

Assessing Badger Road Traffic Casualties

Badger carcasses are frequently encountered at the roadside, usually as a result of collisions with motor vehicles. Sometimes there may be concerns that the badger has died elsewhere and has been placed on, or by the road, in an attempt to conceal the true cause of death. This can often arise when a number of badgers are seen at the same spot over a relatively short period of time. However, because of the way in which badgers use their territory it is not uncommon for this to happen and there may be nothing suspicious at all. There is an “urban myth” that badgers are illegally killed and dumped on roads to avert suspicion. There is no evidence to suggest that this occurs frequently but it is something to be born in mind.

When a dead badger is seen at the roadside it may be possible to conduct a preliminary examination of the carcass to obtain clarification. Undertaking such work is potentially dangerous. If a badger has been hit by a motor vehicle then the examiner may be as well. It is crucial to ensure your safety, and the safety of anyone with you, before trying to examine a badger carcass. In some circumstances (stopping on a motorway or clearway for example) such work may be illegal as well as dangerous. In other cases it may only be possible where appropriate protection for the examiner and warning to other road users can be put in place first. A careful assessment needs to be made in each case to minimise the risks and the clear rule is “if in doubt do not attempt to stop and examine”.

Badgers are low slung animals with thick skin above a layer of fat, the density of which, which varies depending on the time of year. They tend to scurry across roads rather than lope and this means that they are more solidly connected to the ground when hit and absorb more of the energy of the collision than a fox or a deer. Many motor vehicles today have minimal clearance between the chassis and the road to ensure stability. Because of this a vehicle striking a badger tends to knock it aside rather than run over it. The result is that badgers tend to suffer major trauma to the internal organs resulting in almost immediate death whereas a fox or deer can often carry on for a few yards more, clear the road, and die in woodland or fields beyond.

Death is generally accepted to mean irreversible loss of capacity for consciousness combined with irreversible loss of capacity to breathe. The eyes show dilated pupils that are not reactive to light and are often open. In the immediate period after death a condition called “primary flaccidity” occurs and usually lasts for one or two hours. The body muscles relax, the eyelids lose their tension and the joints are flexible and so the lower jaw falls leaving the mouth partially open. After this stage rigour mortis sets in, usually between two and six hours after death. It begins with stiffening in the eyelids, neck and jaw which gradually spreads throughout the body over the next four to six hours. This “rigid stage” can last from three to five hours and then starts to ease gradually as decomposition sets in. It is crucial to appreciate that all these post mortem changes are closely related to the ambient

temperature and also the physical state of the animal immediately prior to death. The lower the temperature the slower the progression.

Stages in dealing with a badger dead at the roadside.

- 1) Is it safe/legal to stop?** Can I park safely and in a way that does not cause danger to me, anyone with me, or other road users
- 2) Is it safe to examine the badger?** Before close examination of an apparently dead badger it is crucial to make sure that it is not able to injure you. Injured animals are scared and in pain. They are unlikely to realise that you are trying to help them and may react aggressively to human contact. Use a stick or something similar to poke the animal to ensure that it is not conscious before getting so close that you cannot quickly and safely retreat. Remember that jumping back suddenly into the road is unlikely to be a safe retreat! **If the badger is not dead contact S.S.P.C.A on 03000 999 999 immediately** and ask for assistance. Keep in mind that the help may take time to arrive and that the injuries may be terminal regardless of the speed and quality of care.
- 3) Is the badger dead?** Road traffic casualty badgers tend to be externally intact with unbroken skin and no obvious signs of trauma. They may occasionally have small amounts of blood around the nose, mouth or anal area. The eyes show dilated pupils that are not reactive to light and are often open. Once death is established a rough idea of how long ago it happened can be obtained from the state of rigour mortis. **Are there any signs of chemical or vomit around the mouth?** This may suggest intentional or accidental poisoning. **BEWARE! Many chemicals/poisons that are lethal to badgers are equally so to humans. YOU MUST WEAR SURGICAL PROTECTIVE GLOVES BEFORE HANDLING THE CARCASS. IF YOU DON'T HAVE THEM STOP NOW!**
- 4) Record the scene.** Take photographs of the badger and the area surrounding it before moving to the next stage. Note (and photograph if safe to do so) any skid marks on the road.
- 5) Is the badger flaccid or rigid?** If the body is flaccid (loose and floppy) look for evidence of fly eggs or larvae (maggots). If eggs, or particularly larvae, are present the carcass has probably passed through the "rigid stage" of rigour mortis described above. In addition to flies, sexton beetles of the genus *nicorphorus* which are black, thumb nail sized with bright orange elytra may be present in the area around the carcass. These insects will seek to bury it and lay their eggs in the remains. Sexton beetles have been recorded successfully burying an entire badger but clearly this will take time even if the substrates are suitable.
- 6) Is the skin of the badger broken?** As mentioned above it is unusual for badger Road Traffic Casualties to have broken skin. There may be some wounds from intra-specific fighting in the rump area and these may sometimes be severe. These are not signs of criminality. Small puncture wounds to the muzzle and face below the eyes,

apparently caused by teeth, are suspicious and suggest that the badger has been involved in a confrontation with a dog. They are not definitive however. Puncture wounds to the main body structure are unusual, may be the result of a gunshot and a check should be made for a larger exit wound on the opposite side. The absence of an exit wound does not necessarily mean that an animal has not been shot.

- 7) Does the death look suspicious?** If so report it to the police (101) and Scottish Badgers (07866 844232).
- 8) Does the death look unsuspecting?** If so report it to Scottish Badgers for inclusion in the National Database. Retain your photographs for now.
- 9) Are you unsure about 7 & 8?** If so contact Scottish Badgers for advice. This can be obtained on 07866 844232 during office hours Tuesday to Thursday inclusive or by calling 07792 142446, 07570 915630 or 07973 273536 between 6am and 10pm every day. Please leave a message if no one is able to answer your call and we will ring you back as soon as possible.

Scottish Badgers

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