurity for species under their care, appropriate control measures for prevalent diseases and parasites including signs, symptoms and how to report concerns.

**K25:** The principles of enclosure design and horticultural choices incorporating the needs of animals, keepers and visitors.

**K26:** The principles of enclosure servicing and environmental monitoring appropriate to the species needs, equipment used, and the factors influencing frequency and methods of cleaning.

**Aquarist:**

**K27:** Factors affecting aquatic biosecurity for species under their care, appropriate control and prophylactic measures for diseases and parasites, to include signs, symptoms, and how to monitor in closed, recirculation and quarantine systems.

**K28:** The fundamentals of life support systems' components, servicing, monitoring, water testing and integrity to meet species needs across multiple systems.

**K29:** The principles of displays, theming and lighting, to include environment replication to incorporate multiple species needs, visitor engagement and staff requirements.

**Skills**

**S1:** Follow diet sheets, safely store, prepare and present diets relevant to the species and individual, review the food intake and record observations.

**S2:** Maintain an enclosure at an appropriate standard to include substrate and furnishings, following an established routine and selecting suitable tools and equipment, to ensure the health of the animal and the integrity of the enclosure.

**S3:** Correctly follow procedures for sustainable waste management, recycling procedures and disposal to include hazardous materials and biosecurity risks.

**S4:** Identify and report potential welfare concerns in animals in a timely manner.

**S5:** Support the administration of appropriate healthcare following instructions from a veterinarian or a competent member of staff.

**S6:** Observe and interpret animal behaviour including innate, learned, abnormal, and species-specific behaviours for species in their care.

**S7:** Support with the capture, restraint and movement of an animal taking into consideration species requirements, level of risk, duration, animal welfare, health and safety, and legislation.

**S8:** Accurately record, retrieve, monitor and disseminate information using a system relevant to their organisation.

**S9:** Support the use of appropriate methods for identifying individual animals.

**S10:** Correctly collect, document and store suitable samples.

**S11:** Use appropriate methods to communicate to internal and external audiences concisely, accurately and in ways that promotes understanding.

**S12:** Actively listen, process and prioritise information, confirm understanding and react according to level of risk, for example lost child procedure, animal escape, instruction from senior staff.

**S13:** Devise and deliver a talk or presentation on a nominated species or habitats to promote the positive role of zoos and aquariums using a range of appropriate resources for example audio/visual equipment physical props.

**S14:** Work in a way that shows compliance with animal related legislation and animal management policies and procedures.

**S15:** Work in a way that shows compliance with health and safety legislation and workplace policies and procedures.

**S16:** Design, implement and analyse a research project using standard research methods.

**S17:** Present the research project and consider the implications of findings for practices within their organisation.

**S18:** Select, implement and review sensory and cognitive enrichment appropriate to enclosure or tank design and species-specific needs taking account of health and safety, and animal welfare considerations.

**S19:** Train animals' using positive reinforcement-based techniques in accordance with the training programme objectives, monitoring and record or report the results.

**Keeper:**

**S20:** Identify potential and existing biosecurity hazards within an enclosure and associated areas, following procedures to mitigate risks and report issues within a timely manner.

**S21:** Assess the strengths and weaknesses of different enclosure designs from the point of view of each stakeholder group and suggest practical improvements.

**S22:** Use, maintain and store a range of tools appropriate to the workplace.

**S23:** Carry out husbandry regimes, environmental monitoring and maintenance of the enclosure according to species requirements.

**Aquarist:**

**S24:** Monitor and identify potential and existing biosecurity hazards within aquatic and quarantine systems and their life support, following prophylactic or reactive procedures to mitigate risks and report issues within a timely manner.

**S25:** Carry out cleaning, water testing and maintain water chemistry parameters in relation to the nitrogen cycle to ensure species welfare.

**S26:** Monitor and maintain the components of mechanical and biological filtration in an aquatic system.

**S27:** Identify the key elements of display designs, theming and upkeep to meet animal welfare, visitor expectations and staff requirements.

**Behaviours**

**B1:** Professionalism: Has an adaptable and flexible positive attitude to work, situations and environments.

**B2:** Teamwork: Able to work as a team and independently in such a way that supports shared goals and supports an inclusive workplace.

**B3:** Personal development: Committed to identifying opportunities for and actively engaging with continuous professional development.

**B4:** Health and safety: Demonstrates proactive adoption of health and safety practices within the limits of their own training and responsibility.

**B5:** Respect: Demonstrates respect and empathy for animals.

**B6:** Customer Care: Able to follow and respect organisation values and policies ensuring a positive visitor experience.

## **Qualifications**

### **English and maths**

English and maths qualifications must be completed in line with the [apprenticeship funding rules](#).

**Does the apprenticeship need to include any mandated qualifications in addition to the above-mentioned English and maths qualifications?**

No

**Consultation** TBC

### **Progression routes**

[ST0398 Animal trainer L4](#)

Learners may progress into employment within the zoo and aquarist, conservation, and animal care sectors. They may decide to specialise. Examples of specialisms are: • conservation • animal training • research • education and teaching in zoos. They may also progress onto Higher Education in a related field.

### **Involved employers**

Broomfield Hall, Chester Zoo, Colchester Zoo, Hertfordshire Zoo, Merlin Entertainments, Slimbridge Wetlands Wildlife Trust, West Midlands Safari Park.

**Other involved stakeholders** Derby College Group, Greens Vocational Education Consultancy, Haddon Training, iPet, Keits, Lantra, Sparsholt College, University of Plymouth, BIAZA.

**Subject sector area:** 3.3 Animal care and veterinary science