

First-opinion veterinary surgeons and wildlife rehabilitation



Liz Mullineaux and Pauline Kidner, from Secret World Wildlife Rescue in Somerset, highlight the veterinary role in wildlife rehabilitation and the valuable service of wildlife rehabilitators.

Most vets will, at some point in their career, have some involvement in the provision of care for free-ranging British wildlife. This may be as a veterinary surgeon employed at a wildlife rehabilitation centre, working for a veterinary practice providing regular services to a centre, but more commonly as a vet in general practice providing emergency care.

The Royal College of Veterinary Surgeons (RCVS) statutory requirements for providing first aid and pain relief (and euthanasia where necessary) clearly extend to wildlife cases.¹ Veterinary professionals are rarely able to take an injured animal from the wild, care for it adequately and eventually release a fit animal back to the wild. Successful rehabilitation requires the skills of a wildlife rehabilitator and facilities of a wildlife rehabilitation centre. Although the RCVS has recently made it clear that the responsibility for wild animals brought into practices by the general public rests with the vet alone (Appendix 1), it acknowledges the unique role of wildlife rehabilitators.

The term 'wildlife rehabilitator' can be used to cover a wide range of individuals with differing knowledge and skills, as will be described later in this article. Good working relationships with rehabilitators are essential if wildlife is to be successfully treated. At its best, wildlife rehabilitation can be the perfect example of the multi-disciplinary 'vet-led team'. Frustrations can arise when expectations are not met and this article discusses how problems can be overcome.

Expectations of vets

As a minimum requirement, all veterinary professionals in general practice need to be confident in the following aspects of wildlife care: information gathering at admission, clinical examination, triage with euthanasia where necessary, provision of first aid (including appropriate fluid therapy and analgesia), provision of appropriate short-term hospitalization and nursing care, efficient transfer of cases to a wildlife rehabilitator.

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All vets and veterinary nurses should have the basic clinical skills to deliver these requirements competently. Veterinary professionals however often lack knowledge regarding the ecology and biology of the wildlife species and therefore struggle to make appropriate decisions. *The BSAVA Manual of Wildlife Casualties* is helpful in this respect, providing this information for each species, or group of species.² Wildlife rehabilitators are often incredibly knowledgeable and can also provide this information when it is urgently required.

Admission

The veterinary practice's responsibility for a wild animal starts at the point of first contact with the member of the public, whether over the telephone or in person. An admission form detailing exactly where the animal was found, under what circumstances, and details of the finder, are essential. Adult animals must be released back at the exact site they were found, so without this information release is often impossible.

The practice should have appropriate facilities to ensure best care for the animal and the safety of both staff and members of the public. These should: limit those at risk, have suitable training and SOPs for wildlife handling, ensure there is appropriate animal handling equipment in the practice (e.g. PPE, gloves (Figure 1), gauntlets, graspers, crush cages, swan bags) and provide additional preventative health measures for staff (e.g. rabies vaccination for those working with bats).

The RCVS has made it clear that consent is not required for a veterinary surgeon to make decisions regarding a wild animal brought in by the general public (see Appendix 1); however, both the *BSAVA Guide to the use of Veterinary Medicines*, and *BVZS Good Practice Guidelines for Wildlife Rehabilitation Centres* suggest best practice is a formal sign-over document.^{3,4} This avoids debate over case management and ensures that wildlife rehabilitation centre staff 'own' the animal and can therefore legally perform minor medical procedures, such as administering ongoing medication, under the Veterinary Surgeons Act.



FIGURE 1: Appropriate gloves should be worn when handling bats such as this long-eared bat (*Plecotus auritus*).
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Examination

A full veterinary clinical examination of wildlife casualties is essential but is frequently lacking. The animal's behaviour, demeanour, respiration and locomotion should be observed prior to 'hands on' examination. In some cases, especially mammals, sedation or general anaesthesia may be necessary; the principles can be extrapolated from domestic species. The primary reason for presentation (e.g. road traffic accident) may not be the only clinical problem. Body condition assessment is useful in helping differentiate between acute and chronic conditions but may naturally be seasonally variable in some species. The examination should focus especially upon body systems that would be vital in that species for survival in the wild (see 'Triage' below) e.g. eyes should be carefully examined in birds of prey (Figure 2).



FIGURE 2: Examination of the eyes is especially important in birds of prey such as this common buzzard (*Buteo buteo*).
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Diagnostic tests rarely alter a triage decision. Some diagnostic modalities may also be unsuitable for the species and unnecessarily expensive. Where a decision is made to treat an animal following triage, diagnostic tests will often be required to ensure adequate treatment, for example, if a fractured limb is to be repaired then radiographs including joints proximal and distal to the fracture site will be required.

Triage decisions and appropriate euthanasia

The term 'triage' is used by wildlife rehabilitators to mean the decision-making process in which an animal is considered suitable for treatment, rehabilitation, and eventual release or euthanasia. Factors influencing a wildlife triage decision are not necessarily medical ones. In order that a wildlife casualty can be successfully released back to the wild it needs to be a 'suitable' casualty from a veterinary perspective (one that can be successfully treated), but there must also be suitable rehabilitation facilities and release sites (for juvenile animals). In addition, legal requirements must be fulfilled and other factors such as the weather and time of year considered.

A 'suitable' casualty animal is one that can be returned to the wild in a physical condition that allows it to survive as any other member of its species. The animal must be able to run or fly, feed itself, defend itself and its territory, and reproduce. There must be no risk to the animal, others of its species, other wildlife, livestock or the general public when it is released.

The first problem for many veterinary professionals is to identify the species and its characteristics; without such knowledge, decision-making is difficult. Wildlife rehabilitators can be an essential source of information and expertise. Veterinary professionals are however, best positioned to assess the health of the animal, and the individual animal's welfare must be prioritized, as to return an unfit casualty to the wild constitutes 'abandonment' and may be regarded as an offence under UK animal welfare legislation. Medical reasons for euthanasia will be influenced both by species and age of animal, but may include: behavioural abnormalities, damage to the jaw (Figure 3) or beak, loss of hearing, permanent blindness, loss of an eye or vision in an eye, loss of a limb (or wing) or permanent loss of function, fracture of a limb or wing involving or very close to a joint, permanent feather damage (Figure 4) or loss of waterproofing, fracture of the pelvis resulting in narrowing of the pelvic canal, loss of reproductive function.



FIGURE 3: Fracture dislocation of the jaw in a fox. This would be considered an appropriate reason for euthanasia.
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FIGURE 4: Plumage should be carefully examined as part of the triage process, as in this sparrowhawk (*Accipiter nisus*)

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Most wild animals require a return to full fitness before their return to the wild. Inadequate veterinary care as a result of lack of skills, knowledge, or funding is unacceptable. Even when veterinary skills and facilities are available, the amount of time a casualty animal may need to spend in captivity to fully recover may result in treatment being inappropriate. The knowledge of wildlife rehabilitators will be extremely useful in this respect.

Both the initial and ongoing costs of professional time, drugs and consumables must be considered. If the finances are not available to care for the wildlife casualty properly then euthanasia is the preferred option rather than inadequate care. Equally, wildlife hospitals that are well funded should not 'over treat' casualties.

Some non-indigenous species, such as grey squirrels (Figure 5) and muntjac deer listed in Schedule 9 of the Wildlife and Countryside Act (WCA), cannot be released in the UK, and a licence is required to keep them in captivity. Other species, such as Canada geese, require a licence for their release. Some birds (listed in Schedule 4 of the WCA) require a licence to keep them in captivity even if they are being rehabilitated. Legal issues must be fully considered at triage and discussed where appropriate with a wildlife rehabilitator.



FIGURE 5: Grey squirrel (*Sciurus carolinensis*) juvenile. This species cannot be released back to the wild or kept in captivity without a licence. ©Secret World Wildlife Rescue

First aid

Most wildlife casualties will present with clinical dehydration or hypovolaemia and require fluid therapy. This may be as simple as providing oral electrolytes to an animal that will drink, or crop-tubing in a bird (Figure 6). In other cases, intravenous (Figure 7) or intraosseous fluids will be most appropriate. Fluid rates and sites of administration can be extrapolated from similar domestic species and are described in wildlife texts.²

Appropriate analgesia should be provided to all wildlife casualties, with doses extrapolated from those used in domestic animals or available in an exotic animal formulary.^{5,6}

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FIGURE 6: Mute swan (*Cygnus olor*) cygnet receiving electrolyte fluid by crop tube. ©Secret World Wildlife Rescue



FIGURE 7: Badger (*Meles meles*) receiving intravenous fluids using the cephalic vein. ©Secret World Wildlife Rescue

Protection of feathers is an essential part of first aid in birds. Wing bandages should be applied where fractures are suspected and damage to trailing primary feathers is likely. Tail guards should be placed on birds of prey (Figure 8).



FIGURE 8: Buzzard with temporary tail guard placed using a surgical instrument sterilizing pouch. ©Secret World Wildlife Rescue

Look after the animal properly in the short-term

Most veterinary practices are suitable only for very short-term care of wildlife casualties and animals should be moved to an alternative facility as soon as they are stable. Whilst in the veterinary practice, accommodation needs to be secluded (away from the sight, sound and smell of humans and other animals), escape-proof, easily cleaned, and provide safe access to the patient. Strict hygiene protocols should be employed, with barrier nursing precautions most appropriate, as the disease status of wild animals is usually not known. A suitable ambient temperature should be provided, as well as appropriate ventilation and lighting, remembering that some species are nocturnal.

Where possible, food should be provided that most closely resembles the wild diet of the casualty, as this will be most readily accepted and best tolerated. In the short-term, veterinary 'recovery' diets can be used in most species and dog or cat food for carnivorous,

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omnivorous and insectivorous species. A range of other foods should also be available in the veterinary practice (or appropriately obtained) including, a variety of seeds and bird pellets, frozen dead day-old-chicks, small frozen fish, fruit, nuts and vegetation. Wildlife rehabilitation centres may help to provide small amounts of such foods for emergency use and keep them freshly replenished. Water should be provided in shallow containers appropriate for the size of animal.

Communication and transfer of cases

Good communication is required between the veterinary practice and the wildlife rehabilitator, or wildlife centre, that may be able to take the casualty animal for ongoing care. Telephone or email contact is best made as soon as the animal has been triaged in order to ensure that expectations can be met. Wildlife centres are frequently very busy with limited resources, considerations such as veterinary staff dropping animals off at a centre after they finish work will be appreciated and help to build relationships.

It is important that all information relating to the casualty animal is transferred including the animal's admission form, details of the clinical examination, and

ongoing treatment requirements (supply of medication to complete any prescribed course will be appreciated). The veterinary practice should keep duplicate copies of all such information. It should not be assumed that the wildlife rehabilitator will necessarily know how to administer medication or change dressings.

Expectations of wildlife rehabilitation facilities and staff

Wildlife rehabilitation facilities are very variable, ranging from a small facility (typically a garden shed) run by an individual and often taking only one species, through to large multi-species establishments. Many of the larger centres will be registered charities. Individuals working as wildlife rehabilitators may do this purely as a hobby, whilst others will be in full time employment at a wildlife centre. Older wildlife rehabilitators will typically be individuals with little formal training but have a wealth of knowledge and practical experience. Increasingly, new staff members at centres will have university degree level qualifications in biological sciences or conservation. It is unlikely that any one centre will have the facilities and skills to take all species and a veterinary practice should have a list of possible individuals/centres. The standards of care do vary and the best way of ensuring good ongoing care for wildlife cases is to take time to visit facilities and build relationships with staff.

Standards

Although there is currently no regulatory framework governing wildlife rehabilitation in the UK, voluntary guidelines are available from BVZS, British Wildlife Rehabilitation Council and International Rehabilitation Council.^{4,7,8} For many organizations these guidelines will be aspirational. As an absolute minimum, facilities should include segregation of predator and prey species, some form of isolation accommodation, good hygiene practices, appropriate accommodation for the species kept and knowledgeable care.

Rehabilitation facilities

Whilst most wildlife centres will be able to care for a 'hospitalized' animal until medically fit (Figure 9), this is not the same as being physically fit to return to the wild. A good centre will have outside aviaries (Figure 10), flight cages and pre-release enclosures (Figure 11) to enable full fitness and normal 'wild' behaviour to re-establish. In some instances, transfer of animals to a secondary facility may be needed. It is unacceptable to release an animal from a small cage back to the wild without some form of rehabilitation.

Release sites

Wildlife centres should have well established policies for release of animals. Adult animals should, in almost all cases, be released back at the exact location where they were found, for reasons of social status, genetics and





FIGURE 9: Carrion crows (*Corvus corone*) juveniles in 'hospital' accommodation at a wildlife rescue centre.
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FIGURE 10: Young tawny owls (*Strix aluco*) in a seclusion aviary at a wildlife rescue centre.
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FIGURE 11: Badger cub group in pre-release enclosure at a wildlife rescue centre.
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disease risks. Groups of reared juveniles ('orphans') require new release sites (Figure 12) and the availability of such sites should be considered at the start of the rehabilitation process. Release sites must be safe and consider existing populations, and they need to be surveyed by someone with appropriate skills and experience. There are potential risks of disease transmission and these need to be considered, ideally following international guidelines.⁹ Landowner consent for releases should always be obtained, and neighbouring activities considered.




FIGURE 12: Tawny owl juveniles in 'soft release' pen with camera trap on release hatch to provide immediate post-release monitoring.
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The time of year may have a major influence on the decision to treat and rehabilitate species that migrate or hibernate. The weather may also influence the ability to release animals. The timing of release may also need to consider natural breeding seasons so that animals are not immediately involved in territorial disputes. There may be considerable welfare issues associated with keeping an animal in captivity until release is possible and care needs to be taken to avoid wildlife centres becoming overwhelmed with animals, which in itself can become a welfare issue.

Post-release monitoring

Little is known about outcomes for animals released back to the wild with research in this area being very limited.^{10,11} However, without such knowledge animal welfare cannot be guaranteed and the whole process of wildlife rehabilitation can be questioned. Wildlife centres and rehabilitators should be encouraged to keep good records, reflect on outcomes at their establishments and where possible carry out post-release monitoring.

Conclusion

Wildlife rehabilitation can be extremely rewarding for veterinary professionals but requires good working relationships with wildlife rehabilitators. A combination of both sides of the 'team' fulfilling minimum expectations, together with good communication, ensures the best possible outcomes for the animals in their care. 

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Pauline Kidner

Pauline Kidner is the Founder and Advisor for Secret World Wildlife Rescue. The charity is nationally acclaimed for its work caring for over 5,000 wildlife casualties each year. She is also the Founder of Wildlife and Badger Care, a volunteer group that 'mans' the telephone every night to give advice, and rescue animals in distress in the South West.



Whilst the focus of her work is to stop pain and suffering in British wildlife, she also believes that through education and demonstration of wildlife work, it is possible to inspire people to care about wildlife. She is an author of four books about her life and often appears on television. Pauline has recently become patron of the Wildlife Art Society International as she feels that the beauty of art depicting wildlife can make people aware of the splendour and fragility of the world around us.

Liz Mullineaux

Liz Mullineaux BVM&S DVM&S CertSHP MRCVS works as Scientific Advisor to Secret World Wildlife Rescue, having carried out the centres clinical work from first-opinion practice for many years. She holds a clinical doctorate looking at the factors influencing badger rehabilitation and is an RCVS Recognized Specialist in Wildlife Medicine (Mammalian). She is co-editor of the *BSAVA Manual of Wildlife Casualties* and author of several other publications on British wildlife medicine. She is the current President of the British Veterinary Zoological Society.



Can you help the SWWR fundraising effort?

Secret World Wildlife Rescue is a well-respected source of British wildlife expertise and centre of excellence where we believe all animals receive the best possible care. The charity exists to rescue, rehabilitate and release British wildlife and to inspire in people a love of wildlife and encourage them to protect it. Each year we directly care for around 5,000 British wild animals, many sent to us from local veterinary practices that only have facilities for their primary care.

We respond to every one of the approximately 12,000 calls for help we receive annually, many of which are from vets and veterinary nurses. We also offer an extensive education programme on and off site for all ages and levels of expertise, from schoolchildren to veterinary professionals.



Over recent years the charity has outgrown its 'hospital' facilities in the farmhouse of its founder. For the last 4 years we have been working out of temporary portacabins on the charity's land next door, where our education centre and pre-release facilities are already well established. At the start of 2020 we committed to building our new Wildlife Treatment Centre, not of course knowing what was to happen. Despite a huge negative impact of COVID-19 on our fundraising we have managed to raise enough money to start the new build and are now trying hard to raise the additional funds to complete the project. Any support from readers of *Companion* would be really appreciated.

To donate:

- Through our website: www.secretworld.org/treatmentcentre
- JustGiving page: <https://www.justgiving.com/campaign/SecretWorldTreatmentCentre>

For further information visit www.secretworld.org or email liz.mullineaux@secretworld.org



Appendix 1: RCVS Guidance.



References and further reading are available at www.bsavalibrary.com and in *e-Companion*.