

REF. NO.	C –ZM.1
TITLE:	ZOOLOGICAL MEDICINE WILDLIFE MEDICINE
CATEGORY AND VALUE:	C - 10 CREDITS
NOTIONAL STUDY HOURS:	100

Candidates working towards the designated Certificate in Advanced Veterinary Practice (Zoological Medicine) will need to complete the A-Professional Key Skills module, the B-Clinical Key Skills module, the B-Zoological Medicine module and three of the five available C-Zoological Medicine modules. Upon completion of all the necessary modules, a further synoptic oral assessment will also be required.

### ASSESSMENT STRATEGY FOR THIS MODULE

*It is suggested that this module can be assessed by the following methods:*

- A **case log** of fifty cases for this C module. These cases should not be used for any other modules the candidate may take. The log should comprise a list of cases seen, dates when the cases were seen and outcome of each case. The log is meant only to document that these cases were seen and no details will be required to put in the case log. These cases should demonstrate that the candidate has seen a reasonable number of cases in practice while studying for the module and is not relying on information gained solely from classical textbooks on the subject.
- Two Essay questions (out of a choice of 5 questions) will need to be satisfactorily completed before the full qualification is awarded. These will be set in an exam situation
- Once the essay questions have been satisfactorily completed, then candidates will attend a PowerPoint quiz where short answers to the 'spots' will be required.

### MODULE CONTENT

At the end of the module candidates should be able to:

- Thoroughly understand the triage methods, pre-release assessment, varying release methods, common diseases seen, principles of disaster medicine, post-mortem techniques and anaesthesia and monitoring relevant to wildlife species.
- Review and constructively criticise current literature on the specialty, to enable them to determine the relevance to their current practice
- Utilize their understanding of Evidence Base Medicine and Decision Analysis to develop practical approaches to dealing with wildlife species.
- Recognize when a case is truly unusual and become familiar with information resources available to enable them to deal with such cases
- Recognize when a case is beyond their personal or practice capabilities for continued testing and monitoring.

## SYLLABUS CONTENT

### 1 Triage Methods

- Be aware of the clinical signs indicating severity of disease in commonly seen wildlife species
- Be aware of which species will respond well to intensive medical care in a captive situation and those which do not
- Be familiar with the biological adaptations of specific species of wildlife such as birds of prey, so as to understand which injuries can be treated and which would require early euthanasia of the animal

### 2 Pre-release assessment

- Be familiar with normal behaviour patterns of selected species of European wildlife so as to be able to assess their suitability for release
- Understand the techniques used to ascertain whether an individual can successfully find food for itself prior to release.
- Be familiar with biologically satisfactory release criteria for individual species e.g. critical weights of European hedgehogs or flight capabilities of falcons such as the Peregrine.
- Be familiar with relevant legislation, such as the Wildlife and Countryside Act 1981 (Amended 2000), so as to ascertain whether an individual animal can be legally released into the wild.

### 3 Release methods soft vs. hard techniques

- Understand the main differences between the soft and hard release methods
- Be aware of the techniques of soft and hard release as applied to specific European wildlife species
- Know the criteria to be assessed before and after release to ensure success
- Be aware of monitoring techniques post release e.g. radiotelemetry
- Be aware of which species are territorial and how this impacts on their release

### 4 Common Infectious Diseases of Wildlife

- Be familiar with the commonly observed diseases of European mammals
- Be familiar with the commonly observed diseases of European birds and reptiles
- Be familiar with the principles of disease epidemics and pandemics in wildlife e.g. avian influenza, terrestrial rabies, rinderpest, foot and mouth disease, West Nile virus etc.
- Be aware of control measures used to prevent the spread of such epidemics and pandemics
- Be aware of the impact of such epidemics on domestic animals and man

### 5 Environmental disaster medicine (strandings, oil spills etc.)

- Understand the techniques involved in treating large numbers of oiled seabirds
- Understand the emergency procedures required to deal with strandings of whales, dolphins and porpoises and how to assess their welfare, health and consciousness
- Have knowledge of the methods for humane destruction of stranded marine mammals

### 6 Covering post mortem techniques.

- Be aware of the standard approach to post mortem examination of wild birds, mammals, fish and reptiles

- Be familiar with collecting samples for parasitological and microbiological examination from wildlife cases
- Be aware of what samples are required for testing for suspected cases of poisoning in wildlife species.
- Be aware of the potential for zoonotic disease contraction and how to avoid this when performing post mortems on wildlife.

#### **7 Specific Nutritional requirements**

- Be aware of the categorisation of commonly seen species of European wildlife with regard to their nutritional preferences (i.e. carnivore vs herbivore vs omnivore vs insectivore)
- Be aware of specific nutritional requirements for commonly seen species of wildlife e.g. preformed vitamin A for mustelids such as the weasel or stoat
- Be aware of specific reported wildlife disease situations that have been associated with nutritional deficiencies
- Be aware of the substitute foods available for feeding injured wildlife whilst being rehabilitated
- Be aware of the risks of feeding certain foods to captive wildlife e.g. wild caught pigeons present a risk of *Trichomonas* sp. infection when fed to birds of prey unless frozen and then defrosted before feeding.

#### **8 Anaesthesia and monitoring requirements**

- Be familiar with the drugs commonly used in field restraint and their antidotes where available
- Be aware of the Health and Safety aspects of certain anaesthetic drugs such as etorphine, used in wildlife capture
- Be familiar with techniques of remote anaesthetic administration e.g. blow pipes, dart guns, syringe construction etc.
- Understand the differences in anatomy and physiology relevant to anaesthesia of individual species groups e.g. breath holding of diving species, difficulty in visualising the larynx for intubation in species.
- Be aware of conditions such as capture myopathy which may impact on the safety of physical and chemical restraint
- Be familiar with accessory equipment such as nets, hobbles, pole snares and visual blinds and their use in certain species to be restrained.