



Approach to diagnostic imaging and complementary post-mortem examinations as part of the Eurasian beaver (*Castor fiber*) NatureScot monitoring scheme.

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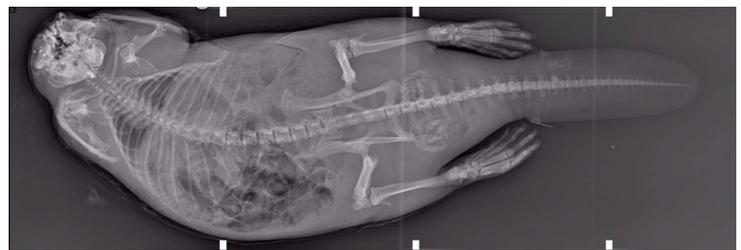
Aim: establishing a diagnostic imaging protocol is to enable veterinarians in general practice to radiograph beavers if required either for welfare or clinical assessments.

Background: beaver cadavers were submitted to the vet school as part of a NatureScot initiative to assess the welfare of beavers shot under licence and collate information on the health status of beavers in Scotland.

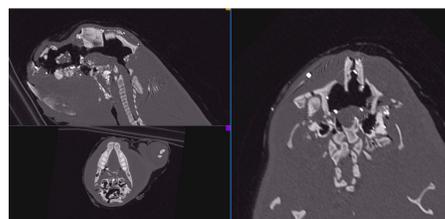
Frozen carcasses were submitted and radiography and computed tomography (CT) conducted prior to defrosting for pathology. Only gross post mortems were conducted as the condition of the carcasses prohibited further histological or microbiological examination.

Outcomes: Outcomes were presented in a report to NatureScot which highlighted that the majority of animals died due to suspected or confirmed traumatic injuries, either gunshot injuries or road traffic accidents. Post-mortem evidence, diagnostic imaging findings and information provided with the carcasses corroborated these findings.

CT provided more detailed information including the trajectory of the gunshot confirming the effectiveness of the kill with injury to vital organs such as the brain stem.



Four whole-body dorso-ventral **radiographs** of beaver 856, stitched together, showing shrapnel in the head and skull fractures.



Sagittal, dorsal and transverse plane **CT** images of the head of beaver 856, showing shrapnel in multiple head structures including the brainstem, indicating that this was an effective kill. There are numerous skull fractures and gas in the cranial cavity.



Four whole-body dorso-ventral **radiographs** of beaver 585, stitched together, showing shrapnel in thorax and abdomen, largest fragment over the spine.



Volume-rendered **CT** image of beaver 586, showing shrapnel in thoracic cavity.

The QR code provides additional post mortem information & a copy of this poster
<https://edin.ac/4nJrSa7>



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