# Tawny owls

A quick guide to clinical findings for vets in practice David Couper Senior Clinician RSPCA West Hatch Wildlife Centre

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# **Tawny owls**

Tawny owls are the most common owl in the UK and are frequently presented as wildlife casualties. Adult birds weigh 340-500g (male) and 420-620g (female). Reasons for presentation include road traffic collisions, entanglement, trichomonosis, and apparent 'orphans.'

Tawny owlets commonly present at around 30 days old when they start to wander away from the nest (this is referred to as 'branching' and the young birds as 'branchers'). They are found on the ground by members of the public, having climbed down, or fallen, from the tree.





# **Tawny owls**

They are frequently uninjured, and can potentially be returned to the tree in which their nest is situated, if this can be identified. However, they are also fairly commonly injured as a result of a fall, potentially suffering from fractures to the wings and legs. They may have been attacked by other animals (e.g. pecked by birds). If they have been on the ground for some time, they may be dehydrated, emaciated, and suffering from flystrike.

They are covered in down, with flight feathers being partly grown. It is common for them to sit with their eyes closed (especially in bright light), and also to appear slumped, until stimulated. Their pupils have a bluish hue, giving the impression of cataracts - this is normal.





# Trauma: wing injuries

General presentation:

Bird found grounded, frequently at roadside.

Signs:

Inability to fly.

Abnormal wing carriage (may not be obvious in owl as wing tips naturally rest on floor at rest).

Wounds, with associated blood, matted feathers, fly-strike.

May be obvious fractures in wing, with associated bruising, and palpable swelling/crepitus.

Trauma to other structures e.g. eyes, beak.

Blood in mouth if haemorrhage into respiratory system exits via glottis.





# Trauma: wing injuries

#### Diagnosis:

May be possible on palpation. Radiography particularly useful to confirm fractures of pectoral girdle.

#### Prognosis:

Depends on location/type of fracture, but generally poor. Worst for open fractures or fractures near joints. Poor prognosis for fractures of coracoid as generally result in a stiff shoulder and poor flight due to involvement of tendon of supracoracoideus muscle in callus.

#### Avoid:

Avoid sending birds with injured wings for rehabilitation without checking for eye trauma first.





# Trauma: collisions: eyes

Eye trauma is very common in tawny owls, given their large eyes, unprotected by a supraorbital ridge. An eye examination with an ophthalmoscope should form part of every examination.

#### General presentation:

Often picked up from road as suspected road traffic collisions. May just be found 'grounded' away from road if have survived initial impact but have subsequently become emaciated and unable to fly as a result of an inability to hunt.

#### Signs:

Injuries to other parts of the body suggestive of impact trauma. Eye held closed despite stimulation. Blood visible in anterior chamber of eye.



Blepharospasm in a tawny owl. Photo: S Bexton

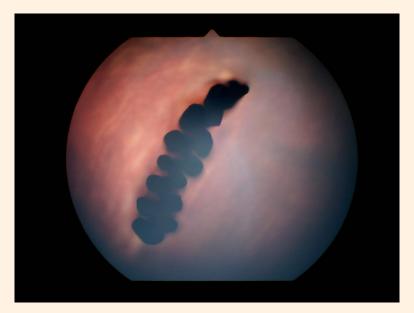


# Trauma: collisions: eyes

#### Diagnosis:

Examine the eye and adnexa carefully. With an ophthalmoscope, perform a fundic exam. The blood vessels are concentrated in the pecten. Following trauma, haemorrhage may be extensive, or present as small clots throughout the vitreous body. A detached retina will appear as a 'billowing' loss of detail. If unsure, compare with the other eye.

The menace response in owls is minimal.



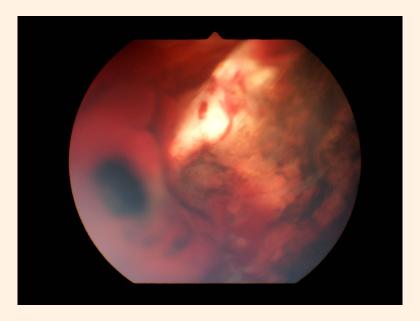
Normal fundus with pecten clearly visible. Photo: J Carter



# Trauma: collisions: eyes

#### Prognosis:

Any long term damage to the eye will affect the owl's ability to hunt so should result in euthanasia.



Loss of detail in fundus as a result of retinal detachment. Photo: J Carter



## Trauma: beak/mouth

#### General presentation:

Often picked up from road as suspected road traffic collisions.

#### Signs:

Damage to beak.

Blood in mouth from local trauma or if haemorrhage into respiratory system exits via glottis.

Respiratory noise as a result of blood in trachea.

Injuries to other parts of the body suggestive of impact trauma.





## Trauma: beak/mouth

#### Diagnosis:

Blood visible in mouth. Radiography useful to diagnose fractures of pectoral girdle.

#### Prognosis:

Likely to be other significant trauma present to have enabled capture. Marked trauma to beak (including fractures/misalignment) will require euthanasia. Damage to beak tip may grow out with time.





# Trauma: entangled in netting/fence wire/abandoned fishing line

General presentation:

Bird found entangled.

Signs:

Fishing line/netting/fence wire wrapped around body/wings/legs. May be visible damage, frequently to propatagium. Inability to fly and poor wing carriage due to soft tissue trauma as a result of being suspended. Flight feather damage.



Fishing line induced injury to propatagium (wing membrane)



# Trauma: entangled in fishing line/netting/fence wire

#### Prognosis:

Full effects of pressure necrosis may take some days to appear so will require monitoring over this period. Prognosis depends on extent of damage - worse if leading edge of propatagium is damaged and tendon of extensor propatagialis longus is exposed. If there is extensive wing feather damage, euthanasia should be performed as tawny owls take 3-4 years to moult flight feathers.





# Trauma: legs and feet

#### General presentation:

Leg issues may be found in birds that are grounded for multiple reasons (e.g. RTC, tawny owlets fallen from tree).

#### Signs:

Wounds on leg, with associated blood, matted feathers, fly-strike. May be obvious fractures in leg, with associated bruising, and palpable swelling/crepitus.

Trauma to other structures e.g. wings, eyes, beak.

#### Prognosis:

Fractures: depends on location/type of fracture, but generally poor. Worst for open fractures or fractures near joints.



Wound and fly eggs on leg of tawny owlet

Photo: H Bryant



# Infection: capillariosis

General presentation:

An incidental finding in tawny owls presented for any reason.

Diagnosis:

Worms visible in pharynx. Distinctive bioperculate eggs may be seen microscopically on smears of faeces or throat swabs.

Treatment:

Not necessary unless bird is otherwise debilitated.

Avoid:

Avoid administering antiparasitic treatments until initial stabilization has been carried out.



Capillaria worms in oropharynx



## Infection: trichomonosis

#### General presentation:

Birds present in an advanced state of disease, by which point they are emaciated and unable to fly; they are frequently presented as 'grounded.'

#### Signs:

The chest profile is concave, with a prominent keel.

The feathers around the mouth may be contaminated with sticky saliva.

The bird/mouth has a sickly aroma.

On opening the beak, caseous lesions can be seen on the roof of the mouth and in the oropharynx.





## Infection: trichomonosis

#### Diagnosis:

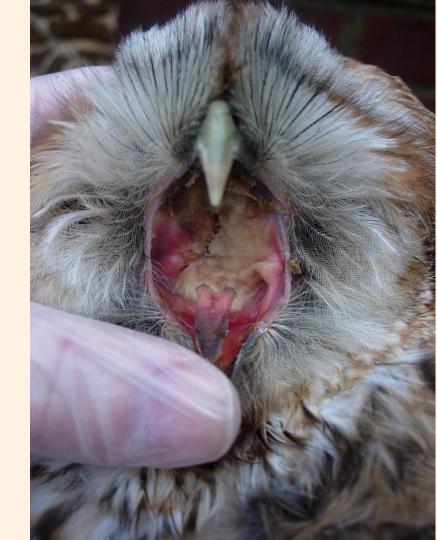
This can be based on presenting signs.

Diagnosis can be confirmed by smearing the lesions with a wet cotton bud, adding a further drop of warm water to the end of cotton bud under a warm tap, then allowing this drop of water to hang off the end of the cotton bud for a few moments (concentrating the trichomonads), before dropping it onto a slide and examining under the microscope for the presence of the motile trichomonads.

#### Prognosis:

As the disease is generally advanced at the time of presentation, with extensive invasion of the pharynx and surrounding tissues, and resulting emaciation, euthanasia should be performed.





# Thank you



