

Veterinary care of British wildlife casualties



Most veterinary professionals working in general practice will at some point in their careers be called upon to provide care for indigenous, free-living animals. Wildlife vets, Liz Mullineaux and Emma Keeble, editors of the new *BSAVA Manual of Wildlife Casualties*, highlight the necessary considerations when caring for wildlife casualties

Why treat wildlife casualties?

Treating wildlife casualties is a careful balancing act between ethical and welfare judgements (Figure 1). At the same time, professional requirements must be fulfilled. Wild animals are fully covered by the Veterinary Surgeons Act and therefore only a member

of the Royal College of Veterinary Surgeons (RCVS) can diagnose and medically or surgically treat wildlife casualties. As the RCVS *Code of Professional Conduct for Veterinary Surgeons* (2017)¹ equally applies, all veterinary surgeons must provide at least emergency care to wildlife. The Veterinary Medicines Regulations 2013 require that a veterinary surgeon must carry out a clinical assessment of the animal, and that the animal must be under that veterinary surgeon's care before a Prescription Only Medicine (POM or POM-V, including Controlled Drugs and those used for euthanasia) is prescribed; the British Veterinary Zoological Society (BVZS) provides useful information on prescribing medicine to wildlife.² Alongside the need to provide care, however, is the need to minimize suffering through inappropriate care and therefore a careful 'triage' process (see below) followed in many cases by euthanasia is often required.³

Legal considerations

Most British wild animals are protected in the wild by the Wildlife and Countryside Act, 1981. This Act allows sick or injured animals to be 'taken' from the wild in order to provide care, with the intention of releasing them back into the wild. However, some species require licenses to keep them in captivity and some cannot be released back into the wild or at all without appropriate licenses in place (Figure 2).⁴

While in captivity, wild animals fall under the Animal Welfare Act, 2006, which means that their 'five needs', as defined in the Act, must be fulfilled. This can be almost impossible in a veterinary practice environment and good relationships with local wildlife rescue centres are essential in order to provide adequate longer term care during the rehabilitation process.

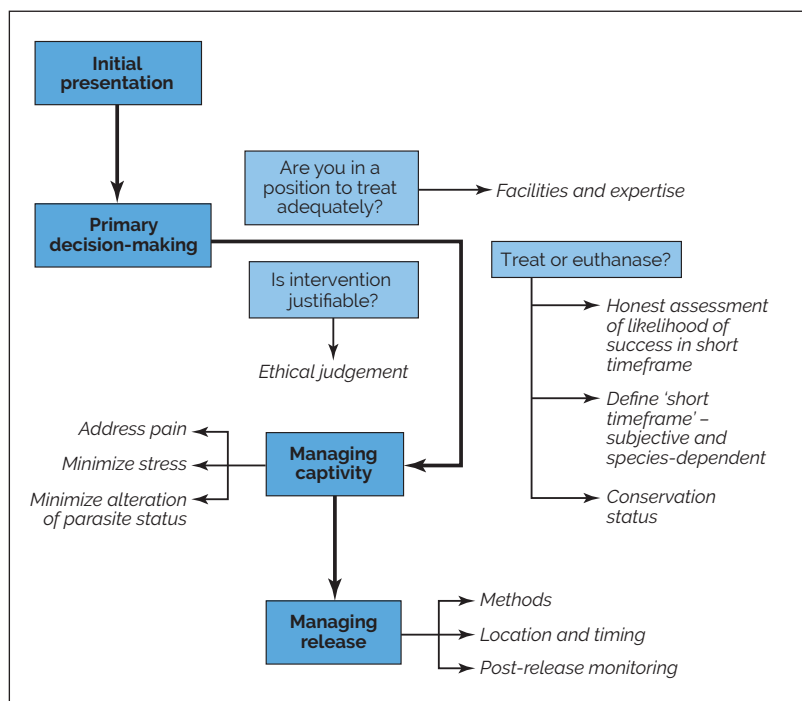


FIGURE 1: Flowchart indicating the critical points of veterinary responsibility for wildlife casualty health and welfare from initial notification to release.

Occasionally, animals may be presented to veterinary surgeons that have been subject to illegal activity such as shooting, trapping and snaring. In these cases, it is unusual for the animal to survive such insult and those surviving usually need to be euthanased. Veterinary surgeons may, however, be called upon to provide evidence in such cases and it is important that this is collected and preserved in the correct way, maintaining a clear 'chain of evidence'.⁵

Capture and handling

The veterinary practice is often the first point of contact for members of the public finding an injured wild animal. As well as professional responsibilities to the animal (see above), veterinary clinicians also take on a responsibility to the finder to ensure their safety, as well as that of the casualty, is maintained. In many instances, it is inappropriate to ask the finder to pick up the animal because of risk of injury or infection, and practice staff must be prepared to attend the animal directly, or contact a wildlife centre or charity who can provide a collection service.

Even with relatively 'safe' animals (e.g. small garden birds, hedgehogs), practice reception staff must be able to provide good advice on how to safely handle the animal, avoiding direct contact by picking the animal up in a towel or blanket, or 'scooping' the animal up in a container. Records should be kept of all phone calls relating to wildlife, in the same way as for other species. Ideally, all animals should be 'signed over' to the practice (or wildlife rescue centre) to allow welfare-based

decision-making to be carried out without the need for further informed consent.⁶

Within the veterinary practice appropriate training and handling equipment, including personal protective equipment (PPE), should be provided for staff dealing with wildlife casualties. A written health and safety policy should be in place, with risk assessments and standard operating procedures (SOPs) for those species commonly encountered by the practice. Risks may be physical (kicks, bites, scratches) and include zoonotic infections (Figure 3).⁶



FIGURE 3: Foxes can carry the zoonotic parasite *Sarcoptes scabiei* as seen in this cub with patchy alopecia, scaling and crusting.

Keeping British wildlife casualties

Schedule 4

Birds listed under Schedule 4, which are mostly birds of prey, including the golden eagle (*Aquila chrysaetos*), peregrine falcon (*Falco peregrinus*) and red kite (*Milvus milvus*), must be ringed and registered with the appropriate authority (Natural England, Scottish Natural Heritage, Natural Resources Wales, Department of the Environment Northern Ireland Environment Agency). If these birds are taken into care, a 6-week general license is available for a veterinary surgeon and a 15-day license for a wildlife rehabilitator to keep a disabled bird for rehabilitation without it being registered

Schedule 9

Mammals listed under Schedule 9, including American mink (*Neovison vison*) and grey squirrels (*Sciurus carolinensis*) can only be kept in captivity with an appropriate license

Releasing British wildlife casualties

Non-indigenous species and those listed in Schedule 9 may not be deliberately released, or allowed to escape, into the wild. This includes reintroduction of native species. Some Schedule 9 species, such as Canada geese (*Branta canadensis*), grey squirrels (*Sciurus carolinensis*) and muntjac deer (*Muntiacus reevesi*), may be released in some areas with an appropriate license

FIGURE 2: Keeping and releasing British wildlife casualties under the Wildlife and Countryside Act, 1981.

Triage

Key to the successful treatment and release of an animal back to the wild is triage. The term 'triage' is used by wildlife rehabilitators to refer to the decision-making process in which animals are either treated or euthanased. This decision may be made at admission in a severely injured animal, or following first aid and reassessment in other cases. In all instances, a triage decision must be made quickly, ideally within the first 24 hours following admission, in order to prevent unnecessary suffering.

The following questions should be taken into consideration during the triage process:⁷

- Is it possible to treat the injury or disease in this animal?
- What species is it and what is its natural history and behaviour in the wild?
- What is the age and sex of the animal?
- How long will the animal have to be in captivity and how often will it have to be handled for treatment?





- Does the time of year have an impact?
- Are suitable veterinary facilities available?
- Are rehabilitation facilities available?
- Are suitable release sites available?
- What are the risks to personnel?
- Will rehabilitation of the animal pose any risks to free-living species or livestock?
- Are there any legislative requirements?

It must be remembered that although wildlife casualties may be easily treated with modern veterinary medicine, it does not necessarily mean that they can be successfully released back into the wild. However, a clinical examination is essential and should be carried out with care, with some knowledge of species-specific anatomy and physiology, an understanding of the ecology of the species, and awareness of what is required for the animal to survive back in the wild.

First aid and stabilization

Most wildlife casualties require first aid and stabilization following admission. This should include both appropriate fluid therapy (Figure 4) and analgesia. Analgesic drug doses can be adapted from those in similar domestic species and using an exotic animal formulary.⁸

Diagnosis and treatment

After initial triage and first aid, it is necessary to make a clinical diagnosis and provide more specific treatment. At this stage a species-specific approach is required; further information can be found in the 20 chapters dedicated to specific animals or group of species, ranging from hedgehogs to seabirds and amphibians, in the *BSAVA Manual of Wildlife Casualties*.



FIGURE 4: Gavage is well tolerated by birds, such as this short-eared owl, and can be performed quickly to reduce stress.

Management in captivity

Veterinary practices are not an ideal environment for wild animals and, once medically stable, every attempt must be made to move the casualty quickly to an appropriate wildlife centre. While in the practice, care must be taken to ensure that the animal is housed in a quiet cage or pen away from the sight and sound of predators, including dogs, cats and humans. The cage must be secure and not easily damaged. Appropriate bedding and perches should be provided where necessary. The casualty must also be housed within the correct temperature range, which depends upon both the species and the age of the animal (Figure 5).

Species	Temperature range (°C)
Mammals	15–24
Very small birds (5–50 g)	25–35
Small birds (50–500 g)	22–32
Medium and large birds (>500 g)	15–25
British reptiles	22–30
British amphibians	15–30

FIGURE 5: Temperature reference ranges for commonly encountered wildlife casualties.

Initial short-term feeding (following fluid therapy) may include the use of veterinary complete liquid diets. Once the animal is eating by itself, appropriate food should be made available in the practice for most species; this may include dog or cat food (badgers, foxes, hedgehogs, other mammals, gulls and insectivorous birds), day-old chicks (badgers, foxes and raptors), seeds (rodents and granivorous birds), fish (otters and sea birds) and commercial pellets (rabbits and waterfowl). ©



References and further reading are available online and in *e-Companion*.

"...an invaluable source of condensed yet comprehensive, pertinent and up-to-date science...especially useful when dealing with a novel situation as almost everything you need to know is there...I would recommend that staff members all know where the practice copy is kept"

Extract from a *BSAVA Manual of Wildlife Casualties, 2nd edition* book review by Stephen Cooke who has a career-long involvement with exotic and wildlife species. (*Veterinary Record*, 1 July 2017)

Further information on all the topics covered in this article is available in the new edition of the *BSAVA Manual of Wildlife Casualties*.

To purchase your copy, visit the bookshop at www.bsava.com or call our Membership Services Team on 01452 726700.

