

Spring 2015 - Issue 61

The Rehabilitator

BWRC NEWSLETTER



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Cover photo by Tom Marshall www.tommarshallphoto.co.uk West Surrey Badger Group



A word from the Chair

'm keeping it brief this time in order to leave enough room for articles from the British Hedgehog Preservation Society, as well as further presentations, notes and resources related to the Sunday workshops from BWRC Symposium 2014! You can download copies of some of these from the Resources page of our website www.bwrc.org.uk. I hope you enjoy this Spring 2015 edition, and don't forget to follow us on Facebook for news of jobs, courses and other events coming up!

Terri Amory, BWRC Chair

Dates For Your Diary

18 April 2015 – North of England Bat Conference. Lancaster University Book online:

http://www.bats.org.uk/pages/northengla ndconference.html. £35 for BCT members and £40 for non-members, including refreshments, a sandwich lunch and choice of afternoon workshop.

6 to 7 June – Wales Bat Conference, Stackpole Centre, Pembrokeshire. For more information see: http://www.bats.org.uk/pages/wales_bat_conference.html

Practising Wildlife Rehabilitation Within Legal Restrictions



Presented by Dr Elizabeth Mullineaux BVM&S, DVM&S CertSHP, MRCVS to BWRC Symposium 2014

egislation affecting the care of British wildlife is currently a bit of a minefield for both vets and rehabilitators, risking prosecution for both if not followed correctly. At the time of writing there are not answers available for all the questions we might ask, however a few sensible suggestions can be made based on experience as a vet working closely with wildlife rescue centres.

The main pieces of legislation to be most concerned about in this context are the Veterinary Surgeons Act 1966 (as amended 2002), Veterinary Medicines Regulations 2014, and the Animal Welfare Act 2006. It is important to remember that there is a lot of other legislation affecting both animals and people associated with wildlife centres and this should be considered when writing centre policy and guidelines.

Vets

Whatever your views of vets are, you do need to have good veterinary involvement with the wild animals you care for. Only vets can legally diagnose medical conditions, prescribe drugs, carry out surgery and have animals legally under their medical care. It is important to have a good relationship with your vet and this really means using one main veterinary practice that is responsible for the animals at your centre. Animals may come in from other vets, and you may choose to use the services of other specialist vets, but you still need a main veterinary practice.

If you don't have a vet on site then your main practice vets need to visit on a regular basis in order to have animals 'under their care', allowing them to treat them and prescribe medication. These visits also allow them to understand how you work, know what animals are on site and provide general advice. These 'advisory visits' should ideally be at least once a week, although this will vary with size of centre and time of year. Regular visits also have the advantage of reducing the transportation of animals to and from the vets. Spend some time choosing a local vet and openly



discuss difficult things with them like costs. If you chose to employ a vet then remember you will need adequate facilities in which they can work and you will still need to provide 24/7 veterinary care for your centre, which is likely to mean employing more than one vet or making use of an additional local practice.

Have a written policy for triage and first aid treatment of animals that come in to you and don't immediately see a vet, agree this policy formally with your vet. If your vet allows you to make any decisions about treatments these need to also be written down clearly in a policy document. Ensure that anything written follows the law, remember only vets can 'diagnose' and 'prescribe' so avoid using these terms. Make use of the telephone (or email) to get veterinary advice. This advice is usually free and helps ensure that you (and your vet) cover yourself legally when making decisions and that the best treatment is provided. You and/or your vet should keep a record of all of these calls.

Veterinary nurses

Veterinary nurses may be employed by your vets, volunteer at your centre, or be employed by your centre. In all instances, even if you employ them, their work must be under the direction and supervision of your vet. This means they must have a very close working relationship with your vet.

Veterinary nurses receive no formal training on British wildlife (these species are not in the RCVS occupational standards). Legally this means that they are not suitably trained to carry out 'Schedule 3' procedures on wildlife species and must receive this training first from the vet who is responsible for them. The BSAVA Nursing Merit Award in British wildlife was the first attempt to formally fill this knowledge gap for veterinary nurses. Veterinary nurses should be 'registered' (RVN) with the Royal College of Veterinary Surgeons (RCVS) and must undertake appropriate continuing education (45hrs over three years) as well as keeping up to date with general changes in their profession. This may be hard to achieve for a RVN working in relative isolation in a wildlife centre and they may be best encouraged to undertake some annual locum work in general practice.

Do not encourage veterinary nurses to do more than they are legally allowed to - they are not 'mini vets'. Specifically veterinary nurses are not legally able to make a diagnosis (e.g. based on an examination, x-ray, or laboratory report), prescribe medication, induce anaesthesia using gaseous anaesthesia, or perform surgery that enters body cavities. Veterinary nurses are allowed to take blood, administer intravenous fluids, give medication and suture minor wounds, however all these must be 'under the direction' of your veterinary surgeon. Have an agreed and written policy for veterinary nursing activities at your centre. If you employ a veterinary nurse ensure that both their job description and employment contract make it clear where duties start and end. RVNs are legally liable for the work they do and should have professional indemnity insurance.

Wildlife centre policy

It is important for you to have written policies regarding all the activities at your centre, as these help protect you if problems ever arise. It is useful to have an admissions policy that allows animals to be signed over to you. This may help protect you legally in terms of 'ownership' and at least helps finders to appreciate that the animal is now your responsibility. Having finder name and



address details can also be good for promotion and funding of your centre providing appropriate data protection clauses are incorporated into your documents.

It is important to agree which of your staff can do which tasks (e.g. give medication) and keep records of this. Ensure that adequate training has been provided for any tasks performed, record this training and ensure that it is kept up to date.



Ensure that there is a policy on the storage of any drugs left on site and who has access to these. Drugs should always be in a locked cabinet with restricted access. Records of drug use should be kept. Have a written policy agreed with your vet regarding euthanasia of animals to include; which cases, under what circumstances, and how euthanasia is to be performed. Any phone conversations or emails regarding euthanasia of individual animals should be carefully recorded.

Keep good records of each animal, the treatment they receive and their progress. Records help to protect you legally, allow the progress of individual animals to be monitored, and allow for reflection on the success (or not) of treatments.

As well as having policy and records for animals it is important that wildlife centres also have good written policy for people (staff, volunteers and members of the public) and for the maintenance of the site itself. Common areas of litigation against centres relate to health and safety and waste disposal.

Moving forward

As was explained by Michael Stanford from the Veterinary Defence Society at the BWRC Symposium 2014, the RCVS and police are currently taking an increased interest in the veterinary care of British wildlife. Whilst this may be a good thing for animal welfare, with vets under increasing pressure to do things properly and legally, this will also potentially impact directly on wildlife centres. Voluntary standards for rehabilitation and release would be preferable to enforced standards and legal actions and BWRC is the obvious place to start discussing and setting minimum standards.



Essentials of wildlife triage



Presented by Professor Anna Meredith MA VetMB PhD CertLAS DZooMed DipECZM MRCVS, Royal (Dick) School of Veterinary Studies, to BWRC Symposium 2014

riage is the process of prioritizing patients based on the severity of their condition, so as to treat as many as possible when resources are insufficient for all to be treated immediately. True triage in this sense can be applicable to wildlife casualty situations where large numbers are involved, such as mass cetacean strandings or oiling incidents, but more frequently the practitioner is faced with a single individual animal, for which 'triage' has come to refer to the process of decision making in terms of **whether to treat or to euthanase**; however the process of assessment and decision making is essentially similar in both situations.

Decisions based on the triage process must always be undertaken as quickly as possible, and at the most within 48 hours of admission, although preferably much more quickly than this, in order to minimise any unnecessary suffering associated with the injury or disease itself, or the stress of captivity. Triage decisions should involve the veterinary surgeon and a clinical examination wherever possible, but agreed protocols and decision-making schemes (preferably written) may be put in place in wildlife hospitals that allow non-veterinary trained staff to undertake the triage process and carry out euthanasia, or this may also take place in the field at the point of capture or retrieval.

The decision-making process

The primary aim of wildlife rehabilitation must always be to return an animal successfully to the wild, as rapidly as possible with minimal adverse effects to its welfare. To do this the animal must be released with a chance of survival at least equivalent to that of other free-living members of its species, and this will depend on it being both physically and behaviourally fit to cope normally with a free-living existence. The alternatives are permanent captivity, which is rarely acceptable on welfare grounds, or euthanasia, which must always be considered at every stage of the assessment and treatment process.



The conservation status of the animal should not, in principle, be a factor in the triage process as individual animal welfare is the main consideration. However, in reality, pragmatic factors and value judgements are often brought into play, and when faced with a conservation-sensitive or endangered species, this can and does affect decisions over the degree of effort and resources allocated to that animal when compared to a very common species, or one that might be considered a pest species or vermin. It is absolutely vital that these conservation-based decisions must never be at the expense of any compromise to animal welfare.



Assessment must be done on an individual case basis and will depend on many factors. Setting aside any fundamental moral or ethical arguments or considerations, a practical approach to the decision making or triage process is to consider the following questions:

- 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 the 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?

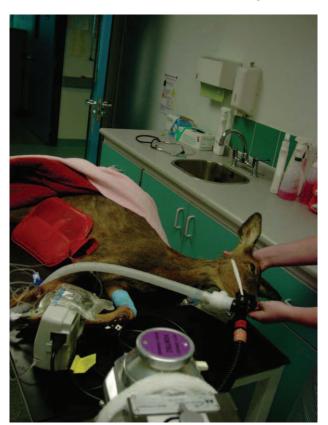
Initial assessment and clinical examination

Brief examination at a distance allows respiratory rate and character, faeces, urine, blood in the transport carrier, lameness and limb or wing position, and obvious wounds to be evaluated. First aid or euthanasia may be indicated at this stage, however if not immediately indicated the animal should be left in the carrier and placed in a warm, dark environment for half an hour prior to restraint and direct examination. In some situations this initial process may need to take place in the field rather than at a clinic or hospital, for example if called out to an RTA or stranding incident.



In highly stressed animals, animals with severe injuries or dangerous animals, general anaesthesia may aid clinical examination. Hydration status and body condition of the animal should be assessed. Wherever possible an accurate bodyweight should be determined early in the assessment process, as it is essential as a guide to health status and for calculation of therapeutic doses. Clinical examination should then be carried out starting with the head and working caudally including all body systems. Important examinations to include are:

- Assessment of the oral cavity (mucus membrane colour,presence of fishing hooks or lines, dentition).
- Ocular examination, especially for intra-ocular haemorrhage (retina or pecten)
- Thoracic auscultation (e.g. pulmonary haemorrhage may occur following road traffic accidents in mammals).
- Assessment of feather/ fur/spine condition.
- Thorough palpation of wings and legs for fractures or luxation.
- Manipulation of joints for swellings and degree of movement.
- Thorough assessment for wounds or evidence of subcutaneous emphysema. Puncture wounds (e.g. cat bites) or ballistic entry and exit wounds can be difficult to detect and may be easily missed.



Following clinical examination (and further diagnostic tests carried out before or after first aid, e.g. radiography if appropriate), the decision whether to treat or euthanase should be made and executed as quickly as possible. **Continuous reassessment** is an essential part of the decision-making and rehabilitation process and should be undertaken even through the relatively rapid process of initial triage, to ensure that any unnecessary suffering is always minimised and euthanasia is undertaken if necessary.

Roe deer under general anaesthetic this can eliminate the psychological stress experienced by casualties during initial examination. @Anna Meredith



Post release survival of rehabilitated Eurasian badger cubs (Meles meles).



Presented by Adam Grogan, RSPCA to BWRC Symposium 2014

Grogan A and Kelly A (2013) A review of RSPCA research into wildlife rehabilitation. Vet Record.

he RSPCA has been interested in the survival of rehabilitated casualty wildlife for over 10 years and has conducted a number of projects on this subject on a number of different species . This paper is a brief summary of a radio tracking project investigating the survival of juvenile badgers that have been reared in captivity in artificial groups.

Not very much is known about badgers post release; often they just disappear never to be seen again to whatever fate awaits them. Prior to 2013, the RSPCA had radio tracked four groups with poor survival rates recorded for the fifteen animals that were released with collars. All four groups had broken up with the badgers in each group dispersing to different areas. Of these animals, nine are known to have died, either due to road traffic accidents or a failure to thrive. The signals were lost for the remaining animals except one, who was tracked for in excess of 200 days before she shed her collar. During this time it is known that she had settled in to a local, wild badger group near to where her artificial badger group was released.

The RSPCA had one group of badgers for release in 2012 but the poor weather that year meant that we struggled to find a release site. In early 2013, we spoke with the West Surrey Badger Group (WSBG) who offered a site to us. This site was very interesting as it had been monitored extensively by the badger group for a number of years who had been monitoring the badger setts in the area and the comings and goings of the local badger population. An artificial sett was also available and so with the enthusiastic support from the landowners, plans were drawn up to release the badgers in summer of 2013.

The WSBG examined the suitability of the site by checking the artificial sett and other setts close by for signs of use by resident badgers and found no visible signs of badger presence. The next task was to prepare the site for the cubs which meant installing an electric fence around the artificial sett, putting in bowls for water and straw for bedding. The five cubs, 3 males and 2 females, arrived in July in two heavy wooden boxes and were released into the sett.

The WSBG were kept busy for the first two weeks with morning check visits and evening feeding visits. Unlike releases done in late autumn, these badgers were active right from the start, and were out the first night. They had their one and only encounter with the electric fence, dug a dung pit, polished up all the food that had been carefully scattered about and hidden under logs and stones, dug a new entrance directly into the back of the sett, and dragged in the straw that had been left outside for them.

A stealth camera, or camera trap, was set up to see what was occurring and recorded all five badgers doing what badgers do. The members of the WSBG appreciated that the evening feed duties were best as it was often possible to watch the badgers emerge from the sett before dark. Sometimes a head would poke out from the entrance while they were still inside the fenced area putting out the food. The electric fence was removed at the end of the 2-week settling-in period and this coincided with the arrival of a student from Swansea, Owen Bidder, who was going to track the badgers at night for the next two weeks. The badgers were now free to explore their new environment.

After one night, only one badger was still sleeping in the artificial sett, while the other four were all in an empty sett 100 metres up the hill. Within days they had discovered another sett about 100 metres down the hill away from the artificial sett.

WSBG members continued to provide food and water during the summer although the amount offered was reduced as time went on. During the first two weeks Owen reported increased exploration by the badgers, finding and exploiting more setts in the area. At an early stage one badger lost his transmitter, which was found detached from the collar on a footpath, almost a kilometre from the release site. Over several weeks the badgers discovered a total of 8 setts that the badger group knew about in the area, as well as one sett that had not been recorded previously; all these setts were empty as far as the WSBG knew.

The badgers did not stay together, but often two or three badgers were found in in one sett, and on the odd occasion all four. Some mating behaviour had been recorded on camera before the group was released so it might be that some alliances had developed while they were still in the enclosure. They seem to move from sett to sett regularly, sometimes using a different sett each day. One badger moved off to the sett that was previously unknown to the WSBG, about a kilometre from the release site and he seems to have found himself a permanent home. The WSBG set up a camera and discovered that he was with an un-collared badger that they believe to be a local resident.

The badgers were tracked until late December 2013 which is when the transmitters all seemed to stop transmitting. The cameras have been deployed a few times since and have recorded some activity so now we plan to use different equipment to see if the badgers are still present. All the



badgers were fitted with microchips and we plan to set up a feeding station with a chip reader and data logger to hopefully record the badgers coming and going at this feeding station, so look out for more news in the future.



Group of five badgers at the release site taken with remote camera.

Photo credit West Surrey Badger Group

What have we learnt?

- After 18 months of captivity badgers can quickly start a natural wild life.
- When released they will find and utilise existing local setts.
- They do not need or even want to stay together as a bonded group.
- They will integrate with local badgers provided there are only a few around.
- It is well worth rehabilitating orphaned cubs.
- It is a rewarding thing to do.

Grogan A and Kelly A (2013) A review of RSPCA research into wildlife rehabilitation. Vet Record

-Symposium 2014 -Sunday Workshop Sessions

THE FOLLOWING NOTES CAN BE DOWNLOADED FROM THE CONFERENCE PROCEEDINGS SECTION OF THE RESOURCES PAGE OF THE BWRC WEBSITE www.bwrc.org.uk BUT REMAIN THE PROPERTY OF THE AUTHORS.

Animal Nursing Practical Workshop led by Dr Liz Mullineaux and Jenna Richardson (Royal (Dick) School of Veterinary Medicine):

Gavaging (crop-tubing) method:

- 1. Weigh the bird and calculate the amount of fluid required. A suitable volume for most casualties (maintenance plus 10%) would be 150ml/kg/24hrs
- 2. Divide the amount calculated into at least four feeds over 24 hours (e.g. for a 100g bird 15ml divided by 4 = 3.75ml).
- 3. Draw up the required amount of warm fluid (e.g. Lectade) or food (e.g. KT extract) in a syringe. Fluid or food should ideally be at body temperature.
- 4. Chose a tube of an appropriate diameter for the bird to be tubed. Choose the correct length of tube by measuring the tube on the outside of the bird's neck, from the beak to the top of the keel. Attach the tube to a syringe that will take the volume of fluid calculated.
- 5. Draw the fluid up the tube to remove any air and until the correct amount shows in the syringe.
- 6. If available ask your assistant to hold the bird with its head facing you. One person can hold the bird while a second person carries out the procedure.
- 7. Experienced personnel may be able to carry out gavage single-handed, particularly for smaller birds. With large, aggressive birds, particularly piscivorous (fish eating) birds, goggles should be worn to protect the eyes and keep the beak open to prevent it biting through the tube.
- 8. Hold the bird's head and gently open its beak, keeping the beak open



- with your finger and thumb and controlling the head at the same time.
- 9. Restrain the bird's body and head, holding the bird in a vertical position with the neck extended.
- 10. Palpate the crop to ensure that it is empty before giving liquids or food by gavage.
- 11. Feed the tube into the mouth and down one side of the beak and tongue to avoid the glottis and trachea at the base of the tongue. The feeding tube must NOT be placed into the glottis.
- 12. Continue to feed the tube gently down the oesophagus into the crop. Confirm the tube is in the oesophagus/crop by visual inspection and/or gentle palpation of the neck, you should be able to feel the tube.
- 13. Slowly depress the syringe to release fluid, watching all the time for fluid coming back up into the throat. Stop immediately if this occurs and continue at slower rate.
- 14. If the bird regurgitates it should be released immediately to a allow it to clear its oral cavity.
- 15. Once all the fluid has been administered, quickly remove the tube to avoid any leaking into the mouth. The bird should be allowed to shake its head and neck if food is being regurgitated.
- 16. Keep the bird's head extended while returning it to its accommodation.
- 17. Avoid disturbing the bird for at least 20-30 minutes to reduce the risk of regurgitation.
- 18. Tubes and syringes should be cleaned and placed for sterilisation (e.g. i Milton for 30 minutes) if a tube is to be reused. Tubes must only be used for more than one bird if appropriately sterilised as there is a real risk of disease transmission. Tubes used for birds of known disease risk (e.g. canker) must be thrown away.

Dr Elizabeth Mullineaux, 2014



Wing bandaging in birds Dr Elizabeth Mullineaux, 2014



Fractures of the lower wing (carpus/manus or digits) may be supported with simple taping of the primary feathers using a medical tape (e.g. micropore) or masking tape.

Fractures of either the radius or ulna alone may also be supported in this way, however these are almost impossible to diagnose without an x-ray. Ensure that the tape is removed at the correct time (see above).



Fractures of the radius and ulna (either alone or together) can be supported using a 'figure of eight' dressing to hold the radius and ulna (lower wing) against the humerus (upper wing).

A 'figure of eight' pattern is used around the wing using Vetwrap (or a similar bandage) of a suitable width. Do not over stretch the Vetwrap when doing this. In this type of bandage the wing is left free from the body so that the shoulder can still move. Ensure that the dressing is removed at the correct time (see above).



Fractures of the humerus can be supported using a 'figure of eight' dressing as above but this time incorporating the body of the bird (leaving the opposite wing free). This holds the wing into the body and restricts all movement including that at the shoulder. Ensure that dressing is removed at the correct time (see above).

Species	Sites for INTRAMUSCULAR injections		
Small birds	Breast muscles (pectoral muscles) either side of the breast bone (sternum) – be careful not to go too deep, use a shallow injection, as deep injections may penetrate the liver or an airsac.		
Larger birds	Breast muscles (pectoral muscles) either side of the breast bone (sternum). Muscles of the FRONT of the upper back leg (thigh) – going into the back of the leg risks serious nerve damage.		
Small mammals	Muscles either side of the spinal cord just in front of the hip (lumbodorsal epiaxial muscles) – the best site in small mammals. Muscles of the FRONT of the upper leg (thigh) – going into the back of the leg risks serious nerve damage.		
Larger mammals	Muscles either side of the spinal cord just in front of the hip (lumbodorsal epiaxial muscles) – useful in badgers. Muscles of the neck (upper third and centrally) – useful in deer. Muscles of the FRONT of the upper back leg (thigh) – going into the back of the leg risks serious nerve damage.		
Lizards	Muscles either side of the spinal cord just in front of the hip (lumbodorsal epiaxial muscles) – the tail should be avoided as British lizard species can lose their tails when handled in this way.		
Snakes and slow worms	Muscles either side of midline approximately one third to half the way down the body from the head end.		
Chelonians (tortoises and terrapins)	Muscles of the back of the upper part of the front leg – medication given in the back leg is quickly eliminated from the body so the front leg is preferred.		
Amphibians	Muscles either side of the spinal cord just in front of the hip (lumbodorsal epiaxial muscles) Muscles of the FRONT of the upper back leg (thigh) – going into the back of the leg risks serious nerve damage.		



Species	Sites for SUBCUTANEOUS injections		
Small birds	Fold of skin under each wing (axillary area). Fold of skin where the back leg meets the body (inguinal area) CARE RE AIRSACS. NOT IN SEABIRDS.		
Larger birds	Fold of skin under each wing (axillary area). Fold of skin where the back leg meets the body (inguinal area). CARE RE AIRSACS. NOT IN SEABIRDS.		
Small mammals	Scruff of the neck between the shoulder blades – most common. Fold of skin in front of the back leg (inguinal area) – if scruff is not accessible. Other areas where the skin can be easily 'lifted' e.g. the 'skirt' of a hedgehog.		
Larger mammals	Scruff of the neck between the shoulder blades – most common. Fold of skin in front of the back leg (inguinal area) – if scruff is not accessible. Under the skin covering the chest wall –only really useful in very large mammals e.g. deer, use a shallow injection, as deep injections may penetrate the chest wall.		
Reptiles	Subcutaneous injections are generally not suitable for reptiles as they are difficult to give and infection risks are high. Use intramuscular injections instead.		

POST-MORTEM RECORD

(Molly Varga, 2014)

Laboratory Reference Number:

Date:

Finders/Rehabilitators Name and Address

Location Found: (OS grid reference)

Chain of Evidence: RSPCA Log Number

Sample location:

Person in charge: Transferred to: Date and time: Signature:

Species:

Dry weight of carcass

CITES status (if applicable):

Crown rump length (mammals)
Snout-anus length (reptiles/amphibians)
Vent to tail tip (reptiles/amphibians)
Total body length (fish/serpents/amphibians)
Carpal length/Tarsal length (birds)

X-ray details:

External Examination
Skin and hair
Parasites (details of any retained)
Feet and claws
Eyes and ears
Sex
Photo details

Subcutaneous tissues

Samples of fat

Mammary tissue: milk/colostrum present

Details of abdominal organs in situ

Free abdominal fluid (samples for culture and cytology)

Gross abnormalities

Photo details

Details of thoracic organs in situ

Pleural fluid (samples for culture and cytology)

Peritoneal fluid (samples for culture and cytology)

Gross abnormalities

Photo details

Remove and weigh all organs -

Heart

Lungs

Liver

Kidneys R= L=

Thymus

Thyroid

Adrenals

Pancreas

Uterus Foetuses present?

Testicles

Retained PAIRED samples of each organ. One set of paired samples (all tissues) in 10 formol saline for histopathology and one set of paired samples (all tissues) frozen for toxicology.

Retained a set of paired samples (all tissues) at 4 degrees if virology required.

Examine and open gut

Gross morphology

Gut contents

Retain two sets of gut contents. Preserve any parasites found in 70% ethanol or as otherwise advised by laboratory

Collect and freeze serum samples if possible

(Molly Varga, 2014)



Would you find a smaller feeding teat useful, especially for those smaller hedgehogs?

"The British Hedgehog Preservation Society have sent us this project proposal — if you would like to know more please contact them using the e-mail address info@britishhedgehogs.org.uk or telephone 01584 890801." — Ed.

One of the hedgehog carers has sent us the following details of a project to see whether a smaller teat could be designed and mass produced:

"We began this project because it was so frustrating to feed the hoglets with the Catac kitten teats, which were far too big, and so they couldn't latch on, and struggled to feed properly. We measured a dead lactating mother's teat and persuaded Catac, the company that makes kitten teats, to try and come up with something more suitable. The prototype teat has proven to be a lot easier to use, and the hoglets fed much more quickly, it was a clear improvement. Each teat lasts for about forty feeds.

The current design is not perfect – ideally the teat would be shorter and be able to fit directly onto a 1ml syringe. However Catac say they cannot improve upon this prototype design without an investment of 10-15K on a new template to shape them to allow fitting on the end of the syringe. Until we know whether there will be a take up by rehabilitators I



don't think it is realistic to spend that sort of money at this stage, and these teats are already a great improvement on what is currently on the market.

Catac are much more likely to persevere through development into production if they think/know there will be a demand for these smaller teats They have asked for figures so they can work out what the sales demand would be, but there are no National figures available, so any feedback from rehabilitators about what they use, what their survival outcomes are, whether they would buy these teats and what they

think would be incredibly helpful."

The carer also sent us a picture of the new sized teat (top) and the old kitten size (below). Plus a picture of a hoglet feeding where the smaller size teat has been used. The outside diameter of an artificial kitten teat is approximately 5.75 mm (0.225"). The outside diameter of the new teat is approximately 3.125 mm (0.135").

Without your honest

opinions this project may or may not go ahead. Do you have a mortality problem that you think a better teat might help with. Do you think using

a smaller teat would make it easier for both you and the hoglet. So please do let us know whether you would use such a teat, how many you might use in a year (given a life expectance of 40 feeds).

If you rescue other wildlife would you also consider trying them on other species, if so what (and again how many a year might you use on these other species).

If this is developed further would you be willing to try out a prototype – those taking large numbers are

most likely to be asked and also any who take in other

wildlife.





BWRC Trustees

Terri Amory, Janet Peto, Tim Thomas, Anne Maskell, Simon Allen, Molly Varga, Adam Grogan, Chris Percival

BWRC would like to thank volunteers Caroline Gould **Website Administrator** and Jayne Morgan **Facebook Page**

Newsletter designed and produced by Nadine Barrow

If you would like to submit an article or letter for publication or give a presentation at a future symposium please contact

Annemaskell@gmail.com

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Please tick to confirm you have read the Terms	Post Code						
and Conditions of BWRC Associate Membership	Email						
Please tick this box if you are a practising rehabilitator (for BWRC statistics only).	Tel						
Regular payment of membership allows us to plan for future activities knowing funds are available. If you would like to help in this way by paying by standing order, please complete this form (including your name and address above). Please note that Associate Membership runs from the 1 st January to 31 st December each year.							
PAYING BY STANDING ORDER Please pay the British Wildlife Rehabilitation Council £15.00 plus a donation of £ on the 2 nd January 20(year) and annually thereafter to: National Westminster Bank PLC, Account number 36290521 Sort Code 54-41-26							
My account number	Sort Code						
Bank name							
Bank address							
	Post Code						
Signature	Date						
PAYING BY CHEQUE/ BACS Associate Membership fee (1st January to 31st December 20) of £15.00 plus a donation of £							
Please tick this box if you require a receipt.							
BWRC newsletter The Rehabilitator will be sent to the e-mail address you have given above. Tick this box if you also wish to receive a printed copy (to the postal address given above).							
The BWRC WILL NOT PASS YOUR DET (If you wish to be listed in the Directory of Rehabilitators on or Form downloadable from the "Find a Rehabilitator	ur website please fill in the Rehabilitation Unit Contact						
If you are a UK tax-payer your membership (and donations) can be worth 25% more to the BWRC – so £10 becomes £12.50 at no extra cost to you. Please tick the box and sign the declaration below. Thank you.							
Please treat this and all future membership fees as Gift Aid							
I understand that I must be paying an amount of income tax or capital gains tax at least equal to the tax that the BWRC reclaims on my membership fee. I will inform BWRC if and when I no longer meet these criteria.							
Signature Date							

BWRC Membership Form February 2015